International Federation of Clinical Chemistry and Laboratory Medicine

Advancing excellence in laboratory medicine for better healthcare worldwide

www.ifcc.org

Annual Report 2024

International Federation of Clinical Chemistry and Laboratory Medicine

Highlights of the Year

WorldLab Congress – Dubai (UAE) May 26th-30th, 20
26th International Congress of Clinical Chemistry and Laboratory Medicine (IFCC WorldLab Congress, Dubai 26th - 30th, May 2024)
https://www.dubai2024.org/
https://storage.mzevents.it/programma_preliminare_20.10.pdf

Global MedLab Week celebrations – April 2024
Week on 22-28 April 2024, highlighting the work of the medical laboratory and the significance of the role of medical laboratory professionals in worldwide patient healthcare.
The theme for this year's Global Med Lab Week was "Labs Save Lives". Explore all the contents for the **Labs Save Lives** project and visit:
https://ifcc.org/ifcc-communications-publications-division-cpd/cpd-committees/public-relations-c-pr/get-ready-to-celebrate-the-global-med-lab-week-2024/

IFCC live webinars – 2024 Series (75 modules):
- Omics in LM: Genomics, proteomics, metabolomics
- Machine Learning in Laboratory Medicine – Recommendation of the IFCC Working Group Part 1 of 2
- Machine Learning in Laboratory Medicine Part II: Case Study Analysis
- Artificial intelligence in the clinical laboratory. Implementation, bioethics and legislation
- Quality system in Labs and accreditation - Challenges of new ISO 15189:2022
- New approaches in clinical and laboratory evaluation of pregnant women
- The evidence of laboratory tests used in the management of diabetes mellitus
- Troponin assays with higher clinical specificity; a novel future option
- Integrated Diagnostics: A new vision for the future of diagnostic specialties
- Management of non-integrated point-care-testing (POCT): challenges and solutions
- Global Supply Chain Issues in Health Care
- Method evaluation in the clinical laboratory (for WG-MEP)
- Diagnostics Efforts: Successes and Challenges to improve the management of patients with Chronic Hepatitis
- “Faster, Higher, Stronger – Together”: When laboratory medicine meets olympic games
- Different Approaches to Bioethics
- Minimum quality specifications based on the state of the art
- Future challenges of Laboratory Medicine
- Current and future perspectives on measuring natriuretic peptides
- Derived lipid profile parameters: navigating the data
- The potential of metabolomics to tackle unmet clinical needs
- Point-of-Care Testing: The never-ending challenges and their resolutions
- Investigations of immune pathologies in everyday practice
- International Perspectives on Estimating Glomerular Filtration Rate Equations
- Intelligent Biosensors in Medical Diagnostics
- Critical Results Reporting and Interpretive Comments

New Working Groups formed:
- SD: Natriuretic Peptides (WG-NP); Tumor Marker Harmonization (WG-TMH)
- TF: Task Force on Laboratory Medicine Practice Guidelines (TF-LMPG)
- ETD: Emerging Technologies (ET) for Improving Prevention and Clinical Management of Cardiovascular Diseases (CVD) - (WG-CARDIOIMPACT)
- ETD: Microsampling (WG-MISP)

The eJIFCC listed with the International Committee of Medical Journal Editors (ICMJE)
Further to being a member of the Committee on Publications Ethics (COPE), since 2024 the eJIFCC is listed with the International Committee of Medical Journal Editors (ICMJE), following the ICMJE's Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals.

New IFCC payment portal:
IFCC launched a payment portal to handle officers’ refunds and payments in general. The new system allows a secure and fast transmission of data, enabling quicker reimbursements, improved transparency, and reduced administrative delays.

e-Academy, open educational resources https://eacademy.ifcc.org/

Adaptive Learning Program, open educational resources (https://ifcc.org/ifcc-education-division/adaptive-learning-program/)

IFCC Flow cytometry courses
- 2024 - 5th International Course on Basics of Flow Cytometry in Cairo (EG)
- 2024 - 2ème Cours de Cytométrie en flux - Algiers (DZ)
- 2024 - Autumn School on Cell Analysis in Immunology in Geneva (CH)

IFCC Professional Scientific Programmes (PEP)
https://ifcc.org/ifcc-education-division/pep-professional-exchange-programme/
PEP supported 16 individuals from around the globe

IFCC VLP programme supported by Abbott http://www.ifcc.org/ifcc-education-division/emd-special-projects/. VLP supported 17 congresses

Implement cooperation and agreements with **IFCC Regional Federations and International Organizations**

IFCC Scholarships granted for WorldLab Congress Dubai
Roche / Werfen - Instrumentation Laboratory: IFCC Scholarships granted for WorldLab Congress Dubai

Young Scientists Forum – third edition held in Dubai at the WorldLab Congress
https://ifcc.org/task-force-young-scientists-tf-ys/ystf_recentactivities/

IFCC FEN - Foundation for Emerging Nations http://www.ifccfoundation.org/

IFCC 2024 Distinguished Awards:

Prof P. Gillery (France), is the winner of the 2024 IFCC-Howard Morris Distinguished Clinical Chemist Award (since 2020) IFCC Distinguished Clinical Chemist Award (1969-2017), sponsored by *Yashraj Biotechnology Ltd. T*his award recognizes, honouring IFCC President Prof. Howard Morris, specifically an individual who has made outstanding contributions to the science of Clinical Chemistry and Laboratory Medicine or the application of clinical chemistry to the understanding or solution of medical problems.

Prof Terho J Lehtimäki (Finland) is the winner of the 2024 IFCC Award for Significant Contributions in Molecular Diagnostics sponsored by *Abbott Molecular.*
This award honors an individual who has made unique contributions to the promotion and understanding of molecular biology and its application In Clinical Chemistry and Laboratory Medicine worldwide.

Prof Etienne Cavalier (Belgium) is the winner of the 2024 for Laboratory Medicine and Patient Care sponsored by Snibe.
The award honours an individual who has made unique contributions in Laboratory Medicine, its application in improving patient care and having a world-wide impact in clinical medicine.

Prof Alan S. Jaffe (United States) is the winner of the 2024 IFCC Distinguished Award for Contributions to Cardiovascular Diagnostics, sponsored by Hytest.
This award honours an individual who has undertaken remarkable scientific work with cardiac markers or immunodiagnostic applications to improve cardiac disease diagnosis.

Dr D. Barthelemy (France) is the winner of the 2024 IFCC-Gérard Siest Young Scientist Award for Distinguished Contributions in Pharmacogenetics, sponsored by Biologie Prospective.
This award recognizes an outstanding young investigator or young leader (under 40 years of age) for his/her contribution to advancing the scientific discipline of pharmacogenomics and Personalized/Precision Medicine and/or its impact on research, development, standardization, quality management, regulatory evaluation or utilization in therapy. This award has been presented for the first time in 2020.

Prof Zhen Zhao (United States) is the winner of the 2024 IFCC Distinguished Women Scientist Award for Contribution to In-Vitro Diagnostics, sponsored by *Yashraj Biotechnology Ltd.*
This award recognizes a woman who has made significant contributions to the development or utilization of In Vitro Diagnostics with emphasis on applications in primary healthcare.

IFCC Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM): Call For Outcome Study Proposals 2024. View the winner: https://ifccfiles.com/2024/01/TF-OSLM-selection-announcement.pdf

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Message from the President of IFCC

Part 1: Introduction & Strategic Direction

The year 2024 marked a pivotal chapter in IFCC's journey as a global leader in clinical chemistry and laboratory medicine. On January 1st, the newly elected IFCC Executive Board began its term, launching a cycle of renewed energy, commitment, and strategic planning. Working in close collaboration with Regional Federations, National Societies, Corporate Members, and IFCC Functional Units, our collective mission was to strengthen the Federation's foundation, embrace innovation, and enhance the role of laboratory medicine in patient care worldwide. Our goal is to ensure that the IFCC continues to stand as the leading global organization representing Laboratory Medicine worldwide.

In an era of rapid scientific, technological, and societal change, collaboration remains key. The IFCC Executive Board actively encourages dialogue with National Societies, Regional Federations, and IVD industry partners. We particularly welcome the participation of young scientists, whose fresh perspectives are critical to our future.

Advancing global healthcare through laboratory medicine requires the full engagement of all IFCC constituents. Member Societies, Corporate Members, and Functional Unit officers continue to serve as the driving force behind our progress. Their input is instrumental in shaping IFCC's new Strategic Action Plans, which will guide our direction in the years ahead. These Plans were developed through inclusive consultation, gathering valuable insights from across the IFCC community. This inclusive approach ensures that the IFCC Strategic Action Plans are a true reflection of the diverse perspectives and expertise within our community.

Strategic Action Plan 2024–2026

A major focus this year was the development of the IFCC Strategic Action Plans for 2024–2026, structured across four core areas:

- **Area A – Supporting Membership**
- **Area B – Broadening Horizons**
- **Area C – Improving the Quality of Laboratory Medicine**
- **Area D – Enhancing IFCC Effectiveness**

After a thorough review and constructive discussion during the Executive Board meeting held on February 15, the Strategic Action Plans were finalized and subsequently shared with IFCC Functional Units, Regional Federations, Member Societies, and Corporate Members. This broad consultation process allowed us to collect valuable feedback, proposals, and critical insights that were discussed also during the second in presence EB meeting on 30-31 May in Dubai, which were instrumental in shaping the final version of the Strategic Action Plans. The final version was then shared widely with all stakeholders to ensure ownership and alignment.

In recent years, IFCC's activities have seen consistent growth. To enhance communication and efficiency, the IFCC Executive Board now meets monthly online. This initiative helps ensure timely decisions and responsiveness to the needs of our growing network

Part 2: Membership & Global Partnerships

The IFCC community continued its upward trajectory in 2024. We were pleased to welcome several new full and affiliate member societies, as well as new corporate members, expanding our global network and reinforcing our collective impact.

This year, IFCC deepened its engagement with partner organizations and international bodies. In a significant step, we signed a Memorandum of Understanding with the Fédération Internationale Francophone de Biologie Clinique et de Médecine de Laboratoire (FIFBCML), affirming our shared commitment to strengthening laboratory medicine through collaboration.

We also advanced collaborations with key partners including JCTLM, BIPM, IUPAC, and SNOMED, particularly in areas such as metrology standards, terminology development, and traceability in laboratory testing. These partnerships reflect IFCC's proactive approach to harmonization and global standardization in laboratory medicine.

In December, I participated to the Joint Committee for Traceability in Laboratory Medicine (JCTLM) meeting held in the first week of December, at the Bureau International des Poids et Mesures (BIPM) in Sèvres, France. This meeting marked the end of Prof. Greg Miller's term as JCTLM President. During the meeting, JCTLM President and Secretary were elected. Upon my proposal after receiving his personal consent first and approval of the IFCC Executive Board JCTLM members elected Prof. Mauro Panteghini as the JCTLM President representing IFCC at the JCTLM. Robert WIELGOSZ from BIPM was elected as the JCTLM Secretary.

In line with its long-standing partnership, IFCC continued its collaboration with the WHO in 2024, contributing to the development of the Fifth Edition of the WHO Model List of Essential In Vitro Diagnostics (EDL 5). This list guides global policy on diagnostic testing and laboratory services, especially in low-resource settings. It is intended to support IVD policy development to improve access to IVD testing and clinical laboratory services. IFCC's contributions aim to improve access to essential diagnostics and reinforce evidence-based laboratory practices worldwide. WHO organized GPSD 2024 Global Consultation on 10-12 September 2024 with the leaders in the field and shared with them the Improving diagnostic safety and implementing Global Patient Safety Action Plan 2021-2030. I attended this meeting representing IFCC upon invitation of WHO and expressed policies of IFCC in this area.

To better connect with stakeholders, the IFCC Executive Board decided to hold Council meetings annually, scheduled just before the opening of EuroMedLab or WorldLab. This decision aims to maximize participation and ensure synergy between strategic dialogue and scientific programming.

Following a membership-wide survey in March, it was confirmed that the IFCC General Conference (GC) should be organized alongside a major IFCC Congress. As a result, the next GC will be held in Bruges, Belgium, on May 16–17, 2025, immediately preceding the EuroMedLab Brussels. This integrated approach supports broader participation while maintaining the integrity and impact of both events.

Part 3: Congress Activities – WorldLab Dubai 2024

The highlight of 2024 was undoubtedly the 26th International Congress of Clinical Chemistry and Laboratory Medicine (ICCCLM) – IFCC WorldLab Congress, held from May 26–30 at the Dubai World Trade Centre (WTC). This global event was organized in collaboration with the 17th Congress of the Arab Federation of Clinical Biology (AFCB), 10th Annual Meeting of the Saudi Society for Clinical Chemistry (SSCC), and 8th International Genetic Disorders Conference of the UAE Genetic Disorders Association (UAEGDA), in partnership with MZ Events.

The WorldLab 2024 brought together 2,045 delegates from 107 countries, with an additional 1,700 visitors, 255 officers, 600 exhibitor staff, and 39 companies having 1,100 sqm of exhibition

space. The Scientific Program featured a robust agenda of plenary lectures, symposia, educational workshops, and poster sessions, covering fundamental science, advanced diagnostics, emerging technologies, and future challenges.

The Congress opened with a keynote lecture by Prof. Dennis Lo (The Chinese University of Hong Kong) on “Pushing Forward the Frontier of cfDNA Diagnostics.” The scientific sessions reflected a truly multidisciplinary approach, addressing cutting-edge topics in laboratory medicine, public health, and precision diagnostics.

Engagement of Young Scientists and Committees

Preceding the Congress, the 3rd IFCC Forum for Young Scientists took place, providing a valuable platform for early-career professionals. Fifty IFCC scholarships supported the participation of young scientists from developing countries, many of whom gave excellent presentations representing diverse regions.

The IFCC Council Meeting was held on May 26, during which strategic updates were delivered by the IFCC Executive Board and Division representatives. The concluding session included a plenary discussion titled “Current and Future Advances and Challenges in Laboratory Medicine.”

Numerous IFCC Functional Unit meetings were held during the Congress, offering face-to-face opportunities for planning and collaboration.

The Executive Board also met with the IFCC Corporate Members, fostering direct dialogue and reinforcing industry partnerships.

Industry Participation and Awards

The In Vitro Diagnostics (IVD) industry played a critical role in the Congress. In addition to co-sponsoring the event, they organized high-level educational workshops and curated an extensive exhibition showcasing the latest technologies, products, and services for clinical laboratories.

The prestigious IFCC Distinguished Awards were announced during the Opening Ceremony and formally presented at the Awards Ceremony Dinner on May 27 at the Dubai WTC. These awards honored seven individuals for their outstanding contributions to laboratory medicine.

The success of WorldLab Dubai was further amplified by the exceptional hospitality of our hosts, the support of UAE health authorities, and the strong presence of dignitaries including Ministers and Sheikhs. We also extend sincere appreciation to MZ Events for their excellent management and coordination.

Part 4: Education, Digital Innovation & New Initiatives

In 2024, IFCC made significant strides in digital transformation, education, and scientific advancement. These initiatives supported professional development across all regions and reinforced IFCC’s leadership in global laboratory medicine.

The IFCC eAcademy expanded substantially, offering an array of podcasts, webinars, and virtual learning programs covering key areas such as molecular diagnostics, quality systems, and laboratory management. Our digital communication tools—IFCC eNews and the eJournal—also grew in reach and readership, becoming vital channels for news and updates across the community.

The IFCC LIVE Webinar Series, launched in 2020, continued its success. In 2024, each session attracted between 2,500 and 5,000 attendees from over 160 countries, with certificates provided to participants. Each 90-minute webinar includes three expert presentations and an interactive panel discussion. I extend my gratitude to all Functional Units, Regional Federations, and National Societies for their valuable contributions. A call for 2025 webinar topics was closed in mid-year, with selected sessions under review.

To further enhance educational quality, the IFCC Accreditation Committee (EB-AC) is developing a webinar accreditation program, supporting continuous improvement in content, delivery, and learner engagement.

New Committees and Strategic Focus Areas

In recognition of emerging challenges in healthcare, IFCC launched two new scientific committees:

Committee on Molecular Diagnostics in Infectious Diseases (C-MDID)

Focus: tuberculosis diagnostics and antimicrobial resistance testing

Committee on Molecular Diagnostics in Oncology (C-MDO)

Focus: molecular approaches for detecting circulating tumour cells and DNA in cancer management

Artificial intelligence is poised to revolutionize laboratory medicine. In 2024, the IFCC Executive Board elevated the ETD Working Group on Artificial Intelligence and Genomic Diagnostics (WG-AIGD) to full committee status as the Committee on Artificial Intelligence in Laboratory Medicine (C-AILM). Under the leadership of Dr. Sarina Yang (USA), the committee will explore AI’s applications, accessibility, and integration into diagnostics.

This year, nine new awardees were selected for the Professional Exchange Program (PEP), which enables early-career professionals to visit host laboratories for up to three months. Through the Scientific (PSEP) and Management (PMEP) tracks, participants gain technical expertise and leadership skills. Over the past three years, 41 laboratory medicine professionals have benefited from this transformative experience, many describing it as life-changing. Their testimonials are regularly featured in the IFCC eNews.

Part 5: Upcoming Events – EuroMedLab 2025 and WorldLab 2026

IFCC General Conference 2025 – Bruges, Belgium

Following the results of a 2024 membership survey, the next IFCC General Conference (GC) was decided to be held in Bruges, Belgium, on May 16–17, 2025, immediately prior to the EuroMedLab Congress in Brussels. Since the previous GC was held in Brussels, it was decided to organize it in a different city before the Euromedlab Congress. This decision aligns with member preferences to combine the GC with a major IFCC Congress, enhancing participation and minimizing logistical challenges.

Bruges was chosen for its accessibility and close connection to Brussels, with frequent direct train service—including from Brussels Airport. The GC would bring together IFCC Officers, Regional Federation representatives, National Societies, and Corporate Members to review current activities, assess ongoing projects, and shape strategic decisions for the Federation’s future.

The 26th IFCC-EFLM EuroMedLab Congress will be hosted by the Royal Belgian Society of Laboratory Medicine from May 18–22, 2025, in Brussels, Belgium. Planning was well underway, with the General Agreement signed in July 2024 between the partners and MZ Events, outlining shared goals around innovation, standardization, and advancing laboratory medicine globally.

The 27th WorldLab Congress will take place in New Delhi, India, from October 25–29, 2026, jointly organized with the Association of Clinical Biochemists of India (ACBI).

On November 19–20, 2024, the first meeting of the Congress Organizing Committee (COC) was held in New Delhi. The in-person and hybrid meeting, coordinated by MZ Events, included a site visit to the Yashobhoomi Congress Centre, a state-of-the-art venue with vast column-free exhibition space, numerous conference rooms, a 6,000-seat auditorium, on-site metro access to Delhi Airport, and multiple event facilities.

Venues for the congress headquarters and social events were selected. The Scientific Program Committee (SPC), co-chaired by Prof. Sergio Bernardini and Prof. Praveen Sharma, is developing a comprehensive, multidisciplinary program. Plans include seven parallel symposia sessions in the mornings, with afternoons reserved for educational workshops. Work is also underway to submit the preliminary program for MedTech Europe compliance and to assist early visa processing.

This Congress is expected to showcase the best of IFCC's global leadership and scientific excellence.

Part 6: Regional & National Engagement

In 2024, IFCC actively supported and participated in numerous regional and national congresses, strengthening its global footprint and reinforcing collaboration across continents.

The XXVI COLABIOCLI Congress and the XXII International Congress of the National College of Bacteriology were held from October 3–6, 2024 in Cartagena, Colombia, under the theme "Science and the Clinical Laboratory United for One Health." This theme underscored the vital interconnections between human, animal, and environmental health.

During the congress, the IFCC Executive Board held its third in-person meeting of the year (October 5–6) and organized three IFCC-sponsored symposia, covering timely and critical issues in laboratory science. This gathering was a valuable platform for dialogue between the IFCC and Latin American colleagues and helped reinforce strategic priorities in the region.

The Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB) held its regional congress in Sydney, Australia, from October 31 to November 3, 2024, at the International Convention Centre, located in the heart of the city. Sydney's strong academic and research ecosystem makes it an ideal host for this premier event, which promises to deliver both scientific excellence and regional engagement. IFCC supported three symposia at this congress also.

IFCC organized a symposium at the WasPaLM Congress, held from October 16–20, 2024, at the Granada Congress Center in Belek, Antalya. The IFCC session, chaired by Prof. John Anetor, was titled "The Place of Sustainable Laboratory Medicine in Patient-Centered Healthcare." Prof. John Anetor was the Chair and speaker, Prof. Guzin Aykal and Prof. James Bonham were the speakers of the IFCC symposium.

The symposium reaffirmed IFCC's commitment to sustainable practices and the evolving role of laboratories in personalized, eco-conscious healthcare.

IFCC Congress Endorsements & Support

Throughout the year, IFCC continued to provide auspices for several scientific and educational events, including congresses, conferences, webinars, and workshops organized by National Societies and Corporate Members. These events remain vital platforms for professional development, collaboration, and capacity building.

Part 7: Global Initiatives & Organizational Developments

The Global Medical Laboratory Week (GMLW), held from April 22–28, 2024, served as a global celebration of medical laboratory professionals and their essential role in healthcare. Coordinated by the IFCC Public Relations Committee (C-PR), the campaign was themed "Labs Save Lives," focusing on the life-saving contributions of laboratory medicine.

GMLW aimed to raise public awareness, spotlight diagnostic innovation, and recognize the tireless efforts of laboratory professionals worldwide. Audio and video submissions were encouraged—particularly from young scientists with awards presented to the most impactful contributions. The campaign emphasized laboratories as indispensable pillars of modern healthcare.

On November 20, 2024, Ms. Alison Vianello joined the IFCC Office as the Executive Assistant to the President and IFCC Board. Selected from a highly competitive field, her appointment followed a thorough selection process conducted by the IFCC President, Past President, Treasurer, and MZ Events.

Ms. Vianello holds a Bachelor's degree in Biology (2022, University of Ferrara) and is expected to complete her Master's in Pharmacogenomics and Precision Therapeutics from the University of Milan by the end of 2024. Her scientific expertise, organizational skills, and dedication make her a valuable addition to the team, ensuring effective support of IFCC operations.

Part 8: Closing Reflections & 2025 Outlook

As we reflect on a year of dynamic growth, scientific achievement, and strengthened collaboration, it is clear that the strength of the IFCC lies in its global community. From regional congresses to international initiatives, from digital innovations to sustainability efforts, every milestone achieved in 2024 was the result of collective commitment and shared purpose.

Our progress would not have been possible without the dedication of our Member Societies, Corporate Members, Functional Units, Officers, and Executive Board colleagues, as well as the many volunteers, educators, and early-career professionals contributing to IFCC's mission.

The challenges facing healthcare—rising demand, emerging diseases, technological disruption, and climate responsibility—require a coordinated and visionary response. IFCC stands ready to meet these challenges, guided by its Strategic Action Plans and driven by a commitment to excellence, equity, and innovation.

Looking ahead to 2025, our key priorities include:

- Strengthening IFCC's leadership role in traceability, sustainability, and environmentally responsible diagnostics
- Expanding our educational footprint, including digital platforms, webinar accreditation, and multilingual content
- Enhancing global equity, particularly through support to low- and middle-income countries and inclusion of underrepresented regions
- Deepening collaboration with WHO, JCTLM, IUPAC, BIPM, and other international stakeholders
- Preparing for EuroMedLab 2025 (Brussels) and the General Conference (Bruges)
- Accelerating innovation through AI integration, multi-omics diagnostics, and new technologies

The IFCC community will continue to be at the heart of these efforts. Together, we will build on the momentum of 2024 and chart a strong course forward.

On behalf of the IFCC, I extend my deepest thanks to all those who contributed to our shared success and offer my warmest wishes for the holiday season.

Tomris Ozben, IFCC President

EXECUTIVE BOARD (EB)

During 2024 the Executive Board had been strongly focused on IFCC's mission and strategic goals.
In particular had been hold 3 EB meetings in attendance and 3 EB meetings by distance. The 169th EB meeting had been hold in Milano in February 14th 15th, then 170th - 171st – 172nd EB by distance, 173rd EB in Dubai during the WorldLab 2025 in May 30th – 31st and finally the 174th EB had been hold in Cartagena de la Indias (CO) on occasion of the COLABIOCLI Congress in October 5th - 6th.

The discussion inside the EB contributed to improve the work of Divisions and Task Forces, monitoring the activities and giving advise and support.

In the meantime, many efforts have been made to increase the participation of Regions and National Countries to IFCC projects and events.

The WorldLab in Dubai was successful for both attendance and scientific program.

The IFCC membership continues to grow, and as of December 31, 2024, included 99 Full Members, 26 Affiliate Members and 67 Corporate Members. During 2024 one Full Member Societies joined: Thai Society of Clinical Pathologists. Three Affiliate Member Societies joined: Association of Clinical Chemistry & Lab Medicine Practitioners Kolkata, India, Fundación Bioquímica Argentina – FBA, Armenian Association of Laboratory Medicine – AALM. We also welcomed ten new Corporate Members Greiner Bio-One GmbH (AT), Zybio Inc. (CN), INSTAND e.V. (DE), Dirui Industrial, Lifotronic Technology Co. Ltd. (CN), Beijing Wantai Biological Pharmacy Enterprise Co. Ltd. (CN), Nanjing RealMind Biotech Co., Ltd (CN), Shenzhen Drawray Biotech Co., Ltd. (CN), Stiftung für Pathobiochemie und Molekulare Diagnostik Referenzinstitut für Bioanalytik - SPMD-RfB (DE), Guangzhou Wondfo Biotech Co. Ltd. (CN).

Many challenges will have to be faced in 2025 focusing the areas for research, education, and collaboration.

I'd like to express my great appreciation to the IFCC Office staff and all the EB members and friends for their positive contribute.

Sergio Bernardini, Executive Board Secretary

TREASURER'S ANNUAL REPORT

During the first year of my second term as the IFCC treasurer along with the efforts and help of IFCC staff the annual dues of Full, Affiliate and Corporate Members were received, the adherence of IFCC operating units to their allocated budgeted were monitored and detailed records of all transactions were kept, reimbursements were processed immediately after the receipt of the claims from the IFCC office. Close collaboration was achieved with the IFCC investment bank (Credit Suisse now UBS) to optimize the financial return on IFCC investments. The annual accounts and financial actions will be reviewed by our KPMG accountants in order to finalize the actual income and expenses at 31st December 2024.

1. COMPARISON OF 2024 PROPOSED BUDGETS WITH ACTUALS AT 31st DECEMBER 2024
For the second time, we separated the actual budget from the sponsorships budget. The 2024 budget was expected to be closed with a deficit of CHF 641.627,62, but it was closed with a surplus of CHF 528.139,17.
Moreover, the sponsorships budget, with the previous year carryover expected to close with a surplus of CHF 641.672,62, but closed with a surplus of CHF 400.979,68 to be carried over to sponsorships budget of 2024 (Fig. 1) as CHF 131.893,79 had been used during 2024.
The increased 2024 performance is due to the fact that a significant part of the income from WorldLab/EuroMedLab 2023 Congress at Rome has been received in 2024 in addition with the profit of WorldLab 2024 Congress organized at Dubai.

IFCC Summary budget 2024

SUMMARY BUDGET	Proposal 2024	YTD real income/ expens
Total Income	1.648.321,24	2.310.879,25
Total Expenses	2.289.993,36	1.782.740,09
Net Income	-641.672,62	528.139, 17

SPONSORSHIP BUDGET ONLY	Proposal 2024	YTD real income/ expens
Total Income	0,00	4.734,30
Total Expenses	811.103,43	131.893,79
Yearly possible difference	-1.452.776,05	400.979,68
Balance with previous years carry over	0,00	

Figure 1. 2024 proposed real and sponsorships budget versus to actual real and sponsorships at 31st December 2024.

2. TOTAL OPERATIONAL REVENUES AND FINANCIAL INCOME

The actual total operational revenues and financial income were CHF 2,310,879.26 as presented per category in comparison with the budgeted income in Fig. 2.

IFCC INCOME 2024

	REVENUES & INCOME 2024	Budget 2024	Actual 2024
02 04 00	Full members (National Societies)	175.000,00	159.012,58
03 04 00	Corporate members	350.000,00	363.947,11
04 04 00	Affiliate members	5.000,00	4.384,24
06 02 01	Income from CLSI royalties	2.000,00	579,90
06 38 01	Revenue ICHCLR for Secretariat support	4.500,00	3.782,55
07 02 26	EuroMedLab – WorldLab Rome 2023	893.521,24	931.323,29
07 02 26	WorldLab Dubai 2024	50.000,00	378.518,61
08 00 01	Income for Scientific Division (SD) European Comm (ex IRMM)	45.000,00	70.592,58
10 00 01	Elsevier support AACC	3.000,00	2.812,50
12 01 01	Income from Comm. Publ. div. (CPD) Endorsement – including ADV	30.000,00	36.563,55
12 01 01	Yashraj Dist Clinical Chemist Award	9.650,00	0,00
12 01 02	Siemens – Henry Wishinsky Award dist Intl services	10.000,00	0,00
12 01 03	Abbott Award for dist. contribution in education	10.000,00	9.367,00
12 01 04	Abbott Award for significant contribution to molecular diagnostics	9.600,00	0,00
12 01 05	Award for Lab Med and Patient care Snibe 2024 / Mindray 2025	9.600,00	0,00
12 01 06	NIST/CLSI Robert Schaffer Award – Seoul 2022	7.500,00	0,00
12 01 07	Young investigator Award – IFCC – Snibe 2023	5.000,00	0,00
12 01 08	Hytest Award for contr. to cardiovascular diagnostic	9.600,00	9.609,00
12 01 09	Gerard Siest – Biologie prospective Award	9.600,00	0,00
12 01 10	Yashraj Dist women scientist Award	9.650,00	0,00
15 05 02	Income from marketable securities	0,00	0,00
18 00 00	FEN expenses reimbursed	100,00	0,00
18 01 01	Bank interest received	0,00	0,00
18 01 02	Realised profits on sales of investments	0,00	28.999,97
18 01 03	Unrealized profits on investments	0,00	165.475,20
19 80 02	Overhead on sponsorship projects	0,00	0,00
20 01 03	Profits on exchange	0,00	145.911,20
	TOTAL REVENUES & INCOME	**1.648.321,24**	**2.310.879,26**

	PROJECTS' SPONSORSHIP ONLY - INCOME 2024	Budget 2024	Actual 2024
06 39 01	Revenue ICHCLR – subaccount	0,00	0,00
08 05 21	Mass Spectrometry 2024 Conference Greece – profit	0,00	0,00
09 05 10	IFCC-AACC Pearls (EMD C-DL)	0,00	0,00
09 05 03	Abbott VLP sponsorship	0,00	0,00
09 05 03	Cardiac Biomarkers Committee – project sponsorship	0,00	0,00
09 05 03	C-POCT Satellite Rome surplus	0,00	0,00
13 05 21	Task Force Global eLearning/eAcademy sponsorship	0,00	0,00
13 05 21	Income for (instrumentation Lab – Werfen) travel scholarships	0,00	4.734,30
07 05 26	Dubai registration fees	0,00	0,00
	TOTAL SPONSORSHIP INCOME	**0,00**	**4.734,30**

Figure 2. The expected and actual income at 31st December 2024.

Thanks all the member Societies and Corporate members that supported IFCC throughout the years. Their continuous contribution have made possible the accomplishment of numerous IFCC tasks and projects. IFCC is grateful to the IVD industry for their support and active participation in the IFCC scientific events and the endorsement of the new form of virtual events. We also thank all the members for their loyalty and attention in paying dues at the start of the year, which helps the cash flow.

Divisions and some Functional Units raised some sponsorships funds which give them a certain flexibility in conducting projects. These sponsorships are used for the specific projects in due time. The unspent sponsorship funds are carried over to the next years. Unfortunately, in 2024 the IVD industry hasn't continued supporting such projects but we hope that this funding will restart in 2025.

3. TOTAL OPERATIONAL COSTS AND FINANCIAL CHARGES

The actual total operational costs and financial charges in 2024 were CHF 1.782.740,09 as presented per category in comparison with the budgeted Expenses in Fig.3. All amounts are in CHF.

IFCC GENERAL EXPENSES 2024 BUDGET TO 31 DECEMBER 2024 ACTUALS			
5. Organisations Affiliated with IFCC			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
05 01 00	APFCB	25.000,00	39,46
05 02 00	COLABIOCLI	25.000,00	13.159,30
05 04 00	EFLM share for EML	519.293,86	502.924,61
05 05 00	AFCB	25.000,00	19.515,53
05 06 00	AFCC	25.000,00	19.688,27
	TOTALE	**619.293,86**	**555.327,02**
6. IFCC Int/Reg Organisations			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
06 01 00	WHO	1.500,00	1.805,63
06 02 00	CLSI Participation	2.000,00	0,00
06 04 00	IUPAC	100,00	0,00
06 08 00	CIOMS	100,00	80,00
06 22 00	BIPM-JCTLM Participation	50.000,00	47.914,29
06 38 00	ICHCLR activities support	0,00	3.782,55
	TOTALE	**53.700,00**	**53.582,47**
7. IFCC Congress Committee (CC)			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
07 07 00	IFCC Symposia Speakers at Regional Congresses	25.000,00	20.064,07
07 80 00	CC Meetings	15.000,00	7.806,25
	TOTALE	**40.000,00**	**27.870,32**

	Organizations PROJECTS' SPONSORSHIP ONLY – EXPENSES		
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
06 39 00	ICHCLR subaccount carry over	200.293,34	4.304,93
07 07 03	EMD Symposium – WorldLab Seoul 2020 – Abbott	9.178,00	0,00
	TOTALE	**210.101,34**	**4.304,93**

8. IFCC Scientific Division (SD)

	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
	COMMITTES		
08 02 06	Nomenclature Properties and Units (C-NPU)	10.000,00	9.855,48
08 02 21	Molecular Diagnostics (C-MD)	10.000,00	0,00
08 02 23	Traceability in Laboratory Medicine (C-TLM)	10.000,00	2.763,11
08 02 25	Reference Intervals and Detection Limits (C-RIDL)	10.000,00	7.371,48
08 02 45	Standardisation of Thyroid Function Tests (WG-STFT)	10.000,00	7.046,71
08 02 27	Bone Markers (C-BM)	10.000,00	4.494,69
08 02 28	Molecular Diagnostics (C-MD) – Committee on Infectious Diseases	10.000,00	0,00
08 02 29	Committee on Molecular Diagnostics in Oncology (C-MDO)	10.000,00	0,00
	WORKING GROUPS		
08 03 35	Standardisation of HbA2 (WG-HbA2) – Stand of HbA2 Measmnt – Joint WG	3.000,00	1.925,57
08 03 39	Standardisation of Albumin in Urine (WG-SAU)	3.000,00	0,00
08 03 41	Growth Hormone (WG-GH)	3.000,00	0,00
08 03 42	Standardisation of Insulin (WG-SIA)	3.000,00	0,00
08 03 43	Standardisation of Troponin I (WG-TNI)	3.000,00	0,00
08 03 44	Harmonisation of Autoantibody Tests (WG-HAT)	3.000,00	0,00
08 03 45	Biomarkers of Neurodegenerative Diseases (WG-BND)	3.000,00	842,50
08 03 51	Commutability (WG-C) – WG in Metrological Traceability (WG-CMT)	3.000,00	154,85
08 03 53	WG Immunosuppressive drugs (WG-ID)	3.000,00	842,50
08 03 54	Apolipoproteins by Mass Spectrometry (WG-APO MS)	3.000,00	1.225,44
08 03 55	Pancreatic Enzymes (WG PE)	3.000,00	0,00
08 03 56	Fecal Immunochemical Testing (WG-FIT)	3.000,00	1.234,56

8. IFCC Scientific Division (SD)

	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
	WORKING GROUPS		
08 03 57	Cell free DNA (WG-cfDNA)	3.000,00	0,00
08 03 58	Procalcitonin (WG-PCT)	3.000,00	2.125,23
08 03 60	Continuous Glucose Monitoring (WG-CGM)	3.000,00	2.855,71
08 03 61	Development of a Ref Measmnt System PT/INR Stand (WG-PT-INR)	3.000,00	0,00
08 03 62	Neonatal Bilirubin (WG-NB) in cooperation with ETD	3.000,00	4.411,41
08 03 63	Natriuretic Peptides (WG-NP)	3.000,00	0,00
08 03 64	Standardisation of HDF (WG-HbF)	0,00	0,00
08 03 65	Global Tumor Marker Harmonisation Initiative (WG-TMH)	3.000,00	0,00
08 03 66	New Conference format for Clinical Mass Spectrometry (WG-CCMS)	3.000,00	0,00
08 03 67	Development of Ref material for Global Stand of fecal calproctctin immunoassyas (WG-FCI)	3.000,00	0,00
	OTHERS		
08 13 01	JCTLM Participation	5.000,00	2.116,51
08 13 02	Participation to JCGM (VIM GUM)	5.000,00	5.197,74
08 80 00	SD Meetings	25.000,00	23.641,96
	TOTAL	**168.000,00**	**78.105,45**

	SD PROJECTS' SPONSORSHIP ONLY – EXPENSES		
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
	SPONSORSHIP		
08 05 02	Standardisation of Thyroid Function Tests (WG-STFT) Sponsorship Phase IV	92.757,61	28.897,17
08 05 03	Standardisation of Carbohydrate-Deficient Transferrin (WG-SCDT) Spons.	13.659,79	2.045,10
08 05 04	Standard of PAPP A (WG-PAPP A) Sponsorship	28.885,05	0,00
08 05 05	Standardisation of Insulin (WG-SIA) Sponsorship	9.000,00	0,00
08 05 07	WG-PTH Project – Sponsorship (to be used by C-BM)	9.096,00	9.459,00
08 05 08	WG-TNI Project – Sponsorship	14.667,00	0,00
08 05 10	WG-FIT Project – Sponsorship	8.747,62	0,00
08 05 20	WG Apolipoproteins (WG-APO MS) Sponsorship	12.597,71	2.573,87

SD PROJECTS' SPONSORSHIP ONLY – EXPENSES			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
	SPONSORSHIP		
08 05 22	Mass spectrometry 2024 Conference Greece – profit	0,00	0,00
	TOTAL	**189.520,73**	**42.975,14**

9. IFCC Education and Management Division (EMD)			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
	COMMITTES		
09 02 04	Committee on Clinical Molecular Biology Curriculum (C-CMBC)	24.000,00	3.461,30
09 02 07	Committee on Evidence Based on Lab. Medicine (C-EBLM)	9.000,00	2.421,28
09 02 09	Committee on Clinical Laboratory Management (C-CLM)	12.000,00	7.887,32
09 02 11	Committee on Education use of Biomarkers in Diabetes (C-EUBD)	9.000,00	3.486,63
09 02 12	Committee on Cardiac Biomarkers (C-CB)	11.000,00	10.177,77
09 02 13	Committee on Chronic Kidney Disease (C-CKD)	9.000,00	842,50
09 02 14	Committee on Point of Care Testing (C-POCT)	9.000,00	4.674,59
	WORKING GROUPS		
09 03 08	WG Lab Error & Patient Safety	8.000,00	1.827,98
	SPECIAL PROJECTS		
09 04 02	Courses on Flowcytometry	8.000,00	793,08
	OTHER		
09 80 00	EMD meetings	25.000,00	18.088,45
	TOTAL	**124.000,00**	**53.660,90**

10. IFCC Communication Publication Division (CPD)			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
10 02 01	Committee on Public Relations	24.000,00	17.398,56
10 02 02	Committee on Internet and Digital Communications (C-IDC)	10.000,00	5.130,00
10 03 01	WG e-Journal	6.000,00	2.219,10
10 03 02	WG e-News	3.000,00	80,00
10 03 04	WG Ibero-American Nomenclature and Translations (WG-IANT)	3.000,00	2.941,91
10 04 00	Publications + Reprints CD, Posters, Exhibition	48.000,00	47.895,31
10 07 01	Internet and Web content	20.000,00	8.061,49
10 80 00	CPD Meetings	30.000,00	21.406,00
	TOTAL	**144.000,00**	**105.132,27**

EMD PROJECTS' SPONSORSHIP ONLY			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
09 02 10	Committee on Distance Learning (C-DL) – incl. IFCC-AACC Pearls	19.445,00	0,00
09 04 01	Visiting Lecturer Programme (VLP) previous years carry over	50.681,00	36.361,21
09 05 04	Committee of Cardiac Biomarkers (C-CB) – sponsorship only	116.919,55	15.399,85
09 02 14	C-POCT Durban/Rome Meeting surplus budget	6.632,19	0,00
	TOTAL	**193.677,74**	**51.761,06**

CPD PROJECT'S SPOSORSHIP ONLY			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
10 00 03	e-Academy	58.716,00	0,00
	TOTAL	58.716,00	**0,00**

11. IFCC Communication Technology Division (EPD)

	EXPENSES	BUDGET 2024	ACTUAL 2024
11 02 01	C-Emerging Technologies in Pediatric Lab Med (C-ETPLM)	14.000,00	8.415,13
11 02 02	C-Mobile Health & Bioengineering Lab Med (C-MHBLM)	14.000,00	1.676,48
11 02 03	C-Artificial Intelligence (prev WG-AIGD)	0,00	0,00
11 03 01	WG Guidance Implement custom-made genomic panels (WG-CGP)	3.000,00	713,08
11 03 04	WG Artificial Intelligence and Genomic Diagnostics (WG-AIGD)	3.000,00	4.016,72
11 03 04	WG Single Cell and Spatial Transcriptomics (WG-SCST)	3.000,00	2.072,42
11 03 05	WG Metabolomics in Lab Med (WG-M)	3.000,00	1.902,71
11 03 06	WG Method Evaluation Protocols (WG-MEP)	3.000,00	793,08
11 03 07	WG Health Technologies Assessment (WG-HTA)	3.000,00	0,00
11 03 08	WG Cardioimpact (WG-CARDIOIMPACT)	3.000,00	0,00
11 03 09	WG Microsampling (WG-MISP)	0,00	0,00
11 80 00	ETD Meetings	30.000,00	19.530,65
	TOTAL	**79.000,00**	**39.120,33**

ETD PROJECTS' SPONSORSHIP ONLY

	EXPENSES	BUDGET 2024	ACTUAL 2024
11 02 01	Durban Meeting surplus budget ICPLM	8.471,00	0,00
11 05 01	ICPLM Virtual satellite Munich	8.046,62	0,00
	TOTAL	**16.517,62**	**0,00**

13. IFCC Special Projects

	EXPENSES	BUDGET 2024	ACTUAL 2024
12 01 00	Brussels/Delhi Awards 2025/2026	60.000,00	43.026,12
13 01 01	Task Force on Ethics (TF-E)	10.000,00	7.255,47
13 01 06	Task Force for Young Scientists (TF-YS)	20.000,00	12.428,41
13 01 12	Task Force History (TF-H)	10.000,00	1.102,26
13 01 15	Task Force Corporate Members (TF-CM)	8.0000,00	6.355,78
13 01 17	Task Force on Global Newborn Screening (TF-NBS)	15.000,00	9,721,66
13 01 18	Task Force on Global Lab Quality (TF-GLQ)	15.000,00	23,833,12
13 01 19	Task Force on Outcome Studies in Lab Medicine (TF-OSLM)	50.000,00	18.865,65
13 01 20	Task Force on Global Reference Interval Consortium (TF-GRID)	40.000,00	19.640,17
13 01 21	Task Force on Global eLearning-eAcademy (TF-GEL)	20.000,00	12.408,70
13 01 22	Task Force Environmental Impact of Laboratory Medicine (TF-ELM)	20.000,00	793,08
13 01 23	Task Force on Laboratory Medicine Practice Guidelines (TF-LMPG)	0,00	2.108,53
13 02 01	Professional Scientific Exchange Programme (PSEP)	90.000,00	70.682,98
13 02 02	Professional Management Exchange Programme (PMEP)	25.000,00	25.422,10
13 03 02	IFCC Scholarships 2023 – TF-YS Forum Rome / Dubai	50.000	59.158,51
	TOTAL	**433.000,00**	**312.802,94**

14. IFCC Statutes & Rules

	EXPENSES	BUDGET 2024	ACTUAL 2024
14 01 01	Swiss Lawyers	10.000,00	20.051,35
14 01 02	Domicile Fees	2.500,00	1.836,85
	TOTAL	**12.500,00**	**21.888,20**

15. IFCC Financial Report			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
15 00 00	Bank Charges	5.000,00	18.513,45
15 00 01	Auditors Fees	25.000,00	38.756,57
15 00 02	Management of investments charge	0,00	0,00
15 00 03	Realised losses on investments	0,00	0,00
15 00 04	Unrealised losses on investments	0,00	0,00
	TOTAL	**30.000,00**	**57.270,02**

16. IFCC Organisational Matters			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
16 01 00	IFCC Office salaries	350.000,00	280.738,42
16 01 01	IFCC Office consultancy & rental expenses	35.000,00	46.768,65
16 01 02	IFCC Office consumable material and office support	20.000,00	17.361,98
16 01 03	IFCC Office Web Master / Technical Support	25.000,00	16.282,61
16 03 00	Nominations Committee travel expenses	500,00	0,00
16 05 00	Treasurer's Office	5.000.00	2.689,22
20 01 01	Depreciation and bad debts	1.000,00	994,30
20 01 02	Interest charges	0,00	0,00
20 01 03	Losses on exchange	10.000,00	5.202,81
	TOTAL	**446.500,00**	**370.004,01**

19. IFCC Executive Board (EB)			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
18 00 00	IFCC Foundation	0,00	0,00
19 06 00	General Conference	0,00	13.518,72
19 40 00	Accreditation Committee	0,00	0,00
19 80 00	EB Meeting and travels & International relations	110.000,00	81.642,91
19 80 01	President's travels & International relations	15.000,00	12.916,11
	TOTAL	**140.000,00**	**107.076,06**

SPECIAL PROJECTS' SPONSORSHIP ONLY – EXPENSES			
	EXPENSES	**BUDGET 2024**	**ACTUAL 2024**
13 05 22	Task Force on Global eLearning-eAcademy (TF-GEL) sponsorship	131.628,00	27.273,28
13 03 01	ROCHE Travel Scholarships – 2023/2024	10.942,00	5.579,38
	TOTAL	**142.570,00**	**32.852,66**

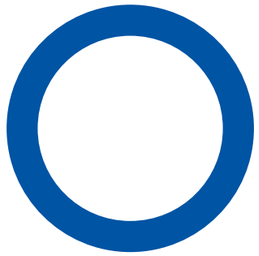
Figure 3. The expected and actual expenses per category at 31st December 2024.

4. TOTAL BALANCE at CREDIT SUISSE on 31 December 2024

Total amount of cash available on December 31st, 2024, when converted into CHF currency was CHF 3.161.948,60 and total amount of our safekeeping accounts (investments) was CHF 3.927.098 thus our total assets were CHF 7.089.046,60 in the as analyzed Table 1 and Figure 4

CURRENCY	TOTAL	TOTAL IN CHF
CHF	2,865,303.60	2,865,303.60
EUR	223,440.30	209,682.00
USD	95,958.74	86,963.00
XAU	0.00	0.00
TOTAL		**3,161,948.60**

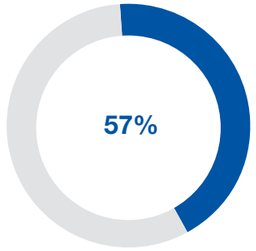
Table 1. Total Balance of cash by Currency at 31/12/2024



Value as of 31.12.24

CHF 7,089,045

International Federation of Clini, RET20



CHF 4,073,907

Portfolio Number S340399-85-4 (CHF)
Investment Solution USB Advice
Reference Currency CHF 4,073,907

CHF 3,015,138

Portfolio Number S340399-85-5 (CHF)
Reference Currency CHF 3,015,138

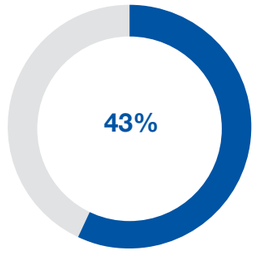


Figure 4. Balance of safekeeping portfolios in CHF (market value) at 31/12/2024

5. IFCC INVESTMENTS AT CREDIT SUISSE

Figure 5. Return of IFCC investments between 2017 to 31.12.2024 was +6.64%

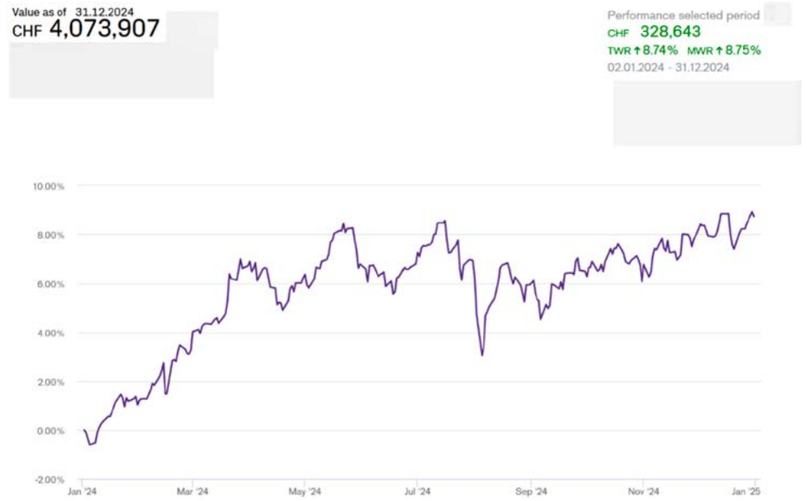


Figure 6. Return of IFCC investments between 01.01.2024 to 14.04.2024 was +8.74%

The important issues of the agreement with UBS are outlined as below:

- Investment strategy: Income oriented
- Risk Profile: Moderate
- Risk Budget: Moderate
- Reporting currency: CHF (with investments in three currencies: CHF, EUR, USD)
  Ticket fee model: 0.22% for the safekeeping fee (no investment fee).

Alexander Haliassos, IFCC Treasurer

CORPORATE MEMBERS' REPORT

Tricia Ravalico (Abbott)

Corporate Representative on the IFCC Executive Board (Jan 2024 – Dec 2024)

In 2024, the IFCC was pleased to welcome the following 10 new corporate members: Bejing Wantai Biological Pharmacy Enterprise, DIRUI Industrial, Greiner Bio-One, Guangzhou Wondfo Biotech, Instand, Lifotronic, Nanjing Realmind Biotech, SHENZHEN Drawray Biotech, Stiftung für Pathobiochemie und Molekulare Diagnostik (SPMD-RfB), and Zybio. This represents the highest new membership total in IFCC history, as pictured in the graph below.

Interest in new IFCC Corporate Membership comes mainly from China, representing 70% (7/10) of the new member positions in 2024, and 25% (17/66) of the total Corporate Members. Other top countries with stand-out membership include Germany (7), Italy (6), the US (6) and the UK (6). Not all IFCC Corporate Members are manufacturers, and all have relevance to laboratory medicine.

In 2024, Corporate Members contributed with annual fees of ~363.950- CHF to approximately 69% of IFCC's total direct annual income from its members (which comprise National Societies and Affiliate Member Societies as well). On top of this, IFCC received sponsorship for scientific or educational projects, awards, travel of students and lecturers, and congresses.

To enhance corporate relations, engagement and activity, the Task Force Corporate Members (TF-CM), continues to be active. Jean-Sebastien Blanchet (Beckman) served as the chair for one year but announced his inability to serve in the role for 2025 due to escalating business priorities. His report for the TF-CM has been reported separately. In brief, however, the TF-CMs is highly regarded and very successful with goals to ensure that Corporate Members' interests are properly addressed within IFCC (i.e. better representation of Corporate Members, more efficient discussion among Corporate Members, identification of common topics and interaction with the direct report to the IFCC Executive Board) and to increase the engagement of Corporate Members in IFCC since many Corporate Members are not actively involved in IFCC activities.

The Corporate Members make additional important contributions to IFCC activities: Numerous delegates from Corporate Members are actively engaged in most of the Task Forces, Committees, and Working Groups in all IFCC divisions and in their Executive Committees, either as full members or as corresponding members, as well as in the Congresses & Conferences Committee.

The following are the contact information for Corporate Representatives who are members of the Executive Committees of IFCC's 4 divisions and the Congresses & Conferences Committee. Please feel free to reach out to them in case you have questions:

- Scientific Division: Christian Vogl (Roche) (1st term Mar 2023-2025)
- Emerging Technologies Division: This division has two Corporate Representatives: Sven Ebert (Roche) (1st term 2024-2026), and Yan Liu (Mindray - Shenzhen Mindray Bio-Medical Electronics) (1st term 2023-2025)
- Education & Management Division: Dusanka Kasapic (Roche) (1st term Jan 2024 Dec 2026)
- Communications & Publications Division: Colleen Strain (Abbott) (1st term Jan 2024 (Dec 2026)
- Congresses & Conferences Committee: Angel de la Fuente (Roche). (1st term Jan 2024 -Dec 2026)

Not that all of the above corporate representatives for each division are in their first term, highlighting the power of active new member engagement.

The following persons were / are Corporate Members of the respective Congress Organizing Committees (COCs):

- IFCC / WorldLab 2024, Dubai, United Arab Emirates: Vincent Chen (Snibe) and Angel de la Fuente (Roche); May 26 - 30 2024
- IFCC-EFLM EuroMedLab 2025, Brussels, Belgium: Abir Alhelou (Abbott); May 18 - 22 2024

Outcome metrics shared in Dubai reinforce a strong overall satisfaction with the IFCC whereby 86% (n=19) of responding corporate members to an annual survey lead by the TF-CMs indicated satisfaction and another 14% (n=3) high satisfaction. There were no corporate members expressing any dissatisfaction in the 2024 survey.

The same survey assessed corporate member interest across 11 benefits offered by the IFCC as it relates to corporate member benefits. The top performing outcomes indicate that holding key influential positions on the key working groups, task forces and committees is the highest benefit for corporate members. This is an especially promising statistic since it is also associated with a 59% interest and 38% strong interest in Corporate Members wanting to become even MORE involved in the IFCC. The other top benefits receiving high votes across multiple companies is brand association with the global leading organization in laboratory medicine and supporting standardization and harmonization of IVD products.
In conclusion, I want to sincerely thank all Corporate Members and all IFCC officers for the partnership and vision to advance health excellence through laboratory medicine. I am grateful to active members of the IFCC TF-CMs and value the leadership across all companies who are serving as valued voice of our corporate membership.

Tricia Ravalico, Corporate Members Representative

COMMITTEE ON CONGRESSES AND CONFERENCES (C-CC)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

P. Laitinen	Chair	FI	2nd	2024 01 - 2026 12
A. Buño Soto	Member	ES	2nd	2024 01 -2026 12
W.H. Fang	Member	CN/TW	1st	2023 01 - 2025 12
V. Palicka	Member	CZ	1st	2023 01 - 2025 12
C. Tsatsanis	Member	GR	1st	2024 01 - 2026 12
C. A. de la Fuente	Corporate Member	Roche	1st	2024 01 - 2026 12
Dr. B.K.T.P. Dayanath	Corresponding Member	LK		
P. Jannetto	Corresponding Member	US		
Dr. July Kumalawati	Corresponding Member	ID		
I. Lukic	Corresponding Member	HR		
G. Panahi	Corresponding Member	IR		
S. Robinson	Corresponding Member	UK		
A. Sepici Dincel	Corresponding Member	TR		
R.R. Sinha	Corresponding Member	IN		
Olga Deli Vazquez Paulino	Corresponding Member	MX		

3. TERMS OF REFERENCE

Reporting instructions for Terms of Reference for all Committees, Taskforces and Working Groups, please provide the following information

Term of reference 1

ICCCLM (WorldLab) applications to host - Call for applications and then the evaluation and scoring of the applications and submitting a recommendation to the EB in regard to the best overall application.

List 2024 accomplishments for this Term of Reference

A call for bids for EuroMedLab2027 was sent to National Societies on June 10, 2024 with a deadline of September 30, 2024. Six (6) bids were received from four (4) National Societies:

1. London – UK
2. Istanbul - Turkey
3. Prague – Czech Republic
4. Athens Megaron - Greece
5. Athens Metropolitan – Greece
6. Thessaloniki - Greece

List 2024 accomplishments for this Term of Reference: EuroMedLabs are organized jointly by EFLM and IFCC, the bids were evaluated and scored by both organizations (EFLM C-ET and IFCC C-CC).

EFLM C-ET Evaluators:

Daria Pašalić, Croatia (EFLM, C-ET Chair)

James O'Connor, Ireland (EFLM, C-ET Member)

Note- according to guidelines committee members from state candidate must be excluded. Therefore, other C-ET members, (Petros Karkalousos from Greece and Eser Sozmen from Turkey) were excluded from evaluation process.

IFCC C-CC Evaluators:

Päivi Laitinen, Finland (IFCC, C-CC Chair)

Antonio Buno Soto, Spain (IFCC, C-CC Member)

Paul Jannetto, USA (IFCC, C-CC Corresponding Member)

Iva Lukic, Croatia (IFCC, C-CC Corresponding Member)

Woei-horng Fang, PR China, (IFCC, C-CC Member)

Shariyar Panahi, Iran (IFCC, C-CC Corresponding Member)

Rajiv Ranjan Sinha, India (IFCC, C-CC Corresponding Member)

Angel de la Fuente, Spain (IFCC, Corporate Member)

Note- according to guidelines committee members from state candidate must be excluded. Therefore, other C-CC Members and Corresponding Members (Vladimir Palicka, Czech; Christos Tsatsanis, Greece; Sarah Robinson, UK; Aylin Sepici Dincel, Turkey) were excluded from evaluation process.

According to the EFLM C-ET evaluation, the mean scores of the candidate cities are as follows: London (96), Athens-Metropolitan (89.5), Thessaloniki (88.5), Prague (86), Istanbul (84.5), Athens-Megaron (79).

According to the IFCC C-CC evaluation, the mean scores of the candidate cities are as follows: London (89), Istanbul (83), Athens Metropolitan (83), Thessaloniki (82), Prague (82), Athens Megaron (76).

Therefore, we jointly propose London to host the EuroMedLab 2027.

A call for applications to host WorldLab 2028 was sent out on September 20, 2024 with a deadline of January 31, 2025. By the deadline, four (49 bids was received (Buenos Aires, Argentina, Harare Zimbabwe, Shanghai, PR-China, Marrakesh, Algeria). C-CC will evaluate and score the bids.

List planned activities in 2025 for this Term of Reference

C-CC will evaluate and score the bids for WorldLab2028.

Term of reference 2

List 2024 accomplishments for this Term of Reference

EB approved the updated guidelines (Guideline for IFCC Auspices, IFCC Auspices

Application form and Guideline for the Organization of a Satellite Meeting to an IFCC-sponsored Congress or Conference) with some revisions. The revised guidelines were implemented and placed on the IFCC website.

List planned activities in 2025 for this Term of Reference

Waiting for EB approval of the following updated guidelines:

1. Guidelines for Preparation of the Scientific Program for an IFCC Internation Congress of Clinical Chemistry and Laboratory Medicine

2. Scientific Program Guidelines for an IFCC-EFLM EuroMedLab

C-CC will make the possible corrections suggested by EB.

Term of reference 3

The C-CC will promote and support Clinical Chemistry and Laboratory Medicine through congresses, conferences, symposia, webinars, master discussions, and other professional meetings. The IFCC is greatly interested in supporting the success of high quality scientific/ educational events that will contribute to the awareness and appreciation of Laboratory Medicine and its contribution to the delivery of appropriate health care.

The granting of IFCC Auspices and the involvement of the IFCC in high quality scientific/ educational events enhances

List 2024 accomplishments for this Term of Reference

IFCC Auspices were granted to 90 events of Laboratory Medicine. 52 applications were received from National Societies or Regional Societies and 38 applications were received from companies, mainly Snibe.

List planned activities in 2024 for this Term of Reference

C-CC will continue granting auspices to congresses, conferences, webinars, symposia and training events.

List planned activities in 2025 for this Term of Reference

Term of reference 4

The EB in collaboration with C-CC will make a written agreement with each meeting organizing committee to define the working relationship with the IFCC and the financial details, and will appoint a liaison from the C-CC to interact with the organizing committee.

The C-CC will maintain open and continuous communications with other IFCC units regarding the planning of meetings, and will promote the inclusion of IFCC functional units and experts in the programmes of these meetings.

List 2024 accomplishments for this Term of Reference

Vladimir Palicka was appointed as a member of the COC of WorldLab New Delhi 2026. He has attended the COC meeting in Delhi.

Antonio Buno Soto has been a member of COC of EuroMedLab Brussels 2025. He has attended COC meetings in Brussels.

Christos Tsatsanis has been appointed a member of the COC of EuroMedLab2027.

List planned activities in 2025 for this Term of Reference

A C-CC member for the WorldLab 2028 has to be appointed.

A call for IFCC sponsored symposia for New Delhi WorldLab 2026 as well as Regional Congresses (APFCB Kuala Lumpur 2027, COLABIOCLI Santa Cruz 2026) will be sent to IFCC EB, Divisions, Committees, Working Groups, Task Forces in 2025. The IFCC EB will select the IFCC sponsored symposia proposals and send them to the organizers of the congresses for final selection according to the scientific program to prove overlapping with other congress topics.

4. ADDITIONAL INFORMATION

EB dismissed three Corresponding Members due to their inactivity. They were Olga Deli Vasquez Paulino, July Kumalawati and B.K.T.P. DAYANATH.

5. 2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

A C-CC meeting during the WorldLab Dubai 2024. The meeting was held in person on May 27, 2024. All Full C-CC Members and three Corresponding Members were present (Antonio Bono Soto, Woei-horag Fang, Vladimir Palicka, Christos Tsatsanis, Päivi Laitinen, Paul Jannetto, Iva Lukic and Rajiv Sinha).

6. MEETING SCHEDULE IN 2025

A C-CC meeting will be held on May 19, 2025 in Brussels during EuroMedLab 2025.

Päivi Laitinen, C-CC Chair

SCIENTIFIC DIVISION (SD)

During 2024, the following members served on the SD Executive Committee:

Christa COBBAERT (NL)	Chair
Konstantinos MAKRIS (GR)	Vice-Chair
Saara WITTFOOTH (FI)	Secretary
Pradeep Kumar DABLA (IN)	Member
Vincent DELATOUR (FR)	Member
Hubert VESPER (US)	Member

Invited Representatives of International Organizations:

Christian VOGL (DE)	Corporate Rep.
Ralph D. JOSEPHS (FR)	BIPM Observer
Liesbet DEPREZ (BE)	EU Comm./JRC Observer
Ian YOUNG (UK)	ICHCLR Observer
Greg MILLER (US)	JCTLM Chair / SD Cons.
Chris BURNS (UK)	NIBSC Consultant
Yang ZHEN (CN)	NIFDC Observer
Karen PHINNEY (US)	NIST Consultant

Relationship with International Organizations

The SD continues to pursue the expansion of its activities to collaborate with international organizations to promote the implementation of the concept of traceability in laboratory medicine and the implementation of reference measurement systems.

Bureau International des Poids et Mesures (BIPM)

Joint Committee on Traceability in Laboratory Medicine (JCTLM)

Joint Research Center (JRC)

National Institute of Standards and Technology (NIST)

The International Consortium for Harmonization of Clinical Laboratory Results (ICHCLR)

Medicines and Healthcare Products Regulatory Agency (MHRA) (previously National Institute Of Biological Standards and Control (NIBSC))

European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

World Health Organization (WHO)

Activities of Committees and Working Groups

The Committees (Cs), which are theme-oriented, carry out much of the scientific and professional activities of the SD. Their work is often in close collaboration with other international organizations. For more specific tasks, the activities are usually accomplished through Working Groups (WGs).

Committees

C-Nomenclature, Properties and Units (C-NPU)

Chair: Young Bae Lee Hansen (DK)

Term of reference 1

To continuously provide advice for the management, updating and publishing of the NPU terminology

List 2024 accomplishments for this Term of Reference

The Joint committee of Committee (IFCC) and Subcommittee (IUPAC) on NPU terminology has a month meeting, except in July, in 2024 advising and managing the NPU terminology.

The NPU Steering Committee website continues to act as the main governance site (http://www.npu-terminology.org), while the NPU terminology itself can be searched from (http://www.ifcc.org/ifcc-scientific-division/sd-committees/c-npu/npusearch/).

List planned activities in 2025 for this Term of Reference

The joint committee will continue the work and meetings to develop the terminology

Term of reference 2

To make recommendations on NPU for reporting clinical laboratory data that conform to or adapt current standards of authoritative organizations, and that will improve their utilization for health care.

List 2024 accomplishments for this Term of Reference

A cooperation agreement between SNOMED CT and Steering committee has been signed and a work of planning has proceeded.

The NPU terminology has been accepted as a terminology in the FHIR environment.

List planned activities in 2025 for this Term of Reference

A continuously plan of a cooperation between SNOMED CT and NPU terminology is being scheduled in 2025.

Term of reference 3

To provide a connection with other organizations concerned with NPU such as the Bureau International des Poids et Mesures (BIPM), the European Committee for Standardization (CEN) and the International Organization for Standardization (ISO), and, by extension, clinical laboratory science societies such as the International Union of Pure and Applied Chemistry (IUPAC), and the in vitro diagnostics industry, to ensure that problems encountered by health care professionals in the area of NPU are considered by those organizations.

List 2024 accomplishments for this Term of Reference

Gunnar Nordin participate in BIPM WG2 meetings and provide input into the upcoming VIM4 (International Vocabulary of Metrology).

Daniel Karlsson reports to the NPU on IHTSDO/SNOMED-CT related matters.

The National Release Centres of Denmark, Norway and Sweden provide national NPU support for those countries and are represented both on the SC NPU and C-NPU.

List planned activities in 2025 for this Term of Reference

Continue to work with the NPU National Release Centres to ensure utility of the NPU terminology and review and respond to questions or concerns.

Continue the work with IUPAC on projects.

Continue communications with external metrology groups (e.g. BIPM WG2), ISO groups and IHTSDO representatives.

Term of reference 4

To act as a consultant group on NPU in clinical chemistry and, by extension, in the rest of clinical laboratory sciences to international scientific panels, regional and national clinical laboratory sciences organizations, editors of scientific journals, manufacturers of clinical laboratory instrumentation and products, and to individual clinical laboratory professionals and other health care professionals.

List 2024 accomplishments for this Term of Reference

-Chair and individual NPU members continue to be active with their societies, particularly in the informatics and terminology arenas

-NPU connected members are active as members of their respective national NPU release centres (NRCs)

-Gunnar Nordin continues to be active within the Joint Committee for Guides in Metrology Working Group 2 (JCGM WG2)C-NPU has contributed as a terminology advisor in the guidelines of correct use of the nomenclature of biochemical indices of bone status (.Guidelines for the correct use of the nomenclature of biochemical indices of bone status: a position statement of the Joint IOF Working Group and IFCC Committee on Bone Metabolism, https://doi.org/10.1515/cclm-2024-1148)

List planned activities in 2025 for this Term of Reference

- Continuation of activities described above
- A vacant titular membership of C-NPU will be open and been published through IFCC.
- A symposium will be held at the IFCC/EFLM EUROMEDLAB 2025 in Bruxelles.

ADDITIONAL INFORMATION

A publication about the NPU terminology in the Nordic countries has been released.

History, Implementation and Current Use of the IFCC-IUPAC's Nomenclature for Properties and Units (NPU) Terminology in Denmark, Norway and Sweden

EJIFCC. 2024 Oct 30;35(3):154-165. eCollection 2024 Oct.

2024 Meetings / conference calls held

26th January: One-hour virtual meeting

23th February: One-hour virtual meeting

22th March: One-hour virtual meeting

26th April: One-hour virtual meeting

10th May: One-hour virtual meeting

26th May Face to face meeting 7-hour meeting in conjunction to IFCC Worldlab Dubai 2024

28th June: One-hour virtual meeting

30th August: One-hour virtual meeting

27th September: One-hour virtual meeting

25th October: One-hour virtual meeting

29th November: One-hour virtual meeting

20th December: One-hour virtual meeting

Meeting schedule in 2025

A monthly virtual one-hour meeting for the joint committee will be scheduled for 2025, except for a meeting in July. A face-to face meeting will be held in conjunction to IFCC/EUROMEDLAB 2025

Publications/conference presentations/webinars

Publication:

Properties and units in the clinical laboratory sciences. Part XXVIII. NPU codes for characterizing subpopulations of the hematopoietic lineage, described from their clusters of differentiation molecules (IUPAC Technical Report)

A video presentation of the NPU terminology was produced for a CCQM Online Workshop on Digital and FAIR Chemical and Biological Reference Data and Certificates: Challenges and Opportunities from 9th-12th September 2024 to contribute to the development of the workshop recommendations.

C-Traceability in Laboratory Medicine (C-TLM)

Chair: Denis Grote-Koska (DE)

Term of reference 1

To support activities regarding Traceability in Laboratory Medicine, permitting IFCC to continue its international role in this area and providing an operating link between the SD and the WGs of the Joint Committee on Traceability in Laboratory Medicine (JCTLM), concerning identification of reference measurement procedures, reference materials and reference laboratories.

List 2024 accomplishments for this Term of Reference

C-TLM contributes to the JCTLM-DBWG as members of the following JCTLM Review teams:

- Enzymes
- Electrolytes and Blood Gases
- Vitamins and Micronutritients

Members/consultants of C-TLM participated at ISO TC212, WG II, Reference Systems. Especially, Anja Kessler, Patricia Kaiser and Denis Grote-Koska were particularly involved as drafting team in the revision of ISO 15193, which prescribes the conditions for reference measurement procedures. Furthermore, regarding ISO 15195 Grote-Koska and Kessler were initiating an important amendment, which will be set although no revision of the standard is scheduled.

Grote-Koska had some correspondence to the JCTLM secretariat for some updates and improvements of the JCTLM website.

List planned activities in 2025 for this Term of Reference

- Deal with request from JCTLM TEP to support on educational activities.
- The members of C-TLM will be faced with presentations in training webinars.
- Participation in JCTLM review teams shall be extended.

Term of reference 2

To support reference laboratories in the context of complete reference systems (accepted reference measurement procedures of higher order, reference materials, and reference laboratories) by establishing an External Quality Assessment Scheme (EQAS) for reference laboratories in order to monitor their competence.

List 2024 accomplishments for this Term of Reference

- Potential improvements of the RELA scheme was discussed at the meeting in Dubai.
- C-TLM initiated addition of pancreatic amylase as a new measurand in RELA. Therefore, correspondence with A. Kessler of the RfB was started and finally also Valproic acid was added for RELA 2025.
- The committee decided during a corresponding meeting to change the term limits of equivalence (LoE) into educational median range (EMR) to prevent known abuse from accreditation bodies. This seemed essential, because the LoE had been used falsely to decide between passing or not passing the EQA scheme.
- A new version of the IFCC RELA EQAS procedure manual was developed and released.

List planned activities in 2025 for this Term of Reference

• The wideness of tolerance limits EMR need a new and fundamental basis (Appendix in IFCC RELA EQAS procedure manual

• CDT as new measurand for RELA will be under investigation

Term of reference 3

To promote establishment and maintenance of IFCC reference laboratory networks for clinically relevant measurands (e.g. the IFCC HbA1c network).

List 2024 accomplishments for this Term of Reference

• The WG-PE network for the establishment of the PRMP for pancreatic amylase was by addition of that measurand to RELA

• WG-NB was supported by scientific discussion about bilirubin traceability and the involvement of Grote-Koska's calibration laboratory

List planned activities in 2025 for this Term of Reference

• At the EuroMedLab 2025 either the C-TLM chair shall participate in WG-NB meeting or a WG-NB representative should partipicate at the C-TLM meeting

• WG-CDT: addition of CDT to RELA will be dicussed to support the standardization developments of the finished WG

ADDITIONAL INFORMATION

New chair since 2024. Three new members during 2024. One members 2nd term is ending. A nomination is required.

2024 Meetings / conference calls held

WorldLab, 28th of May 2024, Dubai

Online, 29th of October 2024

Meeting schedule in 2025

EuroMedLab, May 2025, Brussels

One or more online meetings to discuss open questions of the Brussels meeting

C-Reference Intervals and Decision Limits (C-RIDL)

Chair: Thomas Streichert (DE)

Term of reference 1

RIs and Gestational Age

- **Protocol for pregnancy related Reference Intervals was established**
- **Data acquisition completed**
- **Initial evaluations were carried out using indirect methods**

List 2024 accomplishments for this Term of Reference

Critical review of whether indirect methods are really suitable for calculating pregnancy-related reference intervals, as the problem of gestational age and biological age and necessary data points arises here.

Results: Indirect methods (here TML) could be used for the verification of pregnancy related RIs but due to the above mentioned problems not for the establishment of new RIs. Ethical issues as well as the limited use of indirect methods suggest that the project should be terminated.

Term of reference 2

Education in verification of reference intervals with R including CRAN packages

List 2024 accomplishments for this Term of Reference

- Workshop on Indirect methods (Thomas Streichert)
- Data cleaning procedure before indirect calculation
- Comparison of different direct and indirect methodologies
- Online Tool –RefineR, TML, reflimR
- New online-tool: https://kc.uol.de/rifindr/

The indirect methods provide a range of options for verifying or evaluating reference ranges as well as for establishing new reference limits. However, as the methods are complicated, further education and training is required. In this respect, further practical exercises are planned as part of the meetings.

- Presentation with practical examples from Georg Hoffmann of the Cran-Package: Reference Limit Estimation Using Routine Laboratory Data
- Frank Klawonn: Importance and Uncertainty of λ-Estimation for Box–Cox Transformations to Compute and Verify Reference Intervals in Laboratory Medicine
- Georg Hoffmann, Frank Klawonn: Latest publication on the reflimR package and Introduction to a machine learning approach to challenging data sets where both reflimR and refineR fail to estimate a plausible RI

List planned activities in 2025 for this Term of Reference

Education and Training will stay an important part of the C-RIDL work in 2025.

Term of reference 3

RLS for geriatric people (Yeşim Özarda)

- **Data from Turkey was analysed using various indirect methods**
- **Manuscript in preparation**

List 2024 accomplishments for this Term of Reference

Work in progress

List planned activities in 2025 for this Term of Reference

Completion of manuscript and publication.

Term of reference 4

Update on Guideline CLSI EP28 (Yachana Kataria)

List 2024 accomplishments for this Term of Reference

YK updated C-RIDL and C-RIDL made a comprehensive review of the CLSI EP28 guideline. TS worked on the review and made comments to the EP28 guideline.

List planned activities in 2025 for this Term of Reference

Finished

ADDITIONAL INFORMATION

YO and I discussed possible publications – especially reviews. The update on Ris is one topic.

Together with TF-GRID (Jakob Zierk) we proposed an educational workshop at the EuromedLab in Brussels. Proposed: IFCC Symposium Sponsorship – Invitation – EML Congress, Brussels, BE

May 18-25, 2025. The title of the symposium: New Options for Reference Intervals

With increasing digitalization and digital patient records, laboratory test results are not only in the hands of specialists, but also in the hands of patients. In order for their interpretation to be successful, good reference limits are required, ideally with gender specificity, and -where necessary- with fine age granularity addressing both groups, medical specialists as well as patients.

Current indirect approaches to RI estimation in particular offer the possibility of a) verifying existing limits, b) estimating new limits and c) developing these in a medical context into continuous intervals and even personalized reference intervals that correspond to human biology.

The title and name of the speaker for each of the 4 presentations:

1. Discrete or Continuous Reference Limits? Options in the Light of Electronic Patient Archives.
2. Thomas Streichert
3. The Global Reference Interval Database – A valuable Resource for Laboratory Medicine.
4. Jakob Zierk
5. Reference Interval Harmonization – Is it possible?
6. Victoria Higgins or Ken Sikaris (also possible Mary Kathryn Bohn or Khosrow Adeli - to request)
7. Personalized and Population-Based Reference Intervals. Abdurrahman Coşkun (to request)

- Educational Workshop

Proposal for a joint TF-GRID/C-RIDL 1 day Pre-Congress Satellite Meeting: Indirect Reference Interval Methods: Educational Course & Hands-on Workshop in Brussels 2025 (Option Sunday)

The IFCC TF-GRID and C-RIDL aim to conduct a one-day satellite meeting prior to the IFCC Brussels 2025. The underlying aim is to support the framework for reference interval education, determination and comparisons.

The goals are to:

- Provide an educational opportunity for reference interval theory and statistical practice
- Promote the tools that will be used on the TF-GRID website
- Provide a workshop for hands-on, critical deployment indirect reference interval tools (refineR) using sample data that explores the technical principles and impacts.

Programme (prelim.):

TIME	DURATION	TOPIC	SPEAKER
EDUCATIONAL WORKSHOP			
08:45	15 min	Welcome and introduction	J Zierk & T Streichert & IFCC Nominee
09:00	15 min	Importance of Reference Intervals;	nn
09:15	45 min	Reference Intervals Theoretical Basis	MK Bohn
10:00	45 min	Statistical Approaches to Reference Intervals	A Coskun
10:45	15 min	Morning Tea	
11:00	45 min	Identifying health by excluding disease	KA Sikaris
11:45	45 min	Modern tools for reference Interval analysis	AB Leichtle
12:45	60 min	Lunch	
HANDS-ON-WORKSHOP: PARTICIPANTS ANALYSE DATASETS ON THEIR OWN LAPTOPS IN A CLASSROOM-STYLE ENVIRONMENT			
C	15 min	Introduction to workshop	T Streichert
13:45	45 min	Workshop Group Activities A (focus: R)	JZ/KAS/MKB
14:30	45 min	Workshop Group Activities B (focus: refineR)	JZ/ABL/AC
15:15	15 min	Afternoon Tea	
15:30	60 min	Presentation of Group Activities	Participants
16:30	30 min	Conclusions and Discussion	J Zierk

Jakob Zierk (jakob.zierk@uk-erlangen.de), TF-GRID Chair

Thomas Streichert (thomas.streichert@uk-koeln.de) C-RIDL Chair

2024 Meetings / conference calls held

C-RIDL meeting online on March 5, 2024C-RIDL meeting in presence:

May 26, 2024, at the WorldLab Congress in Dubai

C-RIDL meeting online on June 7, 2024

C-RIDL meeting online on September 13, 2024

C-RIDL meeting online on November 29, 2024

Meeting schedule in 2025

C-RIDL meeting online in March 2025

C-RIDL meeting in presence:

May 19, 2025, at the IFCC EFLM EuroMedLab Brussels 2025

C-RIDL meeting online planned in August and November 2025

C-Standardisation of Thyroid Function Tests (C-STFT)

Chair: Katleen Van Uytfanghe (BE)

Term of reference 1

Establish a system to maintain traceability of free thyroid hormone and TSH measurements.

List 2024 accomplishments for this Term of Reference

Maintaining the reference system for fT4:

The focus for this item is the creation of reference laboratory capacity and the coordination of activities conducted by the reference laboratories to leverage synergies and minimize duplication. Success is indicated in having a functional network of reference laboratories (FT4 RLnetwork) that are active in standardizing FT4 measurements performed in clinical and research settings. Furthermore, it is indicted in new organizations being interested in joining the network and in publications being available or currently under review.

- A network of reference laboratories was established consisting of the following laboratories: Ref4U (Belgium), CDC Clinical Reference Laboratories (USA), Radboud University Medical Center of Nijmegen (The Netherlands), and Reference Material Institute for Clinical Chemistry Standards (Japan). Interest for joining the network was indicated by 4 organization. One of these organisations has presented his candidate RMP during the C-STFT meeting held in May 2024. Further communications are ongoing.
- The Network held dedicated meetings to discuss and finalize the performance criteria for the network, the design of regular interlaboratory comparisons that will allow the continuous evaluation of network members, and the requirements for new members to enter the network. New members will have to present their method in the annual C-STFT meeting using a fixed template, they will also have to confirm that they engage to support the goal of the network and acknowledge the requirements put forward by completing a check list. Templates for the slides to be used, the engagement form and the check list are finalized. A final report is under preparation in the format of a publication by Dr. Van Uytfanghe.
- The design of the next method comparison study is finalized, sample sets are being prepared and will be shipped at the earliest convenience. The intention is to have the samples measured spring 2025 depending on the capabilities of each of the networks' laboratories.
- While the method and services of Ref4U and the method of CDC are already registered in the JCTLM database, the Radboud laboratories published their methods, which is a required step for JCTLM review. It is planned to have all reference methods and labs either listed in the JCTLM database or being ISO accredited.
- Ref4U provided reference measurement services to different organisations for FT4, but also for TT4. Ref4U provided consultancy on the development and validation of FT4 (reference) measurement procedures.
- CDC laboratory is providing reference measurements to the U.S. Collage of American Pathologists Accuracy-based surveys. Furthermore, it is providing technical assistance to manufacturers related to assay recalibration. CDC Clinical Standardization Programs have put in place a formal standardization program for FT4 with reference measurements linked to the IFCC- C-STFT reference system.
- The laboratory at Radboud University provided measurements for FT4 in a research study to assess FT4 status in specific patient populations.
- ReCCS is supporting FT4 standardization in Japan.

Maintaining the reference system for TSH:

The focus of this item is on ensuring continuation and consistency of harmonization by creating a follow-up panel for TSH. At the same time, the C-STFT is assisting with coordinating harmonization activities conducted by manufacturers and national/regional organizations.

- The study design to create and characterize the next TSH harmonization panel according to ISO 21151 was completed, Ethics approvals and Material Transfer Agreements for collecting and processing sera are in place. Specimen collection is finalized (about a 150 samples from different donors were collected).
- With help of the colleagues at CDC samples were aliquoted and samples sets, tailored to each manufacturers measurement range were assembled. Samples are planned to be shipped to all of the IVD manufacturers around December 6th 2024. Repository samples will be further stored at the facilities of the CDC Clinical Standardization Programs. The samples should be measured by the end of January 2025. One of the IVD-participants performed viral testing. Dr. Andersen and her colleague L. Andersen assisted in designing the individual sample sets and the templates used for reporting results.
- C-STFT provided assistance to NIBSC with characterization of the candidate 4th WHO International Standard for human TSH (81/615). The material is needed to link TSH measurements to International Units.
- TSH harmonization based on the IFCC C-STFT reference system is officially implemented in Japan and assay manufacturers are now using the harmonization panel to adjust assay calibration. A manuscript is being drafted.
- To ensure continuation and consistency of harmonization of TSH reference measurement system a more professionalized way of collecting samples should be established. This might need cooperation with professional organizations and/or industry, which needs to be explored. In the framework of these activities Ben Cowper was added as an additional consultant for the C-STFT. This also includes reviewing the conditions under which manufacturers can source aliquots of an established new follow-up harmonization panel for TSH.

Term of reference 2

Coordinate programs to evaluate free thyroid and TSH assays with regards to their analytical performance.

List 2024 accomplishments for this Term of Reference

Coordinate national/regional programs related to FT4 standardization and TSH harmonization

The C-STFT strategy is to ensure consistent calibration to the IFCC C-STFT system globally and to coordinate their implementation on a national/regional level. This allows regional and national organizations to customize activities to meet regional needs and requirements as outlined in relevant regulations and clinical practice guidelines ("Calibrate globally – Implement locally").

B1: FT4

- Ref4U, CDC and the laboratory at Radboud University provide reference measurement services to all interested parties.
- CDC Clinical Standardization Programs runs a Thyroid Hormone Standardization Program. CDC ensures that the program is linked to the IFCC C-STFT by being a successful member of the reference laboratory network. Results were presented at scientific meetings and made available to the IFCC C-STFT.
- ReCCs is working on a national program to standardize FT4 measurements. Relevant stakeholders are working with the Japanese reference laboratory.
- Accuracy-based EQA providers in the Netherlands and the U.S. use the IFCC C-STFT reference laboratory network for fT4 for target value assignments.

B2: TSH

1. The TSH harmonization in Japan is linked to the IFCC C-STFT harmonization panel Harmonized measurement are now used in patient care.

Reference material providers such as NIBSC (UK) and NIST (USA) collaborate with the IFCC C-STFCT reference system for reference material characterization.

List planned activities in 2025 for this Term of Reference

2. Assist with the development and establishment of national/regional programs to standardize/harmonize TSH and FT4 through formal standardization programs and/or by supporting accuracy-based EQA programs.
3. Ensure national/regional efforts are linked to the IFCC C-STFT reference system by making that system available to those efforts.

Term of reference 3

Develop reference intervals for free thyroid hormones and TSH.

List 2024 accomplishments for this Term of Reference

IFCC C-STFT is supporting the generation of regional/local reference intervals using methodologies that are standardized/harmonized to the IFCC C-STFT reference system. Because harmonized and standardized assays have not been available until recently. The development of reference intervals linked to the C-STFT reference system has been slow.

- The reference intervals established in Japan as part of TSH harmonization are as of 2021 officially been used.
- CDC is working with national surveys and other studies to assess the feasibility for establishing reference interval in the U.S. population.
- C-STFT continues communications with researchers to assess the possibility of using existing study and patient data as well as analysing samples in new reference interval studies.
- Work on reference intervals by our member Andersen S has been published. Wigh IMN, Andersen L, Lundgaard MH, Torp NMU, Karmisholt J, Andersen S, Andersen SL. Agreement between routinely used immunoassays for thyroid function testing in non-pregnant and pregnant adults. Clin Endocrinol (Oxf). 2024 Apr 17. doi: 10.1111/cen.15062. Epub ahead of print. PMID: 38630936.

List planned activities in 2025 for this Term of Reference

Coordinate with principal investigators and organizations work related to developing reference intervals to ensure new refence intervals are generated with standardized and harmonized assays. Continue to try to work with the IFCC C-RIDL.

Term of reference 4

Liaise with key stakeholders to promote the use of the standardized assays in routine clinical practice and public health, to ensure analytical performance requirements meet clinical needs, and to help with developing and establishing reference intervals.

List 2024 accomplishments for this Term of Reference

Dr. Van Uytfanghe represents the C-STFT in an American Thyroid Association (ATA) working group that prepares a manuscript about current practices on thyroid hormone measurements. 3 manuscripts were published by this group. Based on this work, an ATA pocket guide was featured. It is accessible on the ATA website: Clinical Practice Guidelines Pocketcards | American Thyroid Association

Dr. Van Uytfanghe maintained and updated the IFCC C-STFT website. The list with publications based on the C-STFT activities has been updated. A page summarizing our article 10.1515/cclm-2023-1332 is uploaded. A page with information on the FT4 Reference laboratory network is under construction.

A proposal was written for a IFCC sponsored symposium at the 2025 EuroMedLab Congress, this proposal was not withheld.

Dr. Van Uytfanghe gave an interview on the TSH harmonization activities that will be part of an article to be published in CAP today. The article is available via the following link: Digging into the interpretation of TSH results - CAP TODAY

Dr. Van Uytfanghe provided prof. C Spencer with material to update the Thyroid Manager Chapter "Thyroid Function Tests Assay of Thyroid Hormones and Related Substances"

Dr. Danilenko has attended the Annual ATA meeting, Dr. Andersen has attended the Annual ETA meeting.

Arrangements were made to organize 2 EFLM webinars. The first one on TSH will be held on May 27th 2025. The one on FT4 is planned early 2026.

JCTLM Database has received funding from IVD and NMIs to automate the submission and review process. Database expansion is expected to come out in early 2025. New ISO standards 15193 and 15194 are expected in October 2024 and will be incorporated in the new automated process.

A proposal is submitted for an IFCC Live Webinar in 2025. If accepted, we have asked to hold the webinar in Fall 2025, and we have asked for the possibilities to also invite members of e.g. ATA, ETA, etc

List planned activities in 2025 for this Term of Reference

- Educate stakeholders, such as those conducting reference interval studies, about the importance of using standardized/harmonized assays. This is achieved by reaching out to principal investigators of large epidemiological studies and those using data form electronic health records.

- Continue to work with professional organizations such as the ATA to increase awareness about the importance of standardization in patient care and public health. This is achieved by publishing and continuing the work conducted by the ATA working group mentioned above. *The possibility to invite members of the professional organisations to attend the webinars mentioned below will be explored.
- Continue to publish and present work conducted by IFCC C-STFT members and other organizations performing or supporting work of thyroid function test standardization. This is achieved by conducting scientific sessions at (inter)national meetings such as the IFCC, AACC and other organizations.

* 2 EFLM webinars are foreseen, a proposal for an IFCC live webinar is under review.

* Explore the possibilities of a more active participation at ETA and ATA meetings.
- Update website to better communicate changes associated with fT4 standardizing and TSH harmonization.

2024 Meetings / conference calls held

Meetings open to all members, corresponding members, industry partners and other interested partners:

In conjunction with IFCC WorldLab May 2027th 2024

Meetings with members only
- 10/01/2024, 29/01/2024, 14/03/2024, 25/04/2024, 26/05/2025, 15/11/2024, 18/12/2024
- Several specific calls were organized in order to e.g. select new members of the C-STFT, etc
- FT4 RLnetwork meetings
- 31/1/2024, 13/06/2024, 15/11/2024
- TSH harmonization meetings
- Several calls were organized to discuss practicalities in the organization of the work discussed under Terms of Reference 1

Meeting schedule in 2025

There is no formal meeting schedule for the members only, FT4 RLnetwork or TSH harmonzation meetings, however regular meetings will be needed in order to follow-up with the different projects that are ongoing.

Our annual general C-STFT meeting is scheduled in conjunction with IFCC EuroMedLab, May 2025 in Brussels.

We proposed to organize a IFCC Live Webinar in fall 2025. If this proposal is not accepted, alternatives will be explored.

Publications/conference presentations/webinars

See also list of the list of accomplishments for Terms of Reference 4.

Publications by different C-STFT members, based on the activities with the C-STFT or the FT4 RLnetwork.

Cowper B, Lyle AN, Vesper HW, Van Uytfanghe K, Burns C. Standardisation and

harmonisation of thyroid-stimulating hormone measurements: historical, current,

and future perspectives. Clin Chem Lab Med. 2024 Jan 31. doi:

10.1515/cclm-2023-1332. Epub ahead of print. PMID: 38295422.

Wigh IMN, Andersen L, Lundgaard MH, Torp NMU, Karmisholt J, Andersen S, Andersen SL. Agreement between routinely used immunoassays for thyroid function testing in non-pregnant and pregnant adults. Clin Endocrinol (Oxf). 2024 Apr 17. doi: 10.1111/cen.15062. Epub ahead of print. PMID: 38630936.

Publications from the ATA working group, with active participation of Dr. Van Uytfanghe to ensure information is mentioning or in line with the C-STFT activities.

Loh TP, Ehrenkranz J, Halsall D, Hoff K, Spencer CA, Van Uytfanghe K, Köhrle

J. Response to Fitzgerald et al. re: "Thyroid Stimulating Hormone and Thyroid

Hormones (Triiodothyronine and Thyroxine): An American Thyroid Association-

Commissioned Review of Current Clinical and Laboratory Status". Thyroid. 2024

Feb;34(2):276-278. doi: 10.1089/thy.2023.0604. Epub 2024 Jan 17. PMID: 38236706.

Thyroid Hormones GUIDELINES Pocket Card - Clinical Practice Guidelines Pocketcards | American Thyroid Association

Others

Digging into the interpretation of TSH results - CAP TODAY

Raverot V, Metrat S, Perrin P, Abeillon J, Lasolle H. MacroTSH: still a big problem for clinicians and clinical biochemists: lessons from a case report. Eur Thyroid J. 2024 May 9;13(3):e240013. doi: 10.1530/ETJ-24-0013. PMID: 38642575; PMCID: PMC11103749.

C-Bone Metabolism (C-BM)

Chair: Etienne Cavalier (BE)

Term of reference 1

PTH Standardisation

List accomplishments for this Term of Reference since October 2023

Exchange of samples with CDC for measurement with the Liege and CDC higher order methods (LC-MS/MS and HR-MS). Measurement of these samples with different immunoassays.

List planned activities in 2024 for this Term of Reference

Measurement and report of the results.

Due to transport issues, the samples have not been able to come from the CDC to Liege. We are working on that and will use a professional third party provider. Unfortunately, this has a cost that will need to be covered by the IFCC Committee funds. Samples from Liege have safely arrived in the US.

Term of reference 2

Bone Turnover Biomarkers

List accomplishments for this Term of Reference since October 2023

Finalization of the nomenclature paper. Presentation of this new nomenclature to the IOF WG on bone indices standardization.

Organization of a workshop (under ESCEO auspices) for the revision of the 2011 paper.

The nomenclature paper has been published and the 2024 recommendations paper has been submitted. Editorial will be also published.

List planned activities in 2024 for this Term of Reference

Publication of the 2 papers.

Seeking for a maximization of endorsements for the nomenclature paper.

Term of reference 3

Vitamin D

List accomplishments for this Term of Reference since October 2023

Collection of samples from pregnant women has started in Graz.

List planned activities in 2024 for this Term of Reference

Finalization of the recruitment.

Publication of the paper using measurement uncertainty (Etienne Cavalier)

2024 Meetings / conference calls held

Meeting at the WCO meeting in London on April 10th

Meeting at the IFCC Worldlab in Dubai

Meeting proposals

Meeting during Euromedlab Brussels

Publications/conference presentations/webinars

doi.org/10.1515/cclm-2024-1148

Working Groups

WG-Standardization of Hemoglobin A2 (WG-HbA2)

Chair: Gabriel Arsene (DE)

Terms of reference 1

To promote the standardization of hemoglobin A2 measurement through the definition of an international reference system, including a reference measurement procedure and primary and secondary reference materials.

List 2024 accomplishments for this Term of Reference

The Certified Reference Materials (CRMs) for HbA2 have been produced and released by the JRC (ERM-DA485/IFCC and ERM-DA486/IFCC). These CRMs as well the Reference Measurement Procedure have been submitted to be listed in the JCTLM database.

List planned activities in 2025 for this Term of Reference

To monitor the implementation of the Reference System by the manufacturers and all the stakeholders.

ADDITIONAL INFORMATION

After internal discussion between the two WGs we propose to merge this WG together with that on HbF standardization.

2024 Meetings / conference calls held

1. 22 May 2024 (by Zoom)

2. In person at the IFCC Secretariat in Milano, 25 September 2024

Meeting schedule in 2025

1. By Zoom, mid February (date not decided yet)

2. In person at the Euromedlab meeting in Bruxelles IFCC Secretariat in Milano, 21 May 2025

Eventual two additional virtual meetings, depending on the developments of the actions related to the terms of reference.

Publications/conference presentations/webinars

A publication on the achievements and future activities has been prepared for CCA and submitted to the IFCC SD for comments and possible future endorsement.

WG-Standardization of Carbohydrate-Deficient Transferrin (WG-CDT)

Chair: Jos Wielders (NL)

Term of reference 1

Promoting the use of the HPLC reference measurement procedure (RMP) as the accuracy base for CDT test standardization

List 2024 accomplishments for this Term of Reference
Ongoing business, a Letter to the Editor (submitted for eJIFCC) should support the use of the RMP and announce the concept internationally once more.
List planned activities in 2025 for this Term of Reference
Ongoing contacts with national societies in some European countries. Some kind of IFCC support would be very welcome.
Ongoing contacts with international EQA organisations.

Term of reference 2

Maintaining sustainability of an international network of reference laboratories

List 2024 accomplishments for this Term of Reference

Work is ongoing, results of the 2024 IFCC Quality round have been received, evaluated and discussed at the past September meeting (by WG members Siebelder and Schellenberg). Reference laboratories have received individual feedback and advice (from WG member Schellenberg).
List planned activities in 2025 for this Term of Reference
Samples for the 2025 round will be launched early 2025 and results discussed with the reference laboratories at the Brussels congress in May.

Term of reference 3

Supporting the worldwide standardization of commercial methods against the RMP

List 2024 accomplishments for this Term of Reference
Work is ongoing, results of the 2024 IFCC Quality round have been received, evaluated and discussed at the past September meeting with the manufacturers
List planned activities in 2025 for this Term of Reference
Samples for the 2025 round will be launched early 2025 and results discussed with the manufacturers of industrial kits at the Brussels congress in May.

Term of reference 4

Offering consultation concerning use of biomarkers of alcoholism towards national or international agencies

List 2024 accomplishments for this Term of Reference

Ongoing contacts in some countries, for example Sweden, Netherlands, Belgium, Italy, Ukraine by several WG members. There were no special requests for consultation from such agency to the WG.

An offer autumn 2024 for consultation and sharing knowledge to the British DVLA (by WG chair) was not accepted by them.

List planned activities in 2025 for this Term of Reference

Ongoing contacts plus active offering consultation and sharing knowledge to medical and governmental organisations in a number of EU countries.

Ongoing contacts and offering of consultancy to manufacturers concerning use and quality of their products.

Term of reference 5

Providing scientific support for the production and delivery of authorised CRM

List 2024 accomplishments for this Term of Reference

Ongoing business for the MCA laboratory in Winterswijk, represented by WG member Siebelder

List planned activities in 2025 for this Term of Reference

Ongoing business.

Term of reference 6

Supporting the development of guidelines for clinical use of CDT assays

List 2024 accomplishments for this Term of Reference

WG members Tagliaro and Porpiglia were asked to prepare a manuscript on the use of CDT to diagnose alcoholism for the Italian Group of Forensic Toxicologists (GTFI). Other experts in Italy were asked to do the same thing with the other currently available biomarkers with the final aim of putting together official guidelines to be approved and released by the GTFI. The final document is currently under revision and will be shared with the WG once available.

List planned activities in 2025 for this Term of Reference

Except for the WG members participation in the Italian guideline mentioned, no other WG involvement is known in new or updated national guidelines on harmful use of alcohol or Fitness to Drive.

ADDITIONAL INFORMATION

Initial plans to broaden the scope of the WG to other biomarkers of harmful use of alcohol have been abandoned, after contact with the IFCC president.

Present status and planned activities 2025

Based on the very limited possibilities of most WG members (being retired) it is a realistic and desirable goal to change the WG into a committee that is mainly active with the sustainability of the RMP and the references laboratories.

I addition consultancy for CDT users could go on.

Looking forward to 2025 / 2026 new WG members, running their own lab and capable of becoming a reference lab, are needed. In addition, new knowledge of mass spec methods (next to HPLC) would be favorable.

2024 Meetings / conference calls held

See previous half year progress report : video meeting WG members with prof Cobbaert.

Annual meeting at Amsterdam Schiphol Airport September 25th. Some members attended by video connection.

Several ad hoc phone contacts between WG members. Ongoing.

Meeting schedule in 2025

Brussels May 18th 2025

Publications/conference presentations/webinars

See half year report:

1. JCTLM listing of the CDT RMP in january 2024
2. Position paper “Recommendations / Position paper IFCC WG-CDT” Clinica Chimica Acta 555 (2024) 117800
3. eIFCC Letter to the Editor (submitted november 2024 / under review)

WG-Standardization of Albumin Assay in Urine (WG-SAU)

Chair: Jesse Seegmiller (US)

Term of reference 1

Analyzed and published comparison studies on 10 urine specimens for urine albumin using the reference measurement procedures from NIST (LC-MS/MS), Singapore (LC-MS/MS) and the University of Minnesota Advanced Research and Diagnostic Laboratory (LC-MS/MS). Mayo Clinic’s reference measurement procedure was still in development and they were not able to publish.

List planned activities in 2025 for this Term of Reference

Application for laboratories to the Joint Commission in Laboratory Medicine is underway.

2024 Meetings / conference calls held

A virtual meeting was held October 28th. Representatives from industry and the FDA were present to discuss moving forward after JCTLM approval.

Meeting schedule in 2025

No meetings are currently scheduled for 2025.

Publications/conference presentations/webinars

W Greg Miller, Lorin M Bachmann, Jeffrey Budd, Ashley Beasley-Green, Karen W Phinney, Hwee Tong Tan, Tang Lin Teo, Qinde Liu, Seiei Shiba, Jesse Seegmiller, Extent of Equivalence of Results for Urine Albumin among 3 Candidate Mass Spectrometry Reference Measurement Procedures, Clinical Chemistry, Volume 70, Issue 11, November 2024, Pages 1375–1382,

WG-Growth Hormone (WG-hGH)

Chair: Michel Vos (NL)

Term of reference 1

To establish a higher order Reference Measurement System for enabling hGH standardization of commercial IVDs, encompassing both the development of Reference Materials and a harmonized Reference Measurement Procedure. The RMP should be set-up in at least two calibration labs, and preferentially in a network of calibration labs.

List 2024 accomplishments for this Term of Reference

The WG worked on getting all the paperwork together to conduct a human subject study to obtain high levels of growth hormones (intense cycling). The plan is to collect about 200 mL of serum (whole unit) from participants in the next months.

Pilot studies (Dr. Lentjes at UMC Utrecht) indicated that high levels of growth hormones can only be obtained with younger individuals (<35 years) after strenuous exercise.

This specimen collection was planned to be completed by end of the year. However, the head of the department of Sports Medicine UMC Utrecht is asking for a scientific review of the literature to obtain the most efficient protocol (step-wise increase in resistance for x minutes). The protocol is planned to be finished December 2024. As the main cycling test for GH induction also requires preventive cardiovascular testing to prevent adverse events, participants have to be planned for two days. The department of Sports Medicine is likely to plan time for GH induction in February 2025, also depending on their primary care agenda. Costs for this collection round are currently covered by a grand from the Dutch Society for Clinical Chemistry.

List planned activities in 2025 for this Term of Reference

Interlab study beginning of 2025 (pending upon receipt of blood from human study) with about 20 labs and manufacturers. Mass spec labs lined up in the Netherlands and Germany for value assignments.

ADDITIONAL INFORMATION

Dr. Vos asked whether there is a system in place to identify collection sites in the future as obtaining blood samples with high hGH is very challenging and costly.

Dr. Vos asked whether it would be possible to have a basic roadmap from the IFCC on how to conduct these kinds of projects also in view of sustainability.

2024 Meetings / conference calls held

The WG communicates twice per year. Last few times only via email as the human subject study preparation proceeded slowly and there was not much to report. Fall 2024 meting was cancelled as no blood specimens were collected yet.

Meeting schedule in 2025

1st meeting 12th of February with a follow-up every 2 months.

WG-Standardization of Insulin Assays (WG-SIA)

Chair: Randie Little (US), Co-Chair: K. Kabytaev (US)

Term of reference 1

To develop a traceability chain for the standardization of insulin

List 2024 accomplishments for this Term of Reference

We are continuing our work on developing an insulin LC-MS Reference Method. After unsuccessfully exploring chemical-based separation techniques, we are now examining antibody enrichment. This approach, when combined with LC-MS after enrichment, has the potential to meet the analytical performance requirements of a reference method. The main challenge was securing a reliable source for antibody-based separation; however, one manufacturer donated antibody-modified magnetic beads. Currently, we are focused on examining and optimizing the experimental conditions.

On a positive note, we recently hired a researcher with the appropriate background who can dedicate his time to continuing the development of the reference system.

We are also in the manuscript preparation stage for a comparison study of insulin assays among leading manufacturers. We used 40 sets of secondary commutable calibrators, prepared from serum samples, to compare 13 insulin methods. The variation among assays, measured as CV for each individual sample, ranged widely from 9% to 111%.

Additionally, we have expanded our committee by adding a corporate member.

List planned activities in 2025 for this Term of Reference

We will be collecting another batch of secondary reference materials for insulin.

Our ongoing work on the insulin reference method will focus on enhancing sensitivity.

2024 Meetings / conference calls held

We held a virtual C-peptide and insulin standardization meeting on October 1, 2024. The event had good participation from both academic and corporate sectors, with more than 50 attendees.

Meeting schedule in 2025

We are likely to hold our 2025 meeting virtually, as we have observed that virtual meetings tend to achieve better attendance.

WG-Standardization of Troponin I (WG-TNI)

Chair: Claudia Swart (DE)

Term of reference 1

Development of a candidate secondary reference measurement procedure and candidate secondary reference material for cardiac troponin I (cTnI)

List 2024 accomplishments for this Term of Reference

PTB and TÜBITAK UME are still improving a potential primary reference measurement procedure. TÜBITAK UME has also looked into peptides as calibrators as a cheaper alternative to whole protein internal standards. A bilateral project on the investigation of the influence of different forms of cTnI (macrotroponin, complexes of the subunits, phosphorylation) on results of potential reference measurement procedures and routine methods, financed by both the Turkish and the German research funding societies (TÜBITAK and DFG), has started and will run until 2027. After establishing the necessary methods, the investigations will be expanded to NIST RM 8121.

NIST and UMSOM have prepared the secondary RM NIST RM 8121. Currently, the commutability study for the four levels of this material is performed at the UMSOM laboratory of Rob Christenson. The necessary clinical samples have been collected so that they cover the four levels of the RM evenly. The set-up of the study has been discussed with SD-EC and the design has been adjusted according to the recommendations.

List planned activities in 2025 for this Term of Reference

The preparation of cTnI with defined phosphorylation state and preparation of macrotroponin is planned for the year 2025 as well as the first tests of the influence of such modifications on different antibody bindings.

NIST and UMSOM will investigate a potential link of RM 8121 to the primary cTnI reference material SRM 2921a depending on the results of the commutability study.

Term of reference 2

Testing for cTnI standardization and clinical validation by comparison with validated commercial assays in a round robin study.

List 2024 accomplishments for this Term of Reference

To show that standardisation of cTnI measurements is possible, a commutability study is currently conducted by the WG. A list of FDA cleared high sensitivity cTnI assays for the commutability study has been established in cooperation with the cooperate members, including:

- ARCHITECT STAT i2000SR hs-cTnI (Abbott)
- Alinity i (Abbott)
- Access 2 hs-cTnI (Beckman Coulter)
- UniCel DxI (Beckman Coulter)
- PATHFAST cTnI-II (LCI Medisense)
- ADVIA Centaur TNIH (Siemens Healthineers)
- Atellica IM TnIH (Siemens Healthineers)
- Dimension EXL hs-cTnI (Siemens Healthineers)
- Dimension VISTA hs-cTnI (Siemens Healthineers)

As all platforms named above are available in R. Christenson's laboratory at UMSOM, it was agreed by the WG to perform all measurements in this laboratory. A draft of the commutability study protocol, agreed by the WG, was submitted to IFCC SD. The comments of IFCC SD were included in the protocol accordingly.

All required clinical samples for the commutability study have been collected. The necessary reagents, calibration materials and quality control materials have been purchased by NIST.

All clinical samples have been assessed for their concentration level using the Atelica hsTNI immunoassay at the UMSOM laboratory. The samples were frozen at -80 °C directly after collecting. The sample concentrations are evenly distributed over the whole clinical range. To fulfil the recommendations published by G. Miller et al. (Clinical Chemistry 2023, 69(9), 966–975), 448 measurements of clinical samples and 108 measurements of the RM have to be performed for each assay. The first measurements have been started.

List planned activities in 2025 for this Term of Reference

The commutability study will be completed in the first half of 2025 and the results will be discussed within the working group. Depending on the outcome, a manuscript for publishing the results will be prepared and the next steps to achieve harmonisation/standardisation of cTnI measurements will be decided.

2024 Meetings / conference calls held

Online meetings were held in March, May and October 2024.

Regular meetings of WG Chair with the organisers of the commutability study, K. Phinney and M. Lowenthal (NIST) and Rob Christenson (UMSOM) at least once a month.

C. Swart presented the work of the WG at the APFCB symposium in Sydney and the IFCC satellite meeting in Athens in November 2024.

Meeting schedule in 2025

Online meeting after completion of the measurements for the commutability study to discuss the results.

In-person meeting is planned in connection with the EUROMEDLAD 2025 in Brussels.

Publications/conference presentations/webinars

The status of the commutability study will be submitted as a contribution to the EUROMEDLAB 2025.

Depending on the outcome, a manuscript for publishing the results of the commutability study will be prepared.

WG–Harmonisation of Autoantibody Testing (WG-HAT)

Chair: Dr Joanna Sheldon (UK)

Term of reference 1

The production of certified reference materials for the quantification of autoantibody concentrations – IgG antibodies to beta-2 glycoprotein 1. Note – this material is now included on the JCTLM database.

List accomplishments for this Term of Reference since Spring 2024

Dr. Liesbet Deprez (JRC), Prof. PierLuigi Meroni (Milan It), Dr. Rohan Willis (Texas US), Dr. Maria Orietta Borghi (Milan It) and Dr. Caludia Grossi (Milan It) and Dr. Joanna Sheldon (London UK) continue to discuss the potential impact of ERM-DA477/IFCC on the harmonisation of the measurement of IgG anti beta2 glycoprotein 1 antibodies.

The group in Milan are leading the work on patients with well-defined clinical anti phospholipid syndrome where measurement of IgG anti beta2 glycoprotein 1 antibodies will be central to the diagnosis and management of the patients. A publication summarising the work is being prepared.

List planned activities in 2025 for this Term of Reference

To continue work on the manuscript with the hope for submission in 2025. JS has been invited to a meeting of the Autoantibody Standardisation committee of Eular in Spring 2025.

Term of reference 2

The production of certified reference materials for the quantification of autoantibody concentrations in Coeliac disease.

List accomplishments for this Term of Reference since Summer 2024

Dr Liesbet Deprez presented the report on the anti tTG IgA and IgG material to the WHO ECBS meeting in October 2024 and the material was accepted. It will be released by the JRC early in 2025.

Term of reference 3

The production of certified reference materials for the quantification of IgG anti glomerular basement membrane antibodies.

List accomplishments for this Term of Reference since Summer 2024

The raw material (approx. 4L) has been processed (defibrination and delipidation) and the resulting in 3500 1ml units.

List planned activities in 2025 for this Term of Reference

The homogeneity and stability studies are in progress and the data from these studies will be processed in 2025. The JRC are currently sourcing patient samples for commutability studies and sited to rune the value assignment protocols.

2024 Meetings / conference calls held

JS and ED are in regular contact when issues arise regarding these projects.

WG-Biomarkers of Neurodegenerative Diseases (WG-BND)

Chair: Henrik Zetterberg (SE)

Term of reference 1

Standardization of CSF Abeta40

Subgroup leads: Magda Korecka and Les Shaw.

List 2024 accomplishments for this Term of Reference

Promising data for a candidate reference method for CSF Abeta40 in place. Commutability for CSF-based reference material for Abeta40 started.

List planned activities in 2025 for this Term of Reference

Commutability study for CSF Abeta40.

Term of reference 2

Standardization of CSF T-tau

Subgroup leads: Chiara Giangrande and Sylvain Lehmann

List 2024 accomplishments for this Term of Reference

Candidate reference method for CSF T-tau in place. Commutability studies underway.

List planned activities in 2025 for this Term of Reference

Formal certification of reference method (submission to JCTLM). Commutability study for CSF T-tau methods in planning.

Term of reference 3

Plasma P-tau217 standardization

Subgroup leads: Henrik Zetterberg and Nicholas J Ashton

List 2024 accomplishments for this Term of Reference

Round robin and pilot commutability study completed (Ashton, Keshavan et al., A&D in press).

List planned activities in 2025 for this Term of Reference

Development of antibody-independent mass spectrometry-based candidate reference methods and new commutability study in planning.

Term of reference 4

Standardization of plasma neurofilament light

Subgroup lead: Johan Gobom

List 2024 accomplishments for this Term of Reference

Candidate reference method developed. Round robin study performed.

List planned activities in 2025 for this Term of Reference

Formal commutability study in planning. JCTLM submission of candidate reference method in preparation.

2024 Meetings / conference calls held

- IFCC WorldLab 2024 (hybrid)
- AAIC Philadelphia (hybrid)

Meeting schedule in 2025

XXVI IFCC-EFLM EUROMEDLAB 2025

Publications/conference presentations/webinars

- IFCC WorldLab 2024: Lecture
- AAIC Philadelphia: Global Biomarker Standardization satellite symposium, lecture

https://pubmed.ncbi.nlm.nih.gov/39228740/

WG-Commutability in Metrological Traceability (WG-CMT)

Chair: Greg Miller (US)

Term of reference 1

Advise IFCC Committees and Working Groups on how to assess the commutability of materials on which they are working.

List 2024 accomplishments for this Term of Reference

Assisted WG-TNI with design of their commutability assessment for new troponin I reference materials.

List planned activities in 2025 for this Term of Reference

As requested by other WGs or Cs.

Term of reference 2

Establish procedures and recommendations for using commutable reference materials in a metrological traceability hierarchy.

List planned activities in 2025 for this Term of Reference

Manuscript “Fauskanger PK, Sandberg S, Johansen J, Keller T, Budd J, Miller WG, Stavelin A, Delatour V, Panteghini M, Stove B. Quantification of difference in non-selectivity between in vitro diagnostic medical devices” was accepted by Biometrical Journal to complete the previous ToR addressing commutability criteria for EQA materials.

This paper is the statistical background for the approach recommended in reference 8 below.

Current Projects:

1. Recommendations to verify commutability for a new batch of a reference material.

Manuscript “Deprez L, Johansen JV, Keller T, Budd J, Greenberg N, Weykamp C, Sandberg S, Panteghini M, Ceriotti C, Barczak E, Rej R, Fauskanger PK, MacKenzie F, Camara JE, Lyle An, W. Miller WG, Delatour V, for the IFCC Working Group on Commutability in Metrological Traceability. Recommendations for assessing commutability of a replacement batch of a secondary calibrator certified reference material” was submitted to Clinical Chemistry.”

2. Recommendations for using a CRM in the calibration hierarchy for a measurement procedure when the clinical sample matrix is different than that of the CRM.

An outline has been developed for how to approach the situation, and possible technical solutions have been discussed. Anticipate a manuscript will be submitted in 2025.

List planned activities in 2025 for this Term of Reference

Two new projects will be added to the work plan.

1. Recommendations for demonstrating commutability with CS for an end-user measurement procedure that was not included in a commutability assessment for an RM.
2. Recommendations for matrix related influences of materials (including internal QC materials) used to estimate imprecision of end-user measurement procedures.

ADDITIONAL INFORMATION

A new work item related to the work of WG-CMT was approved by ISO TC212 “In vitro diagnostic medical devices — Requirements for determining commutability of certified reference materials used as secondary calibrators or trueness controls.” Greg Miller was appointed as the project lead. Several WG-CMT members will be involved as ISO TC212 WG2 members.

2024 Meetings / conference calls held

All virtual meetings: Jan 4, Feb 2, Feb 14, Mar 19, May 2, Jun 24, Jul 22, Sep 12, Oct 21.

Meeting schedule in 2025

January 27 (virtual), others to be scheduled.

May 21, 2-6pm, during the EuroMedLab meeting in Brussels.

Publications/conference presentations/webinars

1. Miller WG, Schimmel H, Rej R, Greenberg N, Ceriotti F, Burns C, Budd JR, Weykamp C, Delatour V, Nilsson G, MacKenzie F, Panteghini M, Keller T, Camara JE, Zegers I, Vesper HW, for the IFCC Working Group on Commutability. IFCC Working Group Recommendations for Assessing Commutability Part 1: General Experimental Design. Clin Chem 2018;64:447-54.
2. Nilsson G, Budd JR, Greenberg N, Delatour V, Rej R, Panteghini M, Ceriotti F, Schimmel H, Weykamp C, Keller T, Camara JE, Burns C, Vesper HW, MacKenzie F, Miller WG, for the IFCC Working Group on Commutability. IFCC Working Group Recommendations for Assessing Commutability Part 2: Using the Difference in Bias Between a Reference Material and Clinical Samples. Clin Chem 2018;64:455-64.
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WG - Immunosuppressive Drugs (WG-ID)

Chair: Caroline Stobe (DE)

No report received

WG-Apolipoproteins by Mass Spectrometry (WG-APO MS)

Chair: L. Renee Ruhaak (NL)

Term of reference 1

To achieve standardization of a panel of clinically relevant serum apolipoproteins (apo) A-I, B, C-I, C-II, C-III, E and apo (a) (including qualitative phenotyping where needed). Standardization is done in such a way that measurement results are traceable to SI as outlined in ISO 17511. Other traceability chains will be used in cases where traceability to SI cannot be achieved.

List 2024 accomplishments for this Term of Reference

Reference measurement procedure

The reference measurement procedure for apo(a) was published in 2023. The analytical validation of the reference measurement procedure for apoA-I and apoB is currently ongoing and expected to be finished in Q1 2025. The working group aims for submission of the RMP for JCTLM listing in May 2025, as well as publication of the method for ApoA-I and ApoB with similar timelines.

The laboratories have worked to better harmonize their procedure and work towards JCTLMlisting.

A network of calibration labs running the same harmonized RMP

A full draft of a manuscript on the level of harmonization between the three calibration laboratories has been prepared and reviewed by the IFCC-SD and WG members. The manuscript is currently in the second round of review for publication in Clinical Chemistry.

Novel medication targeting the covalent bond between apo(a) and apoB in the Lp(a) particle is currently in clinical trials. It is currently not known whether this would lead to the presence of free apo(a) in the circulation and what clinical consequences of such free apo(a) would be. The working group assesses the impact of the presence of free apo(a) in both immunoassays and the RMP to ensure accurate results. Finalization of this activity is planned for Q2 2025.

Primary reference materials

Peptide-based calibration for the apolipoproteins, as initially envisioned, has provided significantly different results compared to the serum protein based calibration. Therefore, we had to reconsider the feasibility of peptide-based calibration by the end of 2023. As a plan B, experiments have been performed using an alternative recombinant protein based approach. Initial results for apo(a) provide consistent results between peptides and based on a first preliminary value assignment using amino acid analysis, concentrations similar to the previous reference material SRM2B were obtained. Formulation of the recombinant material in delipidized serum provides accurate and stable calibration, and consequently, the use of recombinant protein as a primary reference material seems technologically feasible.

Primary reference materials should ideally serve as the calibrators in the reference measurement procedure. This requires sufficient amounts of recombinant protein to perform purity, stability and value assignment studies, as well as serve as long-term calibrators. The working group therefore evaluated the production and purchase of gram-amounts of recombinant materials. However, this is very time-consuming and costly. Moreover, ideal protein materials do not carry tags typically used during the production of the recombinant materials, and carry human post-translational modifications. This is currently not easily accomplished by recombinant protein manufacturing procedures.

Consequently, the working group has decided to work on a two-track solution: a value transfer protocol will be developed and executed from the remainders of the current reference materials for apo(a), apoA-I and apoB. Meanwhile, the feasibility of using smaller amounts of recombinant protein, which could only serve for value assignment of the secondary reference materials is evaluated. This adjusted strategy would imply that the reference measurement procedure will be calibrated using secondary reference materials.

Secondary reference materials

Secondary RMs for apo(a)/Lp(a)

An alternative supplier on the European continent, located closely to JRC, Belgium to reduce the number of F/T cycles, has been contacted. Collaboration with the alternative supplier is very constructive, and legal/ethics framework has been put in place. Consequently, the selection of donors, blood donations in selected donors, and the production of the matrix based secondary reference materials has commenced. Final preparation of the secondary reference materials for apo(a) is envisioned Q1/Q2 2025.

Secondary RMs for apoAI and B

For apoAI and apoB a first commutability study to assess the suitability of matrix-based candidate reference materials has been performed; the data has been reported, and a first draft manuscript has been shared amongst coauthors. The manuscript is anticipated to be submitted by Q4 2024. Along with the preparation of the secondary reference materials for apo(a), the same supplier will also produce secondary reference materials for apos A-I and B. Discussions on the exact amount of reference materials and number of vials is ongoing.

List planned activities in 2025 for this Term of Reference

- ìThe influence of free/fragmented apo(a) on both LC-MS and IA methods will be evaluated to determine if free/fragmented apo(a) could cause discrepant results between LC-MS and IA based results. Finalization of this activity is planned for Q2 2025.
- ìPreparation of a dossier for submission of the RMP for apo(a) to JCTLM is planned for 2025. Submission of the RMP to JCTLM is foreseen in the round of 2025.
- ìThe protocol to aid IVD manufacturers in documenting the effect of transitioning towards nmol/L and recognizing the limitations of immunoassay-based tests at the high concentration end, will be operational in Q2 2025.

- Analytical validation of the RMP for apo(a) was performed. However, it is not finalized for the other apolipoproteins (A-I, B, C-I. C-II, C-III and E). This is foreseen to be finalized Q1 2025.
- Production of the secondary reference materials for apo(a), apoA-I and apoB has been started. Availability of the materials is foreseen by Q2 2025. A value transfer protocol for value assignment of the secondary reference materials is in preparation and will be executed by the calibration labs in 2025.
- Assessment of the feasibility of small scale production of recombinant protein based primary reference materials for value assignment of secondary reference materials to enable SI traceability is foreseen for Q1 2025. If feasible, this strategy will be further pursued throughout the remainder of 2025.

Term of reference 2

To evaluate clinical performance and clinical utility of serum apolipoprotein panel(s) for CVD risk stratification and treatment, in comparison to or together with contemporary blood lipids.

List 2024 accomplishments for this Term of Reference

Apolipoprotein profiles were measured in samples from an RCT comprising >20.000 ACS patients. The clinical performance as well as clinical utility of the baseline serum apolipoprotein profile -on top of the lipid profile- was evaluated. Results indicate much increased performance of a model with the apolipoproteins included compared to just the classic lipid panel. Moreover, through statistical modelling, apolipoproteins could aid in the selection of those patients that would benefit from treatment using PCSK9 inhibitors. A manuscript on these findings has been prepared and is under review for publication in Circulation.

List planned activities in 2025 for this Term of Reference

Besides the cohort of >20.000 ACS patients, the apolipoprotein profile has also been measured in >6.000 obese individuals as well as a control group representing the average Caucasian population. Statistical evaluation of these data to establish reference values as well as the added value of the apolipoprotein profile for the prediction of cardiovascular disease is ongoing and submission of a manuscript describing these findings is anticipated in Q1 2025.

To evaluate the impact of racial differences on the distribution of apolipoproteins, specifically apo(a), the LUMC intends to quantify apolipoproteins in a cohort study comprising six groups from multiple ethnicities. This work is expected to be performed and published in 2025.

2024 Meetings / conference calls held

Thursday 15 February 2024	17:30 – 18:30 CET
Thursday 28 March 2024	17:30 – 18:30 CET
Monday 1 July 2024	17:30 – 18:30 CEST
Thursday 12 September 2024	17:30 – 18:30 CEST
Thursday 14 November 2024	17:30 – 18:30 CET
Thursday 19 December 2024	17:30 – 18:30 CET

An in-person meeting was held at the occasion of Worldlab 2024 in Dubai, UAE: Tuesday May 28th 2024, 8:30-13:00h.

Meeting schedule in 2025

An in-person meeting is scheduled at the occasion of EuroMedLab 2025 in Brussels, Belgium: Tuesday May 20th 2025, 8:30-13:00h.

Moreover, virtual meeting have been planned:

Thursday 13 February 2025	17:30 – 18:30 CET
Thursday 17 April 2025	17:30 – 18:30 CEST
Thursday 12 June 2025	17:30 – 18:30 CEST
Thursday 4 September 2025	17:30 – 18:30 CEST
Thursday 30 October 2025	17:30 – 18:30 CET
Thursday 11 December 2025	17:30 – 18:30 CET

Publications/conference presentations/webinars

Reijnders E, van der Laarse A, Ruhaak LR, Cobbaert CM. Closing the gaps in patient management of dyslipidemia: stepping into cardiovascular precision diagnostics with apolipoprotein profiling. Clin Proteomics. 2024 Mar 1;21(1):19. doi: 10.1186/s12014-024-09465-w. PMID: 38429638; PMCID: PMC10908091.

Diederiks NM, Ruhaak LR, Romijn FPHTM, Pieterse MM, Smit NPM, Cobbaert CM. An LC-MS-based designated comparison method with similar performance to the Lp(a) reference measurement procedure to guide molar Lp(a) standardization. Clin Proteomics. 2024 Jan 24;21(1):5. doi: 10.1186/s12014-023-09446-5. PMID: 38267848; PMCID: PMC10809433.

van der Burgt YEM, Romijn FPHTM, Treep MM, Ruhaak LR, Cobbaert CM. Strategies to verify equimolar peptide release in mass spectrometry-based protein quantification exemplified for apolipoprotein(a). Clin Chem Lab Med. 2024 Oct 28. doi: 10.1515/cclm-2024-0539. Epub ahead of print. PMID: 39450666.

Presentations were held at several conferences globally, including:

- An IFCC-sponsored symposium was held at the occasion of Worldlab 2024, Dubai UAE, during which presentations were held by Prof. Cobbaert and Dr. Ruhaak
- An IFCC-sponsored symposium was held at the occasion of APFCB 2024, Sydney, Australia, during which presentations were held by Dr. Vesper, Prof. Hoofnagle, Dr. Ruhaak and Prof. Cobbaert
- Results of the commutability study for apoA-I and apoB were presented as selected oral presentation from the abstracts at the occasion of APFCB 2024, Sydney, Australia

WG – Pancreatic Enzymes (WG-PE)

Chair: Antje Staaden (DE)

No report received

WG-Faecal Immunochemical Testing (WG-FIT)

Chair: Sally Claire Benton (UK)

Term of reference 1

To harmonise and/or standardise analysis of haemoglobin in faecal samples by immunochemistry (FIT)

List 2024 accomplishments for this Term of Reference

Good progress has been made over the past year which has included additional work looking at commutability of different reference materials on the four FIT methods. Conclusions from this are that a significant difference exists between the quantitative results of FIT systems so a common threshold is not justifiable. Harmonisation is required.

A CRM for FIT has been identified. This needs to be in a lyophilised form for long term stability. The CRM will need to be diluted in the FIT system specific extraction buffer.

CRM is traceable to WHO international standard haemiglobincyanide NIBSC 98/708.

List planned activities in 2025 for this Term of Reference

Production of FIT CRM is planned and alongside this there will be 3 stages of feasibility testing. Once this occurs and if all tests passed then there will be a CRM available for manufacturers to calibrate against which we hope will be available in 2 years.

Protocol has been designed by Liesbet Deprez with input from a FIT-WG harmonisation subgroup. Analysis is carried out at the Bowel Cancer research lab in Guildford, England

Stage 1

Aim: Assess if Hb is stable during the production process (includes dilutions and lyophilisation step) and short storage period (1 month)

Assess if the applied buffer should not interfere with Hb measurements on the various FIT systems

Short outline: Make 3 pilot batches of FIT CRM at 3 different Hb levels corresponding to following Hb levels on faecal samples: 10 µg/g, 40µg/g and 160 µg/g

Timing: Pilot batches prepared in November-December 2024

Measurements January-February 2025

Stage 2

Aim: Test the effect of adding faecal matrix of well controlled composition

Short outline:Use pilot batches of FIT CRM (if they were found suitable in test 1) and compared the results obtained with and without with a faecal matrix

The faecal matrix was prepared according to a standardized protocol

Timing: Measurements Q1-Q2 2025

Stage 3

Aim: Test commutability of the pilot batches of FIT CRM (with or without standardized faecal matrix) with real faecal samples

Short outline: Compare the pilot batches of FIT CRMs with at least 40 real faecal samples (spiked or natural Hb)

Timing: Measurements Q2-Q3 2025

Term of reference 2

To establish EQA and 3rd party IQC programmes

List 2024 accomplishments for this Term of Reference

Global survey carried out of all EQA schemes to understand who has EQA schemes and what the EQA scheme looks like. This has been lead by Carolyn Piggott and Marc Thelan supported by EQA subgroup.

List planned activities in 2025 for this Term of Reference

Submit summary of survey along with recommendations for EQA scheme for FIT for publication to peer-reviewed journal.

There have been several enquiries to the working group regarding the availability of 3rd party QC/IQC and the availability of EQAS.

2024 Meetings / conference calls held

October 2024 – Vienna Austria. Hybrid meeting. 8 in person and 10 on teams. Meeting held to coincide with World Endoscopy organisation FIT for screening meeting

June 2024 – Virtual meeting with the whole group

A number of meetings of the Harmonisation sub group and the EQA sub group have occurred over the year to ensure progress with projects. Updates are then provided to the whole FIT-WG at a minimum of two meetings a year

Meeting schedule in 2025

Whole group meeting – face to face/ hybrid. Euromedlab, Brussels, May 2025.

Publications/conference presentations/webinars

Update on the International Harmonisation of FIT methods. World Endoscopy Organisation CRC Screening Conference, Vienna, October 2024. Sally C Benton. Presentation at the meeting.

WG-Standardization of Procalcitonin assays (WG-PCT)

Chair: Amandine Boeuf (FR)

Term of reference 1

Develop and validate a reference measurement procedure for PCT absolute quantification by Stable Isotope Dilution Mass Spectrometry

List 2024 accomplishments for this Term of Reference

Before pursuing other activities of this ToR (improving the comparability between MS-based methods developed by reference labs and improving the limit of quantification of these methods), the results of the ToR2 and ToR3 need to be available: the need to improve comparability and the need for standardisation of PCT assays need to be evaluated and confirmed. This has been further discussed during the face-to-face meeting organized during WorldLab in Dubai on 27th May 2024, and the strategy has been confirmed. The effort to develop a network of calibration laboratories with MS-based methods will be pursued when activities planned within ToR2 and ToR3 are completed and if the necessity is demonstrated. No additional accomplishment has been obtained in 2024.

List planned activities in 2025 for this Term of Reference

Evaluate results from the commutability study and, when available, from the EQA scheme planned within ToR2 and evaluate the need for standardization of PCT assays within ToR3 to decide further activities within this ToR.

Term of reference 2

Document and understand the variability of results provided by the different commercially available PCT assays

List 2024 accomplishments for this Term of Reference

The commutability study initiated at the beginning of 2024 has been pursued. The two shipments that were on hold have now been dispatched. All the measurements are finalised, LNE has received all the results, and the statistical analysis is ongoing.

As a reminder, one set of materials consisting of 60 clinical specimens (samples from single donors), seven candidate RMs (reference materials produced by LNE within the SEPTIMET project), and 48 EQA materials (materials from past EQA schemes supplied by six different

EQA providers) were sent to nine participating laboratories. Following the decision of Thermo Fisher Scientific not to participate in the commutability study, the B·R·A·H·M·S PCT sensitive KRYPTOR has been included through the participation of a third-party laboratory. This was needed as, due the lack of a reference measurement procedure, this method is currently used as a surrogate reference method for PCT assays.

In the first step, the results have been evaluated using the difference in bias between a reference material and clinical samples, as recommended by the IFCC WG on commutability (WG-CMT) for reference materials. Based on the results available at that time, these preliminary results were presented to the WG members during the face-to-face meeting organized during WorldLab in Dubai on 27th May 2024. Discussion on the best way to set the commutability acceptance criterion for this approach (the maximum allowable noncommutability bias) has been initiated. The members agreed that this discussion is not easy, and it has been reminded that medical needs should drive our choice. It has been decided to evaluate different scenarios (C=10%, C=15%, or C=20%) and further discuss the results.

As the previous recommendations are specific to reference materials, the IFCC WG-CMT recommendations for setting a criterion and assessing the commutability of sample materials used in external quality assessment have been followed in a second step for EQA materials included in the study. In this approach, the criterion to assess the commutability of EQA material between two methods is based on the statistical distribution of the clinical sample results for these methods. This statistical analysis has been performed with the support of Noklus, leaders in the commutability evaluation for EQA materials. Evaluation of this second approach is ongoing.

Specific virtual meetings are organised with study participants to discuss their results and EQA providers that supplied materials to get information on the materials (spiked material or not, type of the matrix, the origin of the recombinant PCT if any…). A meeting will be held at the beginning of 2025 with the WG-PCT members on the study's outcome, and a manuscript for publication on this commutability study is in preparation.

The following steps for this ToR is the organisation of an EQA scheme relying on materials of proven commutability. This EQA scheme intends to document the state-of-the-art on results provided by the different PCT assays used in routine clinical practice and evaluate the need for to improve the harmonisation of PCT results. Initial contacts have been made with potential EQA providers that could support the organisation of this EQA scheme

List planned activities in 2025 for this Term of Reference

Finalise data processing, conclusion and manuscript for publication on the commutability study.

Pursue the organisation of the EQA scheme relying on materials of proven commutability

When results of the EQA Scheme will be available, conclude on the harmonisation level for PCT assay, and if deemed insufficient, start investigation with IVD manufacturers and WG-PCT members on what could be the sources of variability.

Term of reference 3

Evaluate the need for standardization of PCT assays

List 2024 accomplishments for this Term of Reference

Before pursuing other activities of this ToR, the results of the commutability study and the EQA scheme within ToR2 need to be evaluated to better document the need for standardization of PCT assays. No additional accomplishments have been obtained in 2024.

List planned activities in 2025 for this Term of Reference

Evaluate results from the commutability study and, when available, from the EQA scheme within ToR2 toward further evaluation of the need for standardization of PCT assays.

Pursue stakeholder consultation.

Maintain and extend manufacturers' involvement

Term of reference 4

Evaluate the feasibility for standardization of PCT assays

List 2024 accomplishments for this Term of Reference

Feasibility for standardization of PCT assays will be evaluated after activities planned within ToR1, 2 and 3 have been completed. No additional accomplishment has been obtained in 2024.

List planned activities in 2025 for this Term of Reference

Evaluate results from the commutability study and, when available, from the EQA scheme planned within ToR2 and evaluate the need for standardization of PCT assays within ToR3 to decide further activities within this ToR.

Term of reference 5

Perform standardization of PCT assays, if needed and feasible

List 2024 accomplishments for this Term of Reference

Before performing the standardization of PCT assays, outcomes from ToR3 and ToR4 should demonstrate the need and feasibility for standardization of PCT assays.

During the face-to-face meeting organized during WorldLab in Dubai on 27th May 2024 it has been raised that if the work of the working group lead to finally implement this fifth ToR, there will be a need for education of clinicians as this will lead to revision of clinical limits. This has been agreed by the whole working group.

List planned activities in 2025 for this Term of Reference

Accomplishment of this ToR will thus occur after accomplishment of the ToR3 and ToR4.

2024 Meetings / conference calls held

Bilateral virtual meetings was organised with participants of the commutability study, first to prepare it and then to discuss the preliminary results. Bilateral virtual meeting has also been organised with EQA provider that supplied material for the commutability study.

A face-to-face meeting was organized on 27th May 2024 during WorldLab in Dubai.

Meeting schedule in 2025

Bilateral virtual meetings will be arranged with participants of the commutability study to further discuss the results and an online meeting with the WG member will be organised beginning of 2025.

A face-to-face meeting will be organized on 27th May 2025 during EuroMedLab in Brussel.

Publications/conference presentations/webinars

Activities conducted by IFCC WG-PCT are described in a paper published in the IFCC SD Special issue of CCA (Clin Chim Acta. 2021 Apr;515:111-121).

Results of the PCT EQA schemes and an analysis of all published correlation studies is published in CCLM (Clin Chem Lab Med. 2021;59(10):1610-1622).

The development and validation of a candidate reference measurement procedure for PCT absolute quantification by Stable Isotope Dilution Mass Spectrometry is completed and lead to 4 scientific publications.

The first paper on developments was published in analytical and bioanalytical chemistry in May 2021 (Anal Bioanal Chem. 2021 Aug;413(19):4707-4725). All WG members are identified as collaborators.

This publication was subject to a letter to the editor by Fresenius University (Anal Bioanal Chem. 2021;413(19):4917-4919) and a reply (Anal Bioanal Chem. 2021 Aug;413(19):4921-4922).

The fourth publication describe the validation of the candidate RMP based on protein-based calibration (Anal Chem. 2022;94(10):4146-4154).

WG-Continuous Glucose Monitoring (WG-CGM)

Chair: Guido Freckmann (DE), Co-Chair: Robbert Slingerland (NL)

Term of reference 1

Work package 1 (WP-1): Establish a Traceability Chain to a defined Measurand

Completed and published in 2021, see Freckmann et al., 20211

Term of reference 2

Work package 2 (WP-2): CGM Analytical Performance: Procedures & Metrics

1. Establish procedures suitable for assessment of analytical performance of CGM systems,

2. Establish metrics and corresponding minimum acceptance criteria for the analytical performance of CGM systems.

List 2024 accomplishments for this Term of Reference

Work on WP-2 supporting projects (in cooperation with the Institute für Diabetes-Technologie Ulm and the Diabetes Center Berne):

Project 1: Acceptance Criteria and Measurement Procedures for Comparison Measurements

Completed in 2022, see Pleus et al., 20222

Project 2: Distribution of Glucose Concentration and Glucose Rate of Change (ROC)

Taking all previous work into account, standardized testing procedures for CGM performance evaluations were developed including a new graphical presentation, named Dynamic glucose region (DGR)-plot. An article was published in the Journal Diabetes Technology and Therapeutics in January 2024, see Eichenlaub et al., 20246

Project 3: Graphical Display of Accuracy

Completed in 2022, see Stephan et al., 20233 and Eichenlaub et al., 20234

In addition to the WP-2 supporting projects, an extensive literature search on methods of CGM performance studies was performed resulting in a review article. The project was finalized and published in 2023, see Freckmann et al., 20235.

Work on the WP-2 consensus document was continued. Part A which deals with the procedures to collect data for the determination of analytical CGM performance was prepared, extensively discussed with the working group and is currently being finalized. Based on this consensus document, a WP2 publication with special emphasis on the comparator measurement procedure was prepared, circulated among the working group and intensively discussed. It is currently revised to incorporate the feedback from the group. The goal is submission of the manuscript in December 2024.

Part B of the working document will contain all information necessary for data analysis of a clinical CGM performance study and is currently drafted. Some of the ground work for part B has already been done, e.g., project 3 and the literature search mentioned above.

List planned activities in 2025 for this Term of Reference

Further discussions and input to this work package via conference calls and via e-mail.

The publication of WP-2A will be finished, if not already submitted in 2024, and work on the consensus document of WP-2B will be continued to finalize this Term of Reference.

Term of reference 3

Work package 3 (WP 3): Work with ISO on a New CGM Guideline

Establishment of standardized procedures and acceptance criteria for CGM systems, covering mechanical and electromagnetic safety, analytical performance, and ease of use (analogous to ISO 15197 for blood glucose monitoring systems).

Cooperation with ISO should be aimed for, if the International Organization for Standardization (ISO) is interested:

The working group intends to cooperate with ISO to define acceptable procedures and acceptance criteria used to assess analytical performance criteria of CGM systems, with similar scope as that of ISO 15197, which defines procedures and acceptance criteria for systems for self-monitoring of blood glucose. In the future, CGM will also play a role in hospitals. Criteria for the use in in-clinic settings need to be established as well.

List 2024 accomplishments for this Term of Reference

Contact to the German Standardization Organisation DIN is ongoing and several virtual meetings and ongoing email discussions have occurred. The DIN is currently in the process of bringing our standardization proposal to the ISO stage.

In addition, the standardization organisation of the Netherlands was contacted.

List planned activities in 2025 for this Term of Reference

Further cooperation with the German DIN Organization and the International Organization for Standardization (ISO).

ADDITIONAL INFORMATION

The working group welcomed one new full member, John Pemberton from the UK, and two new corresponding members, Daniel Militz from Roche and Sirid Griebenow from Greiner Bio-One, in 2024.

The working group contributed to a consensus document addressing the use of CGM in hospitalized patients. The work was a collaborative effort from the American Diabetes Association (ADA), Diabetes Canada, American Association for Diagnostics & Laboratory Medicine (ADLM) Point of Care Testing (POCT) Division and the POCT Special Interest Group of the Canadian Society for Clinical Chemists (CSCC). The consensus document was published in Diabetes Care in November 2024 (Shaw JLV, Bannuru RR, Beach L, ElSayed NA, Freckmann G, Füzéry AK, Fung AWS, Gilbert J, Huang Y, Korpi-Steiner N, Logan S, Longo R, MacKay D, Maks L, Pleus S, Rogers K, Seley JJ, Taxin Z, Thompson-Hutchison F, Tolan NV, Tran NK, Umpierrez

GE, Venner AA. Consensus Considerations and Good Practice Points for Use of Continuous Glucose Monitoring Systems in Hospital Settings. Diabetes Care.2024 Oct 25:dci240073. doi: 10.2337/dci24-0073. Online ahead of print.)

The working group has intensified its efforts to raise more awareness among clinicians and payers for the necessity for standardization of CGM systems and make it more easily understandable. In this context, a commentary on standardization was written, intensively discussed with the working group and has been accepted for publication in the Journal of Diabetes and Sciences Technology in November 2024 (Pleus S, Eichenlaub M, Eriksson Boija E, Fokkert M, Hinzmann R, Jendle J, Klonoff DC, Makris K, Nichols JH, Pemberton J, Selvin E, Slingerland RJ, Thomas A, Tran NK, Witthauer L, Freckmann G. The Need for Standardization of CGM Performance Evaluation – An Opinion by the IFCC Working Group on CGM. J Diabetes Sci Technol. 2024 Nov 14: doi: 10.1177/19322968241296097. Online ahead of print).

Talks / lectures about the work of the IFCC-WG-CGM were given by Guido Freckmann and others at various events. The list comprises both in-person and virtual events:

- diatec congress, Berlin, Jan 2024
- International Conference on Advances Technologies & Treatments for Diabetes, Florence, Mar 2024
- Annual Meeting of the German Diabetes Association (DDG), Berlin, May 2024
- Annual Meeting of the German Working Group Diabetes + Technology (AGDT), Fulda, Sep 2024
- Annual Meeting of the German Society for Clinical Chemistry and Laboratory Medicine
- (DGKL), Bremen, Sep 2024
- Diabetes Technology Meeting, Burlingame, Oct 2024
- Meeting of the German Diabetes Association (DDG), Hannover, November 2024
- Upcoming: Congress on Cardiovascular, Kidney and Metabolic Outcomes, Dec 2024

2024 Meetings / conference calls held

- Conference call on 21-Mar-2025
- Face-to-face meeting at WorldLab in Dubai on 28-May-2024
- Conference call on 06-Jun-2024
- Conference call on 17-Sep-2024
- Conference call on 05-Nov-2024

Multiple e-mail conversations during the whole year

Meeting schedule in 2025

Periodic e-mail conversations and conference calls are planned for 2025.

The first (virtual) meeting will be in February 2025.

A hybrid meeting is planned for the EML Meeting in Brussels on May 21st 2024.

Publications/conference presentations/webinars

Publications:

1. Freckmann G, Nichols JH, Hinzmann R, Klonoff DC, Ju Y, Diem P, Makris K, Slingerland RJ: Standardization process of continuous glucose monitoring: traceability and performance. Clinica Chimica Acta 515 (2021) 5–12
2. Pleus S, Eichenlaub M, Gerber T, Eriksson Boija E, Makris K, Haug C, Freckmann G: Improving the Bias of Comparator Methods in Analytical Performance Assessments Through Recalibration. J Diabetes Sci Technol. 2024 May;18(3):686-694
3. Stephan P, Eichenlaub M, Waldenmaier D, Pleus S, Rothenbühler M, Haug C, Freckmann G: A stastical approach for assessing the compliance of integrated continuous glucose monitoring systems with FDA accuracy requirements. Diabetes Technol. Ther. 2023 Mar;25(3):212-216
4. Eichenlaub M, Stephan P, Waldenmaier D, Pleus S, Rothenbühler M, Haug C, Hinzmann R, Thomas A, Jendle J, Diem P, Freckmann G: Continuous Glucose Deviation Interval and Variability Analysis (CG-DIVA): A Novel Approach for the Statistical Accuracy Assessment of Continuous Glucose Monitoring Systems. J Diabetes Sci Technol. 2023 Nov;17(6):1506-1526
5. Freckmann G, Eichenlaub M, Waldenmaier D, Pleus S, Wehrstedt S, Haug C, Witthauer L, Jendle J, Hinzmann R, Thomas A, Eriksson Boija E, Makris K, Diem P, Tran N, Klonoff D, Nichols J.H., Slingerland R. Clinical Performance Evaluation of Continuous Glucose Monitoring Systems: A Scoping Review and Recommendations for Reporting. J Diabetes Sci Technol. 2023 Nov;17(6):1506-1526
6. Eichenlaub M, Pleus S, Rothenbühler M, Bailey TS, Bally L, Brazg RL, Bruttomesso D, Diem P, Eriksson Boija E, Fokkert M, Haug C, Hinzmann R, Jendle J, Klonoff DC, Mader JK, Makris K, Moser O, Nichols J, Norgaard K, Pemberton J, Selvin E, Spanou L, Thomas A, Tran N, Witthauer L, Slingerland RJ, Freckmann G. Comparator Data Characteristics and Testing Procedures for the Clinical Performance Evaluation of Continuous Glucose Monitoring Systems. Diabetes Technol Ther. 2024 Apr;26(4):263-275.
7. Shaw JLV, Bannuru RR, Beach L, ElSayed NA, Freckmann G, Füzéry AK, Fung AWS, Gilbert J, Huang Y, Korpi-Steiner N, Logan S, Longo R, MacKay D, Maks L, Pleus S, Rogers K, Seley JJ, Taxin Z, Thompson-Hutchison F, Tolan NV, Tran NK, Umpierrez GE, Venner AA. Consensus Considerations and Good Practice Points for Use of Continuous Glucose Monitoring Systems in Hospital Settings. Diabetes Care.2024 Oct 25:dci240073. doi: 10.2337/dci24-0073. Online ahead of print.
8.. Pleus S, Eichenlaub M, Eriksson Boija E, Fokkert M, Hinzmann R, Jendle J, Klonoff DC, Makris K, Nichols JH, Pemberton J, Selvin E, Slingerland RJ, Thomas A, Tran NK, Witthauer L, Freckmann G. The Need for Standardization of CGM Performance Evaluation – An Opinion by the IFCC Working Group on CGM. J Diabetes Sci Technol. 2024 Nov 14: doi: 10.1177/19322968241296097. Online ahead of print.

Conference Presentations/Webinars:

1. Freckmann G, Slingerland RJ: Continuous Glucose Monitoring – What should be optimized and considered in the future? Scientific short, published online at American Association for Clinical Chemistry (AACC), (2021)
2. Freckmann G, “Standardization in Glucose Monitoring”, presentation at the Euromedlab Meeting, 13-Apr-2022
3. Freckmann G, “Kontinuierliche Glukosemessung CGM – Traceability and Standards”, presentation at DGKL Meeting, 13-Okt-2022
4. Freckmann G, “Traceability of CGM”, presentation at Diabetes Technology Meeting (DTM), 03-Nov-2022
5. Freckmann G, “The Continuous Glucose Deviation Interval and Variability Analysis (CG-DIVA)”, presentation at the diatec Congress, 27-Jan-2023
6. Freckmann G, “Why do CGM performance assessments need more standardization?”, presentation at the ATTD Meeting, 24-Feb-2023
7. Freckmann G, “Güte der Glukosemessung bei CGM-Systemen - Sind Standards notwendig?“, presentation at the German Diabetes Society (DDG) Meeting, 19-May-2023
8. Freckmann G, “Standardization process of Continuous Glucose Monitoring: Traceability and Performance”, presentation at the AACC Meeting, 28-Jul-2023
9. Pleus S, “A scoping review of CGM performance evaluations from the last 20 years”,

presentation at the pre-meeting of the DTM, 01-Nov-2023

10. Freckmann G, “Standardized testing procedures for the clinical performance evaluation of CGM systems: A proposal by the IFCC Working group on CGM”, presentation at the pre-meeting of the DTM, 01-Nov-2023
11. Hinzmann R, “Comparison Measurement Approaches for CGM Accuracy Performance Studies”, presentation at the pre-meeting of the DTM, 01-Nov-2023
12. Eichenlaub M, “Continuous Glucose Deviation Interval and Variability Analysis (CG-DIVA)”, presentation at the DTM, 02-Nov-2023
13. Freckmann G, “Messgenauigkeit von CGM Systemen“, workshop at the diatec Congress, 26-Jan-2024
14. Freckmann G, “International Standard for Evaluation of CGM Systems”, presentation at the ATTD Meeting, 6-Mar-2024
15. Freckmann G, “Standardisierung bei CGM-Systemen: Stand der Dinge“, presentation at the German Diabetes Society (DDG) Meeting, 9-May-2024
16. Pleus S, “CGM: Standardisierung und Messgenauigkeit“, presentation at the AGDT Meeting, 21-Sep-2024
17. Hinzmann R, “Warum unterschiedliche CGM-Systeme unterschiedliche Messwerte anzeigen”, presentation at DGKL Meeting, 26-Sep-2024
18. Eichenlaub M, “Wie man CGM-Systeme standardisieren könnte”, presentation at DGKL Meeting, 26-Sep-2024
19. Freckmann G, “Reliability of and comparability of CGM performance endpoints”, presentation at Diabetes Technology Meeting (DTM), 17-Oct- 2024
20. Freckmann G, “Glukosemessung mit CGM: wirklich zuverlässig?”, presentation at the German Diabetes Society (DDG) Meeting, 23-Nov- 2024
21. Upcoming: Freckmann G, “Consistency in Glucose Monitoring, Consistency in Care: Standardizing CGM Evaluation for Better Patient Outcomes”, presentation at the Congress on Cardiovascular, Kidney and Metabolic Outcomes, 6-Dec-2024

WG-Development of a Reference Measurement System for Sustainable PT/INR Standardization (WG- PT/INR)

Chair: Ton Van den Besselaar (NL)

Term of reference 1

To develop a harmonized reference measurement procedure based on the WHO manual tilt tube technique as well as the complete reference measurement system for global standardization of the PT/INR test. An entire reference measurement system is essential to anchor the commercial International Standards for thromboplastin to assure longitudinal accuracy of PT/INR-test results in time and space across manufacturers.

List accomplishments for this Term of Reference since October 2023

The working group is working successfully on both parallel lines as described in the planned activities.

1. Development of a harmonized MTT as Candidate Measurement Procedure in a network of WHO calibration labs (see Term of reference 4)
2. Selecting and defining a suitable candidate Reference Material as part of the metrological traceability chain to be set up for the development of a sustainable Reference Measurement System that allows global PT/INR standardization

A choice has been made for a single recombinant human reference thromboplastin as primary reference reagent. In March 2023 a study of the new IRP was conducted to evaluate the performance and suitability of the primary standard. Four calibration labs participated in the pilot study. In September 2023 stability of the new IRP was assessed in an accelerated degradation experiment performed by NIBSC and one calibration lab.

According to ISO 17511:2020 one calibration hierarchy with two variant matrices has been defined:

1. Calibration hierarchy for citrated plasma INR measurement
2. The same calibration hierarchy adapted for the POC INR whole blood procedure

The new primary reference thromboplastin (new candidate IRP) should have been manufactured in November 2023. Unfortunately, at NIBSC there were significant delays in the production of reference thromboplastin due to equipment failure which created a backlog of fills of more than 6 months.

The new IRP is filled on 3rd May 2024. The fill is freeze-dried on a 4-day cycle completing on 7th May 2024. The new candidate IRP is available for the multicenter study, including also the homogeneity study, stability study and acceleration and degradation testing. The multicenter data have just been produced and reported by the four calibration labs and are currently under investigation in the WG.

A limited amount of new candidate IRP will soon be made available to the IVD industry after value assignment is accomplished in the Multi-Center Study so that individual IVD-companies can start preliminary evaluations and preparations for future restandardization of their PT/INR tests. It is important to verify ahead the feasibility of the envisioned global standardization and to enable manufacturers to start preparing the regulatory and technical dossiers in anticipation of full establishment and acceptance of this new RMS by WHO in October 2025**.

The formal decision to endorse the proposed new IRP and assigned value will be taken at the ISTH meeting in June 2025, following approval by the SSC Subcommittee on control of anticoagulation and a vote by the SSC Board members.

The WHO-ISTH Liaison Officer will then inform the WHO about the formal recommendation.

** Note: the IVD-industry participating in this WG will receive the candidate new IRP via a planned shipment for preliminary assessment. Ampoules will be labelled with the product code to ensure traceability to the envisioned new IRP in the future.

List planned activities in 2024 for this Term of Reference

Acceleration and degradation testing new IRP (November/December 2024)

Stability testing new IRP after reconstitution (December 2024)

Homogeneity testing new IRP (December 2024)

Start Multicenter Study new IRP (November 2024)

Term of reference 2

To review the agreed WHO procedure for calculating ISI of new international standards as the procedure should not lead to deterioration of the traceability of PT/INR test results

List accomplishments for this Term of Reference since October 2023

Reconsideration of the agreed WHO procedure for ISI assignment based on a new single rec human thromboplastin instead of averaging of ISI's from rec human thromboplastin and bovine thromboplastin. This fundamental change leads to updating the WHO-procedure for calibration labs accordingly.

List planned activities in 2024 for this Term of Reference

The WHO guidelines for the new candidate IRP are under revision, the draft concept will likely be finished as first draft by the end of 2024.

Completion of the Multicenter study was timely in order to submit the report to the WHO Expert Committee on Biological Standardization (ECBS) by the end of December 2024, to be considered for endorsement at the Spring ECBS meeting.

However WHO has decided not to have an ECBS meeting in Spring 2025, due to a limited number of reference material proposals. NIBSC has indicated that the new IRP for thromboplastin has the status of an urgent project, therefore WHO proposed a different route. Our report must be submitted by mid-December 2024.

Term of reference 3

To evaluate the necessity of the co-existence respectively continuation of different thromboplastin reference materials for ensuring global PT/INR standardization.

List accomplishments for this Term of Reference since October 2023

It was decided to opt for a single recombinant human primary thromboplastin for PT/INR standardization of tests, which is described in publication [4]

The new IRP will be available in 2025 for the IVD industry, after formal approval (see Terms of Reference 1, List accomplishments of this Term of Reference since October 2023)

Ongoing activities in 2024 for this Term of Reference

The Multicenter study is finished at the end of November 2024

Accelerated degradation test of the new IRP (November/December 2024)

Homogeneity testing of new IRP (December 2024)

Stability testing after reconstitution new IRP (December 2024)

The process to apply for JCTLM listing has been initiated. Call for nomination is 31 January 2025.

Adoption and implementation of the new IRP with IVD-stakeholders among others is an ongoing process and will continue in 2025.

For JCTLM listing the standardization potential of the new RMS for equivalence testing of routine tests is required and will be planned at the end of 2024 / beginning of 2025

Term of reference 4

Four calibration labs are running the harmonized MTT method for certifying the calibration of commercial thromboplastins from IVD-manufacturers

List accomplishments for this Term of Reference since October 2023

- Testing and evaluation Ring trial 2023-06 Date: January 2024
- Multicenter study 2024; candidate new IRP Date: November 2024

List of ongoing activities in 2024 for this Term of Reference

Paper regarding intercalibration lab variation deduced from ring trial data of the Manual Tilt Tube Technique for Prothrombin Time Testing is under submission.

ADDITIONAL INFORMATION

It was difficult/ impossible in the end for the CCA editor to find reviewers willing to review this coagulation type of RMS paper as there are hardly reviewers knowledgeable about the relevance of metrological traceability of haemostasis test results.

2024 Meetings / conference calls held

- IFCC-ISTH March 28th , Zoom meeting 1.00 – 2.30 pm CET
- IFCC-ISTH May 16th , Zoom meeting 2.30-4.00pm CET
- IFCC-ISTH July 15th , Zoom meeting 2.00-4.30 pm CET
- IFCC-ISTH September 10th , Zoom meeting 3.00-4.30 pm CET
- IFCC-ISTH October 24th, Zoom meeting 2.30–4.30 pm CET

Meeting schedule in 2025

- IFCC-ISTH December 12th, Zoom meeting 2.00-3.30 pm CET

2025 WG meetings are already scheduled:

- IFCC-ISTH January 16th, Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH February 20th , Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH April 17th , Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH June 5th , Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH July 3th , Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH September 11th , Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH November 6th , Zoom meeting 2.00-3.30 pm CET
- IFCC-ISTH December 4th , Zoom meeting 2.00-3.30 pm CET

Publications/conference presentations/webinars

2021

[1] Paving the way for establishing a reference measurement system for standardization of plasma prothrombin time: Harmonizing the manual tilt tube method Antonius M. H. P. van den Besselaar | Claudia J. J. van Rijn | Charmane F. Abdoel | Veena Chantarangkul | Erica Scalambrino | Steve Kitchen | Armando Tripodi | Anita M. Woolley | Lidia Padovan | Christa M. Cobbaert. DOI:10.1111/jth.14873

[2] Bias and uncertainty of the International Normalized Ratio determined with a whole blood point-of-care prothrombin time test device by comparison to a new International Standard for thromboplastin

Antonius M H P van den Besselaar , Claudia J J van Rijn , Charmane F Abdoel , Christa M Cobbaert doi: 10.1016/j.thromres.2021.02.018.

2022

[3] Effect of the reaction temperature on the prothrombin time and the apparent International Normalized Ratio determined with International Standards for thromboplastins. AMHP van Den Besselaar, Christa Cobbaert. Int J Hematol 2022 Apr;44(2):379-384. Doi: 10.111/ijlh.13737.

2023

[4] Defining a metrologically traceable and sustainable calibration hierarchy of international normalized ratio for monitoring of vitamin K antagonist treatment in accordance with International Organization for Standardization (ISO)

17511:2020 standard: communication from the International Federation of Clinical Chemistry and Laboratory Medicine–SSC/ISTH working group on prothrombin time/international normalized ratio standardization.

Antonius M. H. P. van den Besselaar, Anne Stavelin, Steve Kitchen, Michelle Bryant, Armando Tripodi, Erica Scalambrino, Marigrazia Clerici, Petra Herbel, Anja Jünschke, Sascha Meyer dos Santos, Piet Meijer, Rene W. L. M. Niessen, Joost C. M. Meijers, Craig Thelwell, Adam Cuker, Chun Kung, Zhenghua Cao, Norbert Zander, Yosuke Iwasaki, François Depasse, Claudia van Rijn, Shanti Baktawar, Charmane Abdoel, Christa M. Cobbaert. Doi.org/10.1016/j.jtha.2023.12.013

2024 in progress

[5] Intercalibration lab variation deduced from ring trial data of the Manual Tilt Tube Technique for Prothrombin Time Testing: results from a Multicenter Study.

WG-Neonatal Bilirubin (WG-NB)

in cooperation with IFCC Emerging Technologies Division

Co-Chairs: R Graves (AU) and L Mackay (AU)

Please see report under ETD, page 144

WG-Standardization of HbF (WG-HbF)

Chair: Andrea Mosca (IT)

Term of reference 1

Promoting the use of an LC-MS/MS method as the accuracy base for standardization of HbF

List 2024 accomplishments for this Term of Reference

Development of a Reference Measurement Procedure (RMP)
The same biotech Company (Trenzyme BmH) which provided the recombinant hemoglobins for the HbA2 standardization did produce an offer. A call will be launched by the JRC to this regard.

List planned activities in 2025 for this Term of Reference

To purchase the recombinant Hbs, to test their purity and to use them for the development of the RMP.

Term of reference 2

Maintaining sustainability of an international network of reference laboratories

List 2024 accomplishments for this Term of Reference

No actions performed so far

List planned activities in 2025 for this Term of Reference

Activities will start after the achievement of the development of the RMP

ADDITIONAL INFORMATION

After internal discussion between the two WGs we propose to merge this WG together with that on HbA2 standardization.

2024 Meetings / conference calls held

1. 22 May 2024 (by Zoom)
2. In person at the IFCC Secretariat in Milano, 25 September 2024

Meeting schedule in 2025

1. By Zoom, mid February (date not decided yet)
2. In person at the Euromedlab meeting in Bruxelles IFCC Secretariat in Milano, 21 May 2025

Eventual two additional virtual meetings, depending on the developments of the actions related to the terms of reference.

Publications/conference presentations/webinars

A publication on the achievements and future activities has been prepared for CCA and submitted to the IFCC SD for comments and possible future endorsement.

WG on Natriuretic Peptides (WG-NP)

Chair: A Saenger (US)
NO report received

WG-Tumor Marker Harmonization (WG-TMH)

Chair: Huub H. van Rossum (NL)

List 2024 accomplishments for this Term of Reference

1. Investigated the current harmonization status of 6 commonly used tumor markers by using EQA data (AFP, CA125, CA 15-3, CA19-9, CEA and PSA).
2. Published in Clin Chem 2024; 70(4): 669-679
3. Investigated the achievable harmonization for CA 15-3 and CEA by recalibration. Published in Clin Chem Lab med 2025; 63(2): 410-421
4. Have performed study to; i validated the obtained EQA-based harmonization procedures for CA 15-3 and CEA by individual patient samples, and ii) investigate the commutability of 2 commercial CA 15-3 materials as basis for new CA 15-3 international reference preparation
5. Prepared draft for CA 15-3 and CEA harmonization procedure
6. Have invited IVD industry members to participate in both CA 15-3 and CEA harmonization projects.

List planned activities in 2025 for this Term of Reference

1. Initiate activities to involve IVD industry members with CA 15-3 (or CA27.29) and CEA test, in the harmonisation projects.

2. Prepare and start CEA commutability study for CEA standard developed by MHRH
3. Prepare formal procedure to start developing CA 15-3 IRP and commutability and harmonization study.
4. Publish results from CA15-3 and CEA method comparison study by individual patient samples and commercial CA 15-3 materials
5. Perform EQA based CA 125 and CA 19-9 harmonization simulations and investigate potential/challenges for future harmonization of these tumor markers.
6. Try to meet at the ISOBM Annual meeting in Murnau (Germany) and organize a scientific session and workshop on tumor marker harmonization

ADDITIONAL INFORMATION

- We are slightly increasing the scope of the WG:
- We also initiated work to investigate the harmonization of the CA 125 and CA 19-9 tumor markers
- We are exploring initiatives to also investigate the clinical impact of tumor marker harmonization, e.g. for PSA
- Based on these activities it might, at some point be relevant to discuss the opportunity to become an IFCC SD committee
- Finally, the working group has also connected to the ISOBM (International Society of Oncology and Biomarkers) that has an important track record on tumor marker harmonization. It is relevant to also align with them as this will also provide the opportunity to organize special scientific sessions on this topic at their Annual meeting and to also better involve other clinicians and reserachers.

2024 Meetings / conference calls held

5x Virtual meetings throughout 2024 for the total WG
4x meeting for protocol writing committee

Scheduled meetings for 2025

- February 13, 2025, MS Teams
- April 10, 2025, MS Teams
 -> Perhaps also schedule in-person meeting in Brussels Euromedlab May 18-22 2025
- June 12, 2025, MS Teams
- August 14, 2025, MS Teams
- October 9, 2025, MS Teams
 -> Perhaps also have an in-person meeting in Murnau, ISOBM meeting October 13-15 2025
- December 11, 2025, MS Teams

Publications/conference presentations/webinars

Investigating the Current Harmonization Status of Tumor Markers Using Global External Quality Assessment Programs: A Feasibility Study.
van Rossum HH, Holdenrieder S, Ballieux BEPB, Badrick TC, Yun YM, Zhang C, Patel D, Thelen M, Song J, Wojtalewicz N, Unsworth N, Vesper HW, Cui W, Ramanathan LV, Sturgeon C, Meng QH.Clin Chem. 2024 Apr 3;70(4):669-679. doi: 10.1093/clinchem/hvae005.PMID: 38385453
External quality assessment-based tumor marker harmonization simulation; insights in achievable harmonization for CA 15-3 and CEA.
Van Rossum HH, Holdenrieder S, Yun YM, Patel D, Thelen M, Song J, Unsworth N, Partridge K, Moore M, Cui W, Ramanathan L, Meng QH, Ballieux BEPB, Sturgeon C, Vesper H.Clin Chem Lab Med. 2024 Sep 20. doi: 10.1515/cclm-2024-0696. Online ahead of print.PMID: 39299928

C. Cobbaert – SD Chair
S. Wittfooth – SD Secretary

EDUCATION AND MANAGEMENT DIVISION (EMD)

Summary of the Accomplishments of the EMD in 2024

Below, a summary of the accomplishments of EMD functional units and programs is provided

1. All functional units met or exceeded the requirements for face-to-face or virtual meetings.
2. Most chairs are exemplary in their performance and in carrying on their duties. The most significant task for EMD this year has been to identify viable chairs for the Molecular Biology Curriculum Committee and the Flow Cytometry Working Group; we have accomplished that. These were not easy tasks, but I am pleased that we have been successful. In Fact, the flow cytometry new group held already successfully a one-week workshop in Algeria.
3. All functional units performed well, were productive, and operated within budget.
4. VLP was very successful in 2024 and supported 17 congresses; one of our most active years.
5. PEP is highly successful after being revamped with two calls for application per year. No progress however, on getting a financial sponsor for it from our corporate family has been made. Any suggestion or help from the Corporate Representative on the EB would be greatly appreciated. Such a sponsorship is crucial for the growth and viability of this program. In 2024, we supported 16 individuals from around the globe.
6. Learning Lab has currently over 21,000 users from 156 countries, 33% from India alone. The program has CME from the Indian Medical Council. Translations to 9 different languages are actively underway with over 500 translated courses already released. A certificate program for “successful course completion” has been created and currently used. We are working on the logistics for giving IFCC-CE via PROCEED.
7. EMD presented 6 sessions in national and international meetings and organized 5 live webinars.

COMMITTEES

Committee on Clinical Molecular Biology Curriculum (C-CMBC)

Chair: Verena Haselmann (DE), replaced in July by Prof. Andrea Ferreira-Gonzalez who resigned in December 2024
Prof. Orlando Diez Gibert (member) – 2nd term (2023-2025)
Prof. Evi Lianidou (consultant)
The report was not received due to pending membership and a change in chairmanship

Committee for Evidence-based Laboratory Medicine (C-EBLM)

Chair:	Andrew Don-Wauchope (CA) – ADW
Members:	Seema Bhargava (SB)
	Rami Khalil (RK
	Hayley Sharrod-Cole (HSC)
	Sollip Kim (SK)
Consultants:	Karina Rodriguez-Capote (KRC)
	Annalise Zemlin (AZ)

TERMS OF REFERENCE

The main aim of the Committee on Evidence-based Laboratory Medicine (C-EBLM) of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is to disseminate information about Evidence-based Laboratory Medicine (EBLM)

Term of reference 1
Publications on EBLM

List 2024 accomplishments for this Term of Reference
Don-Wauchope AC, Rodriguez-Capote K, Assaad RS, Bhargava S, Zemlin AE. A guide to conducting systematic reviews of clinical laboratory tests. Clin Chem Lab Med. 2024 Jan 4;62(2):218-233. doi:10.1515/cclm-2023-0333. Aug/2023

List planned activities in 2025 for this Term of Reference
The following ideas for publication being discussed:
1. Report on the survey conducted in 2024

Terms of reference 2

Congress attendance and dissemination of EBLM information

List 2024 accomplishments for this Term of Reference
1. 7th AFCC Regional Congress and 3rd EgyLabs Forum : joint session from EBLM and POCT (Dr. A. Zemlin); young scientist presentation from (Dr..R Khalil); oral presentation (Dr. S. Raghuber (corresponding member) 28-29 Feb 2024.
2. National Science Day celebration at Santosh Medical College, Ghaziabad, UP, India. Basics of EBLM (Evidence Based Laboratory Medicine) presented by Dr. S. Bhargavaa
3. Indian Council of Medical Research, New Delhi. Dr D. Bhargava was on the faculty for 3-day programme titled “Interactive Workshop on Systematic Review”
4. 9th International Chemical Pathology Department Conference, Medical Research Institute, Alexandria, Egypt (October 2024). Session on performing systematic reviews. Drs Don-Wauchope, Khalil and Raghuber presented talks based on the paper published in January 2024.
5. 4th POCT Africa Colloquium Cape Town South Africa 14 and 15th Nov: – HbA1c POCT what is the evidence? Dr. A. Zemlin.
6. The committee attended WorldlabMed Dubai in May 2024 and had a face-to-face meeting. Opportunities for discussion with other committees and task force groups were held as well to promote EBLM.
7. A survey was prepared by the committee and circulated by the IFCC to get some information on test menu management using EBLM.

List planned activities in 2025 for this Term of Reference
A. The survey on EBLM is being analysed to present as a poster in Brussels 2025
B. Committee members are encouraged to present on EBLM when the opportunity arises
C. No conference proceeding submission were successful for 2025

Term of reference 3
Webinars

List 2024 accomplishments for this Term of Reference
The following IFCC webinar was presented by C-EBLM in 2024:
“The evidence of laboratory tests used in the management of diabetes mellitus” 15th April 2024
Dr. Zemlin participated in another webinar with C-EUBD and presented on : “Glycated albumin – what is the evidence?”
Dr. Don-Wauchope participated in an IFCC Webinar and presented ApoB V LDL-Cholesterol.
Dr. Bhargava moderated a non IFCC webinar titled “Newest Guidelines for Lipid Management in Indians”

List planned activities in 2025 for this Term of Reference
The following webinar has been submitted for 2025:
“Counting the cost of inappropriate laboratory testing.”
Combined with C-POCT for a possible second webinar. This was submitted later than the deadline. Title: “The use and implementation of POCT in rural areas.”

Term of reference 4
Guideline development / talks

List 2024 accomplishments for this Term of Reference
Dr. Bhargva was appointed to the IFCC task force on guidelines.

List planned activities in 2025 for this Term of Reference
The committee have discussed preparing a document/paper to describe the different types of guidance available to the laboratory community.

ADDITIONAL INFORMATION
Currently considering the applications for the two vacancies on the committee. We have an excellent slate of candidates. Would like to keep Dr. Bhargava as a consultant to the committee to have her continued input on the survey she helped co-ordinate.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)
5 meetings were held in 2024:
23 Feb (online) 9 attended,
27 May (face-to-face Dubai) 10 attended (1 committee member absent),
12 July (online) 8 attended (1 committee member absent),
13 Sept (online) 7 attended and,
2 Dec (online) 7 attended (1 committee member had resigned)
Most committee members attended all meetings. Consultants attended most meetings. Three corresponding members attended meetings regularly. (Tim Lang, Vinita Thakur and Shanel Rhaguber).
All corresponding members had emails sent to them to ask about participation. A summary spreadsheet was sent to the IFCC indicating which corresponding members wished to continue, those who no longer want to participate and those who did not respond to more than one direct email and invitations to attend the committee meetings.

MEETING SCHEDULE IN 2025
Minimum quarterly and one face-to-face in Brussels.
January: to discuss survey analysis and abstract plus manuscript.
March: regular committee meeting
May: In-person meeting
August
November

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS
Please see above under objectives.

Committee on Clinical Laboratory Management (C-CLM)

Chair: Praveen Sharma (IN) -PS
Members: Merve Sibil Gungoren (MG)
Prasenjit Mitra (PM)
Mahesheema Ali (MA)
Annalise Zemlin (AZ)

Term of reference 1

To promote the development of clinical laboratory leaders focusing on skills in:

- **Laboratory Leadership**
- **Team Management**
- **Laboratory Workload Planning**
- **Goal Setting**
- **Strategic Planning and Gap Analysis**
- **Financial Management**
- **Quality Management & Continuous Quality Improvement**
- **Quality Tools and Methods**
- **Risk Management**
- **Project Management**
- **Test Utilization Management**
- **Motivating Staff and Human Resource Management**
- **Culture of Quality**
- **Customer Focus and Patient Safety**

List 2024 accomplishments for this Term of Reference

(1) PS delivered two talks on “Value addition in laboratory medicine” and “Laboratory automation; pros and cons” at the 9th Annual Academic Sessions of College of Chemical Pathologists of Sri Lanka, held from 11th to 13th July 2024, at Hotel Galadari, Colombo, Sri Lanka.
PS delivered one talk on “Blood supply and Availability in India” at LMCE 2024 (Laboratory Medicine Congress & Exhibition) & KSLM 65th Annual Meeting held from September 25-27, 2024, COEX, Seoul, Korea
(2) PM delivered a talk on “Analytical Performance Specifications in the Clinical Laboratory” and chaired two sessions in the North Zone ACBICON 2024 held at AIIMS Jodhpur during 1-3 February 2024.
PM delivered two talks on “POCT versus Central Lab Testing” and “Creating the sustainable clinical laboratory of the future” and chaired one symposium at the 17th APFCB Congress, Sydney (31 October – 3 November 2024)
(3) MA delivered a talk on “Navigating Healthcare Excellence: Unveiling the Significance of Patient-Based Quality Control and Moving Averages” in March 2024 at Ohio Collaborative Laboratory Conference.
MA was a round table speaker at Association for Diagnostics & Laboratory Medicine Annual Scientific Meeting (2024). Chicago, IL, titled “Optimizing Laboratory Medicine Through Strategic Planning”.
(4) MG delivered an invited talk on “How to Manage Patient and Clinician Experience to Improve Satisfaction with Clinical Laboratory Services” at XXXI Meeting of Balkan Clinical Laboratory Federation (BCLF 2024) in October 2024.
MG also delivered a talk on “Value of clinical laboratories in clinical decision making” in an IFCC Webinar on Integrated Diagnostics: A new vision for the future of diagnostic specialties in April 2024.

List planned activities in 2025 for this Term of Reference

To deliver talks at various conferences to promote the development of clinical laboratory leaders.

Term of reference 2

Produces educational and training materials on laboratory leadership in the form of:

- **Publications including monographs, handbooks, and guides.**
- **Workshops**
- **Seminars**
- **Courses**

List 2024 accomplishments for this Term of Reference

(1) C-CLM members conducted an Educational Workshop in 17th APFCB Congress on 1st November 2024 titled “Risk Management in Clinical Laboratory”
PS - An Overview of Risk Management
PM - Risk Management Process in the Clinical Laboratory
Raja Elina - Applying Risk Management for Continuous Improvement
(2) C-CLM members participated in IFCC C-CLM symposia at the 50th Annual Conference of the Association of Clinical Biochemists of India (ACBICON), Chandigarh, India on 5th December 2024
MG - Managing patient and physician expectations to improve satisfaction from Clinical Laboratory services
PS - Value-based laboratory utilisation: Role of leadership
Sedef Yenice - Challenges and Strategies for Continuous Quality Improvement in Medical Laboratories

List planned activities in 2025 for this Term of Reference

The committee is working on a publishable guidance short booklet with the following titles
A. “Essential Problem-Solving Tools for Quality Improvement”
B. “Essentials of Project Management for Laboratory Leaders”
The materials are being reorganised & the committee plans to finalise and publish these booklets in 2025

Term of reference 3

Provides learning resources on topics related to clinical laboratory management.

List 2024 accomplishments for this Term of Reference

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List planned activities in 2025 for this Term of Reference

The committee plans to contribute learning resources and guidelines to IFCC. The proposals/topics have been sent in response to the call from the IFCC Task Force on Global eLearning (TF-GEL) and Task Force on Laboratory Medicine Practice Guidelines (TF-LMPG).

Term of reference 4

Collaborates with other IFCC committees, workgroups, and task forces in the above activities.

List 2024 accomplishments for this Term of Reference

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List planned activities in 2025 for this Term of Reference

The committee is planning a survey on Leadership/Lab Management for residents or young scientists. Once it is ready, we plan to collaborate with the young scientist task force (TF-YS). The committee also plans to work on proposals in collaboration with TF-YS.

Term of reference 5

Administers surveys on specific areas of laboratory management and establishes a database and plans for the preparation of new educational materials based on the results obtained from survey activities.

List 2024 accomplishments for this Term of Reference

The survey report on “Global Supply Chain Management Issues in Clinical Laboratories” has been completed and submitted to IFCC. It is available at https://ifcc.org/ifcc-education-division/emd-committees/c-clm/7-c-clm-publications-and-survey-reports/

List planned activities in 2025 for this Term of Reference

A survey on “Lab management/Leadership for residents or Young scientists” to be planned and executed in 2025.

ADDITIONAL INFORMATION

C-CLM has submitted two IFCC webinar proposals for 2025

- Proposal 1: Leadership, Efficiency, and Change Management in Clinical Laboratories: Navigating Challenges and Driving Success (for June 2025)
- Proposal 2: Global Healthcare Crisis: Addressing the Shortage of Laboratory Personnel (for September 2025)

Publications

- PS et al: Beyond the basics: Sigma scores in laboratory medicine with variable total allowable errors (TEa). Clin Chim Acta. 2025 Jan 15; 565:119971. doi: 10.1016/j.cca.2024.119971. Epub 2024 Sep 24. PubMed PMID: 39326693
- AZ et al: Challenges with communication of critical laboratory results in a resource-limited setting in South Africa. Afr J Lab Med 2024;13(1):2457
- AZ et al: Challenges associated with the effective implementation of new laboratory tests – the international experience. Clin Chem 2024;70(5):693-9

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

- IFCC C-CLM had a functional group meeting at the IFCC Worldlab Congress 2024 in Dubai on 27 May 2024.
- IFCC C-CLM Virtual Zoom meeting on 22 February 2024

Total meetings = 2 (In person-1, Virtual-1).

MEETING SCHEDULE IN 2025

- A functional committee meeting of IFCC C-CLM has been scheduled during EuroMedLab Brussels 2025 (May 2025)
- At least two virtual meetings will be planned

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

IFCC webinar by C-CLM members on "Global Supply Chain Issues in Health Care" was held on June 14th, 2024

- Chair: PS
- Talk 1 - "Role of supply chain in healthcare" - PM
- Talk 2 - "Ramifications of supply chain issues on healthcare" - MA
- Talk 3 - "Mitigating the risk of supply chain issues" - MG

Committee for the Education in the Use of Biomarkers in Diabetes (C-EUBD)

Chair:	Emma English	(UK)
Members:	E. Van der Hagen	(NL)
	A. Sato	(JP)
	J. Skrha	(CZ)
	E. Kilpatrick	(UK)
Consultants:	D. Sacks	(US)
	E.Lenters-Westra	(NL)
	C. Siebelder	(NL)

TERMS OF REFERENCE

The following new terms of reference were agreed at the Dubai 2024 meeting

Term of reference 1

To maintain and further develop the network of reference laboratories for the measurement of HbA1c (through collaboration with C-TLM and any other appropriate IFCC committee)

List 2024 accomplishments for this Term of Reference

1: Continue to provide oversight of IFCC HbA1c Reference Laboratory network: The committee continues to have oversight of the Reference Laboratory Network and receives an annual report for the network coordinator for consultation and feedback. There have been some updates to the reporting of data from the IFCC certification, with changes such as only listing manufacturers who have passed the certification process n the website, in previous years all manufacturers who participated were included, with no indication as to whether they met the criteria. The performance is not currently listed (i.e. the actual sigma score or ‘bronze, silver, gold’ are not listed. With thanks to Carla Siebelder for the presentation of this data from the Rome intercomparison study. With 16 approved laboratories and 1 candidate laboratory. Long term stability of the master equation and calibrators was also confirmed.

2. Continue to expand and deliver the EurA1c study – The committee received updates on progress of the EurA1c study in Dubai and a written report in September 2024. With thanks to Carla Siebelder for this report. There were 21 participating countries with 25 participating EQA providers. Fresh whole blood samples were analysed at 2546 laboratories and lyophilised samples at 1536 generating a total of 4082 returns across Europe, Asia, South America and Africa. Whilst numbers fluctuate, the number of returns is stable around 4,000, representing a significant data pool from which to draw meaningful conclusions about the performance of HbA1c analysers. The data is published each year in the form of a report.

List planned activities in 2025 for this Term of Reference:

1: The next update from the Reference laboratory network will be in Brussels in 2025 where the data from the 2024 Dubai studies (each annual intercomparison study is named after the location of the previous year’s meeting with the exception of the Kotten study which was named in honour of Cas Weykamp’s retirement.

2: There have been some queries raised around the value assignment for the samples for the EurA1c in late 2024. These have been thoroughly investigated and planned experiments to determine the best approach moving forward have been detailed. The data for the next value assignment is due in 2025. The study will continue to run in 2025.

Terms of reference 2 and 4

2. To work in partnership with national and international recognised bodies, associated with diabetes care, to promote the appropriate clinical and analytical use of biomarkers for diabetes
and
4. To support the development national and internationally recognised quality criteria for POCT IVDs for biomarkers of diabetes in a range of clinical settings (where these differ from laboratory methods).

List 2024 accomplishments for this Term of Reference

1: Development of guidelines for the World Health Organization (WHO) prequalification of BGM and POCT HbA1c devicesThis activity continues to be great success in promoting the work of the committee and IFCC more broadly. Both of these documents are now live and in active use. The HbA1c final document can be found at: https://iris.who.int/bitstream/handle/10665/375842/9789240087613-eng.pdf
The BGM document can be found at:
https://iris.who.int/bitstream/handle/10665/374321/9789240082939-eng.pdf
As of December 2024, no manufacturers have submitted devices to the WHO for prequalification however, there is an expected time lag between publication of the guidance and manufacturers having the extensive data portfolio required, ready for submission. EE is a rostered Consultant to WHO and will being reviewing submitted devices at several commissioned sessions with WHO throughout 2025.
EE and ELW have worked closely with FIND (Diagnostics NGO) to develop protocols for clinical studies in Cambodia and Nigeria to assess the performance of POCT HbA1c devices in the intended clinical setting. These studies are complete and data for 3 POCT devices has been gathered an analysed. The report from FIND is expected in early 2025.
2: Initial stages to set up a Prequalification Laboratory for WHO – Extensive work was undertaken on next phase of this activity to work with WHO to create the first Prequalification Evaluation Laboratory (PEL) for HbA1c, which is required in order for the prequalification process to be completed. A PEL is commissioned to undertake independent evaluations of products on behalf of WHO. Whilst all of the required paperwork was created and ready for the WHO approval process, with the protocols for the independent evaluation of HbA1c POC IVDs were drafted (by EE and ELW), reviewed and refined in early 2024. Unfortunately in May 2024 the WHO published the following:
“The need to undertake a prequalification independent evaluation also follows risk-based principles. In this context and as part of a broader effort to streamline assessment processes WHO has taken the executive decision to waive prequalification performance evaluations for in vitro diagnostic medical devices for monitoring of blood glucose in capillary blood and HbA1c point-of-care assays. For such products the prequalification assessment will include the review of a product dossier, a site inspection and labelling review” We were very disappointed with this decision and have expressed this to WHO. EE has spoken at length about this and delivered several presentations discussing the impact.
3: To work with FIND Dx on data gathering to support WHO prequalification processes.
In addition to the work detailed in part one of this section, ELW and EE have worked closely with FIND Dx who have funded the purchase of 19 POCT HbA1c devices for independent performance evaluation. The resultant data is startling and very worrying for some devices that available on the open market aimed at low resource settings. The data supports

the strong reservations we have about WHO deciding not to implement the independent evaluation for prequalification of these devices.
The data has been presented by FIND at the 2024 EASD, by EE at the – 4th PoCT Africa International Colloquium, Title: WHO and pre-qualification of POC IVDs. Cape Town Africa.
The data has been submitted as an article to Clinical Chemistry and has undergone review with revisions submitted to the journal.
4: To define criteria for the evaluation of interference from Hb Variants in HbA1c measurement. Determining if an Hb Variant causes interference with HbA1c measurement is proving complex and as yet there is no defined protocol for how to do this. A particular issue is that a number of POCT devices cannot use frozen samples, making it very difficult to amass sufficient fresh samples for a comprehensive study of a range of different variants. EE and ELW, working with DS, along with Randie Little and Curt Rohlfing at the NGSP have been working to develop and publish guidance on this issue.
5: Royal College of Pathologists Global Health Workforce Project: EE organized for a specialist speaker on genomics medicine (with a focus on diabetes) to speak at this series of events aimed at pathology laboratories in Nigeria, Ghana and Kenya. The session was well received.

List planned activities in 2025 for this Term of Reference:

1: WHO prequalification: This is now complete however we will continue to work with WHO through the evaluation of dossiers as required.
2: WHO performance evaluation We will continue an open dialogue with WHO about the need for prequalification and once the article from the joint study with FIND is published we will use this as supporting evidence in our discussions.
3: FIND and other NGOs. We will continue to work with NGOs to promote good analytical performance of HbA1c devices. Next steps for this area will be decided at the 2025 Brussels meeting.

Term of reference 3

To work with industry partners, to promote the appropriate clinical and analytical use of biomarkers for diabetes (for example in the support of meeting national and international regulatory guidance)

List 2024 accomplishments for this Term of Reference

1:Undertake a listening exercise with global manufacturers for HbA1c version 2.0: you said we did – In 2023 we undertook a very successful listening exercise with a large group of representatives from the key manufacturers of HbA1c IVDs. This was held at the ADLM (formerly AACC meeting in Anaheim in 2023). The Chair of the NGSP (David Sacks, who is also a consultant member of the IFCC-EUBD) and EE the Chair of the EUBD both presented data around key issues pertaining to HbA1c measurement. CS presented data on the IFCC network and EurA1c trials. For the listening exercise an interactive Q&A session was undertaken using real time voting, through the use of QR codes. We followed this up in 2024 at the ADLM meeting in Chicago. We fed back on activities of the committee and updated progress on the topics that had been highlighted at the previous meeting (glycated albumin and Hb Variants). As well as the updates from CS and DS, EE presented the statement from WHO (around prequalification – see above) and there was active discussion around this topic. We also highlighted the publication of our article on the ‘Limitations of glycated albumin standardization when applied to the assessment of diabetes patients’ which was co-authored by members of the committee and consultant members, ELW, Eric Kilpatrick (EK), Asako Sato (AS), and EE, along with Robbert Slingerland from the Working Group on Continuous Glucose Monitoring (WG-CGM). We have therefore successfully assessed the needs of the manufacturers and delivered a publication based on their request, with a further two publications in progress (a second on glycated albumin and the guidelines for assessing interference from Hb variants (see point 4 for ToR 2/4 above).

2: There is still a paucity of funding for industry sponsored presentations with requests for webinars rather than in person sessions. This still limits the opportunities for sponsored workshops as the funding is streamed towards conferences etc. However there have been some opportunities:
Abbott Diagnostics Wyebaden: January 2024; Speaker Dr Erna Lenters: HbA1c POCT testing: is it good enough for clinical practice?
Multicentre tour of Asia, including South Korea, Singapore, New Zealand and Australia, sponsored by Roche: April 2024; Speaker Dr Erna Lenters, Presentations included topics on HbA1c standardization, the role of the IFCC reference laboratory, performance evaluations of HbA1c IVDs, haemoglobinopathies for a range of audiences, including manufacturer reps, customers and local laboratories.
Scientific event organised by Roche Diagnostics in Riga, Latvia: May 2024; Speaker Dr Erna Lenters: The importance of a quality framework for POCT.
EE has been actively making contact with manufacturers and pursuing proposals for further presentations into 2025.

List planned activities in 2025 for this Term of Reference:
1: Listening exercise: The joint IFCC/NGSP meetings at the ADLM congress are proving a very useful tool to engage with a wide range of manufacturers and to promote the activities of the Committee. We have presented a new publication at each meeting, and these have been met with significant interest. We propose to continue to do this as long as funding support continues. It should be noted that the funding for this event does not come from the IFCC but instead from the ERL and the Chair wishes to extend their thanks for this continued support.
2: Expanding the range of input from industry – We will continue to update attempts to further engage with industry for educational events.

Term of reference 5
To monitor the literature on current and emerging biomarkers and advise on best practice in relation to laboratory aspects of diabetes

List 2024 accomplishments for this Term of Reference
1: Publication plans – see section below for list of publications and presentations. The committee members continue to pursue high quality publications in the field of diagnostics for diabetes and have been successful in terms of outputs in the year 2024.
2: Educational materials: Understanding discordance between GMI and HbA1c, with a checklist to identify and manage discordance – an active goal of the Committee is to produce educational outputs that are useful to the laboratory and wider clinical community. In 2023 we were invited to submit a proposal for a perspectives piece in Diabetes Care. There were numerous revisions of a proposal and a submission site set up. The article was delivered by a team of authors from the EUBD including full, consultant and corresponding members. Two clinical colleagues were also included, including one suggested by the journal editor. Disappointingly the final article was rejected at editorial level, however it has subsequently been submitted to Diabetic Medicine and has received favourable review.
3: Systematic review on glycated albumin. Progress is ongoing with this activity. Searches have been updated and two students (one from University of Cambridge and one from University of East Anglia) have generously given their time to progress this project.
4: IFCC Webinars: IFCC Webinars: A Joint Webinar for IFCC from the IFCC Committees for Evidence-based Laboratory Medicine (C-EBLM) and Education on the Use of Biomarkers in Diabetes (C-EUBD) was successfully delivered in April 2024
5: Book Chapter in the Textbook of Diabetes: EE has authored the chapter on monitoring diabetes for the 6th Edition of the Textbook of Diabetes, which was published in February this year. (see list of publications below for full details).

List planned activities in 2025 for this Term of Reference:
1: Educational material: we hope to see the publication of this article in early 2025 and will decide on a topic for the next educational output at the Brussels meeting in 2025.
2: Future systematic and/or scoping reviews: We aim to commission one new review each year on topics related to diabetes biomarkers. These activities are time consuming and labour intensive, however they are still considered one of the highest orders or clinical evidence and we endeavour to generate high quality outputs.
3: IFCC Webinars: A webinar is planned and approved and an appropriate time is being sought due to the maternity leave and subsequent work pressures of one of the speakers.

ADDITIONAL INFORMATION
The refined ToRs were agreed at the Dubai meeting and are reflected in the report above.
The broadening of the scope of the committee to all biomarkers for diabetes continues as evidenced by the publications on glycated albumin and the book chapter on Diabetes Monitoring in the Textbook of Diabetes. Any expansion requires time for underpinning work to be done but this is now bearing fruit, and we anticipate more publications in 2025 (see list below for two already submitted).

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)
Dubai 2024
Various group and individual meetings approx. every month around various projects.

MEETING SCHEDULE IN 2025
Brussels in person meeting, ongoing via teams or zoom or WhatsApp for individual projects.

7. PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS
Publications by committee members:
Lenters-Westra E, Fokkert M, Kilpatrick ES, Schleicher E, Pilla S, English E, van Dijk P. Managing discordance between HbA1c and glucose management indicator. Submitted and under review in Diabetic Medicine.

Lenters-Westra E, Singh P, Vetter B, English E. Challenges in HbA1c Testing: Independent evaluation of 19 HbA1c Point-of-Care devices showed only 6 met IFCC and NGSP certification criteria. Submitted and under review in Clinical Chemistry

English E. Monitoring Diabetes. In Holt RLG and Flyvbjerg A. ed(s) Textbook of Diabetes, 6th Edition. International, 2024, pg 404-414
Lenters-Westra E, Atkin SL, Kilpatrick ES, Slingerland RJ, Sato A, English E. Limitations of glycated albumin standardization when applied to the assessment of diabetes patients. Clin Chem Lab Med. 2024 Jun 17;62(12):2526-2533. doi: 10.1515/cclm-2024-0591

Butler AE, Hunt SC, Kilpatrick ES. Using nephropathy as an outcome to determine the HbA1c diagnostic threshold for type 2 diabetes. Diabetes Metab Syndr. 2024 Apr;18(4):103005. doi: 10.1016/j.dsx.2024.103005. Epub 2024 Apr 10. PMID: 38615570.

Kilpatrick ES, Kallner A, Atkin SL, Sathyapalan T. The variability of measured and calculated low-density lipoprotein (LDL) cholesterol in statin-treated diabetes patients. Ann Clin Biochem. 2024 Dec 5:45632241305936. doi:10.1177/00045632241305936. Epub ahead of print. PMID: 39636720.

Webinars or presentations by committee members:
Abbott Diagnostics Wyebaden: January 2024; Speaker Dr Erna Lenters: HbA1c POCT testing: is it good enough for clinical practice?

Joint Webinar for IFCC from the IFCC Committees for Evidence-based Laboratory Medicine (C-EBLM) and Education on the Use of Biomarkers in Diabetes (C-EUBD) Online April 2024: Speaker Prof Annie Zemlin - Glycated albumin – what is the evidence?

Joint Webinar for IFCC from the IFCC Committees for Evidence-based Laboratory Medicine (C-EBLM) and Education on the Use of Biomarkers in Diabetes (C-EUBD) Online April 2024: Speaker Dr Emma English - HbA1c – pros and cons

Multicentre tour of Asia, including South Korea, Singapore, New Zealand and Australia, sponsored by Roche: April 2024; Speaker Dr Erna Lenters, Presentations included topics on HbA1c standardization, the role of the IFCC reference laboratory, performance evaluations of HbA1c IVDs, haemoglobinopathies for a range of audiences, including manufacturer reps, customers and local laboratories. (8 presentations and 6 laboratory visits)

Scientific event organised by Roche Diagnostics in Riga, Latvia: May 2024; Speaker Dr Erna Lenters: The importance of a quality framework for POCT.

NGSP/IFCC Manufacturer forum at the 2024 ADLM Annual Scientific Meeting Chicago : Speaker, Dr Emma English: IFCC C-EUBD – updates and key developments

NGSP/IFCC Manufacturer forum at the 2024 ADLM Annual Scientific Meeting Chicago: Speaker, Carla Siebelder: IFCC Network and EurA1c update

ACBICON 2024 – Sept 2024; Speaker Dr Emma English: POCT HbA1c current performance and future goals, via pre-recorded video online.

4th PoCT Africa International Colloquium, Cape Town, Africa, November 2024;
Speaker: Dr Emma English - Current Advances in PoCT for diabetes care. Cape Town Africa

4th PoCT Africa International Colloquium, Cape Town, Africa, November 2024;
Speaker: Dr Emma English - WHO and pre-qualification of POC IVDs. Cape Town Africa

4th PoCT Africa International Colloquium, Cape Town, Africa, November 2024;
Speaker: Prof Annie Zemlin - POCT HbA1c- what is the evidence? Cape Town Africa

Committee on Clinical Applications of Cardiac Bio-Markers (C-CB)

Chair: Kristin Moberg Aakre (NO)
Members: O. Hammarsten (SE)
L. Cullen (AU)
Y. Sandoval (US)
N. Mills (UK)
Consultants: F. Apple, P. Collinson, A Jaffe, T Omland.
New members from 01.2025: Jens Peter Gøtze, Blanca Fabre Estremera (young member) and Lori Daniels (Consultant)

TERMS OF REFERENCE
Overall aim: To develop and disseminate educational documents, materials and scientific presentations targeted towards clinical and analytical applications of cardiac biomarkers including, but not limited to, cardiac troponin (high-sensitivity, contemporary and point-of-care assays), natriuretic peptides (BNP, NT-proBNP assays) and emerging novel biomarkers.

Deliverables include:
1) published manuscripts, 2) biomarker reference tables, 3) webinars, 4) podcasts and social media.

Term of reference 1
Published manuscripts (educational)

List 2024 accomplishments for this Term of Reference
The group have published the following educational documents in 2024:
Lower Limits for Reporting High-Sensitivity Cardiac Troponin Assays and Impact of Analytical Performance on Patient Misclassification.
Aakre KM, Apple FS, Mills NL, Meex SJR, Collinson PO; International Federation of Clinical Chemistry Committee on Clinical Applications of Cardiac Biomarkers (IFCC C-CB).Clin Chem. 2024 Mar 2;70(3):497-505. doi: 10.1093/clinchem/hvad185.

List planned activities in 2025 for this Term of Reference
The group is working on the following scientific manuscripts, to be published in 2025/26:
Sex differences in cardiac markers
The use of NP to select patients for risk of HF who should have early treatment
Cardiac markers in AI
Troponins in children
Troponin fragment analysis
ADP article: Article describing what is necessary to derive and validate ADP, including hierarchy of evidence (observational studies, RCTs, implementation studies and meta-analyses). Planned for 2025/26.
The group has started a new initiative called “Q&A”. The goal here is to provide short and simple answers to basic questions related to cardiac markers. The Q&A should be posted on the website but also presented in a printer friendly layout so that they may be distributed to students, routine laboratories and similar. The questions have been collected and systemized by industry members, a total of 6 subgroups with 3-6 question each have been identified. The layout of the pamphlets is being developed together with the IFCC office. The answers to the first subgroup of questions are almost finished while the rest will be addressed during 2025. The plan is that these should be published through 2025. National societies could translate these into native language if necessary.

Term of reference 2
Biomarker reference tables

List 2024 accomplishments for this Term of Reference
The tables are available at the IFCC website. They have been updated in April 2024. The second update (November 2024) is delayed due to some unexpected experience were several manufacturers submitted assays to the tables without the data reported being documented in the package inserts. The group have developed criteria for assays being included in the tables and the update will be done when these are agreed upon (January 2025).
https://ifcc.org/ifcc-education-division/emd-committees/committee-on-clinical-applications-of-cardiac-bio-markers-c-cb/biomarkers-reference-tables/

List planned activities in 2025 for this Term of Reference
We plan to update the tables 2 times during 2025.

Term of reference 3
Webinars and congress presentations

List 2024 accomplishments for the 3rd Term of Reference
The group has delivered the following webinars in 2024:
1. Troponin assays with higher clinical specificity; a novel future option (24th of April)
2. Current and future perspectives on measuring natriuretic peptides (23rd September)

The group has delivered the following congress presentations in 2024:
1. 29th of February, AFCC Regional Conference Cairo (digital presentation): Current and future perspectives on cardiac biomarkers
2. 8th-25th April 2024. Kristin M Aakre has been lecturing in four scientific meetings organized by different Chinese Hospitals in Hefei, Guiyang, Shanghai and Hangzhou and at the Scientific meeting MIIF in Shenzhen (500 international participants): Recent update on educational recommendations from the IFCC Committee on Clinical Application of Cardiac Bio-Markers. This tour was organized by Mindray (IVD company, corresponding member of the C-CB)
3. 29th October, 35th Meeting of Balkan Clinical Laboratory Federation, Antalya: Recent update on educational recommendations from the IFCC Committee on Clinical Application of Cardiac Bio-Markers.
4. 5-7th December 2024. Kristin M Aakre has been lecturing at first conference of the Chinese Society of Cardiothoracic and Vascular Anesthesiology in Shenzhen and meet with key opinion Chinees scientists on cardiac biomarkers discussing the topics currently worked with by the C-CB. She has also been lecturing in one scientific meeting organized at the Chinese Hospitals in Suzhou: Navigating Challenges in Cardiovascular Marker Testing: Insights and Solutions. This tour was organized by Mindray (IVD company, corresponding member of the C-CB)

List planned activities in 2025 for the 3rd Term of Reference
1. FLM congress in Brussels May 2025 (proposal has been accepted): IFCC SYMPOSIUM Cardiac troponins; clinical utility, analytical performance and future opportunities
2. We have made two proposals to the ADLM congress in Chicago
   - Does sex differences in cardiac troponins matter?
   - Optimising management of chest pain with high sensitivity point of care testing.

Term of reference 4
Podcast and social media

List 2024 accomplishments for the 4th Term of Reference
1. A total of 4 “educational” and 4 “meet the experts” podcast are now available on the webpage
2. https://ifcc.org/ifcc-education-division/emd-committees/committee-on-clinical-applications-of-cardiac-bio-markers-c-cb/podcasts/
3. The podcast will be presented in the IFCC news to increase publicity.
4. There has been less activity on Twitter as this platform has changed and may seem less relevant.

List planned activities in 2025 for the 4th Term of Reference
1. Main focus will be to produce more podcasts, the goal should be 4 podcast episodes through 2025.
2. Bluesky or other platforms may be considered as social media channels

ADDITIONAL INFORMATION
This is a well functioning group were all members and consultancies are contributing actively to our work. The grope meet monthly (outside holiday season) on a digital platform. Minutes are available on the groups webpage:
https://ifcc.org/ifcc-education-division/emd-committees/committee-on-clinical-applications-of-cardiac-bio-markers-c-cb/previous-meeting-minutes/

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)
See Terms of References (point 3).

MEETING SCHEDULE IN 2025
The group plan to meet physically on the 8th May in San Diego, USA and once during the fall 2025, probably in Europe.
The group meet regularly (monthly, outside holidays) on a digital platform (TEAMS).

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS
Through 2024 this group has published 1 paper, held 2 webinars, participated in a large number of congress symposia (9), produced podcasts and are currently developing an educational Q&A, see also Terms of references for details.

Committee on Kidney Diseases (C-KD)

Chair:	Joe El Khoury (US)
Members:	J. Delanghe (BE)
	G. Jones (AU)
	R. Selvaratnam (CA) To be Nominated Member
Consultant:	F. Alcantara (BR)
	T. Wada (JP)

TERMS OF REFERENCE

Term of reference 1

List 2024 accomplishments for this Term of Reference

1. May 2024: Presented scientific session at the IFCC WorldLab Dubai 2024 on “PRESENT AND FUTURE OF CHRONIC KIDNEY DISEASE AND ACUTE KIDNEY INJURY DETECTION”
Chair: Joe M. El-Khoury
A: Updates on new eGFR equations and acute kidney injury definitions
Joe M. El-Khoury
B: An update on albuminuria as a chronic kidney disease marker
Joris Delanghe
C: Everything is acute until it becomes chronic – biomarkers of kidney injury
Rajeevan Selvaratnam
D: Using machine learning methods and leveraging electronic health records for acute kidney injury detection and management
Lama Ghazi
2. May 2024: Held successful meeting at IFCC WorldLab in Dubai 2024 with active participation by members who presented 3 talks and corresponding members who shared their perspectives on the field in their region. We also had guest speakers Dr. Etienne Cavalier, who presented his latest publication on a survey of laboratory practices in Europe for reporting eGFR, and Dr. Barnali Das, who presented published data from her hospital comparing KDIGO 2012 AKI criteria to the AACC-AKI 2020 criteria.
3. October 2024: Dr. Joe El-Khoury chaired and presented at COLABIOCLI in Cartagena, Colombia on “New Tools for Detecting and Reducing Error in the Total Testing Process”, with speakers Drs. Sarina Yang, Mark Cervinski and Christopher Farnsworth.
4. November 2024: IFCC Webinar submitted by our committee was presented, titled “International Perspectives on Estimating Glomerular Filtration Rate Equations”, chaired by Dr. Rajeevan Selvaratnam, with speakers Drs. Amy Karger, Etienne Cavalier and Verônica Torres da Costa e Silva.
5. Published a Core Curriculum in the American Journal of Kidney Diseases for training nephrologists about common pitfalls in laboratory medicine testing, titled “Laboratory Anomalies in the Basic Metabolic Panel: Core Curriculum 2025” PMID: 39396361
6. Published a review in Clinical Chemistry on evaluating the use of machine learning and biomarkers for the detection of acute kidney injury, titled “Biomarkers vs Machines: The race to predict acute kidney injury” PMID: 38299927

List planned activities in 2025 for this Term of Reference

1. Dr. Joe El-Khoury will be presenting at the IFCC-EFLM EuroMedLab in Brussels 2025 in Belgium. This presentation was submitted in collaboration with the machine learning group. It will be presented on Tuesday, 20 May 2025, during the Symposium titled “IFCC SYMPOSIUM 3 - Unraveling the Role of Machine Learning in Clinical Chemistry: Bridging the Gap between Potential and Practicality”, chaired by Prof. He Sarina Yang.
“Navigating the challenges of implementing machine learning in clinical laboratory practice” – He Sarina Yang, USA
“Biomarkers vs. Machines: the Race to Predict Acute Kidney Injury” – Joe El-Khoury, USA
“Leveraging Laboratory Data as a Tool to Assess for Preanalytical Errors” – Christopher Farnsworth, USA
“Doing more with patient data: detection of analytical error through patient-based quality control” – Mark Cervinski, USA
2. We submitted a proposal for an IFCC webinar entitled: “Detection of Acute Kidney Injury: Definitions, Biomarkers and e-Alerts” which will be chaired by Dr. Joe El-Khoury, with speakers Dr. Melanie Hoenig, Dennis Moledina and Rajeevan Selvaratnam.
3. We will be holding an in-person meeting at the IFCC-EFLM meeting in Brussels.
4. We are planning to develop a social media campaign to promote best laboratory practices for the laboratory investigations of acute kidney injury and chronic kidney disease.
5. Recruiting new member to fill the void left by Dr. Takashi Wada.

ADDITIONAL INFORMATION

Dr. Takashi Wada recently stepped down from his role as member and has been appointed as a Consultant. We will be recruiting a new member in January 2025, hoping they will be able to join us in person in Belgium.

024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

March 30, 2024 (Virtual)
May 26, 2024 (In person, Dubai, IFCC WorldLab 2024)
September 2024 (Virtual)
October 2024 (Virtual)

MEETING SCHEDULE IN 2025

February 2025 (Virtual)
May 2025 (in person, Brussels, IFCC-EFLM EuroMedLab 2025)
September 2025 (Virtual)
November 2025 (Virtual)

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

1. May 2024: Presented scientific session at the IFCC WorldLab Dubai 2024 on “PRESENT AND FUTURE OF CHRONIC KIDNEY DISEASE AND ACUTE KIDNEY INJURY DETECTION”
Chair: Joe M. El-Khoury
A: Updates on new eGFR equations and acute kidney injury definitions
Joe M. El-Khoury,
B: An update on albuminuria as a chronic kidney disease marker
Joris Delanghe
C: Everything is acute until it becomes chronic – biomarkers of kidney injury
Rajeevan Selvaratnam
D: Using machine learning methods and leveraging electronic health records for acute kidney injury detection and management
Lama Ghazi
2. IFCC November 2024 Webinar, titled “International Perspectives on Estimating Glomerular Filtration Rate Equations”, chaired by Dr. Rajeevan Selvaratnam, with speakers Drs. Amy Karger, Etienne Cavalier and Verônica Torres da Costa e Silva.
3. October 2024: Dr. Joe El-Khoury chaired and presented at COLABIOCLI in Cartagena, Colombia on “New Tools for Detecting and Reducing Error in the Total Testing Process”, with speakers Drs. Sarina Yang, Mark Cervinski and Christopher Farnsworth.
4. Ghazi L, Farhat K, Hoenig MP, Durant TJS, El-Khoury JM. Biomarkers vs Machines: The Race to Predict Acute Kidney Injury. Clin Chem. 2024;70:805-819.
5. Takieddine LT, El-Khoury JM. Laboratory Anomalies in the Basic Metabolic Panel: Core Curriculum 2025. Am J Kidney Dis. Online ahead of print – PMID: 39396361
6. Bohn MK, Asare-Werehene M, Leung F, Brinc D, Selvaratnam R. Discordance between creatinine and cystatin C-based estimation of glomerular filtration rate (eGFR) in solid organ transplant recipients. Clin Biochem. Online Ahead of Print –PMID: 39577715

7. Vermassen T, Geboes K, Lumen N, Van Praet C, Rottey S, Delanghe J. Comparison of different estimated glomerular filtration rates for monitoring of kidney function in oncology patients. Clin Kidney J. 2024;17:sfae006.
8. Dhont E, Van Der Heggen T, Snauwaert E, Willems J, Croubels S, Delanghe J, De Waele JJ, Colman R, Vande Walle J, De Paepe P, De Cock PA. Predictors of augmented renal clearance based on iohexol plasma clearance in critically ill children. Pediatr Nephrol. 2024;39:1607-1616.

Committee on Point-of-Care Testing (C-POCT)

Chair: Adil I. Khan (US)
Members: P. Oliver Saez (ES)
N.L. Khorpi-Steiner (US)
S. Sengupta (IN)
Member/Abbott: P. Jarvis (UK)
Member/ Werfen: P. Pamidi (US)
Consultants: R. Tirimacco (AU)
S. Sandberg (NO)
G. Kost (US)
E. Jacobs (US)

TERMS OF REFERENCE

Term of reference 1

To provide international leadership for developing the clinical practice of POCT in Laboratory Medicine

List 2024 accomplishments for this Term of Reference:

Plebani M, Nichols JH, Luppa PB, Greene D, Sciacovelli L, Shaw J, Khan AI, Carraro P, Freckmann G, Dimech W, Zaninotto M, Spannagl M, Huggett J, Kost GJ, Trenti T, Padoan A, Thomas A, Banfi G, Lippi G. Point-of-care testing: state-of-the art and perspectives. Clin Chem Lab Med. 2024 Jun 17;63(1):35-51. doi: 10.1515/cclm-2024-0675. PMID: 38880779.

List planned activities in 2025 for this Term of Reference:

1. IFCC Guideline on “Analytical Method Verification in Point-of-Care Testing” (on-going).
2. IFCC/ADLM Guideline on Artificial Intelligence/Machine learning and Point-of-Care testing (on-going).
3. Develop a strategy plan for C-POCT

Term of reference 2

To create a forum for high level discussion on a wide range of POCT related topics

List 2024 accomplishments for this Term of Reference:

1. Enhancing Healthcare through Point-of-Care Testing, 3rd Egylab Forum, in collaboration with AFCC and IFCC (C-POCT/C-EBLM), Feb 28-29, 2024.
2. Point-of-Care Testing: State of the art and perspectives, Venice, Italy 4-5 April 2024
3. Selection and evaluation of non-integrated POCT: In, Management of non-integrated POCT: Challenges and solutions, 15 May, 2024.
4. Improvements in healthcare through 21st Century innovations, Cartagena, CO, Oct 3-6, 2024
5. Point-of-Care Testing: the never-ending challenges and their resolutions (webinar), October 28, 2024.
6. Improving Wellness, Emergency Response, and Resilience with Prehospital Testing. Asian Pacific Federation of Clinical Biochemistry Regional Congress in Sydney, Australia on Oct 31- Nov 3, 2024.
7. Bridging the disparity gap through traditional and AI enhanced POCT. XII Argentine Congress of Quality in the Clinical Laboratory (CALILAB 2024), Nov. 6-8 2024, Buenos Aires Argentina.
8. Quality requirements for POCT performed outside hospital settings. XII Argentine Congress of Quality in the Clinical Laboratory (CALILAB 2024), Nov. 6-8 2024, Buenos Aires Argentina.

List planned activities in 2025 for this Term of Reference:

1. Collaborative webinar between C-POCT and C-EBLM: The use and implementation of POCT in rural areas.

Term of reference 3

To promote quality in the use, performance, interpretation and reporting of POCT across the full spectrum of clinical chemistry and laboratory medicine.

List 2024 accomplishments for this Term of Reference.

1. IFCC Guideline on “Analytical Method Verifiction in Point-of-Care Testing” (on-going).

List planned activities in 2025 for this Term of Reference

1. IFCC Guideline on “Analytical Method Verification in Point-of-Care Testing” (on-going).
2. IFCC C-POCT /C-MHBLM/ADLM Guideline on Artificial Intelligence/Machine learning and Point-of-Care testing (on-going).

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

See Terms of Reference #2 and #3

MEETING SCHEDULE IN 2024

C-POCT Meetings held:
27 May
15 August
12 December

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

1. AFCC CONGRESS, CAIRO, EGYPT, 25-26 JANUARY 2024

PROPOSAL FROM THE IFCC C-POCT /C-EBLM

Session title: "Enhancing Healthcare through Point-of-Care Testing"
Co-Chair/ Speaker 1: Prof. Adil I. Khan, email: adil.khan@temple.edu
“Leveraging Artificial Intelligence in Point-of-Care Testing”
Co-Chair/Speaker 2: Prof. Annalise Zemlin, email: azemlin@sun.ac.za
“Comparing laboratory and POCT HbA1 for the monitoring and diagnosis of diabetes - what is the evidence”
Speaker 3: Dr. Sohini Sengupta, email: drsohini9@gmail.com
“Establishing a Quality Management System in POCT: the challenges & solutions.”
Speaker 4: Dr. Lena Jafri, email: lena.jafri@aku.edu
“Empowering Future Physicians: Integrating POCT into AKU Medical College's Undergraduate Curriculum.”

2. Plebani M, Nichols JH, Luppa PB, Greene D, Sciacovelli L, Shaw J, Khan AI, Carraro P, Freckmann G, Dimech W, Zaninotto M, Spannagl M, Huggett J, Kost GJ, Trenti T, Padoan A, Thomas A, Banfi G, Lippi G. Point-of-care testing: state-of-the art and perspectives. Clin Chem

Lab Med. 2024 Jun 17;63(1):35-51. doi: 10.1515/cclm-2024-0675. PMID: 38880779.
3. Management of non-integrated point-of-care testing (POCT): challenges and solutions. 15 May 2024
Prof Tahir Pillay: Moderator
Prof. Adil Khan: Selection and evaluation of non-integrated POCT.
Prof. Lena Jafri: Individualized Quality control Program .or non-integrated POCT
Prof. Geoffrey Omuse: Continuous glucose monitoring opportunities and challenges in training and competency assessment of POCT users
4. Symposium: Point-Of-Care Testing: Improvements In Healthcare Through 21st Century Innovations. Cartagena, CO, Oct 3-6, 2024
President: Adil Khan.

1. Dr. Ravinder Singh (US): Advanced Home Care: Opportunities and Challenges for Point-of-Care Testing.
2. Dr. Adil Khan (US): Improving Point-of-Care Testing Through Artificial Intelligence.
3. United States
4. Dr. Paloma Oliver (ES): The Use of Key Performance Indicators in Point-of-Care Testing.
5. Dr. Anna Füzéry (CA): Community-Based Dual HIV/Syphilis Poct as a Solution to a Province-Wide Syphilis Outbreak in Alberta, Canada. Point-of-Care Testing: the never-ending challenges and their resolutions (webinar), October 28, 2024, Prof. Adil I. Khan: moderator Dr. Sohini Sengupta: Establishment of a Quality Management System in POCT: from the ground, up. Prof. Julie Shaw: Establishing and monitoring quality indicators for POCT. Prof. Lena Jafri: Empowering Future Physicians: Integrating POCT into Aga Khan University's Medical College's Undergraduate Curriculum.
6. Improving Wellness, Emergency Response, and Resilience with Prehospital Testing. Asian Pacific Federation of Clinical Biochemistry Regional Congress in Sydney, Australia on Oct 31- Nov 3, 2024. Improving wellness, emergency response, and resilience with Prehospital testing. Chair: Adil Khan (US): Artificial Intelligence and POC Testing: bridging the disparity gap in healthcare. Gerald Kost (US): POC Strategies for the Archipelagos and Island Nations of the Pacific Samarina Musaad (NZ): Pre-hospital tests: its impact on the indigenous population of the Northern Region of New Zealand
7. Bridging the disparity gap through traditional and AI enhanced POCT. XII Argentine Congress of Quality in the Clinical Laboratory (CALILAB 2024), Nov. 6-8 2024, Buenos Aires Argentina.
8. Quality requirements for POCT performed outside hospital settings. XII Argentine Congress of Quality in the Clinical Laboratory (CALILAB 2024), Nov. 6-8 2024, Buenos Aires Argentina.

Working Groups

Working Group Laboratory errors and patient safety (WG LEPS)

Chair: Mario Plebani (IT) Jan-Jun, Vincent De Guire (CA) Jul-Dec

TERMS OF REFERENCE

Term of reference 1: promoting the standardization in the field of Quality indicators reducing laboratory errors and improving patient safety.

List 2024 accomplishments for this Term of Reference

Activity 1 : the 2024 WG-LEPS consensus group meeting.

The 2024 Consensus Meeting of the Working Group on Laboratory Errors and Patient Safety (WG-LEPS) was held on June 17-18, 2024, in Quebec, Canada, under the auspices of the Canadian Society of Clinical Chemists (CSCC) and the Quebec Society of Clinical Biology (SQBC). This meeting brought together global experts and stakeholders to advance the development and implementation of international Quality Indicators (QIs) for improving patient safety in laboratory medicine.

Key Outcomes

1. Essential Quality Indicators (QIs):

- A streamlined panel of 6 Essential QIs was selected to enhance global participation and
- focus on critical areas of the total testing process.
- QIs include:
- Misidentification rates (Pre-MisR/Pre-MisS).
- Sample rejection rates.
- Hemolysis rates (Pre-HemI/Pre-HemV).
- EQA performance (Intra-Unac).
- Troponin Turnaround Time (TAT).
- Incorrect laboratory report rates (Post-RectRep).

2. Improving Global Collaboration:

- Strategies were discussed to engage national societies and integrate QIs into local and
- international laboratory practices.
- Focus on data accessibility and alignment with accreditation bodies like ISO15189 and
- CAP to standardize reporting practices.

3. Industry Partnerships:

- Collaboration with Siemens Healthineers and Abbott to develop IT solutions for
- automated QI monitoring.
- Projects include middleware integration and pre-analytical error tracking systems.

4. Patient Outcome Focus:

- Strong emphasis on linking QIs to patient outcomes.
- Plans for partnerships with patient-centered organizations to assess the clinical and
- financial impacts of laboratory errors.

5. Global Quality Specifications:

- A new strategy for calculating weighted Quality Specifications (QS) based on national
- programs was proposed to enhance participation and data harmonization.

6. Standardization Efforts:

- Initiatives to collaborate with LOINC and SNOMED for creating standardized codes to
- streamline error tracking and reporting globally.

Strategic Priorities for 2024-2025

- Finalize and disseminate the Essential QIs across national societies.
- Strengthen ties with accreditation bodies to embed QIs into quality management frameworks.
- Advance global QS development with structured data-sharing mechanisms.
- Promote middleware and software solutions for efficient QI tracking.
- Foster collaboration between laboratories, clinicians, and healthcare organizations to better connect QIs with patient outcome

Activity 2: The IFCC-Abbott Visiting Lecturer Program (VLP) of the Canadian Society of Clinical Chemists in collaboration with the WG-LEPS.

Event Overview

The IFCC-Abbott Visiting Lecturer Program (VLP) played a pivotal role in the success of the Joint Annual Conference of the Canadian Society of Clinical Chemists (CSCC) and the Quebec Society of Clinical Biology (SQBC), held from June 16-19, 2024, at Mont Sainte-Anne, Quebec, Canada. The conference focused on advancing quality improvement in laboratory medicine and patient safety, leveraging the expertise of IFCC lecturers to foster knowledge exchange and innovation.

Key Activities Supported by VLP

1. Symposium: IFCC Expert Insights on Quality Improvement and Patient Safety

The plenary symposium was a central feature of the conference, drawing over 300 delegates from Canada and internationally.

- Objective: To disseminate advanced knowledge and promote harmonization in quality indicator (QI) practices.

Moderators:

- Dr. Vincent De Guire (Canada), member of WG-LEPS and chair of the Canadian QIs comparison program.
- Prof. Mario Plebani (Italy), chair of WG-LEPS and president of EFLM.

Topics Covered:

- Dr. Pieter Vermeersch (Belgium) discussed the critical role of accurate error reporting in
- improving patient safety.
- Dr. Wilson Shcolnik (Brazil) shared insights from Brazil's national QI comparison program.
- Dr. Sohini Sengupta (India) presented on implementing WG-LEPS guidelines at the
- national level, sharing the Indian perspective.
- Impact: Delegates gained exposure to diverse international practices, sparking discussions on implementing these insights locally.

2. Workshop: Advancing POCT Quality

- This interactive session focused on integrating Point of Care Testing (POCT) Quality
- Indicators into global comparison programs.
- Attendance: Approximately 30-40 participants.

Moderators:

- Dr. Vincent De Guire, chair of the CSCC Special Interest Group on Quality Indicators.
- Dr. Julie Shaw, expert in POCT and corresponding member of the IFCC Committee on
- Point of Care Testing.

Key Discussions:

- Strategies for incorporating Canadian POCT QIs into the IFCC framework.
- Participants shared experiences and challenges in applying QIs in clinical settings.
- Outcome: Fostered a robust exchange of knowledge, strengthening international collaboration on POCT standards.

Activity 3: Collaboration with the CSCC QIs in POCT working group to establish official QIs in POCT

In their collaborative work wit the WG-LEPS, the CSCC working group has identified five key Quality Indicators (QIs) for Point-of-Care Testing (POCT) glucose monitoring, aiming to enhance laboratory quality assurance globally. This initiative follows a systematic process of risk assessment and data accessibility analysis, focusing on the total testing process across pre-analytical, analytical, and post-analytical phases.

Key Indicators Identified

1. Positive Patient Identification (PPID): Ensures accurate patient-matching during testing, now integrated into the Canadian QI comparison program.
2. Internal Quality Control (IQC) Failure Rates: Tracks QC non-conformances, highlighting analytical issues requiring follow-up.
3. Critical Results Follow-Up: Monitors compliance in repeating critical glucose measurements to confirm accuracy.
4. Operator Training Compliance: Assesses the impact of testing by non-certified users or gaps in training.
5. External Quality Assessment (EQA): Identifies gaps in POCT practices through standardized external evaluations.

Implementation and Challenges

The QIs were selected based on ease of data extraction and alignment with existing IFCC guidelines, ensuring global adaptability. Challenges include ensuring data accessibility, integrating indicators into existing systems, and addressing variability in clinical practices.

Impact and Future Directions

These QIs provide a robust framework for monitoring and improving POCT glucose testing. Integration into national and international comparison programs, including the IFCC Models of QIs (MQI), is expected to standardize practices, reduce errors, and enhance patient safety globally. Collaboration with clinical stakeholders remains critical for successful implementation.

List planned activities in 2025 for this Term of Reference

- Virtual meeting every 2 months.
- In person meeting at the WorldLab/EuromedLab
- Multiple subcommittees meeting to advance specific projects

Term of reference 2

List 2024 accomplishments for this Term of Reference

1. Multiple lectures were given by members of the WG-LEPS on the subject of Quality Indicators
2. The exchange of communication between members significantly increased in 2024 with a hybrid in person/virtual meeting in June and a follow up virtual meeting in November.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

- A in person/virtual consensus group meeting was held in Quebec Canada in June 2024.
- A virtual meeting was organized in November 2024
- Multiple exchange was done by email within members.
- Multiple virtual meetings were organized between M. Plebani and V. De Guire for the coordination of the activities.

MEETING SCHEDULE IN 2025

List planned activities in 2025 for this Term of Reference

- In person meeting of the WG-LEPS at the WorldLab/ EuroMed Lab in Brussels
- Symposium at the WorldLab/EuromedLab by V. De Guire, L Sciacovelli and Pieter Vermeesh moderated by M. Plebani
- Multiple virtual meetings of the WG-LEPS
- Proposal for an IFCC Webinar By V. De Guire, M. Plebani, P Vermeesch, moderated by M. Plebani

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Prioritizing patient's safety by elevating standards in laboratory medicine: The IFCC WG-LEPS Guidelines and the Canadian Experience. Canadian Diagnostic Executive Forum, Toronto, October 22nd 2024.

Benchmarking of Laboratory Processes: IFCC WG-LEPS Guidelines and the Canadian Experience, Association of Diagnostic and Laboratory Medicine annual meeting, Chicago, USA, July 29th 2024

Advancing POCT Quality: Discussion on the Value and Strategies of Integrating Canadian POCT Quality Indicators in the IFCC QIs Comparison Program. Joint Annual meeting of the Canadian Society of Clinical Chemistry and Quebec Society of Clinical Biology, Mont Sainte-Anne, Canada, June 18th 2024.

Prioritizing patient's safety by elevating standards in our laboratory processes through APM, Joint Annual meeting of the Canadian Society of Clinical Chemistry and Quebec Society of Clinical Biology, Mont Sainte-Anne, Canada, June 17th 2024.

Prioritizing patients' safety by elevating standards in our laboratory processes, European Federation of Laboratory Medicine, Webinar, April 2024

Poster presentation at the 2024 Worldlab by the Brazilian representatives:
-Impact of Laboratory Accreditation on the Performance of Quality Indicators in an International Indicator Benchmarking Program.
-Evolution of Performance Sigma Metrics for 5 Key Laboratory Indicators in an International Indicator Benchmarking Program Over a 4-Year Timeframe

Visiting Lecturer Programme (IFCC-VLP)

Chair: Sedef Yenice (TR)

VLP Applications table is provided apart as a separate PDF document

IFCC - Abbott Visiting Lecturer Programme
Applications approved for 2024

PERIOD	LOCATION	DATE OF APPROVAL	APPLICANT	SPEKEAR/S	LECTURER/S, WORKSHOPS
28–29 Feb	Cairo, Egypt	23.01.2024	Rajiv Erasmus	Khosrow Adeli (CA) virtual presentation	A) Pivotal Role and Impact of Laboratory Medicine in Public Health and Patient Care: Developing and Disseminating Supporting Evidence B) Reference Interval Harmonization: Harnessing the Power of Big Data Analytics to Achieve Harmonization Across Populations and Analytical Assays
				Tomris Ozben (TR)	A) Integrated diagnostics: evidence-based therapy guidance in oncology from tumor markers to liquid biopsy B) Green labs: Implementing sustainable practices in medical laboratories.
16–19 Jun	Quebec, Canada	11.03.2024	Paul Yip	Peter Vermersch (BE)	A) Lecture: When patient safety depends on our capacity to record and report laboratory errors B) Workshop: Advancing POCT Quality: Discussion on the Value and Strategies of Integrating Canadian POCT Quality Indicators in the IFCC Comparison Program
				Wilson Shcolnik (BR)	A) Lecture: Sharing the insight on the Brazilian program of Quality Indicators Comparison B) Workshop: Advancing POCT Quality: Discussion on the Value and Strategies of Integrating Canadian POCT Quality Indicators in the IFCC Comparison Program
				Sohini Sengupta (IN)	A) Lecture: Implementing the WG-LEPS guidelines to the national level, the Indian experience B) Workshop: Advancing POCT Quality: Discussion on the Value and Strategies of Integrating Canadian POCT Quality Indicators in the IFCC Comparison Program
11–14 Jul	La Paz, Bolivia	10.05.2024	Alvaro Justiniano Grosz	Maria M. Blanes (PY)	A) Hormone Standardization. Technical and Interpretation Problems B)Biological Assessment in Gynecological Endocrinology C) Preanalytical in endocrinology
				Carlos A. Peruzzetto	A) The challenge of accreditation in clinical laboratories National Regulations vs ISO 15189 B)Construction of indicators in clinical laboratory and their application C) Quality system documents, their preparation and control
				Beatriz Varela (UY)	A) Navigating the transition: strategies for managing quality control lot changes B) Delta check: an analytical approach C) Risk Management in the Clinical Laboratory
11–13 Jul	Colombo, Sri Lanka	16.04.2024	Thushara Geegana	Mehdi Mirzazadeh (UK)	A) Newborn Screening B) Metabolic bone disease Populations and Analytical Assays C) Analytical methods in newborn screening
				Farhan Ahmed (UK)	A) Renal stone prevention B) Advancement in lipid management

IFCC - Abbott Visiting Lecturer Programme
Applications approved for 2024

PERIOD	LOCATION	DATE OF APPROVAL	APPLICANT	SPEKEAR/S	LECTURER/S, WORKSHOPS
21–22 Aug	Las Condes, Chile	15.07.2024	Eduardo Aranda	Khosrow Adeli (CA)	A) Critical Importance of Post-Analytical Quality in Total Quality Management B) Harnessing Big Data Analytics for Transformative Advances in Laboratory Medicine: Unlocking a Promising Future
9–14 Sep	San Pedro Cholula, Mexico	15.05.2024	Araceli Hernández Hernández	Maria Montserrat Blanes (PY)	A) Workshop: Future perspective tumour markers B) Lecture: Laboratory manifestations of hyperandorgenism in pediatrics and adolescents
19–21 Sep	Quito, Ecuador	14.07.2025	Patricia Mayorga	M. del Carmen Pasquel (EC) L. Figueroa E. Gonzalez (MX)	A) Performance indicators in the clinical laboratory, their practical utility B)Workshop on performance indicators in the clinical laboratory, the most important C) Update of documents in the clinical laboratory. new rules. development of an example of a document requested by the health authority. D) Equipment qualification what is it, how does it apply to the laboratory, how should I do it? A)New approach to kidney, cardiovascular and metabolic disease B) How to address 21st century diseases and digital technology C)Workshop: Knowing the correct Renal Profile, Lipid Profile and Glycemic Profile A) Interpretation of histograms, scategrams and review of blood smears in the diagnosis of hemato-oncological diseases B) Most frequent hematological pathologies identified in the clinical laboratory (red and white series) C) Workshop on morphological diagnosis of myeloid and lymphoid leukemias, standardization in the reporting of results (clinical cases)
3–6 Oct	Cartagena, Colombia	03.09.2024	Marlene Isabel Vélez De La Vega	Federico Remes Gustavo Borrajo Dubraska Diaz Campos	A) Ethical Dilemmas in the Use of Remnant Samples in the Clinical Laboratory and Informed Consent B) Professional Ethics in the HIV Diagnostic and Monitoring Laboratory. A) Defining Cut-Off Values: A Critical Variable for the Reliability of the Neonatal Screening System. B) Neonatal Screening Expert Panel A) Antimicrobial Susceptibility Testing of Animal Pathogens Update B) Laboratories to the Rescue: The Importance of Veterinary Diagnostics in Antimicrobial Optimization.

IFCC - Abbott Visiting Lecturer Programme
Applications approved for 2024

PERIOD	LOCATION	DATE OF APPROVAL	APPLICANT	SPEKEAR/S	LECTURER/S, WORKSHOPS
8–11 Oct	Manila, Philippines	14.06.2024	Anacleta P. Valdez / Bernadette R. Espiritu	Bernard Gouget (FR) Pradeep K. Dabla (IN)	A) Quality Assurance of Point of Care Testing B) Ethics and Artificial Intelligence (AI) A) Mobile Health Technologies and Sustainability B) Total Quality management of medical and molecular laboratories
10–12 Oct	Lima, Peru	24.04 / REV 14.06.2024	Luis E. Figueroa Montes	Juan Manuel Gallardo Montoya (MX) Tomris Ozben (TR) Fabio Brazao (BR)	A) Changes in the neutrophil-lymphocyte ratio as markers of inflammation in chronic kidney disease B)Role of oxidative stress as biomarkers of arterial hypertension in its different stages A) Recent Advances and Challenges in Laboratory Medicine B) Integrated diagnostics: evidence-based therapy guidance in oncology from tumor markers to immunohistochemistry, liquid biopsy and imaging. A) Spermogram: current aspects of standardization B) Brazilian reality of laboratory diagnosis of chronic kidney disease C) Presentation of the book: Laboratory examinations in emergency medicine
23-25 Oct	Teheran, IRAN (IAB)	19.09.2024	Siamak Salami	Khosrow Adeli (CA)	A) IFCC's Global Leadership in Clinical Laboratory Standardization and Harmonization B) Big Data Analytics in Laboratory Medicine: Real-World Application in Reference Interval Harmonization Across Clinical Laboratories
28 Oct - 1 Nov	Antalya, TURKEY	24.07.2024	Sedef Yenice; Dogan Yucel	Mauro Panteghini (IT) Marc H. M. Thelen (NL) Octavia Palmer (US)	A) Analytical performance specifications: moving from models to practical recommendations B) Establishing, evaluating, and monitoring analytical quality in the traceability era A) How EQA can be used to study the impact of analytical performance on clinical classification B) How allowable bias becomes part of imprecision and what that means for your laboratory A) Laboratory Medicine: Advancing Diagnostics and Data Analytics for Better Health for All B) Sepsis Interrogation: Unlocking the Power of Laboratory Medicine for Risk Stratification and Early Detection to Ensure Positive Patient Outcomes
6-8 Nov	Buenos Aires, ARGENTINA	27.06.2024	Dr. Luis García	Damien Gruson (BE) Adil Khan (US) Rosa Sierra Amor (MX)	A) Update on thyroid function tests B) AI in precision laboratory medicine C) Emerging technologies and CVD prevention A) Bridging the disparity gap through traditional and AI enhanced POCT B) Quality requirements for POCT performed outside hospital settings A) A retrospective approach towards a future of continuous improvement in the laboratory B) Quality parameters in the clinical laboratory

IFCC - Abbott Visiting Lecturer Programme
Applications approved for 2024

PERIOD	LOCATION	DATE OF APPROVAL	APPLICANT	SPEKEAR/S	LECTURER/S, WORKSHOPS
20–22 Nov	Zarqa, Jordan	02.09.2024	Hussein Hijjawi	Khosrow Adeli (CA)	Innovative Technological Advancements in Laboratory Medicine: Predicting the Lab of the Future
22–23 Nov	Peshawar, Pakistan	24.04.2024	Sahar Iqbal	Dianne Webster (NZ) Mehdi Mirzazadeh (UK)	A) Newborn Screening for Congenital Hypothyroidism B) Newborn Screening for Congenital Adrenal Hyperplasia A) Common metabolic bone disorders and the role of laboratory medicine in diagnosis and management B) The role of Chemical Pathology in diagnosis and management of rare metabolic bone disorders
5–7 Dec	Chandigarh, India	03.09.2024	Rajiv R. Sinha	Bernard Gouget (FR) Sedef Yenice (TR)	A) Exposome thinking: the interface of digitization, urbanization and health B) Chandigarh and the Open Hand: Le Corbusier's Vision of the Intelligent Indian City A) Precision in Practice: Utilizing Data-Driven Decision-Making in Clinical Laboratories B) Challenges and Strategies for Continuous Quality Improvement in Medical Laboratories
19–21 Dec	Ahmedabad, India	03.09.2024	Shanti Naidu Kamatham	Sedef Yenice (TR) Rajiv Erasmus (ZA) Tahir Pillay (ZA)	A) Precision in Practice: Utilizing Data-Driven Decision-Making in Clinical Laboratories B) Navigating the New Regulatory Landscape for Laboratory Developed Tests A) Impact of Point of Care Testing on patient outcomes : challenges and prevention of errors B) Leadership in the medical laboratory for effective patient care A) Practical considerations for performing lipid profiling in the assessment of cardiovascular risk B) Challenges with immunoassays: dealing with standardization, harmonization and interferences

Flow cytometry Working group (WG- FC)

Chair: Claude Lambert (FR)

TERMS OF REFERENCE

Term of reference 1

List 2024 accomplishments for this Term of Reference

29 January – 3 march Workshop university Monastir Tunisia
Inauguration of the CMF Platform and Opening of the Training Session
Remarks by Mr. Hédi Hadj Salah, President of the University of Monastir
Remarks by Mrs. Sana Salah, Vice-President for Research at the University
Remarks by Mr. Mohamed Ridha Hachana, Educational Coordinator and Co-organizer of the Workshop
Opening of the New Flow Cytometry Core Facility
30 students from science, pharmacy, or medical faculties across Tunisia will participate:
Basic training in flow cytometry, protocol setup, sample preparation, and data analysis.
Three days of hands-on practical sessions, limited to 24 students, divided into 3 groups.

List planned activities in 2025 for this Term of Reference

Setting of a certificate on flow cytometry in Tunisia, Monastir starting April-May 2025

Term of reference 2

List 2024 accomplishments for this Term of Reference

2nd course on Flowcytometry for diagnosis in immunology and hematology
in partnership with the Algerian society of Immunology.
18-21 April 2024 in Algers, Algeria
Speakers
Pr Azzedine TAHIAT
Pr Mohamed BRAHIMI
Dr Claude LAMBERT
Dr Anis LARBI

More than 50 participants attended the lectures for the basis on flow cytometry, protocol design and sample preparation. Practicals were perfomed on electronic data analysis in 2 groups, focusing either on immunology or hematology.

List planned activities in 2025 for this Term of Reference

3rd course on Flowcytometry for diagnosis in immunology and hematology in partnership with the Algerian Society of Immunology

Term of reference 3

THE FLOW CYTOMERY SUMMER SCHOOL

List 2024 accomplishments for this Term of Reference

8th edition, MAY 13-15TH 2024,
Faculty of Biology, University of Bucharest, Romania.
in partnership with the Romanian Association of Flow cytometry.
More than 24 participants attended the lectures for the basis on flow cytometry, protocol design and sample preparation. Practical's were performed on electronic data analysis in 2 groups, focusing either on immunology or hematology.

List planned activities in 2025 for this Term of Reference

FLOW CYTOMERY SUMMER SCHOOL,
9th edition, MAY 2025,

Term of reference 4

List 2024 accomplishments for this Term of Reference

IFCC ICCCLM (WorldLab) Congress, Dubai, UAE,
26 may 2024.
Symposium, 4 conferences on
Flowcytometry principles and its roles in precision medicine;
Principle of flow cytometry and issues in diagnosis
Principle of flow cytometry and issues in diagnosis
Dr Claude LAMBERT
IFCC Flow cytometry working group
Univ Hospital Saint-Etienne France

FCM in characterizing Lymphoproliferative disorders
Pr Mohammed Brahimi,
Laboratory of Heamatology and flow cytometry; Oran Algeria

FCM in diagnosis of immunological disorders and biotherapies
Najla Mekki
Maître de Conférences Agrégé en Immunologie
Pasteur Institute in Tunis, Tunisia
FCM in characterizing acute leukemic disorders
Pr Heba RASLAN,
Haematologist pathology laboratory Soudia Arabia

List planned activities in 2025 for this Term of Reference

None

Term of reference 5

List 2024 accomplishments for this Term of Reference
Atelier " Initiation à la Cytométrie en Flux »
Université de Monastir
Juillet 8-9th 2024
Dr. Hela Jaidane
Dr. Hachana Mohamed Ridha
Dr. Najla Mekki
Dr Claude Lambert

24 attendes
Formal lectures in the Morning; Practices in the afternoon, 3 groups of 8 students: sample preparation, analysis on 10 color Flowcytometer, Data analysis of applications in immunology and cell biology, cancer, infectiology

List planned activities in 2025 for this Term of Reference

Term of reference 6

List 2024 accomplishments for this Term of Reference
5th International Course on Basics of Flow Cytometry
Clinical Pathology Department, Faculty of Medicine (For Girls),
Al-Azhar University
3rd-6th of November, 2024
Speakers
Pr Reham HAMMAD Al-Azhar University
Dr. Claude Lambert (Saint-Etienne Univ. Hospital, IFCC, France)
More speakers from Al-Azhar, Aim Sham and Cairo Universities in Cairo. Egypt
Workshop extended to 4 days compared to previous years, one day on the bases in Flow cytometry, 1 day on applications in haematology. One day dedicated to immunology.
More than 36 participants
The last day was practicals for 24 participants only due to limitation in space (benches, labs): sample preparation and analysis on cytometer. Data analysis.

List planned activities in 2025 for this Term of Reference
6th International Course on Basics of Flow Cytometry

Term of reference 7

List 2024 accomplishments for this Term of Reference

IFCC Autumn school of Cell Analysis in Geneva Applications in immunology
Faculty of Medicine University of Geneva
18-22 November 2024
With the participation of
Dr Claude LAMBERT
Dr Antonio COSMA
Dr Silvia Della BELLA
Pr Fouad SEGHROUCHNI
Pr Thomas MATTHES
And more speakers from Switzerland
18 participants from different countries in Europe in the fields of medicine, pharmacy and veterinary medicine
Formal lectures in the morning
Practice in the afternoon (sample preparation, analysis on cytometer (DxFlex™, Aurora™, data analysis
Assessment at the end with a Multiple choice questionnaire

List planned activities in 2025 for this Term of Reference
2025 IFCC Autumn school of Cell Analysis in Geneva Applications in immunology

Term of reference 7

List 2024 accomplishments for this Term of Reference
Second IFCC Workshop on 'Flow cytometry - Basics to monitoring in Immunodeficiencies'
Organized by Department of Biochemistry All India Institute of Medical Sciences,
Jodhpur India
Reported January 2025

List planned activities in 2025 for this Term of Reference
January 2026

4. ADDITIONAL INFORMATION
The working group has competed its 2 mandates for the great majority of the members.

Name	**Country**	**Service dates**
Claude Lambert	France	
Matthias Schiemann	Germany	
Mesude yılmaz	Turkey	
Andreas Spittler	Austria	
Maria Eugenia Schroeder	Uruguay	
Katherina Psarra	Greece	
Cecilia Rodriguez	Argentina	
Evangelos Ntrivalas,	New York	
Ulrich Sack	Germany	

The group will be renewed January 2025
Evangelos Ntrivalas has accepted to takeover the chair of the group.

Name
Evangelos Ntrivalas
New chair of the group
Najla MEKKI (TN)
Prof. Azzeddine TAHIAT (DZ)
Dr. Sojit TOMO (IN)
Alexandre DESJONQUERES (FR)
Pr Reham HAMMAD (EG)

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)
Meetings of the group in Dubai May 2024
Very few face to face participation
Otherwise, mainly discussion by mail.

MEETING SCHEDULE IN 2025
Annual Autumn school of immunology in Geneva
Workshop in Latin America
Annual workshop in Bucharest
Annual workshop in Cairo
Annual school of cell analysis in Morocco
New workshop in India (Jodhpur)
New workshop in Tunisia
Potential workshop in South Asia
Potential workshop in sub-Saharan Africa

Nader Rifai, EMD Chair

COMMUNICATIONS AND PUBLICATIONS DIVISION (CPD)

COMMITTEE / WORKING GROUP / TASK FORCE
Communications and Publication Division (CPD)
Committee of Internet and Digital Communications (C-IDC)
Corporate member representative
Committee on Public Relations (C-PR)
eNews working group (WG-IFCC eNews)
eJIFCC (electronic journal) working group (WG-eJIFCC)
Ibero-American Nomenclature and Translation working group (WG-IANT)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

CPD EXECUTIVE COMMITTEE

Name	Position	Country	Term	Time in Office
T. Pillay	Chair	SA	2nd	2022 01 - 2024 12
D. Topcu	Secretary	TR	1st	2024 01 - 2026 12
K. Vaidyanathan	Member	IN	1st	2024 01 - 2026 12
H. Bhattoa	Member	HU	1st	2024 01 - 2026 12
MdC Pasquel Moxley	Member	EC	1st	2024 01 - 2026 12
K. Psarra	Member	GR	2nd	2022 01 - 2024 12
C. Strain	Corp. Rep.	CA	1st	2024 01 - 2026 12

Committee of Internet and Digital Communications (C-IDC)

Name	Position	Country	Term	Time in Office
D. Topcu	Chair	TR	1st	2024 01- 2026 12
R. Shrestha	Web Editor	NP	2nd	2023 01 - 2025 12
A. Sibtain	S. Media C.	PK	2nd	2023 01 - 2025 12
L. Brennan-Bourdon	Member	MX	2nd	2022 01 - 2024 12
	to be nominated			

Committee on Public Relations (C-PR)

Name	Position	Country	Term	Time in Office
MdC Pasquel Moxley	Chair	EC	1st	2024 01 - 2026 12
M.E. Schroeder-Castagno	Member	UY	1st	2023 03 - 2025 12
A. Agravatt	Member	IN	1st	2024 01 - 2026 12
R. Khunga	Member	MW	1st	2024 01 - 2026 12
E. Rodríguez-Borja	Member	ES	1st	2024 01 - 2026 12

eNews working group (WG-IFCC eNews)
Katherina Psarra was the Chair of the WG-IFCC eNews, but unfortunately due to health reasons the operative role as eNews Editor was undertaken generously by T. Pillay (Chair IFCC CPD)

eJIFCC (electronic journal) working group (WG-eJIFCC)

Name	Position	Country	Term	Time in Office
K. Vaidyanathan	Member	IN	1st	2024 01 - 2026 12
H. Bhattoa	Member	HU	1st	2024 01 - 2026 12

Ibero-American Nomenclature and Translation working group (WG-IANT)

Name	Position	Country	Term	Time in Office
Raul Girardi	Chair	ARGENTINA	2nd	2023 01 - 2025 12
Natalia Russo	Member	ARGENTINA		
Beatriz Mina Guerrero	Member	BOLIVIA		
Alvaro Justiniano Cortez	Member	BOLIVIA		
Amadeo Sáez-Alquezar	Member	BRAZIL		
Alba Cecilia Garzón	Member	COLOMBIA		
Enrique Abraham	Member	CUBA		
Zoila Rita García	Member	REP. DOMINICANA		
MdC Pasquel Carrera	Member	ECUADOR		
Patrocinio Chueca	Member	ESPAÑA		
Antonio Rider	Member	ESPAÑA Aff		
Cristobal Avivar Oyonarte	Member	ESPAÑA Aff		
AM Valdés de García	Member	GUATEMALA		
M Jezabel Vite Casanova	Member	MEXICO		
Yaremi Juarez	Member	PANAMA		
LE Figueroa Montes	Member	PERÙ		
Henrique Reguengo	Member	PORTUGAL		
Montserrat Blanes	Member	PARAGUAY		
Elizabeth Guillen	Member	PARAGUAY		
Ana Maria Piana	Member	URUGUAY		

TERMS OF REFERENCE
CPD Executive Committee

Term of reference 1
Carrying out public relations policy as it affects production of material to be used for enhancing the professional image of the IFCC

List 2024 accomplishments for this Term of Reference
The 2024 UNIVANTS of Healthcare Excellence awards recognize key teams around the globe who are achieving measurably better healthcare. Through this IFCC partnership and with support from the IFCC eNEWS, amplification of recognized best practices was possible.
Commercial feedback was also provided to various function teams, including the C-PR committee related to campaign for elevating Lab Medicine. Patricia Ravalico participated in the voting and led activities with the Task Force of Corporate Members to provide rules for unbiased commercial videos in 2024.
Other insights related to the industry voice were shared at board meeting updates related to conferences, brand considerations associated with the new IFCC website, and more.
List planned activities in 2025 for this Term of Reference
Colleen Strain supported all needs of the CPD as the new industry representative. She has an active role with UNIVANTS and will continue to support the great collaboration between IFCC eNEWS and IFCC eNewsFlash and the UNIVANTS Award program. She will likely help enforce and support an industry perspective for Lab Week initiatives and other key programs across the CPD.

Term of reference 2

The e-JIFCC and the publication process of the IFCC publications

List 2024 accomplishments for this Term of Reference
Publication of the newsletter and journal continued unabated with Digiwedo for the publication of the eNews and the eJIFCC as well as the website for the maintenance of the publications. The format of the eNews and eJIFCC were reviewed and these appear in the new format.

List planned activities in 2025 for this Term of Reference
We are in the process of providing a dedicated landing page for each article published in the eJIFCC, where a unique DOI would be provided and a download counter. A mobile friendly version for the eNews is envisioned.

Term of reference 3
Maintain the recognition of the IFCC and its activities by establishing and maintaining an IFCC world wide web site.

List 2024 accomplishments for this Term of Reference
Work with the Digiwedo (the new provider) for the website continued. The website has been continuously modernized to be mobile responsive. The entire website was migrated. Development and testing of the reimbursement and communications portal was done and has gone live.

List planned activities in 2025 for this Term of Reference
Continual improvement of the website.

Term of reference 4
The CPD is responsible for the continued production of the IFCC Handbook and the Annual Report

List 2024 accomplishments for this Term of Reference
Data for the revision of the IFCC Handbook and Annual Report were collected and compiled for production.

List planned activities in 2024 for this Term of Reference
Data collection and updating will continue.

COMMITTEE OF INTERNET AND DIGITAL COMMUNICATIONS (C-IDC)

Term of reference 1
Promote IFCC activities through the website, social networks, and any other digital platform, offering functional units a vehicle to distribute the information they produce.

List 2024 accomplishments for this Term of Reference
- The communication section of the IFCC User Portal was updated to enhance interaction and information exchange between IFCC committees.
- IFCC news content is now published through the newly redesigned IFCC website, improving visibility and accessibility.
- A download counter for the year 2024 was developed by Digiwedo, enabling tracking of eJIFCC and eNews engagement metrics. Further enhancements are ongoing.
- Minor visual enhancements were implemented across the IFCC main website to improve user experience and interface consistency

List planned activities in 2025 for this Term of Reference
- Further updates and new feature implementations on the IFCC User Portal to enhance functionality and user engagement.
- Development and deployment of the Collective Payments feature to streamline group transactions.
- Integration of submission forms to facilitate various registration anD application processes (e.g., scholarships, memberships, event registrations).
- Technical integration of Workcast for seamless webinar participation and Mail up for optimized email communication.
- Implementation of automated reimbursement file generation tailored for KPMG reporting standards.
- Development of the Accounting Portal to support financial transparency and efficiency
- Advanced website analytics development

Term of reference 2

Explore new communication technologies and any other innovative technology tools that could be used to promote IFCC goals.

List planned activities in 2025 for this Term of Reference
Continue the integration of the various tools for a seamless and consistent communication over the different media platforms and continue the research for the most suitable tools for the IFCC needs.

Term of reference 3
Develop and maintain the IFCC App.

List 2024 accomplishments for this Term of Reference

List planned activities in 2025 for this Term of Reference
- Developing a mobile accessible and user-friendly app to increase engagement for both IFCC website and portal
- Launch survey for app

Term of reference 4

Manage social media accounts to promote IFCC worldwide.

List 2024 accomplishments for this Term of Reference
- Updated IFCC Social Media Policy.
- Activated Hootsuite for streamlined social media management.
- Launched social@ifcc.org for centralized communication.
- Subscribed to Canva Pro to enhance visual content quality.

List planned activities in 2025 for this Term of Reference
- Development and implementation of a structured Yearly Social Media Plan to support IFCC communication goals.

Term of reference 5
Develop and deploy new tools through the Internet to meet the needs of IFCC projects.

List 2024 accomplishments for this Term of Reference
Mentioned above

List planned activities in 2025 for this Term of Reference
Mentioned above

Term of reference 6
Offer internet support and provide other digital tool services to all National Societies.

List 2024 accomplishments for this Term of Reference
Mentioned above

List planned activities in 2025 for this Term of Reference
Mentioned above

CORPORATE MEMBER (COLLEEN STRAIN)

Term of reference 1

List 2024 accomplishments for this Term of Reference
The 2024 UNIVANTS of Healthcare Excellence awards recognize key teams around the globe who are achieving measurably better healthcare. Through this IFCC partnership and with support from the IFCC eNEWS, amplification of recognized best practices were possible, with elevated awareness through collaboration with the IDC for dedicated UNIVANTS content on the IFCC webpage.
Received and helped to implement GMLW enhancements, including video guidance related to time, with additional feedback related to commercial bias in videos. Provided recommendations related to prizes.

List planned activities in 2025 for this Term of Reference
- Continued collaboration with eNews and UNIVANTS, as well as expanded collaborations with the IDC.
- Consultant to the CPR with industry perspective
- Committee on Public Relations (C-PR)

COMMITTEE ON PUBLIC RELATIONS (C-PR)

Term of reference 1 :

Selection of C-PR Members (January-February 2024)
Fourteen applications from outstanding professionals from around the world were received. The four highest-scoring candidates were chosen by vote, taking into account their region of origin to cover all six IFCC federations as much as possible, their age, their experience in community activities, and their desire to work with the Committee. New members were informed of the C-PR activities to be carried out in 2024 and were provided with support in their assigned regions.

List 2024 accomplishments for this Term of Reference
1. M.E. Schroeder-Castagno
2. A. Agravatt
3. R. Khunga
4. E. Rodríguez-Borja

List planned activities in 2025 for this Term of Reference
1. Retain and encourage new Committee members so they can contribute enthusiastically and efficiently to IFCC projects planned by the committee.
2. Encourage new members to participate in in-person and Zoom meetings.

Term of reference 2 :Meetings C-PR

List 2024 accomplishments for this Term of Reference
Hold Zoom meetings every two weeks to coordinate and execute actions for GMLW 2024.

1. 29th February, 2024: Welcome the new members and schedule Global Med Lab Week 2024. Generate the required documents and guidelines. Share all materials with national representatives and country champions.
2. 14th March, 2024: Review the contacted countries and overcome any communication challenges. The first GMLW 2024 invitation videos from Prof. Tomris Ozben, C-PR members, and other professionals are presented.
3. 28th March, 2024: Each member indicated the progress they made in videos and podcasts. We reviewed the guidelines for podcasts and videos, and the Narahaus advertising material to promote GMLW and distribute it in all IFCC and GMLW countries and on social media.
4. 12th April, 2024: The received videos are uploaded to the cloud. An intense social media activity continues to promote the GMLW event with the theme "LABORATORIES SAVE LIVES." The certificate is presented to participants.
5. 6th May, 2024: The activity results are presented by region, by country, for each of the members according to their assignments, and for the Chair for GMLW 2024. The results of the three best videos are shown: Vietnam in first place, Lithuania in second place, and there is a tie for third place for Ecuador and Sri Lanka. The EB will be consulted about the possibility of awarding prizes to the four countries.
6. Monday 27th May 2024 (8:30am to 3:30pm GST). Dubai, in person. Conclusions from GMLW2024. The results are analyzed: podcast, videos, social media. The reports from Anmys and Naranhaus are analyzed, and an action plan is being developed with these companies to improve GMLW 2025. The results indicate a successful outcome for GMLW 2024. It has grown on social media and its dissemination worldwide. The champions have been a great support in this activity.
   How the Certificate will be delivered to participants is analyzed and decided. It is decided to use a platform used by Anmys. It will be free and automates the process.
   Winners will receive prizes directly from IFCC.
   First Place: $500
   Second Place: $400
   Third Place: $300 (two prizes due to a tie)
   Current and future plans for C-PR
   Upcoming GMLW 2025 (Title: will remain the same as 2024,Labs Save Lives). The content, creation strategy, and guidelines for participants are being planned.)
   All challenges for 2025 will be considered to improve the timescale for receiving materials and thus select the winners more quickly.
   The calendar of activities is planned until December 2024, zoom meetings are planned for the following months, one per month is suggested

7. 6th September,024
   Request and analysis of company quotes to support GMLW 2025.
   New guides for podcasts and videos are being developed in English, Spanish, and French. Young scientists will support the French translation.
8. 27th September, 2024
   Several documents are being developed, such as the guidelines to podcast and videos, and the GMLW 2025 activity plan, and promotion will begin in October 2024.
9. 8th November, 2024
   Invitation letters are being sent to all coordinators of all IFCC functional units, and to all IFCC regional and national representatives to participate in GMW 2025, so that they can support this activity by encouraging the submission of audio to generate podcasts and videos with the theme LABS SAVE LIVES.
10. 29th November, 2024
    Letters are generated requesting regional representatives to award prizes to the video winners, the top three from each Federation.
    All generated letters must be approved by the executive before being sent. Approved letters are then sent through the IFCC secretary.

List planned activities in 2025 for this Term of Reference

Meetings.
Monthly or biweekly meeting until before GMLW 2025 on Zoom. An in-person meeting in Brussels at Euromedlab 2025.

Term of reference 3

List 2024 accomplishments for this Term of Reference

1. New podcast and video guides were created for GMLW 2024, according to its new title, LABS SAVE LIVES. The guides were created in English and Spanish and disseminated through IFCC members, the chair, and the secretary.
2. WhatsApp groups were created in every country where possible. This was done with the goal of improving the dissemination of GMLW and encouraging participation from colleagues from the six federations that make up IFCC.
3. Anmys reports indicate that among IFCC social media platforms, Facebook grew with new followers and views. Work has been done to generate buzz for GMLW since February. The effect of this was positive, and the following report is presented.
4. GMLW 2024 was significantly improved compared to 2023. Prizes were awarded to the winners, and certificates of participation were given to all those who submitted materials such as audios and videos.
5. Several countries held scientific, cultural, and recreational activities for GMLW 2025
6. Countries from the federations that make up IFCC participated: AFCC, APFCB, COLABIOCLI, EFLM, AFCB, and NAFCC.The participation of the Asia-Pacific Federation was the most notable in 2024.

List planned activities in 2025 for this Term of Reference

1. Generate a plan or program of activities for GMLW 2025, which will begin in October 2024.
2. Produce more detailed and clear podcast and video guides for participants, in English, Spanish, and French.
3. Invite all IFCC functional unit coordinators and authorities to participate in GMLW 2025 under the theme "LABS SAVE LIVES."
4. Encourage more active participation among federations that have not been active in recent years by reaching out to regional representatives.
5. Encourage participation, especially among young scientists, with incentives or prizes. The greatest incentive for them would be receiving an award for a laboratory medicine-related activity granted by the IFCC.
6. Regional prizes will be awarded by each federation (the top three video winners in each federation).
7. A global winner will be chosen from the regional winners. This prize will be awarded directly by the IFCC.
8. Prizes will be awarded to the top three podcasts worldwide. These three winners will be chosen from all the podcasts received. The prizes are awarded directly by the IFCC.
9. Various activities will be promoted in each country to commemorate this global week, especially scientific activities.
10. The GMLW and IFCC social media platforms will be promoted, generating excitement starting in January 2025.

WORKING GROUP EJIFCC (ELECTRONIC JOURNAL) (WG-EJIFCC)

The present Annual Report outlines the key activities, achievements, and performance metrics of the Working Group – electronic Journal of the International Federation of Clinical Chemistry and Laboratory Medicine (WG-eJIFCC) for 2024. In alignment with the IFCC mission to advance excellence in laboratory medicine worldwide, the WG-eJIFCC continues to play a pivotal role in disseminating high-quality scientific content through its official open-access platform, eJIFCC. This report provides a comprehensive overview of manuscript submissions, peer-review statistics, editorial operations, and Editorial Board engagement. It also highlights editorial office performance benchmarks and collaborative efforts to enhance the journal's visibility, efficiency, and academic impact. The data reflect the Group's ongoing commitment to editorial rigor, promoting international contributions, and supporting the global laboratory medicine community through timely and relevant scholarly communication.

Manuscript Submissions and Decisions

During 2024, the eJIFCC received 68 manuscript submissions, maintaining a 50% acceptance rate consistent with rigorous peer-review standards.

Editorial Office Performance Metrics

- Average time for initial technical check: 1–2 weeks
- Average time to receive reviewers' decisions: 1 month
- Average time for authors to submit revisions: 1 month
- Average time to reach final decision: 2–3 months

These timeframes reflect the journal's commitment to prompt and thorough manuscript processing.

Demographics of Published Manuscripts – 2024

The eJIFCC continues to uphold its global outlook by publishing contributions from a geographically diverse authorship. In 2024, manuscripts originated from four major regions—Europe, Asia, the Americas, and Africa—reflecting the journal's inclusive editorial policy and its international reach within the scientific community of laboratory medicine.

The highest number of published manuscripts originated from Asia (20), followed by Europe (8), the Americas (5), and Africa (1).

Published Manuscripts from IFCC Committees – 2024

In collaboration with various IFCC scientific divisions and committees, the eJIFCC published committee-authored manuscripts in Issues 3 and 4, enriching the journal's authoritative content.

eJIFCC CiteScore – Scopus 2024

In 2024, the eJIFCC attained a CiteScore of 2.3, as reported by Elsevier's Scopus. This metric reflects the average number of citations per document published over four years, signifying the journal's growing scientific visibility and influence in the laboratory medicine community. This achievement attests to the editorial board's, authors', and reviewers' sustained commitment to scholarly excellence.

Updates on the IFCC website 2024

Publication Ethics & Malpractice Statements

In 2024, the eJIFCC revised its Publication Ethics and Malpractice Statements, aligning with internationally recognized standards including the Committee on Publication Ethics (COPE) guidelines. The updated policies clearly define ethical responsibilities for authors, reviewers, editors, and publishers, covering:

- Authorship criteria
- Conflict of interest disclosure
- Integrity of peer review
- Prevention of data fabrication, falsification, and plagiarism
- Procedures for handling misconduct

This update strengthens the journal's dedication to ethical publishing and academic integrity.

IBERO-AMERICAN NOMENCLATURE AND TRANSLATION WORKING GROUP (WG-IANT)

Term of reference 1:

Organise and manage the Ibero-American corner on the web site and Produce Spanish and Portuguese informative and educational documents

List 2024 accomplishments for this Term of Reference

- Publication of events related to IFCC (courses, webinars, congresses, GMLW 2024 and 2025, etc.)
- Start publishing scientific documents such as guidelines and recommendations published in Ibero-America, enabling a space such as: guidelines, standards and recommendations in Latin America. The following were published:

*Clinical practice guidelines on type 2 diabetes mellitus for outpatient care. Ministry of Health of Uruguay

*Clinical Practice Guidelines on the diagnosis and treatment of Chronic Kidney Disease. Comisión Honoraria de Salud Renal, Uruguay

*Guía Nacional para el abordaje de las dislipemias en adultos. Ministry of Health of Uruguay 2019

*National Consensus on renal diseases in children and adolescents in the first level of care. Ministry of Health of Argentina

*Preanalytical procedures and sample collection. Spain

*Management of Chronic Kidney Disease in adults at the first level of care, Ministry of Health of Argentina

*FBA GT-DL RECOMMENDATIONS: New clinical decision limit for diagnosis of impaired fasting blood glucose. Pre-analytical and analytical considerations for the clinical laboratory. Foundation Bioquímica Argentina, Argentina

List planned activities in 2025 for this Term of Reference

- Continue the publication of IFCC, COLABIOCLI, SANAC and SeMedLab documents and of the scientific societies of each member country.
- Continue to publish guidelines, standards and recommendations
- Translate such documents from other languages.

Term of reference 2:

Editorial Board of the e-journal "Diagnostico in Vitro"

List 2024 accomplishments for this Term of Reference

- The publication of the three annual editions in February, June and October was completed.
- The editorial committee was reorganised by removing members who did not collaborate
- Clinical cases of interest due to their regional characteristics are published.

List planned activities in 2025 for this Term of Reference

- Continue with the publication schedule of the three annual editions in February, June and October.
- Continue with the reorganisation of the editorial committee by removing members who were not collaborating and modifying the societies according to their institutional modifications.
- Publish the recommendations depending on the number of pages.
- Possibility to publish translations of eJournal articles.

Term of reference 3:

Produce Spanish and Portuguese terminological documents

List 2024 accomplishments for this Term of Reference

- The official Spanish version of VIM: International Vocabulary of Metrology has been published

List planned activities in 2025 for this Term of Reference

- The official Portuguese version of VIM: International Vocabulary of Metrology is about to be published.

Term of reference 4:

Produce Spanish and Portuguese translations of IFCC documents

List 2024 accomplishments for this Term of Reference

- GMLW translations were published on the website and in an article in DIV
- The possibility of IFCC being able to exhibit in Spanish at EuroMedLab 2025 was published.
- The promotion and features of the IFCC Webinar: Minimum quality specifications based on state of the art

List planned activities in 2025 for this Term of Reference

- Continue to publish translated IFCC documents or events
- ranslate the proposal of The UNIVANTS of Healthcare Excellence program

ADDITIONAL INFORMATION

The CPD has undergone a full overhaul as regards to its members. Almost all Chairs were appointed in 2024: H. Bhattoa and K. Vaidyanathan Co-Chairs WG eJIFCC, D. Topcu Chair C-IDC, MdC Pasquel Moxley Chair C-PR and C. Strain Corporate representative.

Committee of Internet and Digital Communications (C-IDC)
Thanks to the great IT support provided by DIGIWEDO the new website is online and many other new projects are being developed.

Corporate Representative
Colleen Strain thanks for CPD for a productive 2024 and looks forward to an equally productive 2025.

Committee for Public relations (C-PR)
Each year, more activities will be carried out, and ideas will be generated to promote GMLW Week and to make this week more widely known and established each year throughout the world. We will also recognize the IFCC initiative to highlight the important work of clinical laboratory professionals in saving lives and protecting health worldwide.

WG IFCC eNews
To appoint a new Chair for the WG IFCC eNews.

WG eJIFCC
The overarching objective for the second half of the first editorial term is to position the eJIFCC to achieve a Clarivate Impact Factor in the range of ~2.0. To this end, a series of planned initiatives and strategic actions are outlined below:

1. Web of Science Application
   A renewed application for inclusion in the Web of Science (WoS) was submitted on 26 June 2024. Follow-up is required once all pending documentation and compliance measures are finalized (see sections below).
2. DOAJ Indexing
   The application to the Directory of Open Access Journals (DOAJ) is pending, contingent upon successful integration of DOI registration, which is in progress.
3. DOI/Crossref Integration
   A request for an account has been initiated via the mEDRA platform to enable DOI assignment through Crossref. This is a prerequisite for several indexing and citation services, including DOAJ and PMC.
4. Subdomain for eJIFCC
   Implementation of a dedicated subdomain for the eJIFCC is recommended to ensure separation from the main IFCC website. This facilitates independent management, enhanced data security, and future scalability.
   Note: This is a mandatory requirement as per PMC feedback (see Item 8).
5. ICMJE Registration
   The eJIFCC is now officially registered with the ICMJE, effective 31 January 2025. The journal appears on the list of publications that follow ICMJE recommendations:
   ICMJE Listing – IFCC
6. Policy Updates on Journal Website
   Updates required by WoS—such as the Clinical Trials Policy, Consortium Authorship Guidelines, and others—have been incorporated into the journal's webpage. These revisions align with the standards outlined in the communication from Dr. Ashish Aggarwal (dated 04 April 2025).
7. Article-Level Metrics and Budget Proposal
   A proposal is being developed to implement dedicated landing pages for each accepted article, featuring real-time data on views and downloads. Budget planning and vendor quotations for this enhancement are currently underway and will be submitted for review and approval by the IFCC Executive Board (EB).
8. PMC Technical Feedback
   In response to PubMed Central (PMC) feedback, the following XML tagging improvements are being addressed to align with FAIR Principles (Findability, Accessibility, Interoperability, and Reuse):

- Author Contributions: Implement <role> tagging in accordance with PMC standards.
- Funding Statements: Tag complete statements within the <funding-group> element.
- Data Availability Statements: Tag as <sec sec-type="data-availability"> within <back>.

Reference: PMC Tagging Guidelines

9. Editorial Board Structure
   From July 2025 onwards, plans are in place to appoint a new Co-Editor-in-Chief, and to restructure the Editorial Board, if deemed necessary, to support expansion and meet evolving editorial demands.

IBERO-AMERICAN NOMENCLATURE AND TRANSLATION WORKING GROUP (WG-IANT)
All the activities were published on the social networks Instagram and Facebook of the group
https://www.instagram.com/rinconiberoamericano/
https://www.facebook.com/rinconiberoamericano.ifcc
Due to its immediacy, not only all the information from the RIA website but also the webinars, the DIV magazine, the IFCC events, COLABIOCLI, the national societies, communications, commemorations of world health-related days, teaching, etc. were uploaded on the networks.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)
CPD Executive Committee
May 2024- IFCC WorldLab Dubai
November 2024- Amsterdam

Committee of Internet and Digital Communications – C-IDC
C-IDC Meeting - May 2024- IFCC WorldLab Dubai
Several Zoom meetings with DIGIWEDO to develop user portal for IFCC Website.
Continuous contact over WhatsApp Group for quick discussions
As the corporate representative for the CPD, Colleen attended all CPD meetings. There were no other meetings required, although where possible, she also attended committee/working group meetings associated with CPD.

Committee for Public relations – C-PR
9 virtual meetings and 1 in-person meeting in Dubai during the Word Lab with the Communications and Publications Committee. C-PR during 2024.

WG eJIFCC
WG eJIFCC meeting - May 2024- IFCC WorldLab Dubai
Regular online meetings between the two co-Chairs.

Ibero-American Nomenclature and Translation working group (WG-IANT)
WG-IANT meeting - May 2024- IFCC WorldLab Dubai
Congress on Quality in the Clinical Laboratory (CALILAB 2024). Buenos Aires, 6-8 November 2024.

MEETING SCHEDULE IN 2025
CPD executive
May 2025- EuroMedLab Brussels, Belgium
September 2025- Debrecen, Hungary

Committee of Internet and Digital Communications – C-IDC
Zoom meetings as required
Colleen Strain will continue to be active and in attendance to support the IFCC CPD and will also be attending bimonthly meetings with the IFCC TF-CMs.

Committee for Public relations – C-PR
Zoom meetings will be held weekly or every two weeks until the end of GMLW 2025, and then monthly thereafter.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS
Representative eNEWs articles:
Improved management of patients with high LDL-C through electronic health record-directed algorithms for guideline-concordant high-intensity statin prescribing
Early detection of metabolic-dysfunction associated steatotic liver disease using FIB-4
GetCheckedOnline: Better access to testing for sexually-transmitted and blood-borne infections
Electronic Journal: In Vitro Diagnostics/WG-IANT/RIA/CPD-IFCC:

1. February 2024: Report and interview with Prof. Sergio Bernardini, Secretary of the IFCC Executive Board 2024-2026
2. Presentation and interview with:
3. June 2024: Report and interview with Prof. Dr. Tomris Ozben, President of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC)
4. Presentation and interview with:
5. October 2024: Report and interview with Prof. Dr. Tahir Pillay, Chair of the Communications and Publications Division of the International Federation of Clinical Chemistry and Laboratory Medicine (CPD-IFCC).

Conferences/Webinars:
Interview on Radio El Microscopio promoting World Laboratory Medicine Professionals Week, April 22-28, 2024. Broadcast throughout Latin America.
Moderator of the webinar organized by the Ecuadorian Society of Clinical Biochemistry (SEBIOCLI) for World Laboratory Medicine Professionals Week, April 18, with the participation of Bioq. María Cecilia Lopez from Argentina on the topic, Exploring the Biochemistry of the Future, and Dr. Amadeo Saez from Brazil on the topic of Epidemiology and Control of Dengue and Chagas Disease.
Moderator of the webinar organized by the Ecuadorian Society of Clinical Biochemistry through the GMLW on April 27, with the participation of Dr. Luis Figueroa from Peru on the topic: ADA 2024 Diagnostic Criteria for Diabetes and Dr. Enrique de Jesus Gonzalez Cruz on the topic Special Cytochemical Stains as an Aid in the Diagnosis of Myeloid and Lymphoid Leukemias.
Moderator of the webinar organized by SEBIOCLI, with the participation of Dr. Yury Rodriguez, on the topic: The path to quality in the clinical laboratory, on May 22, 2024.
Speaker at the webinar organized by SEBIOCLI, on the topic: Risk management in the clinical laboratory, grow or disappear, on June 27, 2024.
Moderator of the webinar organized by SEBIOCLI, with the speaker Dr. Michelle Sanchez from Chile, on the topic: Helicobacter pylori in stool, IgG and IgM antibodies, interpretation and reporting, on July 25, 2024.
Speaker at the International Symposium on Quality. Topic: Management Indicators in the Clinical Laboratory, September 19, 2024.
Speaker at the Workshop: How to Obtain Management Indicators in the Clinical Laboratory, September 20, International Symposium on Quality in the Clinical Laboratory.
Speaker at the International Conference on Quality in the Clinical Laboratory, organized by SEBIOCLI EL ORO, Machala, September 23, 2024. Topic: Document Management in the Clinical Laboratory.
Speaker at the Conference on Quality for the Clinical Laboratory, Topic: Equipment Qualification, Guayaquil, September 24, 2024.
Speaker: XXVI COLABIOCLI Congress, 1st Forum for Young Clinical Laboratory Professionals in Latin America. Topic: Active participation of young professionals in C-PR activities. How can these activities be developed?

Summary
The functional groups work effectively, generate ideas, support the chair, and desire that projects be increasingly improved, more successful, and that objectives be efficiently met.
All members of the functional group are contributing and attending scheduled meetings.
To improve variation in member collaboration, corresponding members and regional representatives will be more effectively integrated to collaborate with the C-PR. This has greatly contributed to the success of the activities, especially those of the GMLW, and has also allowed for the identification of new and efficient collaborators who consistently support and fill the gaps of one of the official members, who was not collaborating effectively.
The WG-eJIFCC's achievements in 2024 reflect unwavering dedication to advancing laboratory medicine through high-quality, accessible scientific publishing. By upholding rigorous editorial standards, encouraging global contributions, and pursuing strategic development initiatives, the eJIFCC is well-positioned to increase its academic impact and service to the global clinical chemistry community.
The Working Group extends gratitude to its authors, reviewers, Editorial Board members, and IFCC leadership for their invaluable contributions and looks forward to continued progress in the coming years.
The IFCC CPD enjoys a very generous support of the EB. All developments and creative initiatives have always enjoyed the blessings and encouragement of the EB.

Tahir Pillay, CPD Chair until Dec 2024
Harjit Pal Bhattoa, incoming Chair Jan 2025

EMERGING TECHNOLOGIES DIVISION (ETD)

During 2024, the following members served on the ETD Executive Committee:

D. Gruson	Chair	BE	1st	2024 01 - 2026 12
S. Shah	Vice-Chair	IN	1st	2024 01 - 2026 12
B. Gouget	Secretary	FR	1st	2024 01 - 2026 12
W. Lee	Member	KR	1st	2024 03 - 2026 12
Y. Liu	Corporate Member	CN	1st	2023 01 - 2025 12
S. Ebert	Corporate Member	CH	1st	2024 01 - 2026 12
S. Bernardini	Consultan and EB Liaison	IT		
M. Ferrari	Consultant	IT		
P. Fortina	Consultant	IT		
R. Greaves	Consultant	AU		
L. Kricka	Consultant	US		

In 2024 the ETD Committees are:
- Committee on Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM)
- Committee on Mobile Health and Bioengineering in Laboratory Medicine (C-MBHLM)

The Committee on Artificial Intelligence in Laboratory Medicine (C-AILM) was ratified in 2024 and started its activities in 2025.
In 2024 the ETD Working Groups are:
- Guidance for the Implementation of Custom-made Genomic Panels (WG-CGP)
- Single Cell and Spatial Transcriptomics (WG-SCST)
- Metabolomics (WG-M)
- Method Evaluation Protocols (WG-MEP)
- Neonatal Bilirubin (WG-NB) - in cooperation with IFCC Scientific Division (SD)
- Health Technologies Assessment (HTA) Core Model for Laboratory Medicine

The Working Groups on Emerging Technologies (ET) for Improving Prevention and Clinical Management of Cardiovascular Diseases (CVD) - (WG-CARDIOIMPACT) and on Microsampling (WG-MISP) were proposed in 2024 and started their activities in 2025.

Committee - Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM)

MEMBERSHIP

L. Kyriakopoulou	Chair	CA	1st	2024 01 - 2026 12
F. Taneli	Member	TR	1st	2024 01 - 2026 12
CL Omosule	Member	US	1st	2024 01 - 2026 12
A. Gupta	Member	IN	1st	2024 03 - 2026 12
C.M. Mak*	Member	CN/HK	2nd	2022 02 - 2024 12
K. Kohse	Consultant	DE		
S. Geaghan	Consultant	US		
T. Lang	Consultant	UK		
R. Greaves	ETD EC Liaison	AU		

*Dr. Mak's term will be completed in December 2024. A call for nominations has gone out and the deadline for submission of nominations is November 10th.

List of Corresponding Members	**Nominated by Clinical Society**
Michaela Hartmann	German Society of Endocrinology
Stefan Wudy	European Society of Pediatric Endocrinology (ESPE)

List of Corresponding Members	**Nominated by National Societies**
Name	Full and Affiliate Member Societies
Martha Lyon	Canadian Society of Clinical Chemists (CSCC)
Agnès Mailloux	Société Française de Biologie Clinique (SFBC)
Sojit Tomo	Association of Clinical Biochemists of India (ACBI)
Anita Devnath	Association of Medical iochemists of India (AMBI)
Elena Dumin	Israel Society for Clinical Laboratory Science
Atsushi Watanabe	Japan Society of Clinical Chemistry (JSCC)
Audrone Eidukaite	Lithuanian Society of Laboratory Medicine
Josephine Onakoya	Association of Clinical Chemists Nigeria (ACCN)
Anne-Lise Bjørke-Monsen	Norwegian Society of Medical Biochemistry
Ranya Abu Sair (PMTA)	Palestinian Medical Technology Association
Josep Miquel Bauçá (SEQCML)	Sociedad Española de Medicina de Laboratorio
Eresha Jasinghe	Association for Clinical Biochemistry, Sri Lanka
Joely Straseski (AACC)	American Association for Clinical Chemistry

TERMS OF REFERENCE

Term of reference 1
To identify, prioritize and coordinate projects to support the emerging science in pediatric laboratory medicine across the total testing process.
The committee has identified the following key areas of emerging technologies and clinical applications in paediatric laboratory medicine:
Genomic testing and applications
Artificial Intelligence
POCT
Micro-sampling
NBS
These areas of emerging technologies are included in the short, mid and long term plans of the activities of the committee.

List 2024 accomplishments for this Term of Reference
Completed, submitted and published manuscript on "Considerations for applying emerging technologies in paediatric laboratory medicine" Tim Lang , Sharon Geaghan , Tze Ping Loh , Chloe Mak , Ioannis Papassotiriou , Lianna G Kyriakopoulou
Clin Chem Lab Med 2024 Jul 24;62(10):1938-1949

List planned activities in 2025 for this Term of Reference
Manuscript is prepared on the role of emerging technologies in child health care.

Term of reference 2
To review the current concepts in Pediatric Laboratory Medicine and advance laboratory practice through the development and dissemination of position papers and guidelines.

List 2024 accomplishments for this Term of Reference
Sweat test guidelines– Ronda Greaves in collaboration with RCPAQAP inborn errors advisory group. The Guidelines are being reviewed by the C-ETPLM for comments.
Guidelines on genomic and transcriptomic technologies in pediatric health care are in progress.

List planned activities in 2025 for this Term of Reference
Guidelines for genomic and transcriptomic technologies

Guidelines on micro-sampling

Term of reference 3
To develop existing links and establish new links with clinical and scientific societies working in other specialist organizations including neonatology, pediatrics, inherited metabolic diseases and other rare diseases.

List 2024 accomplishments for this Term of Reference
Dr. T Lang is representing C-ETPLM on group reviewing recommendations and standards of neonatal lab values for International Neonatal Consortium (part of the Critical Path Institute)
L. Kyriakopoulou on working group for a document to be presented to ISO for emerging technologies

List planned activities in 2025 for this Term of Reference
The committee is in the process of discussing potential collaborations with the European Society of Endocrinology

Term of reference 4
To lead education activities

List 2024 accomplishments for this Term of Reference
During the first 4 months of 2023 the committee had focused its efforts on the development of the ICPLM (International Congress in Peadiatric Laboratory Medicine) in Dubai. However, the congress did not move forward.
Since May 2024, the efforts have been re-focused on the development of the ICPLM 2025 as a satellite conference during the EuroLab 2025 in Belgium.

List planned activities in 2025 for this Term of Reference
XVIIth ICPLM in Belgium. Speakers have been finalized and details of the scientific program with the input of the IFCC executive are being finalized.
A webinar proposal will be submitted by the end of November. Speakers have been finalized.
A proposal on Pediatric Emerging Technologies has been submitted for the 2025 ADLM meeting in Chicago

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON

Committee meetings have been held monthly
February 1
March 22
April 19
May (in person in Dubai)
June 22
July 19
August 30
September 20
October 18

MEETING SCHEDULE IN 2025
Monthly meetings have been scheduled for the 3rd Friday of every month. The committee has met in January and discussed upcoming and ongoing projects. A number of working meetings are also being held as needed. Members of the committee have met with the cardiac markers committee and the NBS chair to discuss potential collaborations.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS
“Considerations for applying emerging technologies in paediatric laboratory medicine” Tim Lang , Sharon Geaghan , Tze Ping Loh , Chloe Mak , Ioannis Papassotiriou , Lianna G Kyriakopoulou Clin Chem Lab Med 2024 Jul 24;62(10):1938-1949
The group is working effectively and meeting objectives.
All members of the committee are very engaged and working well together to achieve the goals of the committee.

Committee on Mobile Health Bioengineering in Laboratory Medicine (C-MHBLM)

MEMBERSHIP

Name	Position	Country	Term	Time in Office
J. Nichols	Chair	US	1st	2024 01 - 2026 12
L. Abdel Wareth	Member	UAE	1st	2024 01 - 2026 12
A. Ganguly	Member	IN	1st	2025 01 - 2027 12
J. Rytkőnen	Member	FI	1st	2025 01 - 2027 12
E. Saatçi	Member	TR	1st	2024 01 - 2026 12
A. Gammie	Consultant	UK		
K. Kotani	Consultant	JP		
J. Becker	Consultant	FR		
B. Gouget	EC Liaison	FR		

TERMS OF REFERENCE

Term of reference 1
- **To review the current concepts of e-Health including broadband connectivity, software, digital networking, big data, mobile connectivity, smart infrastructure and even artificial intelligence to support the delivery of health and medical care for individuals and communities.**
- **To promote the potential of e-health and m-health in laboratory medicine to improve service delivery for patients including more cost effective models of care, remote monitoring, improved access even over large distances and rapid data analyses and generation of knowledge.**

List 2024 accomplishments for this Term of Reference
- Published Dark Labs: Illuminating the Future of Fully Automated Diagnostic Laboratories.
- Published MHBLM recommendations for “Interfacing Mobile Health Devices to the Electronic Medical Record” in December 2024 eJIFCC
- Developed an excel spreadsheet overview of “Smartwatches on the market and their functionality”

List planned activities in 2025 for this Term of Reference
- Develop market review of smartwatches to submit to eJIFCC or other appropriate journal
- Develop a literature review of clinical applications of m-Health to publish in the peer literature

Term of reference 2
- **To establish collaborations and partnerships with the other organizations concerned with e- Health /m-health and clinical societies and international organizations/bodies.**

List 2024 accomplishments for this Term of Reference
- Collaborated with WG-AIGD on survey “AI in the laboratory” to incorporate into their AI survey of IFCC members

List planned activities in 2025 for this Term of Reference
- Develop guidelines on AI/ML for POCT with IFCC C-POCT and ADLM CPOCT division
- Collaborate with WG-AIGD to publish a paper on evolution of AI and m-Health
- Contact manufacturers of m-Health devices (Microsoft, Google, Apple) to discuss areas where C-MHBLM could collaborate

Term of reference 3

- **To promote an environment where digitally enabled and integrated systems help specialists in laboratory medicine to deliver patient-centered health experiences and quality health outcomes.**
- **Advancing digital health and harnessing artificial intelligence in lab medical practice to improve clinical diagnosis**

List 2024 accomplishments for this Term of Reference

- Committee members gave 3 in person presentations related to m-Health
- Webinar on Intelligent Biosensors in Medical Diagnostics being given by WG- AIGD

List planned activities in 2025 for this Term of Reference

- Develop a 2025 webinar proposal on CGM wearables and Mobile Health Devices to present jointly with the CGM workgroup

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Held 3 virtual or in-person meetings in 2024

MEETING SCHEDULE IN 2025

Plan monthly virtual or in-person meetings of the C-MHBLM in 2025

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Publications:

Dark Labs: Illuminating the future of fully automated diagnostic laboratories - Mike Heydlauf and Mark Edwards

Committee Recommendations:

Interfacing mobile health devices to the electronic medical record - accepted for eJIFCC for December 2024

Presentations:

Advances in mobile and digital technologies for POCT - Precision Med Tri-Con, San Diego 03/27/2024 - James Nichols in person presentation

Intelligent diagnostics fusion: The synergy of generative AI and POCT - Next Generation Summit/ Enabling POCT Dx, Washington DC, 08/19/2024 - Bernard Gouget in person presentation

Performance metrics for continuous glucose monitors - Next Generation Summit/Enabling POCT Dx, Washington DC, 08/19/2024 - James Nichols in person presentation

Intelligent biosensors in Medical Diagnostics - Onur Uygun noted that the AI and Genomics Committee is giving this IFCC webinar in November 2024.

All members have been active and engaged in committee publication development, and generating project ideas

Given the time differences between committee members, it is challenging to find a time to meet virtually when all members of the committee can join. However, all committee members have been engaged and actively participating in email follow-up.

The Committee would appreciate any contacts at companies engaged in m-Health for committee members to contact for potential collaborations with IFCC.

Working Group on Guidance for the Implementation of Custom-made Genomic Panels (WG-CGP)

MEMBERSHIP

Name	Position	Country	Term	Time in Office
J. Morrisette	Chair	US	2nd	2022 01-2024 12
C. Paolillo	Chair	IT	1st	2025 01 - 2027 12
OO. Soriyan	Member	NG		
M. Ewalt	Member	US		
C. Santonocito	Member	IT		
M. E. Marmarelis	Member	US		
M. Carroll	Member	US		
M. Murthy	Member	BW		
YM Martei	Member	US		
C. Davies	Member	US		
J. Segal	Member	US		
C Rushton	Member	US		

TERMS OF REFERENCE

Term of reference 1

Assist clinical laboratories in developing in-house NGS programs

List 2024 accomplishments for this Term of Reference

The main activity we worked on was the completion of a survey. The survey aimed to gather insights on the needs for genomic testing in oncology, especially in community hospitals and low-resource settings

List planned activities in 2025 for this Term of Reference

1. We are now preparing for the next phase of the group, and we are working on outlining the key objectives and projects for 2025, including:

a) Strengthening collaborations,
b) Advancing the development of educational materials,
c) Initiating genomic test implementations in relevant clinical settings.

2. Manuscript based on IFCC survey results on current needs and best practices for moving genomics into emerging nation settings
3. A manuscript of best practices for validation of clinical NGS and reporting, based on the seminal papers in the field, with links to the IFCC website
4. Identification of an appropriate hospital or clinic in an emerging nation(s) to implement genomic testing associated with targeted therapy in the oncology setting

MEETING SCHEDULE IN 2024

- Virtual kick off meeting with all the members, to share plans and projects and also to understand their commitment to the working group.
- Follow up meeting for survey final review and submission
- Presentation of the survey result to all members

The functional group chair of 2024 had some personal health issue so there were no no formal meetings from the group throughout 2024. However in 2025, the new chair has already scheduled and held meeting with members and planned activity to reach the set up goals of 2025

The member of the group will be updated in 2025 with only the active member of the group.

Working Group on Artificial Intelligence in Genomic Diagnostics (WG-AIGD)

MEMBERSHIP

CHAIR
Dr. He Sarina Yang
Associate Professor of Clinical Pathology and Laboratory Medicine
Weill Cornell Medicine
525 E. 68th Street
New York, NY 10065

TERMS OF REFERENCE

In 2024 we were in a process of updating this working group's name and terms of reference. We proposed to change the name to "Artificial Intelligence and Laboratory Medicine" working group.
These are the new TOR that we proposed to the Board:

1. To evaluate and monitor the latest trends and advancements in research and development in the field defined by the intersection of Laboratory Medicine, Clinical Diagnostics, and Artificial Intelligence (AI).
2. To address the challenges hindering the effective implementation of AI in Laboratory Medicine.
3. To promote the discussion and awareness of the necessity and benefits of integrating emerging AI technologies in Laboratory Medicine.
4. To foster collaborations and partnership with academic institutes, industry leaders, and other relevant organizations to advance the applications of AI technologies in Laboratory Medicine.
5. To contribute to the development of international standards that guide the use of AI in Laboratory Medicine and Clinical Diagnostics

Term of reference 1

To evaluate and monitor the latest trends and advancements in research and development in the field defined by the intersection of Laboratory Medicine, Clinical Diagnostics, and Artificial Intelligence (AI).

List 2024 accomplishments for this Term of Reference

1. Dr. Christopher McCudden presented in the IFCC Webinar titled "Healthcare revolution: the emerging role of AI in laboratory medicine.
2. Dr. Sarina Yang presented "Leveraging machine learning to improve current diagnostic algorithms and laboratory stewardship" in the IFCC WorldLab Conference in Dubai.

List planned activities in 2025 for this Term of Reference

The AI working group is actively involved in the planning of "Clinical Laboratory AI Revolution (CLAIR) 2025 symposium" in Belgrade, Serbia. It will be a one-day symposium discussing the cutting-edge advances of AI and machine learning in laboratory medicine. Dr. Damien Group will present a keynote lecture on "Opportunities and challenges of artificial intelligence in the laboratory medicine field".

Term of reference 2:

To address the challenges hindering the effective implementation of AI in Laboratory Medicine.

List 2024 accomplishments for this Term of Reference

Our working group is conducting a survey which focuses on the implementation of machine learning models in Pathology and Laboratory Medicine. This survey aims to gather expert opinion on the assessment/validation studies and monitoring ML models before and after implementation. This survey is co-developed with ADLM Data Analytics Steering Committee. We believe the survey will provide valuable insights into the current status of AI/ML in our field.
https://weillcornell.az1.qualtrics.com/jfe/form/SV_bOh2DUwlliP447A
Dr. McCudden was a co-author in the article titled "Validating, implementing, and monitoring machine learning solutions in the clinical laboratory safely and effectively", a review published in Clinical Chemistry. This review discusses challenges and key considerations in the process of implementing machine learning models in laboratory medicine.

List planned activities in 2025 for this Term of Reference

We will analyze the survey results and present the data to the IFCC Emerging Technology Division. We hope to write a manuscript describing the status of ML implementation and provide expert opinion on evaluating machine learning tools in clinical workflow.

Term of reference 3

To promote the discussion and awareness of the necessity and benefits of integrating emerging AI technologies in Laboratory Medicine.

List 2024 accomplishments for this Term of Reference

Dr. Jason Park, a member of the WG and Editor-in-Chief of Clinical Chemistry Journal, led the publication of a special collection on Artificial intelligence in Laboratory Medicine. This special collection highlights recent articles on AI that have been published in CCJ.

List planned activities in 2025 for this Term of Reference

AI symposium in 2025

Term of reference 4

To foster collaborations and partnership with academic institutes, industry leaders, and other relevant organizations to advance the applications of AI technologies in Laboratory Medicine.

List 2024 accomplishments for this Term of Reference

We had a meeting with Roche Data Analytics team to discuss potential collaboration opportunities. We would like to promote collaboration and partnership with industry leaders to advance the utilization of AI/ML in clinical lab. After the meeting, Dr. Michael King, a data scientist at Roche, expressed willingness to join our working group. He has provided valuable input to the ML survey.
List planned activities in 2025 for this Term of Reference
We hope to have further collaboration with industry leaders and get industry sponsorship to organize more activities.

Term of reference 5

To contribute to the development of international standards that guide the use of AI in Laboratory Medicine and Clinical Diagnostics.
We plan to develop an expert opinion on implementing machine learning models in laboratory medicine.

ADDITIONAL INFORMATION

Two new members, Dr. Weishen Pan and Dr. Michael King, joined the AIGD WorkingGroup.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Our working group has an in-person meeting in the IFCC WorldLab Conference in Dubai in May 2024

MEETING SCHEDULE IN 2025

We plan to have an in-person meeting in the IFCC WorldLab Conference in Brussels in 2024.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

1. Gruson D, Fux E, Kemalogğlu T, Gouget B, Li W, Shah S, Liu Y, Ebert S, Greaves R, Yang HS, Montes L. Contribution of laboratory medicine and emerging technologies to cardiovascular risk reduction via exposome analysis, an opinion of the IFCC division of emerging technology. Clinical Chemistry and Laboratory Medicine. 2024 doi: 10.1515/cclm-2024-0788.
2. Yang HS. Machine learning for sepsis prediction: prospects and challenges. Clinical Chemistry. 2024; 70(3):465-467. PMID: 38431277.
3. Spies NC, Farnsworth CW, Wheeler S, McCudden CR. Validating, implementing, and monitoring machine learning solutions in the clinical laboratory safely and effectively. Clinical Chemistry. 2024. 70(11): 1334-1343.
4. Dr. Christopher McCudden presented in the IFCC Webinar titled “Healthcare revolution: the emerging role of AI in laboratory medicine.
5. Dr. Sarina Yang presented “Leveraging machine learning to improve current diagnostic algorithms and laboratory stewardship” in the IFCC WorldLab Conference in Dubai.
6. Dr. Sarina Yang presented “New tools for detecting and reducing errors in the total testing process” in XXVI COLABIOCLI 2025 conference in Colombia. This proposal

Our working group has been working very hard to achieve the goals set at the beginning of the year, such as designing a machine learning survey, holding an in-person meeting in Dubai, and providing everyone the opportunity to meet and discuss. However, our WG’s capacity is limited. Due to shortage of members that are actively involved, many tasks cannot be carried out, and there is limited capacity to collaborate with other WGs or committees.

The challenges we face are that the WG members have diverse backgrounds, and some people are not interested in participating in the WG discussion. Only a few members have been actively involved in brainstorming initiatives and designing surveys. Because people are located in different time zones, it is difficult to organize monthly meeting. We have primarily communicated via email.
We appreciate the EB for approving the AILM committee. We hope to do more work in 2025 and collaborate with other WGs and committees.

Working Group Single Cell and Spatial Transcriptomics (WG-SCST)

MEMBERSHIP

A.P. South	Chair	US	2nd	2024 01 - 2026 12
R.J. Cho	Member	US		
P. Fortina	Member	US		
B. LaFleur	Member	US		
I. Fuentes	Member	CL		
Joice Zhu (Louyin Zhu)	Corresponding Member	CN		

TERMS OF REFERENCE

Overall Terms of Reference
Provide a regularly updated perspective on the clinical diagnostic applications of single-cell and spatial transcriptomic technologies as they evolve and become more accessible over the next 3 years through both the creation of a webpage and the publication of manuscripts to:
Assist clinical laboratories in developing in-house single-cell and spatial transcriptomics
Provide up to date information on potential therapy matches through identification of effector cell types in different disease states
Provide up to date information on technologies and approaches as they become commercially available

Term of reference 1

Assist clinical laboratories in developing in-house single-cell and spatial transcriptomics

List 2024 accomplishments for this Term of Reference

Our 2024 publication summarises the technologies at the time and provides an interface between laboratories and the working group through contact details available on the journal website (see Skin in the game: a review of single-cell and spatial transcriptomics in dermatological research)
Dr. Raymond Cho’s laboratory has set up a free computational tool to assess single cell data in the context of inflammatory skin diseases, found at the following website link: RashX
External laboratories can use this tool to assess single cell data and there is a link on the website to contact Dr. Cho’s laboratory directly with questions relating to obtaining data and it’s utility in a research context.
To better understand the landscape and genomic needs of community hospitals and hospitals in low resource settings we have been working with the Working with the Guidance for the Implementation of Custom-made Genomic Panels Working Group (WG-GCP) to devise and distribute a survey; “Determining the needs for oncology genomics in community hospitals and hospitals in low resource settings”. Once knowledge of the level of current, approved, genomic applications being used in a laboratory setting the working group will have a better understanding of how to implement Single Cell and Spatial transcriptomics into clinical practice.
The working group presented a symposium at IFCC World Lab, Dubai on May 28th “THE POTENTIAL OF SINGLE CELL AND SPATIAL BIOLOGY IN THE EVOLUTION OF CLINICAL MEDICINE” where members of the working group presented an introduction to single cell and spatial transcriptomics and gave examples of how this technology can be applied to the clinical problems of difficult to diagnose inflammatory skin diseases, chronic verses acute wounds, and determining the mechanism of action of an experimental therapeutic showing remarkable efficacy in clinical trial for the treatment of squamous cell carcinoma in a rare genetic disease.

List planned activities in 2025 for this Term of Reference
At this time, we are scheduling our meetings for the year and will discuss follow up publications and presentations. We will also continue to pursue the survey developed by the WG-GCP. Dr. South had agreed to take over the survey distribution from the chair of the WG-GCP, Dr. Jennifer Morisette, but the status of the survey is unknown at this time since Dr. Morisette stood down from her role as chair.

<u>Term of reference 2</u>
Provide up to date information on potential therapy matches through identification of effector cell types in different disease states

List 2024 accomplishments for this Term of Reference
This work is ongoing and focusses on the expertise of the working group, primarily in the field of dermatology studying inflammatory skin disease, wounding and squamous cell carcinoma of the skin and head and neck.

List planned activities in 2025 for this Term of Reference
At this time, we are scheduling our meetings for the year and will discuss follow up publications and presentations.

<u>Term of reference 3</u>
Provide up to date information on technologies and approaches as they become commercially available

List 2024 accomplishments for this Term of Reference
Publication and symposium detailed in terms of reference 1.

List planned activities in 2025 for this Term of Reference
At this time, we are scheduling our meetings for the year and will discuss follow up publications and presentations.
Dr. South is relocating his laboratory from Thomas Jefferson University, Philadelphia to the University of Wisconsin, Madison and will be in his new position February 3rd 2025. After this time activities of the working group will resume.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)
Wednesday November 22, 2023
Friday February 2, 2024
Tuesday March 5, 2024
Thursday May 2, 2024
Tuesday May 28, 2024 (in person)
September 10th, 2024

MEETING SCHEDULE IN 2025
Meetings will resume in February 2025

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS
Skin in the game: a review of single-cell and spatial transcriptomics in dermatological research. Schepps S, Xu J, Yang H, Mandel J, Mehta J, Tolotta J, Baker N, Tekmen V, Nikbakht N, Fortina P, Fuentes I, LaFleur B, Cho RJ, South AP. Clin Chem Lab Med. 2024 Apr 25. doi: 10.1515/cclm-2023-1245. Online ahead of print. PMID: 3865630
The working group presented a symposium at IFCC World Lab, Dubai on May 28th “THE POTENTIAL OF SINGLE CELL AND SPATIAL BIOLOGY IN THE EVOLUTION OF CLINICAL MEDICINE”

We believe that during the first three quarters of 2024 we were working effectively and meeting objectives. Due to Dr. South’s relocation activities have been put on hold for Q4 of 2024 and will resume late Q1 2025.

Not all members are actively participating. If this continues, we will seek alternate members with more time to focus on the working group.

Working Group on Metabolomics (WG-M)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
E. Fux	Chair	DE	1st	2021 10 - 2024 12
A. Bendt	Member	SG		
S. De Bruyne	Member	BE		
D. Di Natale	Member	IT		
D. Friedecky	Member	CZ		
J. Ivanisevic	Member	CH		
M. Lenski	Member	FR		
J. Otvos	Member	US		
D. Wishart	Member	CA		

List of Corresponding Members, nominated by National Societies

Etienne Cavalier	Royal Belgian Society of Laboratory Medicine (RBSML)
Qing Li	Chinese Society of Laboratory Medicine (CSLM)
Marie Lenski	Société Française de Biologie Clinique (SFBC)

TERMS OF REFERENCE

<u>Term of reference 1-6</u>
Assess Metabolomics approaches and Identify barriers/ challenges for clinical applications.

1. **To evaluate and monitor emerging trends of Research in the field of Metabolomics.**
2. **To provide an overview on metabolite discovery strategies by combining metabolomics with orthogonal experimental and computational biology approaches.**
3. **To assess the applications of Metabolomics in clinical diagnosis and prognosis.**
4. **To develop periodic updates of the applications on Metabolomics technologies and methods in clinical diagnosis.**
5. **To assess the accessibility and the barriers to routine implementation of Metabolomics in clinical laboratories.**
6. **To develop a resource that will inform the IFCC community on developments in the applications of Metabolomics in Clinical Diagnosis /Prognosis as well as methods/technologies in the IVD Market.**

List 2024 accomplishments for this Term of Reference

1. Preparation of manuscript based on global survey conducted in November 2023. Publication in CCLM in June 2024 A global perspective on the status of clinical metabolomics in laboratory medicine – a survey by the IFCC metabolomics working group (https://doi.org/10.1515/cclm-2024-0550)
2. Concept for large language model (LLM) to be built around a data repository for clinical metabolomics. Damien Gruson invited to monthly meeting in November 2024 to discuss funding and potential application at IFCC outside the WG-M.
3. Webinar on clinical metabolomics in October 2024. Topics included NBS and IEM by metabolomics, clinical volatolomics and clinical toxicology using metabolomics. 2000 registrations for the event were recorded

List planned activities in 2025 for this Term of Reference

1. Opinion paper on definition of clinical metabolomics in preparation
2. Implementation of LLM for clinical metabolomics on IFCC webpage to provide a repository to metabolomics users

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Monthly meeting with all members on second Wednesday (11 meetings held in 2024)
In-person/Hybrid meeting Worldlab Dubai in May 2024

MEETING SCHEDULE IN 2025

Monthly meeting with all members on second Wednesday
In person meeting at Euromedlab – Bruxelles in 2025

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

1. A global perspective on the status of clinical metabolomics in laboratory medicine – a survey by the IFCC metabolomics working group (https://doi.org/10.1515/cclm-2024-0550)
2. Webinar on clinical metabolomics
3. Poster presentation at Worldlab Dubai
4. Presentation at the French Society of Analytical Toxicology (SFTA) on 6.6.2024 in Nantes (Marie Lenski)

Working Group on Method Evaluation Protocols (WG-MEP)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
R. Greaves	Chair	AU	1st	2022 05 - 2024 12
B. Cooke	Member	AU		
C. Markus	Member	AU		
E. Theodorsson	Member	SW		
M. Tran	Member	VN		
R. Zakaria	Member	AU		
HH Alp*	Member	TR		
CS Ho	Consultant	CN/HK		
TP Loh	Consultant	SG		

*Hakan Alp has joined the WG at the start of 2025 – previously he was a corresponding member

TERMS OF REFERENCE

Term of reference 1:

To review and summarise the literature and guidelines on method evaluation procedures used in clinical laboratories.

List 2024 accomplishments for this Term of Reference

1. 1. The literature on clinical versus statistical significance has been reviewed during 2024 and a writing group was established to commence development of a manuscript. Thank you to Prof Elvar Theordorsson for leading this writing group.

List planned activities in 2025 for this Term of Reference

The literature on precision/imprecision is planned to be reviewed in 2025 and a call for expression of interest to join a writing group will be post to corresponding members.

Term of reference 2:

To provide high-level guidance and incorporate evidence-based procedures for method evaluation, taking into account the intended clinical application of the measurement procedure.

List 2024 accomplishments for this Term of Reference

1. Linearity assessment: deviation from linearity and residual of linear regression approaches. Lim CY, Lee X, Tran MTC, Markus C, Loh TP, Ho CS, Theodorsson E, Greaves RF, Cooke BR, Zakaria R. Clin Chem Lab Med. 2024 Jul 19;62(10):1918-1927. doi: 10.1515/cclm-2023-1354. Print 2024 Sep 25. PMID: 39026453 The LEAP checklist has been simultaneously published to support appropriate method validation information submitted to journals.
2. The LEAP checklist for laboratory evaluation and analytical performance characteristics reporting of clinical measurement procedures. Loh TP, Cooke BR, Tran MTC, Markus C, Zakaria R, Ho CS, Theodorsson E, Greaves RF; IFCC Working Group on Method Evaluation Protocols (WG-MEP). Pathology. 2024 Feb;56(1):142-143. doi: 10.1016/j.pathol.2023.11.001. Epub 2023 Nov 27. PMID: 38065819 No abstract available.
3. The LEAP checklist for laboratory evaluation and analytical performance characteristics reporting of clinical measurement procedures. Loh TP, Cooke BR, Tran TCM, Markus C, Zakaria R, Ho CS, Theodorsson E, Greaves RF; IFCC Working Group on Method Evaluation Protocols (WG-MEP). Ann Clin Biochem. 2024 Jan;61(1):3-7. doi: 10.1177/00045632231206029. Epub 2023 Oct 15. PMID: 37838926.
4. The LEAP checklist for laboratory evaluation and analytical performance characteristics reporting of clinical measurement procedures. Loh TP, Cooke BR, Tran TCM, Markus C, Zakaria R, Ho CS, Theodorsson E, Greaves RF; IFCC Working Group on Method Evaluation Protocols (WG-MEP). Pract Lab Med. 2024 Jan 9;39:e00355. doi: 10.1016/j.plabm.2024.e00355. eCollection 2024 Mar. PMID: 38313811 Free PMC article.
5. The LEAP Checklist for Laboratory Evaluation and Analytical Performance Characteristics Reporting of Clinical Measurement Procedures. Loh TP, Cooke BR, Tran TCM, Markus C, Zakaria R, Ho CS, Theodorsson E, Greaves RF; IFCC Working Group on Method Evaluation Protocols (WG-MEP). Ann Lab Med. 2024 Mar 1;44(2):122-125. doi: 10.3343/alm.2023.0342. Epub 2023 Oct 23. PMID: 37869780 Free PMC article.

List planned activities in 2025 for this Term of Reference

1. To finalise a manuscript on statistical versus clinical significance
2. To commence a writing group for the development of a manuscript on precision (imprecision)

Term of reference 3:

To engage key stakeholders on method evaluation procedures including and not limited to: IFCC members and clinical stakeholders.

List 2024 accomplishments for this Term of Reference

The LEAP checklist has been translated and published into two languages (Farsi and Vietnamese)

1. گزارشLEAP دستورالعمل چک لیست کردن ویژگ یهای عملکرد سنجشی روش های انداز هگیری بالینی Tze Ping Loh, Brian R. Cooke, Thi Chi Mai Tran, Corey Markus, Rosita Zakaria, Chung Shun Ho, Elvar Theodorsson, Ronda F. Greaves, IFCC Working Group on Method Evaluation Protocols (WG-MEP). 2024 Mar Thank you to Dr Rosita Zakaria and Hassan Bayat Iranian Association of Clinical Laboratory Doctors (IACLD) for the translation into Fasi
2. Tze Ping Loh, Brian R. Cooke, Thi Chi Mai Tran, Corey Markus, Rosita Zakaria, Chung Shun Ho, Elvar Theodorsson, Ronda F. Greaves, IFCC Working Group on Method Evaluation Protocols (WG-MEP). 2024 Mar. Thank you to Dr Mai Tran for the translation into Vietnamese

List planned activities in 2025 for this Term of Reference

To look to CCA and CCLM to endorse the LEAP checklist as part of their submission requirements

Term of reference 4:

To develop and disseminate educational resources for clinical stakeholders, to inform best practices for method evaluation protocols.

List 2024 accomplishments for this Term of Reference

1. IFCC webinar of method evaluation protocols
2. Half day workshop on method evaluation conducted at APFCB Conference in October 2024. Sydney Australia

List planned activities in 2025 for this Term of Reference

1. Method evaluation lecture as part of Nepal VLP program proposed for June 2025
2. Other opportunities will be investigated as they arise.

Dr Tze Ping Loh changed from co-chair to consultant in the second half of 2024

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

We have held a monthly business meeting for the WG and also additional writing group meetings throughout 2024. All of these meetings have been via Zoom
We last met F2F in Dubai in May 2024.

MEETING SCHEDULE IN 2025

Short monthly business meetings are scheduled through 2025 for the second Tuesday of the month (except May).
A F2F half day meeting is scheduled to be held in association with the EuroMedLab meeting in Brussels.

In addition, separate writing group meets are planned throughout 2025. In Jan – Feb 2025 these meeting have run weekly for two hours to finalise the manuscript on statistical versus clinical significance.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Listed under TOR 2, 3, and 4
The addition of Hakan Alp as part of the 2024 writing group has been an excellent addition. All members of the core WG are working well together.
In 2024 the writing group for statical versus clinical significance was formed, with two of the corresponding members expressing their interest to participate. Unfortunately, one of these corresponding members did not deliver on their writing/reviewing tasks. This caused some delays and eventually these activities were redivided amongst the other WG members.
I would like to see some additional members globally to ensure the balance of the WG.
We should also discuss CLSI in relation to this WG as they have indicated a strong interest in our activities.

Working Group on Health Technology Assessment (WG HTA)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

D. D'Angela	Chair	IT	1st	2023 06 - 2025 12
S. Bernardini	Member	IT		
HP Dauben	Member	DE		
I. Gutierrez Ibarluzea	Member	ES		
M. Orso	Member	IT		
B. Polistena	Member	IT		
F. Spandonaro	Member	IT		

TERMS OF REFERENCE

Term of reference 1

Identify and collate relevant documents from national and supranational organizations devoted to HTA.

List 2024 accomplishments for this Term of Reference

- Literature review about HTA standard and report
- Article publication on journal Clinical Chemistry and Laboratory Medicine (CCLM), Volume 62 Issue 10 (July 2024) “HTA model for laboratory medicine technologies: overview of approaches adopted in some international agencies”
- List planned activities in 2025 for this Term of Reference
- Updating literature review about HTA standard and report

Term of reference 2

Conduct survey to member societies to find how and where HTA is applied in their Countries and to validate some Assessment Element specific for laboratory diagnostics technologies.

List 2024 accomplishments for this Term of Reference

- Possible conduct survey to member societies to find how and where HTA is applied in their countries;

List planned activities in 2025 for this Term of Reference

- Identify the statements (in progress)
- Survey

Term of reference 3

Make a Core HTA Model specific for Laboratory Medicine

List 2024 accomplishments for this Term of Reference

See above (n. 1 and 2)

List planned activities in 2025 for this Term of Reference

See above (n. 1 and 2)

Term of reference 4

- **Develop a paper about framework HTA for laboratory medicine technology**

List 2024 accomplishments for this Term of Reference

- none

List planned activities in 2025 for this Term of Reference

- Paper writing (December 2025)

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

We had two web-meeting and several correspondence by e-mail

MEETING SCHEDULE IN 2025

Two web-meeting and mail

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

One publication in 2024 and one submission expected in 2025

Working Group on Neonatal Bilirubin (WG-NB) in cooperation with IFCC Emerging Technologies Division ETD and Scientific Division SD

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
Lindsey Mackay	Co- Chair (SD)AU		1st	2022 10 - 2025 12
Ronda Greaves	Co- Chair (ETD)	AU	1st	2022 10 - 2025 12
Johanna Camara	Member	US		
Vincent Delatour	Member	FR		
Christian Hulzebos	Member	NL		
Stanley F Lo	Member	US		
Agnès Mailloux	Member	FR		
Marcel Clemens	Members	DE		
Schmidt				
Mercy Thomas	Member	AU		
Miranda van Berkel	Member	NL		

TERMS OF REFERENCE

Please note the order of the WG-NB TOR was updated in February 2025 to reflect current priorities.

Term of reference 1

To understand the current status of agreement in neonatal bilirubin determination against clinical decision levels and EQA performance

List 2024 accomplishments for this Term of Reference

The Dutch consortium that is co-ordinating the "EQuiTaBILIty study" examining the comparability of neonatal bilirubin measurement continued to update the WG via our member, Miranda van Berkel. Following on from the initial presentation of data to the WG in May 2024, an online meeting with the whole WG was held on 10 September 2024 to provide a summary of the results of the study and the data analysis carried out to date. This study has allowed assessment of performance of ~12 current platforms versus a commutable neonatal blood-based material. It also includes two reference laboratories, an LC-MS/MS laboratory and an HPLC laboratory. The samples in the study include pre-, during and post-phototherapy, the NIST SRM 916b pure bilirubin material spiked into blood and the Dutch EQA material. It has provided excellent evidence of where specific issues exist with respect to the bias of platforms versus the reference laboratories. Historically it has never been clear whether observed biases may be a result of non-commutable materials, whereas this is the first in depth study with neonatal material. It has also provided information on the types of materials which appear to be highly commutable.
On 6 February 2025 Vincent Delatour provided an update to the WG on the new EU COMET project "Manufacturing of commutable calibrators and quality control materials for standardization and post-market surveillance of IVD tests". This project has several work programs that align to the WG-NB TOR, particularly WP3 which includes a commutability study for neonatal bilirubin.

List planned activities in 2025 for this Term of Reference

The "EQuiTaBILIty" consortium will continue work on the publication of aspects of the study. They are also using this as an opportunity to review the appropriate Analytical Performance Specifications (APS) for neonatal bilirubin and a survey is being prepared by the consortium that will be circulated under the IFCC banner to seek feedback from neonatologists. Miranda van Berkel will provide a further update at the May 2025 WG meeting.
The "EQuiTaBILIty" study included the Dutch EQA material so allowed a direct comparison of EQA performance versus performance with this commutable neonatal material. The work of this study will feed into the EU COMET study and an online meeting is planned for early April 2025 to discuss the most appropriate materials to include in the COMET commutability study. Major EQA providers will be invited participate in the COMET project to work towards improving the commutability of materials used internationally in EQA schemes.
At our May 2024 WG meeting, corporate members requested that the WG consider production of a guidance document on the production of secondary calibrators as this was felt to be one of the potential reasons for differences between platform results, the outcomes of the "EQuiTaBILIty" and COMET studies will be valuable for this.

Term of reference 2

To collaborate with major manufacturers (from both traditional and near-patient technologies) on neonatal jaundice testing to improve comparability and traceability (where appropriate)

List 2024 accomplishments for this Term of Reference

There is strong engagement from the 12 corporate corresponding members in the WG.
The online meeting of the full WG on 10 September 2024 presented the results from the Dutch "EQuiTaBILIty study"; there was a high level of interest from manufacturers. The study results are still to be published by the Dutch group which has meant more detailed discussions with manufacturers is currently somewhat limited. Hopefully by the May 2025 meeting this will have occurred and more detailed discussions can be held.
The WG is continuing to liaise with manufacturers on their calibration approaches as some are still utilizing the older NIST 916a pure calibrant, rather than the 916b material that was released several years ago. The nature of manufacturer calibration materials continued to be reviewed with some using human serum and some bovine serum which may be causing issues. Manufacturers requested that the WG consider preparation of a guidance document on how to best produce a commutable secondary calibrant.

List planned activities in 2025 for this Term of Reference

It is planned that at our May 2025 meeting manufacturers will be invited to provide feedback on the results of their platforms in the Dutch EQuiTaBILIty study and where biases from the RMP results were detected. We will discuss their insights and possible actions.
We will continue to work with manufacturers on calibration approaches, including further encouragement to move from NIST 916a to NIST 916b as the higher order CRM and provision of guidance on the best practice production of secondary matrix reference materials.

Term of reference 3

To review the availability and appropriateness of current JCTLM and other CRMs, RMPs and RMSs, define the appropriate measurand(s) and consider appropriate traceability chains

List 2024 accomplishments for this Term of Reference

The review of the current CRMs/RMPs, including non-JCTLM listed services, was described in the WG position paper published in July 2024. This publication summarised the status and the potential issues seen by the WG. The new batch of the NIST higher order pure calibrant (SRM 916b) has now been submitted to JCTLM and NIST responded in January 2025 to the review questions.
Issues with the two JCTLM listed RMPs have been flagged with JCTLM to devise a way forward to update these entries. As a result of this JCTLM published a letter to the editor "Time to refresh and integrate the JCLM database entries for total bilirubin: the way forward" in CCLM in October 2024. Currently, one of the main reference measurement providers is using a method that is not JCTLM listed and which is a "calibration-free" method. The WG's views on the appropriateness of this methodology was described in the WG position paper. It is believed that now a high order NIST calibrant is available moving away from a calibration free approach would be the WG's preference to ensure the best standardization of measurements worldwide and over time. It was agreed that Stanley Lo would submit an updated RMP from his reference laboratory for JCTLM listing to replace the two currently listed historical RMPs and to represent current best practice. This revised submission should occur in the first quarter of 2025.

The calibration free candidate RMP has been invited to submit to JCTLM to have the method formally assessed. The Dutch EQuiTaBILIty study allowed a direct comparison of the two currently utilized RMPs for neonatal bilirubin with a neonatal material and showed they are in very good agreement. However, from a best practice from a traceability view point the WG would prefer to persuade this group to commence using NIST 916b calibrant.
The JCTLM letter to the editor also noted the apparent discrepancies in performance of the three JCTLM-listed RMS providers in the recent RELA programs. JCTLM are liaising with these providers on this issue.
An additional aspect the WG has considered is at the current time would a shift to mass spectrometry based RMPs be more appropriate? This was considered in the WG position paper and the Dutch "EQuiTaBILIty study" included one European MS laboratory so has allowed a current direct comparison between spectrophotometric and MS methodologies. The LC-MS/MS participant in the study presented to the WG on 6 February 2025. Although the method had insufficient precision to allow an effective comparison with other platforms, it has provided insights on photoisomers present in the samples and this will be published to provide insights on how this may affect platform performance.

List planned activities in 2025 for this Term of Reference

Continued liaison with NIST to ensure JCTLM listing of the current pure bilirubin calibrant SRM 916b, working with Stanley Lo to ensure publication of a new single RMP to JCTLM for the American RMP.
Continued liaison with the German calibration free RMP providers to encourage them to participate in the WG and consider how they submit their method to JCTLM.
Continued review of the performance and insights from mass spectrometry-based methods. While the current methods appear to be inappropriate as candidate RMPs, they can provide important additional information of bilirubin species present in samples, for example in the pre-, during and post-phototherapy samples included in the "EQuiTaBILIty study".

Term of reference 4

To define appropriate performance parameters to ensure fitness for clinical purpose (screening, diagnosing or monitoring)

List 2024 accomplishments for this Term of Reference

Miranda van Berkel is using the "EQuiTaBILIty" study to now assess Analytical Performance Specifications (APS) for neonatal bilirubin. She has presented to the WG on this work and this will be a focus for 2025.

List planned activities in 2025 for this Term of Reference

A survey on APS prepared by Miranda van Berkel and reviewed by the WG will go out under the IFCC auspices to seek feedback from neonatologists. This will be reviewed at our May 2025 meeting.

Term of reference 5

To periodically review emerging methodologies, their fitness for purpose and recommend solutions to improve comparability and traceability.

List 2024 accomplishments for this Term of Reference

Consideration of emerging technologies was covered in the WG position paper, however currently the focus remains on the laboratory-based methods and improvements that could be made in this area. The WG-NB symposium held at the Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB) held on 31 October 2024 included a dedicated talk on emerging devices presented by Mercy Thomas.

List planned activities in 2025 for this Term of Reference

An overview of current emerging technologies will be presented to the WG at our May 2025

meeting, however a more detailed focus on emerging technologies is still not likely to commence at this point. There remains initial work to do to assess the true measurands involved in traditional central lab methods, blood gas analysers and POC devices and to assess how to practically achieve better comparability. We are aware that there is momentum with respect to the development of POC devices and have one WG member who is monitoring this area and providing feedback.

Term of reference 6

To develop and disseminate publications and educational resources related to neonatal jaundice testing for stakeholders to support best practice

List 2024 accomplishments for this Term of Reference

WG position paper published in CCLM in July 2024.
WG symposium held at the 2024 APFCB conference in Sydney, Australia on 31 October.

List planned activities in 2025 for this Term of Reference

Preparation of best practice guidelines for the production of secondary matrix reference materials by manufacturers and commutable EQA materials.

2024/25 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Eleven video conferences of members held on:

- 12 January, 22 February, 3 April, 2 May, 21 June, 15 July, 30 August, 30 September, 10 December 2024, 6 February and 27 February 2025

Full day face to face/hybrid meeting of members, corresponding members and corporate members held on 28 May 2024 in Dubai.
Online meeting of members, corresponding members and corporate members held on 10 September 2024 to provide a further update on the Dutch “EQuiTaBILIty study”.

MEETING SCHEDULE IN 2025

The next online meeting has been set for early April 2025 to discuss the EU COMET project “Manufacturing of commutable calibrators and quality control materials for standardization and post-market surveillance of IVD tests”, several work programs within this project have linkages with the WG TOR. Of current importance is working with the WG to select the types of materials that are most suitable for consideration as commutable EQA materials.
Online meetings of the WG will continue at around a monthly/bimonthly cycle. The full WG will meet on 21 May 2025 for a full day meeting.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Christian V. Hulzebos, Johanna E. Camara, Miranda van Berkel, Vincent Delatour, Stanley F. Lo, Agnès Mailloux, Marcel C. Schmidt, Mercy Thomas, Lindsey G. Mackay, Ronda F. Greaves and On behalf of the IFCC Working Group Neonatal Bilirubin. Bilirubin measurements in neonates: uniform neonatal treatment can only be achieved by improved standardization. Journal Clinical Chemistry and Laboratory Medicine (CCLM) https://doi.org/10.1515/cclm-2024-0620
Presentation of WG-NB symposium at 2024 APFCB in Sydney, Australia on 31 October
The WG has been dedicated to regular meetings to progress the TOR, input from corporate members has been very positive.
All members of the WG have been attending meetings regularly and are fulling inputting into the work program.
We continue to liaise with JCTLM to resolve the issues with the CRMs and RMPs for bilirubin on the database. We still have the issue that the reference measurement system for total bilirubin currently involves one RMP calibrated with NIST SRM 916b and one “calibration-free” RMP which is not felt to be ideal. Despite the good comparability of these methods, the WG would prefer that where an applicable high order pure calibrant is available JCTLM support calibrated RMPs and so any influence the EB could have on this would be appreciated.

Damien Gruson, ETD Chair

TASK FORCES

Task Force on Ethics (TF-E)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
J. Wiencek	Chair	US	1st	2024 01 - 2026 12
M. Zaninotto	Membe	IT	1st	2023 03 - 2025 12
SK Datta	Member	IN	2nd	2023 01 - 2025 12
J. Verona	Member	AR	2nd	2023 01 - 2025 12
A Amayo	Member	KE	1st	2024 01 - 2026 12
N. Fink	Consultant	AR		
E. Freggiaro	EB Liaison	TR		

TERMS OF REFERENCE

Reporting instructions for Terms of Reference for all Committees, Taskforces and Working Groups, please provide the following information

Term of reference 1

To increase awareness and to provide a voice among Laboratory Medicine Professionals, including researchers, on ethical issues and to encourage the practice of Laboratory Medicine to the highest ethical standards

List 2024 accomplishments for this Term of Reference

- Wiencek presented a scientific session on the ethics in scientific research at EFLM Strategic Conference, Sept 2024.
- Zaninotto presented a scientific session on ethics at SIBioC Congress, Oct 2024. At the end of the session, a short summary of the IFCC TF on Ethics activities was presented to the participants.
- Verona presented a scientific workshop on the ethical use of checklists in clinical and biomedical research at the CALILAB, Nov 2024.
- TF members wrote several articles putting “Ethics in the Spotlight” in IFCC News to increase awareness (Verona, Amayo, Zaninotto, Wiencek).
- Presented a webinar for the IFCC series on the “Artificial intelligence in the clinical laboratory. Implementation, bioethics and legislation.”
- Submitted two webinars to IFCC eAcademy. 1.) Equity and Access to Lab Testing (accepted, 9 July 2025) and 2.) Sustainability and Ethics (accepted, 3 Sept 2025).
- Developed ethics workshop subgroup to plan for a possible in person event.
- Worked closely with the IFCC Task Force on Lab Medicine Practice Guidelines to create a policy on how to report and manage conflicts of interest in the development of clinical guidance documents (currently in final draft form).

List planned activities in 2025 for this Term of Reference

- Recruit two full member positions to task force at end of 2025
- Review corresponding, consultant and industry members for continuing interest
- Explore partnerships with other IFCC Task Forces, Committees as well as National Societies (e.g., Association for Diagnostics and Laboratory Medicine) to investigate ethical issues across various areas of laboratory medicine.
- Continue to identify foundational and emerging ethical issues impacting patient care globally, such as access to laboratory testing, artificial intelligence, and patient blood management
- Present webinar for the IFCC series on "Ethics and Sustainability."
- Present webinar for the IFCC series on "Equity and Access to Lab Testing"
- Wiencek to present an invited talk at IFCC 2025 General Congress to summarize TF activities.
- Develop and submit at least two webinar proposals for IFCC to consider such as Ethical issues in patient blood management, Evolution of ethical concepts in laboratory medicine, Management of conflicts of interests in laboratory medicine (2026 series).

Term of reference 2

To develop freely available guidance documents and articles for IFCC member societies on various ethical issues with a goal to publish through IFCC official publications

List 2024 accomplishments for this Term of Reference

- Published manuscript in Clinical Chemistry and Laboratory Medicine on "Ethical checklists for clinical research projects and laboratory medicine: two tools to evaluate compliance with bioethical principles in different settings."
- Published abstract in Clinical Chemistry and Laboratory Medicine in the article "A vision to the future: value-based laboratory medicine" on "Ethics in scientific research and publication." This abstract was the first of its kind to look at scientific retractions in laboratory medicine journals.
- Surveyed IFCC members to determine ethical perspectives regarding patient's access to test results. The survey was open for one month and closed 17 March 2025.
- Submitted a proposal to the Task Force on Lab Medicine Practice Guidelines for a position statement on the Ethical use of Artificial Intelligence in Laboratory Medicine.
- Developed a proposal for a position statement on the Ethics of patient blood management
- Wrote a policy manuscript with the IFCC Task Force on Lab Medicine Practice Guidelines for the disclosure and management of conflicts of interest in guidance document development.
- Compared the evolution of ADLM/AACC Code of Ethics
- Compared the evolution of the Declaration of Helsinki as it relates to laboratory medicine concepts
- Compared the evolution of the ISO 15189:2003 to ISO 15189:2022 (2003, 2007, 2012 and 2022) on the basis of ethical requirements

List planned activities in 2025 for this Term of Reference

- Publish final policy manuscript with the IFCC Task Force on Lab Medicine Practice Guidelines for the disclosure and management of conflicts of interest in guidance document development.
- Finalize and publish manuscript for the comparison of ISO 15189:2003 to ISO 15189:2022 on the basis of ethical requirements
- Finalize and publish manuscript for the comparison of AACC/ADLM Codes of Ethics
- Finalize and publish manuscript for the comparison of Declaration of Helsinki as it relates to laboratory medicine concepts
- Develop and publish position statement manuscript on the Ethical uses of Artificial Intelligence in Laboratory Medicine

- Review data from the perspectives of laboratory professionals and patient's access to test results
- Develop and publish manuscript based on survey findings from above

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Virtual
Six virtual meeting in Feb, Jul, Aug, Oct, and Dec 2024
In person
Padova, Sept 2024

MEETING SCHEDULE IN 2024

Virtual
3rd Monday of Month (Except Feb, June and Nov) at 8am EST
In person
Brussels, 18 May 2025
In addition, the chair requires all subgroups to establish meetings at a specified cadence, no less than once every two months for projects.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

- Verona J, Gülsen Y, Zaninotto M, Munsaka S, Serdarevic N, Datta SK, Wiencek J and Fink N; on behalf of the IFCC Task Force on Ethics. Ethical checklists for clinical research projects and laboratory medicine: Two tools to evaluate compliance with bioethical principles in difference settings. Clin Chem Lab Med. 2024;63(1):60-70.
- Verona J, McCudden C, Topcu DI, Gervais D. IFCC Webinar "Artificial intelligence in the clinical laboratory. Implementation, bioethics and legislation.
- Amayo A. Ethics in the Limelight: IFCC WorldLab Dubai 2024. IFCC e-news. 2024; Nov(11):11.
- Wiencek J. Ethics Front and Center at 2024 EFLM Strategic Conference in Padova, Italy. IFCC e-news. 2024; Nov(11):12.
- Zaninotto M. Spotlights on "Ethics" at 56 SIBioC Meeting, Bologna, Octover 8-10 2024. IFCC e-news. 2024; Nov(11):12.
- Verona J. "Ethics in the Spotlight" Workshop: Ethics in research and the clinical laboratory. The use of checklists.
- Plebani M, Cadamuro J, Vermeersch P, Jovičić S, Ozben T, Trenti T, McMillan B, Lowe CR, Lennerz J, Macintyre E, Gabelli C, Sandberg S, Padoan A, Wiencek JR, Banfi G, Lubin IM, Orth M, Carobene A, Zima T, Cobbaert CM, van Schaik RHN, Lippi G. A vision to the future: value-based laboratory medicine. Clin Chem Lab Med. 2024;62(12):2373-2387. (abstract on Ethics of research and publication)

J. Wiencek, TF-E Chair

Task Force for Young Scientists (TF-YS)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
S. Fares Taie	Chair	AR	2nd	2023 01 - 2025 12
C. Imperiali	Member	ES	2nd	2023 01 - 2025 12
A. Rampul	Member	ZA	2nd	2022 01 - 2024 12
S. Campbell	Member	US	1st	2022 05 - 2024 12
U. Senarathne	Member	LK	1st	2023 05 - 2025 12
M. Lenski	Member	FR	1st	2023 05 - 2025 12

TERMS OF REFERENCE

Term of reference 1: CONGRESSES AND CONFERENCES

List 2024 accomplishments for this Term of Reference

1. AFCC Congress 2024. IFCC YS-TF presentation (Ashlin Rampul). El Cairo, January 25-26th, 2024. (Programme attached in separate document)
2. XVI Congès Català de Ciències de Laboratori Clínic (Claudia Imperiali). Barcelona, April 25-27th, 2024.
3. IFCC WORLDLAB YS FORUM 3rd edition. Joint activity with the AEU society. Dubai, May 25-26th, 2024.
4. IFCC WORLDLAB TF-YS meeting. Dubai, May 25-26th, 2024.
5. COLABIOCLI conference. YS symposium + Forum. Programme in progress. Cartagena (Colombia), October 3-6th, 2024.
6. Congress of the Malaysia society in July: participation of Ashlin Rampul
7. Congress of the Tunisian society of clinical biology (STBC) in October: participation of Alexander Tolios (corresponding member)

Term of reference 2: WEBINAR SERIES

List 2024 accomplishments for this Term of Reference

Webinar 1: “Omics in Laboratory Medicine”. January 15th

Moderators: Alexsei and Marie

Webinar 2: “Critical Laboratory Results”. December

Moderators: Ashlin

Term of reference 3: LAB-SURFING

List 2024 accomplishments for this Term of Reference

Continue working with the platform that is being used successfully by YS from all around the world.

Newsletters to improve the communication among users.

Required an update on IT and google certificates.

Licences and maintenance is required in a yearly basis.

Term of reference 4: CAPILLARY PROGRAMME

List 2024 accomplishments for this Term of Reference

Continue assisting the corresponding members of the TFYS to motivate them to create YS groups in their country and region. Moreover, we are permanently trying to get more committed with our activities by doing surveys and seeking other points of view for our programmes.

The TFYS is the largest TF comprising +50 corresponding members.

Term of reference 5: MENTORSHIP PROGRAMME INTERVIEWS

List 2024 accomplishments for this Term of Reference

As every year, during 2024 we had 3 interviews published on the IFCC e-News.

This mentoring minutes program is intended to educate IFCC Young Scientist members on any current mentorship program in the laboratory research area. The program focuses on “how, when, what and why” about the existing mentor and mentee relationship and tips on how others can learn from their relationship.

Term of reference 6: RADIO EL MICROSCOPIO

List 2024 accomplishments for this Term of Reference

During 2024 we continued supporting the Radio El Microscopio with scientific knowledge and interviewing world renowned scientists.

Term of reference 7: LIVEMYLAB PROJECT

List 2024 accomplishments for this Term of Reference

During 2024 we continued working on this program with CPD. Same videos with different editioeditionsbe used by CPD for other activities.

Term of reference 8: CLINICAL CASE STUDIES

List 2024 accomplishments for this Term of Reference

During 2024 we continue with the presentations of the selected clinical cases.

Since 2023 we developed a clinical case study project where YS from the IFCC community presents their experience with interesting real-life case studies. We designed a guideline for clinical case abstracts and all YS were invited to submit interesting clinical cases for which we received more than 40 submissions for the first call for abstracts. All cases submitted to TF-YS Clinical Case Discussions undergo peer review with an objective grading based on a point system. The first online Clinical Case Discussion session took place in November 2023 and we intend to hold monthly clinical case discussions. For the presentation of the clinical case studies, we invited IFCC experts to make comments on the clinical cases to increase the discussion and understanding. We intend to publish all presented cases in a booklet as ‘TF-YS Clinical Cases: Role of the Clinical Laboratory on Patient Care’ along with comments from the experts in the field.

Moreover, we are in contact with Prof Janos to publish a selection of the Clinical Case Reports in the eJIFCC. Submission Guidelines were prepared and shared among YS to apply

Term of reference 9: YS FORUM

List 2024 accomplishments for this Term of Reference

Young Scientists are the future of laboratory medicine and comprise the major workforce of laboratory professionals. Future leaders need to be trained and encouraged to succeed in their role, ideally with the support of experienced leaders. To make this feasible, YS must have activities that encourage their participation, offer opportunities of training and improve communication and networking.

During 2024 we prepared the third edition of the YS FORUM that took place in the IFCC WorldLab Dubai 2024. Following the method used in the first two editions, we developed the programme with the YS nominated for the IFCC-ROCHE scholarship.

Together with the local organization, we created a wonderful scientific program that included the YS lectures showing their work + a visit to a local University and Laboratory. Moreover, we had the visit of the local authorities.

Term of reference 10: DIGITAL COMPETENCES

List 2024 accomplishments for this Term of Reference

In January of 2024, we launched a platform hosted in GitHub with repository material and start the training meetings.

Every month we had a zoom meeting where Jacob Adler explained some basic programming skills with Markdown and then R basics + RStudio, Database, Dataleaks, Data Warehouses.

During 2022 EFLM conference in Munich, we started developing a joint programme with DGKL (Jakob Adler) to offer selected material on digital competences for YS. This programme started in 2023 with the coordination of Jakob Adler and Marie Lenski. In this period, we conducted a survey that was distributed to all YS, we presented a poster in the IFCC-EFLM Euromedlab Rome 2023 and we published an article on Digital competences in Laboratory Medicine (doi.org/10.1515/labmed-2023-0021).

Term of reference 11: “MEET A YOUNG SCIENTIST”

List 2024 accomplishments for this Term of Reference

This activity relies on the increase of communication of TF-YS with corresponding members and help them to communicate with the laboratory medicine community. It consists in

1) A meeting between 1 corresponding member and 1 Core member of IFCC-TF-YS to present IFCC TF-YS activities and help corresponding members to get involved in these activities.

2) To prepare an interview of the corresponding member, that will be published in IFCC eNews and on IFCC-TF-YS communication channels (Facebook, instagram...)

Term of reference 12: “CRITICAL LABORATORY RESULTS SURVEY”

List 2024 accomplishments for this Term of Reference

During 2023 a survey was launched by Judit Gonda, a Young Scientist from Hungary, that aims to get to know the protocol and habits of Reporting Critical-Risk Laboratory Results in different countries.

The survey is available in English, French, and Spanish.

The aim of this survey is:

- to see whether different countries use national guidelines or whether they have any protocol in their respective institutions
- to compare the protocols between countries
- to describe how critical values for tests are defined, and how they are reported to clinicians
- to conclude on harmonized practical tips.
- More information about the survey in available in english, french and spanish in the IFCC eNews published in november 2023: https://ifcc.org/ifcc-communications-publications-division-cpd/ifcc-publications/enewsletter/

During 2024 we analyze and publish the results of the survey.

Term of reference 13: “DYNAMIC ENDOCRINE TESTING SURVEY”

List planned activities in 2024

We initiated a survey on dynamic endocrine function testing, especially in the paediatric population to understand the current practices and extend this activity to collaborate research work between YS from different countries to work together for reference intervals and cut-off limits for dynamic endocrine function tests such hCG stimulation test, Short Synacthen test, ect. The collaborations for hCG stimulation test already commenced.

This activity will continue into the year 2025 to cover the major dynamic endocrine function tests.

Term of reference 14: “E-NEWS ARTICLES”

List 2024 accomplishments for this Term of Reference

- eNews IFCC - IFCC WorldLab 2024 – Dubai´s conference - July issue
- eNews IFCC - IFCC WorldLab 2024 - Dubai through Young Scientists' eyes Part 1 - July issue
- eNews IFCC - IFCC WorldLab 2024 - Dubai through Young Scientists' eyes Part 2 - August issue
- eNews IFCC - IFCC WorldLab 2024 - Dubai through Young Scientists' eyes Part 3 - September issue
- APFCBeNews: publication about Dubai's conference
- "Meet a Young Scientist" project: Corresponding members interviews submitted
- eNews IFCC - IFCC WorldLab 2024 - October:
- Meet a Young Scientist from the IFCC Task Force for Young Scientists - spotlights on:
  Karen Heverin, Ireland
  Kohki Okada, Japan
  Charles Lefèvre, France
- eNews IFCC - IFCC WorldLab 2024 – November:
  Meet a Young Scientist from the IFCC Task Force for Young Scientists - spotlights on:
  Matthijs Oyaert, Belgium
  Elias Chipofya, Malawi
  Tamar Ramishvili – Georgia

ADDITIONAL INFORMATION

The TF-YS is collaborating in the Translation to different languages (Spanish and French) of Area9 courses (supported by IFCC)

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Detailed in previous terms of reference

MEETING SCHEDULE IN 2025

IFCC-EFLM EuroMedLab 2025

4 EDITION OF THE YS FORUM 2025

IFCC GC Brugge 2025

MASS SPEC SATELLITE MEETING 2025

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Webinars submitted for 2025:

1) March 2025 Source of errors in LM, coordinated by Charles & Udara

2) June 2025 Sensor Biotech/POCT coordinated by Don & Ashlin

3) Sept 2025 Scientific communication and publication coordinated by Marie

4) End 2025 Leadership coordinated by Dipuo & Sean.

5) Gender perspectives in laboratory medicine coordinated by Claudia

Santiago Fares Taie, Chair IFCC-TF-YS

Task Force History (TF-H)

IFCC HISTORY BOOK: A STRATEGIC CHRONICLE FOR THE 75TH ANNIVERSARY

Bernard GOUGET, Mathias M. MÜLLER, T-H co-chairs

As the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) prepares for its 75th Anniversary in 2027, the Federation is finalizing a comprehensive History Book to reflect the evolution of its structure, scientific influence, and global impact from 2002 to 2027. Spearheaded by Prof. Mathias M. Müller and Dr. Bernard Gouget, the initiative emphasizes the strategic leadership and collaborative efforts of IFCC Divisions, Officers, and Regional Federations. Two current Division Chairs are coordinating regional data collection to ensure that this milestone publication accurately reflects the diversity and depth of the Federation's accomplishments.

Over the past two decades, IFCC has refined its governance structure to reflect inclusivity, agility, and strategic foresight. The Executive Board now includes Regional Federation and Corporate Member representatives, ensuring that global perspectives and industry insights inform IFCC's priorities. A more participatory Council, enhanced voting rights, and the creation of new Divisions and Task Forces, such as the Task Force on History, demonstrate IFCC's ability to evolve structurally while staying aligned with its mission.

IFCC's collaboration with over 60 Corporate Members has become a cornerstone of its innovation strategy. Corporate partners contribute not only financial support but also technical expertise, enabling joint development of educational programs, awards, symposia, and reference materials. Initiatives like the UNIVANTS of Healthcare Excellence award exemplify how IFCC and industry jointly recognize exemplary practices that improve patient outcomes. Corporate representation on committees and working groups strengthens IFCC's capacity to translate emerging technologies into clinical practice.

The Scientific Division (SD) is at the core of IFCC's contribution to global healthcare, leading standardization and metrology initiatives critical to laboratory accuracy and reliability. Among its greatest achievements is the international adoption of the IFCC reference measurement system for HbA1c, revolutionizing diabetes monitoring. The SD maintains a global reference laboratory network and works closely with ISO, WHO, and JCTLM to harmonize laboratory measurements across regions. Its committees address enzymology, molecular diagnostics, reference intervals, and emerging biomarkers, ensuring IFCC remains the scientific authority in laboratory medicine.

The Education and Management Division (EMD) has expanded access to high-quality training through the IFCC e-Academy, webinars, adaptative learning and Visiting Lecturer Programs. These initiatives particularly support low-resource countries, enhancing both technical and managerial capabilities. EMD's contributions also include the development of laboratory quality systems, ISO 15189 guidance, and mentorship programs, ensuring that laboratories meet international standards while nurturing leadership among professionals.

The Communications and Publications Division (CPD) transformed IFCC's outreach strategy with the launch of the eJIFCC open-access journal, the monthly IFCC eNews, and digital platforms for social engagement. Campaigns like 'Labs Are Vital' and 'Labs Save Lives' have significantly increased public and political awareness of laboratory medicine's central role in healthcare. The CPD also ensures multilingual content accessibility, amplifying the Federation's global presence.

Created in 2018, the Emerging Technologies Division (ETD) identifies and evaluates disruptive innovations including AI, omics, mobile diagnostics, and bioengineering. Its committees develop validation frameworks, guidance documents, and cross-disciplinary projects that bridge science and clinical practice. Collaborations with the Scientific and Education Divisions ensure a coordinated pathway from innovation to implementation.

IFCC has established itself as a proactive international federation by continuously evolving its governance to include Regional Federation and Corporate Member representation. It introduced the P6 Medicine model, Personalized, Predictive, Preventive, Participatory, Psycho-cognitive, and Public as a guiding framework. During the COVID-19 pandemic, IFCC acted rapidly through a dedicated Task Force, multilingual webinars, and strategic alliances, demonstrating agility and global leadership.

The IFCC History Book stands as a testament to two decades of transformation, scientific excellence, and forward-thinking innovation. Through the synergistic efforts of its divisions and the visionary leadership of its Officers, IFCC has not only shaped global standards and strengthened professional education but has actively led the evolution of laboratory medicine worldwide.

As the organization approaches its 75th anniversary, it remains firmly committed to advancing healthcare through science, innovation, and global collaboration. IFCC's leadership has been especially vital during periods of global uncertainty and rapid change. During the COVID-19 pandemic, IFCC swiftly mobilized its international network to deliver real-time educational webinars, expert guidance, and coordinated diagnostic strategies. Beyond the crisis, IFCC has continued to champion the critical role of diagnostics in modern health systems, advocate for the integration of laboratory professionals in clinical decision-making and align its vision with transformative trends such as personalized medicine, artificial intelligence, and digital health. As the field of laboratory medicine becomes increasingly data-driven, predictive, and patient-centered, IFCC stands at the forefront, "as a trusted authority, a catalyst for innovation, and a unifying force in global laboratory science. Its legacy is one of progress; its future, one of promise.

Mathias M. Mülller and Bernard Gouget, TF-H Chairs

Task Force Corporate Members (TF-CM)

Chair: Jean-Sébastien Blanchet (FR)

Name	Position	Term
Jean-Sébastien Blanchet	Chair	12/24 1st
Yan Lui	Secretary	01/24 1st
Vincent Chen	Member	04/23 2nd
Peng Yin	Member	05/24 1st
Lily Li	Member	05/24 1st
Jose Rafael Gutiérrez	Member	05/24 1st
Retired/Retiring/Changes (4):		
Brendan Meyer	Fromer Member	
Alessandro Ortisi	Former Secretary	
Andy Quintenz	Former Member	
Tricia Ravalico	Former Chair, but active as EB Representative	
Corresponding Members (9):		
Nasrin Al Thubian	Beckton Dickinson	
Jan Gorka,	DiaSys Diagnostics Systems	
Ana-Maria Šimundić	Greiner Bio-One GmbH	
Anne Skurup	Radiometer Medical ApS	
Jamie Philips Deeter	Roche	
Melvin Passay	Sansure BioTech Inc	
Andrea Battola	Sansure BioTech Inc	
Maurizio Gramegna	Technogenetics	
Lindsay Sun Beckman	Coulter	

Aim

The aim of IFCC TF-CM is to enable Corporate Members to make significant and growing contributions to the activities of IFCC, and to elevate key topics and priorities for the betterment of industry collaborations, laboratory medicine and health care.

Objectives:

- To assist IFCC in promotion of science, innovation, and advancement of the essential contribution of laboratory medicine to health care.
- To facilitate discussion among Corporate Members & identify common topics of interest and/or concern.
- To improve the engagement of Corporate Members with the IFCC.
- To serve as the “voice of industry” and be more accessible to all IFCC teams and leadership, enabling a more diverse understanding and appreciation of needs among corporate members and the IFCC.
- To increase awareness with other Corporate Members of IFCC TF-CM and to encourage their participation in IFCC activities.

TERMS OF REFERENCE

Term of reference 1

To improve the engagement of Corporate Members with the IFCC

List 2024 accomplishments for this Term of Reference

- The IFCC TF-CM has a core team of 12 companies with engaged and motivated corporate representatives. In 2024, 4 members left the TF-CM, 2 due to retirement from their companies and 2 due to completion of their terms in responsibility including a former secretary and a former chair. Despite these changes, replacements were promptly identified to support the TF-CM in the key roles of secretary and chair. This is indicating a strong engagement of IFCC corporate members in the TF-CM.
- The annual corporate members (CMs) survey was re-conducted in October 2024. The results of the sur vey indicated that 80% of CMs are satisfied and 10% are very satisfied with IFCC. This is a total 90% of satisfaction of CMs with IFCC. The welcome package, developed by the TF-CM, was especially appreciated. The survey results indicate a strong motivation from corporate members to become more active in IFCC. There is a key interest for CM to be part of the decision-making process in IFCC activities. There are still opportunities for improvement, especially to get CMs more involved in the IFCC scientific projects and also to improve conferences attendance and implication of CMs in the scientific program.
- The welcome package developed by the TF-CM was reconducted in 2024 and sent to all CMs. This was very much appreciated by new IFCC CMs.

List planned activities in 2025 for this Term of Reference

Term of reference 2

To serve as the “voice of industry” and be more accessible to all IFCC teams and leadership, enabling a more diverse understanding and appreciation of needs among corporate members and the IFCC

List 2024 accomplishments for this Term of Reference

In 2024, a key initiative of the TF-CM was the establishment of small working sub-groups, allowing members to dedicate time to discussing specific topics and developing a unified industry position (“voice of the industry”).

In collaboration with Dr. Christian Volg (Roche), the current corporate representative at the Scientific Division, a dedicated TF-CM working sub-group was formed to address macroprolactin interferences. This group held multiple focused discussions, enabling CMs from various companies to share insights and challenges. Through these exchanges, a consensus on the issue emerged.

Following this, a virtual meeting was organized with key experts, including Dr. Fahie-Wilson, Dr. Smith, and Dr. Horváth, as well as Prof. Cobbaert, Chair of the Scientific Division. Their presentation of the issue provided valuable insights, helping CMs identify communication needs related to macroprolactin interferences. Concerns raised by CMs were addressed in an open and constructive manner.

As a result, a concrete action plan was developed, outlining various initiatives to enhance communication and education on the macroprolactin topic across the industry.

List planned activities in 2025 for this Term of Reference

TBD

Term of reference 3

To facilitate discussion among Corporate Members and identify common topics of interest and/or concern

List 2024 accomplishments for this Term of Reference

Enhancing communication among CMs has been a key priority for the TF-CM in 2024.

To facilitate discussions on various topics, dedicated working sub-groups were established. These groups provide TF-CM members with the opportunity to engage in focused discussions, exchange insights, and identify key aspects relevant to CMs, ultimately working toward a unified position.

The following TF-CM working sub-groups were formed:

- CMs involvement in IFCC conferences

- CMs communication strategy

Each sub-group meets independently and presents its discussions and recommendations during regular TF-CM calls, ensuring alignment on key topics of interest.

List planned activities in 2025 for this Term of Reference

TBD

Term of reference 4

To increase awareness with other Corporate Members of IFCC TF-CM and to encourage their participation in IFCC activities

List 2024 accomplishments for this Term of Reference

A key initiative for raising awareness among corporate members about IFCC benefits and activities is the Welcome Package, which is distributed to each new corporate member. In 2024, this initiative continued, with the package sent to all IFCC corporate members. Survey results confirmed that this effort is highly valued by CMs.

As part of a broader strategy to enhance communication with CMs, the TF-CM organized dedicated presentations on two IFCC divisions: Emerging Technologies Division (ETD) and Education and Management Division (EMD).

On June 28, 2024, Prof. Damien Gruson presented an overview of ETD activities during a virtual meeting with CMs. His presentation was well received and led to ongoing engagement between CMs and the ETD through a survey designed to assess challenges and opportunities related to emerging technologies.

On September 23, 2024, Prof. Nader Rifai introduced the EMD's initiatives, focusing on the Professional Exchange Program and Adaptive Learning Program, during a TF-CM call. His presentation sparked valuable discussions and interactions between CMs and the EMD.

Additionally, a direct communication effort was undertaken via an ETD-led survey to better understand the priorities and challenges CMs face regarding emerging technologies. Insights from this survey will help the ETD tailor its priorities and activities to better support corporate members.

The annual CM survey, conducted by the TF-CM in 2024, also played a crucial role in identifying corporate member engagement and interests in IFCC activities. Strengthening direct communication with all IFCC CMs fosters greater participation in IFCC initiatives.

Finally, the in-person TF-CM meeting during WorldLab in Dubai provided an invaluable opportunity for IFCC CMs to engage with the TF-CM core team, experience their enthusiasm firsthand, and reinforce the collective effort to represent the industry's perspective within the IFCC. This collaboration continues to drive shared success between IFCC and CMs in advancing excellence in laboratory medicine.

TF-CM core team. In-person meeting, Dubai, May 2024.

Top left to right:

Vincent Chen (Snibe), Jan Gorka (DiaSys), Lilly Li (Quidel Ortho), Brendan Meyer (BD), Anne Skurup (Radiometer), Ana Maria Simundic (Greiner)

Bottom left to right:

Jose Gutiérrez (Siemens), Tricia Ravalico (Abbott), Jean-Sebastien Blanchet (Beckman Coulter), Yan Liu (Mindray), Jamie Deeter (Roche)

List planned activities in 2025 for this Term of Reference

TBD

ADDITIONAL INFORMATION

Due to external reasons, the 2023 chair (Jean-Sebastien Blanchet), has decided to step down his responsibility of TF-CM chair. The TF-CM secretary (Yan Liu) will ensure a smooth transition until a new chairperson is identified.

TF-CM members are strongly committed to collaborating with the IFCC to promote scientific innovation and advance excellence in laboratory medicine.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

10 meetings were held in 2024:

- Week 9 – Feb 26th(virtual)
- Week 13 – March 25th (virtual)
- Week 22 – May 27th – Dubai in person
- Week 31 – July 29th – Chicago in person
- Week 39 – Sept 23rd (virtual)
- Week 41 – October 16th (virtual) – macroprolactin working group
- Week 48 – Nov 25th (virtual)
- Week 50 – Dec 9th (virtual) – working group on CM benefits and conference

MEETING SCHEDULE IN 2024

The duration and the frequency of the TF-CM meetings will be increased to ensure appropriate time for discussion and conduct the 2025 activities

- 14th Jan 2025
- 11th Feb 2025
- 11th Mar 2025
- 15th Apr 2025
- 21st May 2025 – in person meeting in Brussels/EML)
- 24th Jun 2025
- 22nd Jul 2025
- 26th Aug 2025
- 23rd Sep 2025
- 21st Oct 2025
- 18th Nov 2025
- 15th Dec 2025

Jean-Sébastien Blanchet (FR), TF-CM incoming Chair

Task Force on Global Newborn Screening (TF-NBS)

Joint Task Force of IFCC and International Society of Newborn Screening (ISNS)

Co-Chairs: Jim Bonham (UK) - Aysha Habib Khan (PK)

Members: Van Leung-Pineda, M.A. Ascurra de Duarte, F. Boemer, U. Ceglarek, M. Kase, D. Webster, E. Lebredonchel, K. Valdyanathan,

EB liaison: Rajiv Erasmus

IFCC Office: Smeralda

Corresponding Members: N. Abesadze, J Anetor, A. Fonseca, M. Gebre, P. Gyawali, B. Kumar Yadav, D. Lehotay, A. Pagdhune, G. Polo, C. Queijo, B. Repič, H. Rocha, T. Satekge, E. Sozmen, G. Borrajo

TERMS OF REFERENCE

A summary of the projects with which the Task Force has been involved during 2024

The Task Force is supporting the development of newborn screening in the following countries:

Nigeria, South Africa, Indonesia, Algeria, Dominican Republic, Nicaragua, Georgia, Kazakhstan, Romania, Bulgaria, Nepal, Sri Lanka, Pakistan and Iran

The interest in screening has grown steadily helped by ‘in country meetings’ in the following: South Africa, Nigeria, The Dominican Republic, Georgia, Kazakhstan

Updates from each of these countries is received on a regular basis and discussed at the Task Force meetings and at related events.

Updates from each of these countries is received on a regular basis and discussed at the Task Force meetings and at related events. Some of these are summarised below:

Dominican Republic

Dr. Perez de Ferran had a meeting on February 13, 2025 with the Director of the National Health Service (Servicio Nacional de Salud SNS) Dr. Martin Ortiz Lado and other government leaders. It was an initial meeting to discuss how to progress the NBS Law. It was discussed that the building is still destined to be for use for NBS and clinical areas related to the management of the detected diseases. The plan is to start in 4 centers in Santo Domingo. The law was promulgated in May 2024 and the goal is to start within 2 years. Dr. Ortiz Lado reiterated that they will include Dr. Perez de Ferran without further details.

Indonesia

2022 saw the development of referral laboratories expanded from 4 labs to 11 labs and the relaunching of CH screening by the Deputy Minister of Health.

2023 The issuance of Minister of Health Regulation No. 3 of 2023 and Minister of Health Decree No. 1511 of 2023: SHK is mandatory for births covered by universal coverage. The establishment of the Expert Commission on Newborn Screening, involving cross program collaboration and professional organizations. The commission holds regular online and offline meetings to discuss the progress and development of newborn screening.

2024 The development of three referral laboratories: Labkesda DKI Jakarta, Labkesda Lampung, and Labkesda East Borneo. This designation was made after a selection and assessment process conducted by the Directorate of Public Health Governance, PDS Patklin, and IDAI.

As a result, the number of babies screened for congenital hypothyroidism has risen from 102,000 in 2022 to a total of 2.1m and the coverage has risen from 2% to 46% during this period.

South Africa

In 2024, The South African Rare Disease Advisory Board (RDAB held an initial virtual discussion/ webinar to gauge interest for the RDAB in 2024 and will require diverse expertise (clinical, policy, research, academic). It has been decided that North-West University will host the RDAB to ease resource constraints while retaining Chris Hendricks as chair in a less hands-on role driving the RDAB development. A solid governance structure will be required. The core NBS group will likely fall under the RDAB as a sub-committee/work stream.

The African Federation of Clinical Chemistry (AFCC) Newborn Screening Committee held their 4th in Feb 2025. They have completed an NBS Policy in Africa survey questionnaire, ready for distribution to AFCC affiliated nations. Plans are underway for an editorial and opinion paper on the status of NBS in Africa together with further collaborations planned.

Algeria

A collaboration between the Bordeaux University Hospital in France and centres in Oran and Algiers has led to an approval equipment in 2025 and the intention to screen 120,000 babies. The first babies were tested in March 2025.

The project is being undertaken together with the Ministry of Health.

Georgia

Since 2003, a state newborn screening (NBS) program has been in place, managed by the LEPL "National Health Agency of Georgia." In September 2024, the program was transferred to a new private laboratory, and its scope was expanded to include additional disorders.

Despite these advancements, significant gaps remain, including the need for improved technology (e.g., integrating MS/MS into the newborn screening program), trained laboratory

staff, better public awareness, and improved coordination among the various components of the state and screening program.

Romania

The Ministry declared, in an event organized by EC and National Health Insurance on Cross Border Health Care that upscaling NBS is one of his priorities for 2025 and funds have been allocated for this as part of the Operational Program for Health and will soon be launched.

Sri Lanka

Efforts to expand the newborn screening programme to include inherited metabolic disorders is continuing. There is on-going collaboration with centres in the UK and elsewhere. The main aims of these collaborations are to secure funding for equipment and to help support and train staff.

Nigeria

A two-day national workshop on newborn screening was organised on the 20th and 21st Nov 2024. The meeting was well attended with national and international speakers including representatives from the Ministry of Health in Nigeria.

A conference report is being prepared for publication in the International Journal if Neonatal Screening.

List planned activities in 2025

The plan is to continue to support the above-mentioned countries. In addition, the following new countries have been included, where activities will be followed:

Pakistan, Georgia, Bangladesh,

The Global Task Force on Newborn Screening has several active projects and there are strong indications, exemplified by the change in the law in the Dominican Republic in April 2024 that these activities are bearing fruit.

The additional impetus provided by the recommendation made by WHO at WHA77 in May 2024 provides additional encouragement and we would, on that basis anticipate 2025 to prove a busy year.

While we should maintain the flexibility to adapt our plans to take advantage of opportunities as they arise, there are 5 countries: Nigeria, South Africa, Dominican Republic, Kazakhstan, Pakistan and possibly one other from – Indonesia/Sri Lanka, in which, based upon national plans, we might reasonably anticipate in country activity requiring support from members of the Task Force.

ADDITIONAL INFORMATION

Working with WHO

The 77th World Health Assembly (2024), held in Geneva, specifically encouraged member states to consider implementing universal NBS, diagnosis, management, and long-term care for children with birth defects. The growing global focus on this issue was evident at the Geneva WHA, which featured four side events dedicated to newborn screening and related topics.

TF members, AHK & DW organized one of the sides events organized by Clan (Caring and living with children with NCD) jointly by IFCC, ISNS, @Mates4kids, IPA, and Kemenkes, entitled “What Will It Take to Scale #NewbornScreening So That #EVERYnewborn Has an Equal Chance to Life and Health?” at 77th World Health Assembly on 26 May 2024. Official event report can be accessed here wha77_official_event_report_-_final.pdf and the final NBS Flyer with IFCC participation is available online here.

In response, WHO has launched a consultative process involving a group of global experts to develop a comprehensive framework for the screening, diagnosis, and management of birth defects, particularly integrated into routine health services in low- and middle-income countries (LMICs). This initiative will unfold through a series of virtual consultation rounds from September to December 2024. The discussions will bring together stakeholders from academia, NGOs, research networks, ministries of health, and UN agencies such as UNICEF, UNFPA, and WHO.

Anticipated outcomes include a WHO framework document to guide program managers in LMICs in implementing tertiary prevention services for birth defects and promoting alignment across various workstreams regardless of the specific birth defect. These developments are highlighted in a Lancet publication released on 16th September 2024, titled "The 77th World Health Assembly resolution calling for newborn screening, diagnosis, and management of birth defects: moving towards action in low-income and middle-income countries" (link to article).

World Map Project

The International Society for Neonatal Screening (ISNS) is developing an online world map to provide a comprehensive, accessible overview of global newborn screening activities. This initiative has been significantly supported by the recent landmark publication by Therrell et al., a 183-page compendium with 1,590 references, offering an unparalleled depth of information on screening practices worldwide. The detailed data presented in this paper serve as a foundational resource for populating the map, enabling ISNS to visually represent the current status, gaps, and progress in newborn screening across different regions. Once completed, this tool will be instrumental for policymakers, researchers, and program implementers in identifying areas of need, fostering collaboration, and guiding strategic expansion of newborn screening services globally.

Newborn Screening Academy

A one-day event is planned for 23rd March 2025, just before the European ISNS meeting in Luxembourg, specifically designed for individuals who are new to, or have limited experience in, biochemical newborn screening. The event will adopt a workshop-style format to introduce basic concepts and practical aspects of newborn screening, encouraging active participation. Efforts are underway to secure funding to support attendance, and the registration fee is expected to be kept to a minimum—around 60 Euros. This initial event is envisioned as a learning opportunity, with the goal of refining the approach and expanding similar initiatives to other settings, including low- and middle-income countries (LMICs).

International Development Coordination Group on NBS

The International Development Co-ordination Group functions as an informal yet purposeful platform, focused more on sharing individual and organizational activities than on launching joint initiatives. Its core objective is to create a collaborative space where members can stay informed about global developments, exchange relevant background information, and gain valuable insights into effective practices—as well as lessons learned from challenges. By fostering transparent communication and mutual learning, the group seeks to reduce duplication of effort, enhance strategic alignment, and offer encouragement during difficult periods.

Importantly, the group also serves as a dynamic contact network, connecting organizations engaged in newborn screening, rare diseases, and broader health initiatives across diverse settings. It provides a foundation for building relationships, amplifying collective knowledge, and strengthening global efforts through informal collaboration.

Participants in the current meeting include representatives from key international organizations: ISNS (Jim Bonham), IPOPI (Johan Prevot), the Asia Pacific Society of Human Genetics

(Camencita Padilla), ADLM (Mike Bennett), CONSA/ASH (Andrew Zapfel), Metabolic Support UK (Jonathan Gibson), APHL (Jelili Odoju), CDC (Carla Cuthbert), WHO (Anshu Banerjeea), IFCC (Aysha Habib), ClanChild Health (Kate Armstrong), MetabERN – European Reference Network (Maurizio Scarpa), and GPED – Global Pediatric Endocrinology and Diabetes (Francisca Grob).

Collectively, this group embodies a spirit of cooperation and shared purpose, contributing to a more connected and informed global health community. The work of the IFCC/ISNS Global Task Force on Newborn Screening was highlighted during the second meeting, with a focus on the pressing need to expand newborn screening in low- and middle-income countries (LMICs). Practical imperatives were shared for two high-priority conditions: sickle cell disease (SCD) and congenital hypothyroidism (CHT). For sickle cell disease, data from Ranque et al. (Lancet Haematology, March 2022) reveal a staggering under-5 mortality rate of 36.4% in sub-Saharan Africa, with an excess mortality of 29.6%. Given an estimated 300,000 babies born with SCD annually in the region, nearly 90,000 children are believed to die from the disease each year due to lack of timely diagnosis and treatment. Similarly, the burden of congenital hypothyroidism remains critical. With approximately 140 million babies born globally each year—95 million of whom are in regions without screening—and a conservative incidence estimate of 1 in 3,000, over 30,000 children per year are denied early and effective treatment, resulting in lifelong developmental consequences. Despite this, global coverage remains alarmingly low. In 2014, Ford et al. reported that only 29.3% of newborns worldwide were screened for CHT, and a decade later, a study published in December 2024 shows a marginal increase to just 29.6%. These figures underscore the urgent need for global action and the continued efforts of the Task Force to promote equitable access to newborn screening services.

International Neonatal Screening Day (INSD)

INSD was celebrated this year with a renewed focus on three key themes: the unique challenges and opportunities in low- and middle-income countries (LMICs), the emergence of new technological innovations in screening, and the vital role of patient and family experiences. This year's observance emphasized the need to expand equitable access to newborn screening in resource-limited settings, where early detection can significantly improve outcomes but remains underutilized. Advances in technology—such as point-of-care testing, digital health platforms, and improved laboratory methods—were also highlighted as transformative tools to enhance coverage and efficiency. Equally important was the spotlight on the voices of patients and families, whose lived experiences bring urgency, insight, and humanity to policy and practice decisions, reinforcing the importance of person-centered care in newborn screening programs.

Global Diagnostic Coalition Meeting

AHK attended the Global Diagnostics Coalition (GDC) meeting was held Monday, 24 March 2025 at 16:30 Geneva time for implementation of WHA76.5 Strengthening Diagnostics Capacity resolution , AHK proposed creating a task force on Newborn Screening for addressing the need for low cost quality solutions for newborn screening.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

- Bridging Gaps and Developing Synergies for Universal Health Advancements across Regions or Continents in newborn screening at IFCC Expert Symposium 9th International congress of Biochemistry, Oct. 23-25, 2024, Tehran, Iran (Virtual)- (AHK & JB)

In-Person

- WHA77 Side Event ““What will it take to scale #NewbornScreening so that #EVERYnewborn has an equal chance to life and health? on 26 May 2024, Geneva, Switzerland (AHK & DW)
- PAK-IMD-Net, Rare Link Seminar Series, Pakistan. Hybrid Seminar on A critical gap in medical education for biochemical genetics improving patient outcomes. Thursday, Dec 5, 2024, Aga Khan University (AHK & DW)
- PAK-IMD-Net, Pakistan Society of Chemical Pathology Meeting ‘ChemCon” A Policy Dialogue on Implementing Newborn Screening in Pakistan. (AHK)
- Newborn screening consortium -Nigeria (NSC-N). Integrated newborn screening Nigeria: The way to go. November 2024 -In Country Meeting.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

IFCC Webinar

Two IFCC webinars were submitted this year.

The IFCC Webinar held on 27th February 2025 drew strong global interest, with 3,500 registrants and 850 active participants on the day. The webinar focused on advancing newborn screening initiatives in low- and middle-income countries (LMICs) through innovative and sustainable strategies tailored to local contexts. Recognizing the barriers these regions face, including limited infrastructure, financial constraints, and workforce training gaps, the program highlighted practical solutions to bridge these challenges. Prof. Jim Bonham opened with insights on expanding newborn screening in LMICs, outlining the foundational elements required for successful implementation. Dr. Hafsa Majid introduced the use of virtual learning platforms to train healthcare workers in Dried Blood Spot (DBS) collection, offering a scalable and accessible solution to address training limitations. Dr. Lena Jafri concluded with a presentation on the development of a rare disease registry, emphasizing its value in generating evidence to inform policy and guide targeted screening efforts. Together, the sessions showcased a multidimensional approach to supporting sustainable newborn screening in LMICs, with a focus on education, innovation, and data-driven planning.

The 2nd webinar is on The Role of Genomic Testing in Newborn Screening: Innovations, Challenges, and Implications. And is awaiting scheduling by the IFCC office

Presentations by Taskforce Members 2024

Nigeria, Lagos. The following presentations were made by Task force members John Anetor, Marika Kase Marika and Jim Bonham:

- Screening Options – Method,
- Technology & Infrastructure needed for NBS in Nigeria,
- Key Challenges / Opportunities
- Benefits of Appropriate and Well Organized NBS in All Healthcare Settings 20th November 2024
- Global stakeholders supporting development of NBS in LMIC
- Integrated Newborn Screening Nigeria: The Way To Go

Pakistan

- Charting the Path: NBS Scale-up and sustainability in Pakistan in ChemCon, Annual Conference of Pakistan Society of Chemical Pathology Nov. 2024 at Peshawar. Facilitator from taskforce DW & AHK

- Navigating the Diagnostic Landscape of Rare Diseases in Low-Middle Income Countries" on Wednesday, February 28th, from 10 am to 12 pm. This is in line with the 'World Rare Disease Day'. The event will be conducted in a hybrid format, with participation from Nairobi, Kenya and Karachi. Panelist
- Keynote lecture: Biochemical Genetics and Evolving Educational Curricula in Pakistan: A Pathway to Scientific Advancement and Societal Development, Rare Link webinar A Critical Gap in Medical Education for Biochemical Genetics - Improving Patient Outcomes at Peer Place, AKU on 5-12-2024

Tehran – (virtual) IFCC Expert Symposium 18th National and 9th International Congress of Biochemistry and Molecular Biology. The role of newborn screening in the early detection of rare disorders: doing good and avoiding harm.

- Bridging Gaps and Developing Synergies for Universal Health Advancements across Regions or Continents in newborn screening

Geneva - Keynote lecture Global Horizons in Newborn Screening at MATES4Kids, WHA77 Side Event ""What will it take to scale #NewbornScreening so that #EVERYnewborn has an equal chance to life and health? on 26 May 2024, Geneva, Switzerland

Brussels – MEP Parliament Event 6th November 2024 – Newborn Screening: Crucial Early Diagnosis

Barcelona - World Orphan Drug Conference 23rd – 24th October 2024 Seminar:

- The next chapter in Newborn screening -Bridging the NBS Gap between LMIC and advanced countries - Bringing together metabolomics and genomics – how and why?

Barcelona - (virtual) European Reference Network meeting 22nd October 2024 Newborn Screening – much to celebrate, much to do.

Barcelona - Screen 4 Rare project meeting. 21st October - Discussion panel on genomics in newborn screening

Utrecht - 50 years of Newborn Screening 17th October - The International Impact of Newborn Screening over the last 50 Years

Ljubljana – Genomics in Newborn Screening Meeting 25th – 27th September 2024 - Genes, metabolites, or proteins, what to analyze and when? 1st or 2nd or 3rd tier applications.

Malaga - Menkes meeting 13th September 2024 - Innovation in Newborn Screening, protecting what we have while developing new potential

Turku – Revvity World view, newborn screening meeting – 10-14 June 2024 – Introductory talk from ISNS.

Rome – 24th National Myology Conference, 5th – 8th June 2024 – Newborn Screening – where are we now?

Kazakshstan (virtual) 15th – 19th April 2024 - Newborn screening history and principles

Sitges – 12th 14th April 2024 – ERNDIM 30th Anniversary, History Talk

Heidelberg – 18th – 20th March 2024 New Lives meeting - Strategies to reduce uncertainty (and harm) caused by recent and future NBS programmes

Paris - 21st – 23rd February 2024 Euro NMD meeting – Current and future perspectives on newborn screening

Ibadan - June 28th June 2024, the first International Neonatal Day celebration in honour of Robert Guthrie was held at the University College Hospital Ibadan . Theme: Determinants of Newborn Screening program: Technology or Policy. Presentation: Newborn Screening: Beginning With What You Have.

Lagos - July 4th 2024, the Newborn Screening Consortium-Nigeria organized a sensitization

Policy Documents

- MATES4Kids (Maximizing Access to Essential Supplies for Children) Consensus Statement on the need to urgently scale universal access to Newborn Screening to achieve the SDGs (_mates4kids_nbs_consensus_statement_-_final_-_20240628.pdf)
- Newborn Screening Child-Friendly Rights Flyer "What are the rights of children with newborn screening? by Caring and living as neighbors (CLAN) (Newborn Screening Rights Flyer)

Publications 2024

1. Freeman K, Taylor D, Dinnes J, Clark C, Kander I et al, (2024) Evaluating whole genome sequencing for newborn screening – a series of systematic reviews and a roadmap for evidence generation for policy advisors BMJ 2024 - Submitted
2. Clark C, Holder P, Boardman FK, Moody L, Cowlard LC, Walter C, Bonham JR, Chudleigh J (2024) International Perspectives of Extended Genetic Sequencing When Used as Part of Newborn Screening to Identify Cystic Fibrosis Int J Neonatal Screening 2024, 10, 31. https://doi.org/10.3390/ijns10020031
3. Moody L, Clarke S, Compton M, Hughson-Gil RI, Boardman FK, Clark C, Holder P, Bonham JR, Chudleigh J (2024) Advances in newborn screening: development of an online scenario-based tool to enable research participation and public engagement. J Participatory Medicine 2024 https://preprints.jmir.org/preprint/59686/accepted
4. Chudleigh, J, Holder, P, Clark, C, Moody, L, Cowlard, J, Allen, L, Walter, C, Bonham, JR & Boardman, F (2024), 'Parents' and children's views of wider genomic testing when used as part of newborn screening to identify cystic fibrosis', SSM - Qualitative Research in Health , 2024 vol. 6, 100455. https://dx.doi.org/10.1016/j.ssmqr.2024.100455
5. Holder P, Clark CC, Moody L, Boardman FK, Cowlard J, Allen L, Walter C, Bonham JR, Chudleigh J (2024) Stakeholder Views of the Proposed Introduction of Next Generation Sequencing into the Cystic Fibrosis Screening Protocol in England Int. J. Neonatal Screen. 2024, 10, 13. https://doi.org/10.3390/ ijns10010013
6. Leire Solis L, van Coille S, Bonham JR, Hauk F, Hammerstrom L, Staal FJT, Bruce Lim B, Pergent M, Johan Prévot J (2024). Newborn Screening Today and Tomorrow: A Brief Report from the International Primary Immunodeficiencies Congress Int J Neonatal Screen 2024 Apr 5;10(2):30. doi: 10.3390/ijns10020030
7. Moat SJ, Ssali J, Shakespeare L, Taj N, Wu THY, Anderson M, Ghosh A, Lemonde H, Pierre G, Sharrard M, Sreekantam S, Bonham JR (2024). Retrospective Review of Positive Newborn Screening Results for Isovaleric Acidemia and Development of a Strategy to Improve the Efficacy of Newborn Screening in the UK. Int J Neonatal Screen. 2024 Mar 13;10(1):24. doi: 10.3390/ijns10010024
8. Moat SJ, Bonham JR, Cavanagh C, Birch M, Griffith C, Shakespeare L, Le Masurier C, Manfredonia C, Hird B, Goddard P, Smith S, Wainwright L, Carling RS, Cundick J, Jenkinson F, Collingwood C, Flynn N, Taj N, Mirzazadeh M, Ramgoolam T, Robinson L, Headley A, Morgan T, Elliman D, Tetlow L. (2024) Consistency in the Assessment of Dried Blood Spot Specimen Size and Quality in U.K. Newborn Screening Laboratories. Int J Neonatal Screen. 2024 Sep 5;10(3):60. doi: 10.3390/ijns10030060. PMID: 39311362; PMCID: PMC11417764

Jim Bonham Co-Chair/ISNS (UK), Aysha Habib Khan Co-Chair (PK)

Task Force on Global Lab Quality (TF-GLQ)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name Position	Position	Country	Term	Time in Office
E. Amann	Co-Chair	DE	2nd	2024 01 - 2026 12
Q. Meng	Co-Chair	US	2nd	2024 01 - 2026 12
I. Blasutig	Member &Secretary	CA	2nd	2024 01 - 2026 12
R. Bais	Member	AU	2nd	2024 01 - 2026 12
A. Carobene	Member	IT	1st	2024 03 - 2026 12
JM. Giannoli	Member	FR	2nd	2024 01 - 2026 12
A. Perret-Liaudet	Member	FR	2nd	2024 01 - 2026 12
A. Thomas	Member	UK	2nd	2024 01 - 2026 12
A. Vassault	Member	FR	2nd	2024 01 - 2026 12
J. Lin	Corp. Rep./Abbott	US	2nd	2024 01 - 2026 12
A.J.T. Poloni	Corp. Rep./Controllab	BR	1st	2024 05 - 2026 12
G. Henriksen	EQALM Rep	DK		
P. K. Dabla	Consultant	IN		
A. Haliassos	EB Liaison	GR		

TERMS OF REFERENCE

Reporting instructions for Terms of Reference for all Committees, Taskforces and Working Groups, please provide the following information

Term of reference 1

> Focus on resource-limited countries and identified labs in four countries mostly in need of improving EQA (EQA acceptance rates < 90%)

List 2024 accomplishments for this Term of Reference

The EQA pilot program spanned two years: 50 labs were supported in 2022, 100 labs were supported in 2023. Participating labs were provided with EQA materials, interpretation software, specific training and support concerning their products by One World Accuracy (1WA). The IFCC EB decided not to extend the contract with 1WA. The provision of EQA material by 1WA thus ended in December 2023. Individualized formal TF-GLQ letters were sent to the liaison managers of the 10 participating countries (Georgia, Serbia, Bosnia/Herzegovina, Bolivia, Colombia, Peru, Malawi, Zambia, Indonesia, Sri Lanka) to inform their 10 participating labs on terminating the provision of EQA material free of charge.

In general, participation rates in the EQA pilot study and performance were quite discrepant by the different participating countries and labs: Some labs scored constantly high with acceptance rates of > 90% of all tests, whereas other labs showed acceptance rates of only between 50 – 80% of all tests, which by all means is extremely poor.

Underperforming countries/labs identified were: Zambia, Malawi, Columbia and Bolivia. Special

List planned activities in 2025 for this Term of Reference

Based on the in-depth analysis (see reference paper listed below under § 7), the TF-GLQ will continue to provide EQA material support free of charge (and with no cost for IFCC; donations by two commercial vendors) and respective trainings to those four countries (see term of reference 3 below).

Term of reference 2

> Satisfaction survey on IFCC EQA pilot program from participating countries.

List 2024 accomplishments for this Term of Reference

A second satisfaction survey (the first one was conducted in 2022) was sent to the 100 participating labs, asking:

- Feedback on the satisfaction of the initial pilot phase (2021-2023).
- Feedback on your current and future needs and requests for training materials.

Answers from all examined participating countries were received by April 30, 2024. The answers were analysed and summarized as follows:

All countries expressed satisfaction with the EQA program and expressed a willingness to continue the program in some capacity, remaining open to various EQA material providers.

List planned activities in 2025 for this Term of Reference

This term of reference 2 was completed in 2024. No further activities in 2025 unless additional EQA providers are identified.

Term of reference 3

> Continue supporting the provision of EQA materials for those identified countries most in need and conduct on-site trainings in low- and middle-income IFCC member-state countries.

List 2024 accomplishments for this Term of Reference

No on-site trainings were done in 2024.

However, new activities were initiated concerning the identification of free-of-charge EQA material donation:

Controllab of Brazil has pledged to donate EQA materials in Biochemistry, Hematoscopy, and Parasitology to low- and middle- income countries in Latin America (i.e., Bolivia, Colombia) for 30 labs for total of 12 months (Oct 2025 – Oct 2026).

RCPAQAP of Australia has committed to provide EQA materials for 30 labs in Zambia starting in 2025 (project is part of the TF-GLQ-EQALM collaboration).

WEQAS of UK has committed to donate EQA materials for labs in Malawi (project is part of the TF-GLQ-EQALM collaboration).

List planned activities in 2025 for this Term of Reference

In 2025 and 2026 the TF-GLQ will closely monitor and analyse above programs in order to learn (and make these learnings available to the global Clinical Chemistry community) on EQA application and utility.

In addition, on-site trainings / workshops are planned for Uruguay, Bolivia, Kenya, and Ethiopia. Teams of three TF-members for each 2-day intensive workshop will be dispatched. To minimize travel costs, two back-to-back visits are planned-one for Latin America (Uruguay, Bolivia) and one for Africa (Kenya, Ethiopia).

Term of reference 4

> Develop IQC and EQA training materials for eAcademy, Webinars and other publications.

List 2024 accomplishments for this Term of Reference

There is a wealth of data published on GLP, IQC and EQA. To avoid duplicating such available data, publications were first searched and collected into a data base (https://cloud.ifcc.org/index.php/apps/dashboard/). This material is currently being reviewed for relevance and actuality by TF-GLQ subgroups.

List planned activities in 2025 for this Term of Reference

In a next step, various forms of presentations on GLP, IQC and EQA topics will be developed.

A TF-GLQ manuscript: "Ensuring Internal Quality Control Practices in Medical Laboratories: IFCC recommendations for practical applications based on ISO 15189:2022" has been developed and will be submitted to Clinica Chimica Acta.

ADDITIONAL INFORMATION

The Nepal Association for Medical Laboratory Sciences (NAMLS), in combination with the Nepal Accreditation Foundation (NAF), has requested the TF-GLQ to conduct a workshop to enhance the knowledge and skills of laboratory professionals in Nepal on ISO 15189:2022 implementation. The workshop shall take place on June 5-7, 2025. An Abbott-IFCC VLP application has been submitted and was approved.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

ZOOM:

February 15,

March 21,

April 24,

May 26,

June 27,

July 25,

August 29,

September 26,

October 24,

November 21,

December 19

In person:

May 26 (IFCC World Lab Dubai)

Numerous individual ZOOM calls (e.g., with EQALM, IFCC president, etc).

MEETING SCHEDULE IN 2025

January 23,

February 20,

March 20,

Monthly thereafter last Thursday of the month.

May 18 (EuroMedLab Brussels)

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Renze Bais, Anne Vassault, Ivan M. Blasutig, Pradeep Kumar Dabla, Ji Lin, Armand Perret-Liaudet, Annette Thomas, Kandace A. Cendejas, Sarah E. Wheeler, Jean-Marc Giannoli, Qing H. Meng*and Egon P. Amann* External quality assessment performance in ten countries: an IFCC global laboratory quality project.

Clin Chem Lab Med. 2024 Sep 2;62(12): 2435-2443.doi: 10.1515/cclm-2024-0859

PRESENTATIONS:

Egon Amann and Qing Meng:

External quality assessment performance in ten countries: an IFCC global laboratory quality project. 50th ACBICON 2024. Golden Jubilee Conference of Association of Clinical Biochemists of India. December 4-7, 2024. Chandigarh, India

Qing Meng:

Integrated Diagnostics of Tumor Markers in Cancer Practice. Dec 2, 2024, Department of Clinical Biochemistry, Maulana Azad Medical College, New Delhi, India.

Improving Global Laboratory Quality: The Strategies and Approaches of The IFCC Task Force on Global Lab Quality (TF-GLQ). 50th ACBICON 2024. Golden Jubilee Conference of Association of Clinical Biochemists of India. December 4-7, 2024. Chandigarh, India

Anne Vassault:

What is changing in laboratories with new ISO EN 15189:2022: the patient at the heart of medical laboratories concerns.

IFCC Live Webinar on Quality system in Labs and accreditation - Challenges of new ISO 15189:2022. (Moderator: Prof. Tomáš Zima, Czech Republic; Speakers: Dr. Erik Oehlenschlaeger, Denmark, Dr. Andrew Griffin, Australia, Dr. Anne Vassault, France.

Pradeep K. Dabla:

Proficiency Testing in Medical Laboratory – Improving Lab Quality Management (Workshop & Onsite Training of Lab Professionals); PRE-CONFERENCE WORKSHOP AT ACBICON 2024, CHANDIGARH, INDIA, 4th Dec 2024.

Egon Amann, Qing Meng, TF-GLQ Co-Chairs

Task Force on Global eLearning/eAcademy (TF-GEL)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
A. Park	Chair	UK	2nd	2024 01 - 2026 12
P. Hamilton	Member	UK	1st	2025 01 - 2027 12
L. Langman	Member	US	2nd	2024 01 - 2026 12
N. Tabatadze	Member	GE	2nd	2024 01 - 2026 12
Coordinators/Consultants				
T.P. Loh	Coordinator for Asia Pacific area	SG	1st	2024 01– 2026 12
A. Fares-Taie	Coordinator for Latin/ Noth America area	AR	2nd	2024 01-2026 12
H. Can Çubukçu	Consultant	TR		
P. Mitra	Consultant	IN		
O. Najjar	EB Liaison	PS		

TERMS OF REFERENCE

Deliverables

Development of eLearning programs in the field of laboratory medicine, which include:

Live Webinars – Global Broadcast

Recorded Webinars for the eAcademy Platform

Online courses and certificate programs

Online practical workshops and tutorials

Term of reference 1

List 2024 accomplishments for this Term of Reference

- In 2021 we have held 18 webinars
- In 2024 we have held 27 webinars
- The webinars presented in English had 1400–5500 attendees each from ~ 160 countries around the world, listening live to the webinar presentations.
- >73,000 attendees in total
- The webinars are presented in English, but have also been presented in Spanish, French and Chinese: in 2024 there were 23 presented in English, 3 in Spanish and 1 in French.

List planned activities in 2025 for this Term of Reference

Continuing the successful webinar programme

Term of reference 2

List 2024 accomplishments for this Term of Reference

Webinars are recorded to the eAcademy platform

VLP lectures are recorded to the eAcademy platform

List planned activities in 2025 for this Term of Reference

Continue as above

Term of reference 3

Online courses and certificate programs

List 2024 accomplishments for this Term of Reference

Worked on Proceed accreditation

List planned activities in 2025 for this Term of Reference

For the webinars the IFCC has also provided the certificate of participation and from 2025 it is providing CE credits (PROCEED™)

Term of reference 4

List 2024 accomplishments for this Term of Reference

Online courses

Online practical workshops and tutorials

Attempting to develop

List planned activities in 2025 for this Term of Reference

Have developed new strategy for developing this and will be liaising with the President (ongoing) concerning this, as this has been very challenging to date.

ADDITIONAL INFORMATION

Developing online courses is challenging historically and we are in the process of attempting a new approach in conjunction with the President.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

In person IFCC WORLDLAB DUBAI 2024

~6 Zoom meetings

6. MEETING SCHEDULE IN 2025

In person Brussels (Eurolab)

Zoom meetings planned

Adrian Park TF-GEL Chair

Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

Name	Position	Country	Term	Time in Office
Z.Zhao	Chair	US	2nd	2025 01 - 2027 12
M.A Serdar	Member	TR	2nd	2025 01 - 2027 12
V. Gounden	Member	SA	2nd	2025 01 - 2027 12
E.Koldberg Amundsen	Member	NO	2nd	2025 01 - 2027 12
L.Jiang	Member	CN	1st	2024 03 - 2026 12
M. Banarjee	Member	IN	1st	2024 03 - 2026 12
T. Ozben	Member	TR	1st	2024 03 - 2026 12

List of corrispondent members, nominated by National Societies

Name	Full and Affiliate Member Societies
K. Rodriguez-Capote	Canadiad Society of Clinical Chemists (CSCC)
M.M. Suchitra	Association of Medical Biochemists of India (AMBII)
M. Wakul	Japan Society of Clinical Chemistry (JSCC)
V. Pant	Nepalese Association for Clinical Chemistry (NACC)
R. I. Alvarez Carrasco	Association Médica Peruana de Patología Clínica (AMPCC)
V. Pecoraro	Italian Society of Clinical Chemistry and Clinical Moluecular Biology (SIBIoc)
R. Khanafsa	Palestinian Medical Technology Association (PMTA)
J. Cao	Association for Diagnostics and Laboratory Medicine (ADLM)
A.R. Guerra Ruiz	Sociedad Española de Medicina de Laboratiorio (SEQML)

TERMS OF REFERENCE

Reporting instructions for Terms of Reference for all Committees, Taskforces and Working Groups, please provide the following information

Term of reference 1

List 2024 accomplishments for this Term of Reference

1. A new initiative in 2024: TF-OSLM Podcast: Three podcasts have been posted in 2024:
2. Assessing and reviewing test clinical utility
   https://eacademy.ifcc.org/lessons/prof-tony-badrick/
3. Pharmacogenetic: Transforming Patient Care in Precision Medicine:
   https://eacademy.ifcc.org/lessons/prof-dr-ron-van-schaik/
4. Optimizing Health Outcomes: The Expanding Impact of Point-of-Care Testing:
   https://eacademy.ifcc.org/lessons/dr-tivani-mashamba-thompson/

Optimizing Health Outcomes: The Expanding Impact of Point-of-Care Testing

In this podcast, Dr. Mashamba-Thompson will discuss how point-of-care testing (POCT) is revolutionizing healthcare, bringing diagnostics closer to patients and improving outcomes worldwide. Join us as we explore the impact of POCT on disease diagnosis and treatment; the challenges and opportunities in resource-limited countries; the operational benefits and real-world impact of POCT in primary care; and emerging technologies and the future of POCT.

- Speaker: Dr. Tivani Mashamba Thompson
- Affiliation: Professor and Deputy Dean: Research and Postgraduate Studies for Faculty of Health Sciences at University of Pretoria/Universiteit van Pretoria

Assessing and reviewing test clinical utility

We discuss with Professor Badrick the importance of assessing test clinical utility before implementation and the manner in which routine laboratories can approach defining and assessing clinical utility of a test.

- Speaker: Professor Tony Badrick
- Affiliation: CEO of the RCPAQAP. He is Adjunct Professor School of Pharmacy and Pharmacology, Griffith University, Gold Coast, Honorary Associate Professor, National Centre for Epidemiology and Public Health Australian National University College of Health and Medicine, Honorary Associate Professor, Faculty of Medicine, Bond University, Gold Coast, and Visiting Fellow, Australian Institute for Health Innovation, Macquarie University.

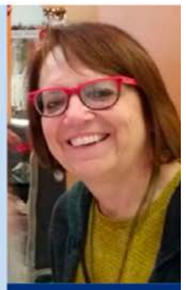
Pharmacogenetic: Transforming Patient Care in Precision Medicine

Welcome to the podcast series planned by the IFCC taskforce of outcome studies in laboratory medicine. In this podcast, Professor Ron Van Schaik talked about [Pharmacogenetic: Transforming Patient Care in Precision Medicine]. Dr. Van Schaik is a European Specialist in Laboratory Medicine and Full Professor of Pharmacogenetics and Clinical Chemistry. He is head of the Department of Clinical Chemistry at Erasmus MC - University Medical Center Rotterdam and Director of the International (IFCC) Expert-Center for Pharmacogenetics. He is a renowned expert in pharmacogenetics and has published >350 peer reviewed articles relevant to this work. One of the work that he discussed in this podcast has been included in the IFCC database of outcome studies as a highlighted article: *https://oslm.ifcc.org/publication/dpyd-genotype-guided-dose individualisation-of-fluoropyrimidine-therapy-in-patients-with-cancer-a-prospective-safety-analysis/*

- Speaker: Prof. Dr. Ron van Schaik

№ 10
October 2024
eNews

Editorial



Katherina Psarra, MSc PhD, eNews Editor

Dear colleagues

The fall is here for many countries in the northern hemisphere. It is still summer in Greece, permitting us to swim in the sea, with a cool breeze chasing away the hot summer weather.
Our President Prof Tomris Ozben in her message is inviting you to participate in all IFCC events. She reminds you of Euromedlab 2025 and the General Conference 2025, to take place in Belgium in May. In her message she is presenting the National and regional congresses she participated in, like the 17th Baltic Congress of Laboratory Medicine and the XIII Serbian Congress of Medical Biochemistry and Laboratory Medicine and she congratulates the organizers for the excellent work.
We congratulate her for the honorary Diploma she was awarded by the Executive Board of the Society of Medical Biochemistry of Serbia. We also congratulate her for her participation in the World Patient Safety Day 2024. It is an important event, and this invitation shows the central role of IFCC in patients' safety. In her message she is presenting all the future IFCC webinars, as well.
In this issue The IFCC Task Force OSLM is excited to announce the launch of a podcast series on Outcome Studies in Laboratory Medicine, the first one by Professor Tony Badrick. The Task Force is asking for research proposals for studies evaluating the impact of laboratory testing on healthcare outcomes.
You are all aware of the VLP and PSEP IFCC programs. Very interesting examples of these really successful programs are presented in this issue. Go through them and think of their importance in your own laboratorian's life.
Don't forget to consider as a national society the bid for Euromedlab 2027 WordlLab 2028.
In this issue meet Young Scientists from the IFCC Task Force-Young Scientists. These interviews are very interesting, because they present the young laboratorians' life in several countries of the world (in this issue Ireland, Japan, France).
Go through the Univants invitation to apply for the prestigious award that recognizes best practices of healthcare excellence.
In this issue the German Society for Clinical Chemistry and Laboratory Medicine (DGKL), presents MedLabPortal, the first information portal operated by a medical society for laboratory medicine.
Finally, "Mass Spectrometry Meets Clinical Laboratories" in Athens, Greece. Learn about this important event, organized by the IFCC Scientific Division and the Greek Society of Clinical Chemistry – Clinical biochemistry and apply to attend it on site or virtually.
Dear friends go through the eNews. You will be informed about a lot of activities, IFCC, our Society is planning. Participate in IFCC's life and your everyday work in the lab will be enriched.
And, please, don't forget to come in contact with us and to send your ideas, your events to be presented in the eNews.
Warm regards

Katherina

The IFCC Taskforce on Outcome Studies in Laboratory Medicine (IFCC TF-OSLM) announces a podcast series

The IFCC Task Force OSLM is excited to announce the launch of a podcast series on Outcome Studies in Laboratory Medicine. The series serves to provide practical tips and helpful guidance to assist the laboratorian/clinician to engage with and perform laboratory focussed outcome studies. Each podcast will be with an expert in the field or investigators whose outcome studies have served as excellent examples of how laboratory outcome studies can be performed.

Our first guest in the podcast series is Professor Tony Badrick. Professor Badrick is currently the CEO of the RCPAQAP since 2015. He is an Adjunct Professor School of Pharmacy and Pharmacology, Griffith University, Gold Coast, Honorary Associate Professor, National Centre for Epidemiology and Public Health Australian National University College of Health and Medicine, Honorary Associate Professor, Faculty of Medicine, Bond University, Gold Coast, and Visiting Fellow, Australian Institute for Health Innovation, Macquarie University. He was also President of the Australasian Association of Clinical Biochemists (2003-2007), Chair of the Faculty of Science RCPA (2012-2018) and is Chair of the Education and Laboratory Management Committee of the Asian Pacific Federation of Clinical Biochemistry. Prof Badrick is also the regional IFCC representative for Asia-Pacific region.

Click on the link to listen to Prof Badrick's podcast: https://eacademy.ifcc.org/courses/assessing-and-reviewing-test-clinical-utility/

Prof Tony Badrick, speaker of the first TF-OSLM Podcast

List planned activities in 2025 for this Term of Reference

Three more podcasts are planned to be posted in 2025

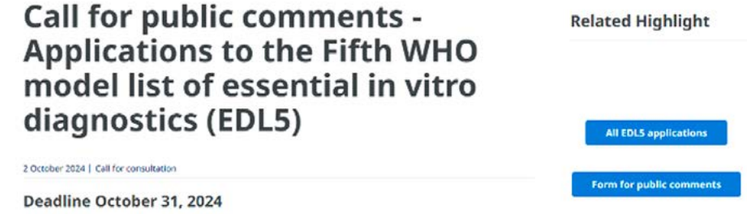
Term of reference 2

List 2024 accomplishments for this Term of Reference

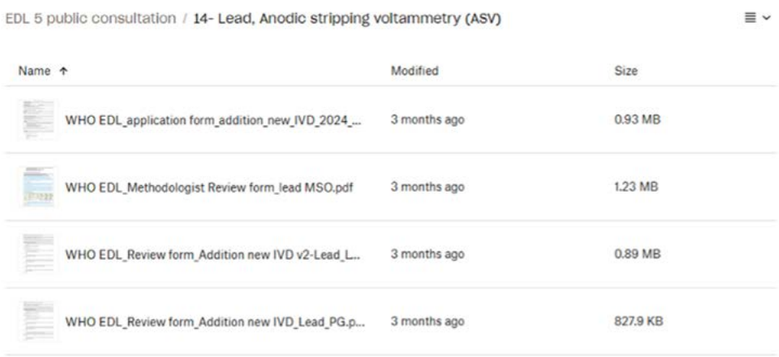
Submission of a proposal to respond to the WHO call: lead (blood lead concentration)

Status: public comments

https://www.dropbox.com/scl/fo/hetwu75so004o8o9ahyns/ADL0qerEfapmY7oYRVS2Z2Y/14-%20Lead%2C%20Anodic%20stripping%2v0voltammetry%20(ASV)?dl=0&rlkey=xou5c7u47mcmj3hq19p0nvx4q&subfolder_nav_tracking=1



List planned activities in 2025 for this Term of Reference



WHO EDL
Application to add a new IVD test

Applicant's information

1. Primary contact person

Last name: Zhao	First name: Zhen
Email: zhz9010@med.cornell.edu	
Details of the organization submitting the application: International Federation of Clinical Chemistry and Laboratory Medicine	

2. Secondary contact person (If applicable)

Last name:	First name:
Email:	
Details of the organization supporting the application:	

Name of test category and assay format

3. Generic name of the test being addressed in this application

Lead (blood lead concentration)

4. Assay format being addressed in this application

Methods:

- Anodic stripping voltammetry (ASV) **Point-of-care test; Laboratory settings (assay formats)**
- Electrothermal atomic absorption spectrometry (also referred to as graphite furnace atomic absorption spectrometry, GFAAS)
- Inductively coupled plasma mass spectrometry (ICP-MS)
- Flame atomic absorption spectrometry (FAAS)

5. Please add the applicable nomenclature code(s) (e.g. EMDN, GMDN) if known

N/A

Participate in the WHO Global Diagnostics Coalition.

Term of reference 3

List 2024 accomplishments for this Term of Reference

Call for outcome study proposals:

Summary

Research Funding Available

Call for outcome study proposals

IFCC's Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM) is seeking research proposals for studies evaluating the impact of laboratory testing on health outcomes.

Strategic Objectives

- To promote directed research evaluating the role of laboratory medicine on clinical outcomes
- To build awareness and understanding with regards to the critical role laboratory medicine plays in healthcare outcomes

Timeline

Release date: June 25, 2024

Application deadline: November 1, 2024 @ 11:59 PM EST

Award notification: December 20, 2024

Application process

- Applications and supporting documents (in PDF format) must be submitted via the ***Application form.***
- For any questions, please email the IFCC Office (Smeralda Skenderaj, email: smeralda.skenderaj@ifcc.org).
- Applications must be submitted in English. All supporting documents that are not in English must be accompanied by an English translation.
- Please follow the guidelines carefully when developing and drafting a proposal

- Total submission: 52 proposals
- Proposals advanced to the 2nd round: 11 proposals
- Accepted with conditional resubmission requests: 2 proposals
- Revision and resubmission required: 3 proposals
- Not funded: 47 proposals

Significant improvements:

1. Increased focus on outcome-related studies: Over 50% of the submissions this year were outcome-focused, compared to just 30% in the past two years. This increase is likely due to our efforts in education and clarification of the application requirements.
2. Enhanced review process: We conducted thorough reviews and discussions. Rather than directly accepting or declining proposals, we prioritized providing constructive feedback and required resubmissions to ensure the quality of the work. The resubmission deadline will be Feb 15, 2025.

List planned activities in 2025 for this Term of Reference

Post another call for proposal.

Term of reference 4

List 2024 accomplishments for this Term of Reference

List planned activities in 2025 for this Term of Reference

1. IFCC Webinar Proposal: Innovations in Microbiology: Tackling MDR Challenges with Point-of-Care Testing and Optimizing Clinical Outcomes March 10, 2025
2. Accepted proposal for the 2026 Nordic Congress in Clinical Biochemistry. Title: Outcome studies in laboratory medicine

Term of reference 5

Search Evidence for Outcome Studies in Laboratory Medicine and Create a repository/database of publications that is accessible by members of IFCC:

In December 2023, the IFCC was excited to launch the "Database of Outcome Studies in Laboratory Medicine" developed by our Task Force through the efforts in the past two years. In 2024, the TF continued on adding more articles into the database

Database weblink: https://oslm.ifcc.org

List 2024 accomplishments for this Term of Reference

Continue on adding more articles into the database

COLABIOCLI Regional Federation Congress in Cartagena, Colombia, from October 3-6, 2024.

Title: Moving Beyond Sensitivity and Specificity: Showing the Value of Lab Medicine Through Outcome Measures

Chair: Zhen Zhao, PhD

Speaker 1: David Grenache, PhD
Tricore Reference Laboratories
Talk Title: Using Outcomes Studies/Measures to Improve the Delivery of Care

Speaker 2: Zhen Zhao, PhD
Weill Cornell Medicine, USA
Talk Title: Beyond the Lab: Transforming Patient Care through Impactful Testing Outcomes

Speaker 3: Mari DeMarco, PhD
Providence Health Care, Vancouver, BC, Canada
Talk Title: Alzheimer's disease biomarker testing: Learning from persons with lived experience

ADLM Annual Meeting 2024

Moving Beyond Sensitivity and Specificity: Showing the Value of Lab Medicine Through Outcome Measures

Moderator: Jing Cao, PhD, DABCC, FADLM, University of Texas Southwestern Medical Center
Speaker(s):
•Using Outcomes Studies/Measures to Improve the Delivery of Care
David Grenache, PhD, MT (ASCP), DABCC, FADLM, Tricore Reference Laboratories

•The Important Differences Between Observational and Implementation Studies
Allan Jaffe, MD, Mayo Clinic

•Beyond the Lab: Transforming Patient Care Through Impactful Testing Outcomes
Jing Cao, PhD, DABCC, FADLM, University of Texas Southwestern Medical Center

Moderator/Chair: Rana Khanafsa

Speaker 2: Mamoun AT Ibaideya
Detection of multi drug resistant Enterobacterales from clinical samples focus on carbapenem resistant Enterobacterales. (Palestinian medical complex experience).

Speaker 1: Etaf Sliman Hadyeh
Guidelines for the prevention and control of carbapenem-resistant Enterobacteriaceae in health care facilities

Speaker 3: Gyorgy Abel
POCT (Point of Care Testing) and Molecular Diagnostics in Microbiology

ADDITIONAL INFORMATION

Dr. E.M. Simbaqueba Sanchez and J.A. Snyder has completed their first term and were not renewed for the second term. Dr. Li Jiang and Dr. mithu Banerjee jointed the taskforce as members.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

The Task Force OSLM has been managing to have monthly virtual meetings and one in-person meeting per year to have always feedback and updates among the members for a more linear and successful work.

In 2023 we had 9 virtual meetings and one in-person meeting during the WorldLab in Dubai on May 26, 2024.

MEETING SCHEDULE IN 2025

For 2024 the meetings have maintained the monthly/bi-monthly schedule.

The first meeting in 2024 has been held on February 3.

The Task Force has also organized an in-person meeting during the EUROMEDLAB 2025 in Brussles on May 20, 13:30-17:30, 2024.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

Zhen Zhao, "Linking laboratory testing to clinical outcomes", Labquality days 2024, International Congress on Quality in Laboratory Medicine and Health Technology, February 2024, Helsinki, Finland

Rana Khanafsa, Extended Spectrum Lactamases Expression in Klebsiella pneumomiae in West Bank, World Lab in Dubai on May,2024

Zhen Zhao, TF-OSLM Chair

Task Force on Global Reference Interval Database (TF-GRID)

No report received

Task Force on Environmental Impact of Laboratory Medicine (TF-EILM)

CHAIR & MEMBERSHIP/TERMS OF OFFICE

1. J. Anetor 2024-	December 2026-Chair	
2. T. Mannis	Member	2023- 2025
3. G. Akyal	Member	2023-2025
4. F. Atunez	Member	2023- 2025
5. L. Partakusum	Member	2023- 2026
T. Badrick	EB Laison	2024- 2026
F. Wenzel	Corporate Member	2013-2025
1. N. Bukhrashvil	Corresponding Member	
2. H. Majid	Corresponding Member	
3. S. Herath -	Corresponding Member	
4. A. Sanders-	corresponding Member	

TERMS OF REFERENCE

Reporting instructions for Terms of Reference for all Committees, Taskforces and Working Groups, please provide the following information

Term of reference 1

1. **Identify existing peer-reviewed, high-quality publications that describe the impact of laboratory medicine operations on the environment and actions that laboratories and manufacturers can take to reduce the negative impact**

List 2024 accomplishments for this Term of Reference

At least 5 peer-reviewed high impact publications on environmental impact / sustained or green laboratory have been uploaded to the IFCC website.

List planned activities in 2025 for this Term of Reference

The TF plans to identify additional recent publications of similar standing to upload.

Term of reference 2

Develop recommendations and practice guidelines that laboratories in developed and developing countries can implement to reduce the environmental impact of laboratory operations without compromising the quality of services provided to patients

List 2024 accomplishments for this Term of Reference

This is being developed; it was initially thought that we would partner with EFLM but now we are developing an independent IFCC TF-EILM guidelines- in progress

List planned activities in 2025 for this Term of Reference

Continue with guideline preparation and conclude it by end of 2025

Term of reference 3

Develop a plan to share information and educate IFCC national society and corporate members

List 2024 accomplishments for this Term of Reference

Two publications have bee submitted to journals in 2024, one is at the galley proof by eJIFCC- addressed both developed and developing countries.

List planned activities in 2025 for this Term of Reference

The e JIFCC- Environmental issues in clinical laboratories: pragmatic pathways to sustainability accepted, published in 2025 (Commentary)

The other in African Journal of Laboratory Medicine (AJLM) targeted developing counties is undergoing editorial process

Term of reference 4

Identify existing peer-reviewed, high-quality publications that describe the laboratory testing that can be performed to measure both levels and biological effects of toxic environmental chemicals in human biological material, including studies to demonstrate the concentrations of chemicals found in human biological tissues (human biomonitoring)

List 2024 accomplishments for this Term of Reference

This was a joint project with IATDMCT- revised MOU with IFCC but IATDMCT president is yet to endorse this revised MOU- pending

List planned activities in 2025 for this Term of Reference

It is planned that this will be pursued and possibly start the process all over /

Another partnership with the Quality Assurance Institute led by Gammie Allistaire may be entered into.

ADDITIONAL INFORMATION

TOR 5..As required, The Task Force will establish a formal collaborative link with the EFLM Task Force on Green Labs and other IFCC groups and organizations involved in related activities.

Presented a symposium at Dubai-2024-title

33rd WASPaLM 2024 Antalya– Turkey- presentation- 'Pathology and Laboratory Medicine- Integrating the Sustainability Pathway for Greater Effectiveness' Well received by a global audience

IFCC Live webinar (TF-EILM) 25th March 2025 title 'Impact of Laboratory Medicine on the Environment and How it can be Mitigated by Clinical Laboratories' – 2700 registrants 600 participated live. Many others have watched the recorded version.

2024 MEETINGS / CONFERENCE CALLS HELD (VIRTUAL & IN PERSON)

Quarterly virtual meetings of the TF were held.

One physical meeting was held in Dubai.

MEETING SCHEDULE IN 2025

Two virtual meetings of the TF have been held so far. A physical meeting of the TF is scheduled for 21st May in Brussels.

PUBLICATIONS/CONFERENCE PRESENTATIONS/WEBINARS

As alluded to above one paper had already been published eJIFCC another is awaiting final editorial decision in African Journal of Laboratory Medicine.

Another involving the Chair of the TF and the EB Laison has been asked to be revised by 'Clinical Biochemistry'

Tony Badrick, TF-EFLM Chair, John I. Anetor, incoming Chair and Guzin Aykal, TF-EILM co- Secretary

FOUNDATION FOR EMERGING NATIONS

The activities of the FEN were again restricted by the dual challenge of finding hosts for scholarship recipients in the post-pandemic world and diminishing funds.

The FEN Board:

- Approved the annual report and accounts for 2024.
- Achieved tax exemption from the Swiss Regulatory Authority

The Board recognised that the purposes of FEN were increasingly difficult to achieve and recommended a move towards closure as the assets of the Foundation are run down.

The Board acknowledges the continuing excellent support of Paola Bramati

Graham Beastall FEN Chair

REGIONAL FEDERATIONS

REGIONAL FEDERATIONS AFFILIATED WITH IFCC

There are six main Regional Professional Laboratory Medicine organizations which can be considered IFCC regional partners:

- AFCB - Arab Federation of Clinical Biochemistry
- AFCC - African Federation of Clinical Chemistry
- APFCB - Asia-Pacific federation of Clinical Biochemistry
- COLABIOCLI - Latin-American Confederation of Clinical Biochemistry
- EFLM - European Federation Clinical Chemistry and Laboratory Medicine
- NAFCC – North American Federation of Clinical Chemistry and Laboratory Medicine

AFCB

Arab Federation of Clinical Biology

The Arab Federation of Clinical Biology (AFCB) continues to grow in strength and regional representation. We are pleased to announce that the Kingdom of Saudi Arabia, our most recent member, joined the Federation this year—reinforcing our collective capacity and scientific reach.

A major milestone for the Arab world was achieved with the hosting of the IFCC WorldLab 2024 Congress in Dubai. The event was organized by the IFCC in partnership with the Arab Federation of Clinical Biology (AFCB), which held its 17th Congress, and the Saudi Society for Clinical Chemistry (SSCC), which held its 10th Annual Meeting in parallel with the congress. The UAE Genetic Diseases Association (UAEGDA) and the Emirates Clinical Chemistry Society (ECCS) also contributed by providing regional coordination and local organizational support. Held alongside these events, the 8th UAEGDA International Genetic Disorders Conference added further scientific depth to the overall program.

We are proud that this landmark global event took place in our region. It was a great success, attracting significant international participation from all corners of the globe, thanks to the

richness of its scientific program and the added value offered by the city of Dubai. The congress provided an exceptional opportunity for AFCB members to participate, present their scientific work, and strengthen international collaborations. It also highlighted the Arab region's expanding role in the global landscape of laboratory medicine.

Despite the complex regional context, marked by conflict and instability in parts of the Arab world, the AFCB has experienced a revival of collaborative activity. Member countries have taken part in cross-border scientific meetings, launched student exchange programs with leading universities, and provided online professional development courses. Several Memoranda of Understanding (MoUs) were signed among national societies to strengthen cooperation and advance laboratory medicine in the region.

AFCB member societies have placed particular emphasis on supporting young scientists. Regional meetings and training workshops have focused on innovation, the role of artificial intelligence in laboratory medicine, and the importance of fostering early-career professionals. This focus stems from our firm belief that the future of laboratory medicine depends on investing in emerging scientific talent.

In countries affected by conflict or hosting large refugee populations, the AFCB has prioritized support for healthcare services and laboratory responses to migration and war-related health challenges. The Federation has mobilized expertise and resources to assist local laboratory professionals in addressing public health surveillance, diagnostics, and epidemiological threats under challenging conditions.

On the scientific front, AFCB member societies have organized multiple high-profile conferences and workshops with international participation. Collaborative agreements have been formalized with the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM), which included the AFCB in its 2022–2023 strategic plan and is preparing a new memorandum of understanding. We also continue to maintain our foundational partnership with the Francophone Federation of Clinical Biology and Laboratory Medicine Societies (FIFBCML), with ongoing collaboration and MoU development.

We are proud to report that eight AFCB member societies submitted official annual activity reports this year, reflecting a high level of engagement and continued commitment to excellence:

- ALAM (Algerian Association of Medical Laboratories- Algeria)
- ECCS (Emirates Clinical Chemistry Society)
- SCLA (Syrian Clinical Laboratory Association – Syria)
- SDBLB (Lebanese Syndicate of Clinical Biologists – Lebanon)
- SSCB (Sudanese Society of Clinical Biology- Sudan)
- SSCC (Saudi Society for Clinical Chemistry – Saudi Arabia)
- STBC (Tunisian Society of Clinical Biology – Tunisia)
- PMTA (Palestinian Medical Technology Association – Palestine)

Reports of above listed societies are included in the Societies Report' section in this Annual Report.

Looking ahead to 2025, the AFCB remains committed to:

- Expanding its network of member countries
- Supporting the rebuilding of post-conflict laboratory infrastructure
- Strengthening quality standards and harmonization across the region
- Developing digital learning platforms to reach underserved areas

Through collaboration and shared vision, the AFCB continues to serve as a unifying platform for laboratory professionals across the Arab world

Christian Haddad, President AFCB

AFCC

African Federation of Clinical Chemistry

1.0 Introduction:

The African Federation of Clinical Chemistry (AFCC) is a regional federation of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) that was inaugurated in Ibadan, Nigeria in 2009.

The federation aims to promote improvement in the health and well-being of the communities it serves through the development and practice of Clinical Chemistry and Laboratory Medicine in general, including education and scientific excellence. Member societies are defined by geographic location. Thus, sixteen national societies (14 full and 2 affiliate) constitute the membership of the federation.

2.0 Membership:

1. Algeria: Société Algerienne de Biologie Clinique (SABC)
2. Botswana: Botswana Institute of Clinical Botswana: Laboratory Professionals (BICLP) (affiliate member)
3. Egypt: Egyptian Society of Clinical Chemistry and Clinical Laboratory Sciences (ESCC)
4. Egyptian Association of Health Care Quality and Patient Safety (EAHCQPS) (affiliate member)
5. Ethiopia: Ethiopian Medical Laboratory Association (EMLA)
6. Kenya: Kenyan Association of Clinical Chemistry (KACC)
7. Malawi: Malawi Association of Medical Laboratory Scientists (MAMLS)
8. Morocco: Societe Marocaine de Chimie Clinique (SMCC)
9. Nigeria: Association of Clinical Chemists of Nigeria (ACCN)
10. Rwanda: Rwanda Society of Pathologists (RSP)
11. South Africa: South African Association of Clinical Biochemistry (SAACB)
12. Sudan: Sudanese Association of Clinical Biology (SACB)
13. Tunisia: Societe Tunisienne de Biologie Clinique (STBC)
14. Zambia: Biomedical Society of Zambia (BSZ) in Zambia
15. Zimbabwe Association of Clinical Biochemists (ZACB).
16. Libyan Society was added to IFCC in 2024

As reported last year five societies namely: Algeria (SABC), Egypt (ESCC), Rwanda (RSP), Sudan (SACB) and Tunisia (STBC) are yet to participate actively in the activities of AFCC. However, we are making frantic efforts to make them active.

3.0 AFCC Executive Board (AFCC EB 2023-2024)

President: Mabel A. Charles-Davies

Immediate Past President: Rajiv Erasmus

Secretary: Adekunle B. Okesina

President- Elect: Gizachew Akalu

Treasurer: Hilary Lumano

Members- at-large: Badre Eddine (Morocco) and Joseph Ahaneku (Nigeria) 2005.

4.0 AFCC Committees:

The committees have been very active and they are meeting regularly and giving feedback to the Executive Baord.

There are five AFCC committees.

a. Point of Care testing with Prof. Rajiv Erasmus as Chair

b. Education &Training with Dr. Gizachew Akalu as Chair

c. Standardisation & Traceability with Prof. J.I Anetor as Chair

d. Newborn screening committee with Professor A.B Okesina as chair.

d. Young Scientists Forum with Dipuo as co-ordinator

5.0 AFCC Board/Council Meetings

AFCC Board and Council meetings took place in May, 2024 during Dubai Worldlab conference. Other meetings were held via zoom and related platforms.

6.0 AFCC ACCOUNT

The AFCC Account is domiciled in South Africa. The Board decided at its meeting that the Past President Prof Erasmus and Treasurer Dr Hilary should operate the account until formal handing over was complete. However, we are still sorting out the handing over.

7.0 2024 AFCC Congresses

The 2024 AFCC Congress took place in Egypt on 28-29 February, 2024. It was initially planned for January but was later shifted to February. The conference was a huge success with support from IFCC and some cooperate members like SNIBE, Midray who gave financial support and Abbot who sponsored young scientists to this conference. We sponsored many young scientists from various parts Africa. POCT conference and workshop took place in Cape Town South Africa organized by Pofessor Erasmus. Zambian had their annual National conference in December 2024.

In November 2024 3 day workshop was organized by AFCC in partnership with Newborn Screening Consortium of Nigeria. During the workshop AFCC celebrated Professor Okesina for his retirement and 70th birthday. Also Dr Josephine Aramide Onakoya Celebrated her 70th birthday. The next AFCC biannual conference will take place in Ethiopia and plans are already at an advanced stage.

8.0 Wordlab Dubai conference

AFCC mounted a symposium at the Dubai conference which took place in UAE from 26-30 May, 2024. Four speakers at session on Inborn Errors of Metabolism include: Prof. A. B. Okesina-Chair, Dr.G.T. Akalu, Prof. J.I. Anetor and Prof. R.T. Erasmus.

We had a stand which was maned by the young scientists during the conference we also sponsored many young scientists to the conference.

Other activities in 2024 include: participation in African Health Congress, partnership with GAHAR to organize Excellence Award and active participation during the Global Health Week.

9.0 AFCC Collaborations

AFCC collaboration with ASLM is still on going. Many empowerment seminar series coordinated by the University of Zimbabwe took place and this is still ongoing. MOU was signed with SNIBE during this period.

10.0 AFCC Website /Secretariat/Constitution

The activation of the AFCC website is still pending while the board is waiting for the new contractor to deliver.

Despite discussions on the AFCC Secretariat, there is still no Secretariat. Board is yet to decide where to locate the secretariat because we have not been able to put in place the logistics required.

We are yet to review our constitution which is long overdue because of various changes that have taken place in the Federation after its inauguration in 2009.

11.0 Membership Drive

We have continued to make efforts for more members from Africa and we hope that this will yield results soon. With Libya society joining IFCC we can say that a new member was been added.

12. Conclusion

AFCC has major role to play in Africa with respect to development and support of practice of Laboratory medicine. We have been encouraging the national societies to be more active and to provide avenue for scientific development of their members. We also support local conferences of these societies in the best possible way. The future is bright.

Adekunle Bashiru Okesina, Secretary AFCC

APFCB

Asia-Pacific Federation of Clinical Biochemistry and Laboratory Medicine

The focus of Board activity in the first year has been improving internal processes and communication with the EB and the Chairs. Virtual Board/Chairs meetings have been held most months.

A formal agreement with the AACB to provide secretariat services has been in place for twelve months now, and many APFCB historical documents have been archived with the AACB Office.

Ordinary members and Affiliate members showed no difference in numbers, but activity of members did decrease during the past years. Some Corporate members were delisted as result of non-responsiveness, but we are glad to see some new ones.

1. ORDINARY MEMBERS (in alphabetical order)

There were some minor changes to the ordinary members during the year with the loss of the TACB because of their inability to sustain the organisation during the pandemic.

1. Australasian Association of Clinical Biochemists (AACB)
2. Association of Clinical Biochemists of India (ACBI)
3. Association for Clinical Biochemistry, Srilanka (ACBSL)
4. Chinese Association for Clinical Biochemistry, Taiwan (CACB)
5. Chinese Society of Laboratory Medicine (CSLM)
6. Hong Kong Society of Clinical Chemistry (HKSCC)
7. Indonesian Association of Clinical Chemistry (IACC)
8. Iranian Association of Clinical Laboratory Doctors (IACLD)
9. Japan Society of Clinical Chemistry (JSCC)
10. Korean Society of Clinical Chemistry (KSCC)
11. Malaysian Association of Clinical Biochemistry (MACB)
12. Mongolian Association of Health Laboratorians (MAHL)
13. Nepal Association for Medical Laboratory Science (NAMLS)
14. Pakistan Society of Clinical Pathologists (PSCP)
15. Philippine Association of Medical Technologists (PAMET)
16. Singapore Association of Clinical Biochemistry (SACB)
17. Vietnamese Association of Clinical Biochemistry (VACB)

2. AFFILIATE MEMBERS (in alphabetical order)

There have been two new Affiliate members this year.

1. Association of Medical Biochemists of India (AMBI)
2. College of Chemical Pathologists of Srilanka (CCPSL)
3. Macao Laboratory Medicine Association (MLMA)
4. Mongolian Association of Laboratory Medicine (approved on 12th October 2024)
5. Nepalese Association of Clinical Chemistry (NACC)
6. Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL)
7. Thai Society of Clinical Pathology (TSCP) (approved on 4th July 2024)

3. CORPORATE MEMBERS (in alphabetical order)

1. Abbott Laboratories (Singapore) Pte Ltd.
2. Beckman Coulter Hong Kong Ltd.
3. Becton Dickinson Holdings Pte Ltd.
4. Bio-Rad Laboratories (Singapore) Pte Ltd.
5. Diasorin APAC Pte. Ltd.
6. DiaSys Diagnostic Systems GmbH
7. Greiner Bio-One Singapore Pte Ltd.
8. MR Global (HK) Limited
9. QuidelOrtho
10. RCPAQAP
11. Roche Diagnostics Asia Pacific Pte Ltd.
12. Shenzhen Mindray Bio-Medical Electronics Co, Ltd
13. Siemens Healthcare Pte Ltd.
14. Snibe Co., Ltd.
15. Sukraa Software Solution Pvt Ltd.
16. Sysmex Corporation
17. Thermo Fisher Scientific
18. Waters Pacific Pte Ltd.
19. Beckman Coulter Hong Kong Ltd
20. Becton Dickinson Holdings Pte Ltd (BD Diagnostics – Preanalytical Systems)
21. Bio-Rad Laboratories (Singapore) Pte Ltd
22. DiaSys Diagnostic Systems GmbH
23. Mindray Medical International Limited
24. Quidel Ortho *
25. Roche Diagnostics Asia Pacific Pte Ltd
26. Sekisui Medical Co Ltd
27. Siemens Healthcare Pte Ltd
28. Shenzhen New Industries Biomedical Engineering Co Ltd (Snibe Diagnostic)
29. Sukraa Software Solution Pvt Ltd
30. Sysmex Corporation
31. The Royal College of Pathologists of Australasia Quality Assurance Programs (RCPAQAP)
32. Thermo Fisher Scientific
33. Waters Pacific Pte Ltd

4. EXECUTIVE BOARD AND COMMITTEE CHAIRS

APFCB Executive Board:

- Dr Tony Badrick — President, Meeting Chair
- Dr Endang Hoyaranda — Past President
- Dr Sam Vasikaran — Vice President
- Dr Praveen Sharma — Secretary
- Dr Elina Raja — Treasurer

Chairs of APFCB Standing Committees

- Dr Cui Wei — Chair, Education Committee
- Dr Tian Sian Hwa — Chair, Lab Management Committee

- Dr Woei Horng Fang — Chair, Congress and Conferences Committee
- Dr Pradeep Dabla — Chair, Communications and Publications Committee
- Dr Tze Ping Loh — Chair, Scientific Committee

The following are activities conducted by the committees:

LABORATORY MANAGEMENT

Chair: Tjan Sian Hwa

Member: Dr Prasenjit Mitra (ACBI)
Dr M Jamsani Mat Salleh (MACB)
Dr Thyrza Darmadi (IACC)
Vincent Chen (Snibe)

There are four Task Forces:
- Pre-analytical Task Force
- Green Lab Task Force
- POCT Task Force and
- ISO 15189 and Analytical Quality Requirement Task Force

2024 Activities:

1st PREANALYTICAL WEBINAR:

- Date: 20th March 2024
- In Collaboration with MACB
- Theme: Road to Laboratory Excellence: Mastering Pre-Analytical Factors in Laboratory Testing
- Speakers: Prof Giuseppe Lippi (EFLM), Dr Andrian Alif (MACB), Dr Muhamad Syahmi Nazli (MACB)
- Participant: 984 participants from Malaysia, Indonesia, Singapore, Philippines, India, Hongkong, Australia, Iran, Macau, Nepal, Pakistan, Thailand, Vietnam and Zimbabwe
- Survey: Excellent responses

1ST POCT WEBINAR:
- 30th April 2024
- In collaboration with ACBI

Topics:
- Professional Training and Certification in POCT (Prof Adil Khan- ADLM),
- Audits and Quality Indicator Monitoring for POCT (Dr Julie Shaw- Canada),
- Role of the POCT Coordinator (Dr Paloma Oliver Soez - Spain)
- Detail report on progress
- Participants: Indonesia, Malaysia, India, Kenya, UAE, UK, Nepal, Albania, British Indian Ocean Territory, Thailand, Nigeria, Mauritius, Pakistan, Somalia
- Survey result: The Q&A session was extensive and interesting as it showed the interest of the participants in knowing about various aspects of POCT. The participants provided their feedback through email about the impact the webinar had in their routine practise. There were suggestions to conduct more webinars on different aspects of POCT in the future.

2ND SUSTAINABILITY WG WEBINAR
- Date: 5th June 2024 supported by Premier Health Lab and Siemens
- In collaboration with MACB
- Topics: Green Lab: Advancing Environmental Sustainability
- Insights into Sustainable Laboratory Best Practices: Sharing Experience (Deeroshaa Thevenderan)
- Sustainable Partnership (Lim Ai Tin)
- Registrant: 333 and attendees: 106

1ST ISO 15189 ACCREDITATION AND ANALYTICAL REQUIREMENTS WEBINAR
- 15 June 2024
- In collaboration with IAC, Supported by Snibe

Topics:
- The New Standard of ISO 15189: 2022. What should laboratories do? (Tjan Sian Hwa -IACC)
- The importance of metrological traceability in clinical laboratories for accurate results (Tony Badrick -AACB)
- Uncertainty of Measurement in Clinical Laboratory as a tool for improving the result interpretation (Ken Sikaris – AACB)
- Registrant: 1750 registrants and 790 attendees from Algeria, US, Australia, Filipina, Georgia, India, England, Japan, Korea, Cambodia, Malaysia, Nepal, Pakistan, Singapore, Sri Lanka, Switzerland, Thailand, Hongkong
- Survey result: Excellent survey result,
- Active participants with a lot of QnA

2ND ISO 15189 ACCREDITATION AND ANALYTICAL REQUIREMENTS WEBINAR:
- Date: 27 July 2024
- In collaboration with: IACC, Supported by Snibe

Topics:
- Effective IQC planning and strategies. Khosrow Adeli (IFCC)
- Using Sigma metric for planning and monitoring IQC . Thyrza L Darmadi (IACC)
- Troubleshooting of Internal Quality Control failures in your laboratory – Rozita Abdullah (MACB)
- Registrant: 1200 attendees from India (4), Malaysia (104), and Indonesia
- Active participants with a lot of QnA

1. 3RD ISO 15189 ACCREDITATION AND ANALYTICAL REQUIREMENTS WEBINAR:
- Date: 28 September 2024
- In collaboration with: IACC, Supported by Snibe

Topics:
- Harmonization of External Quality Assessment Scheme (Yusra, INAEQAS)
- How to select Proficiency Testing (PT) / External Quality (FLM) Assessment (EQA) Program? (IACC)
- The interpretation and Troubleshooting of EQA result
- Active participants with a lot of QnA

17TH APFCB CONGRESS – SYDNEY

Sustainability Seminars
- Green Lab: Global Challenge and APFCB Initiatives on Sustainability – Tjan Sian Hwa
- Creating the Sustainable Clinical Laboratory of the Future – Prasenjit MItra
- Digital Transformation in Sustainable Management – Mohd Jamsani Mat Saleh

POCT Seminars
- Quality management in POCT – Thyrza Darmadi

- Competency and Training in POCT – Tjan Sian Hwa
- POCT vs Central Lab Testing – Prasenjit Mitra

4th ISO 15189 ACCREDITATION AND ANALYTICAL REQUIREMENTS WEBINAR:

- Date: 23 November 2024
- In collaboration with: IACC, Supported by Snibe

Topics:

- Method validation vs Method Verification: Which one to choose? Tran Thi Chi Mai (VACB)
- Step by Step Method Verification in Clinical Laboratory -Barnali Das (IFCC)
- Reference Interval and Clinical Decision Limit Verification- Sam Vasikaran (AACB)
- Participants: 583 from Indonesia and Malaysia
- Active participants with a lot of QnA

Preanalytical Webinars Series (3 sessions) in Collaboration with BD in November 2024

APFCB MEMBERS POCT SURVEY:

- Current situation and what are still required

Most of the audience are from Indonesia, India and Malaysia. If APFCB events can be shared not just through websites but also through emails to APFCB's members we think there will be more participants from the other members and the activities will have a bigger impact.

Thank you for the corporate members (Abbott Diagnostic, Snibe and BD) support in making our activities run.

APFCB Laboratory Management Committee

Chair: Tjan Sian Hwa

Member: Dr Prasenjit Mitra (ACBI)
Dr M Jamsani Mat Salleh (MACB)
Dr Thyrza Darmadi (IACC)
Vincent Chen (Snibe)

CONGRESS AND CONFERENCES COMMITTEE

Committee Chair: Dr. Woei-horng Fang (Taiwan)

Members of the Committee:

Mr. Ronaldo Puno (Philippines)

Dr. Rajiv Ranjan Sinha (India)

Dr. Mehrdad Vanaki (Iran)

Ms. Sasha Duan (Mindray - Corporate Member)

Mr. Fionn Quinlan (Waters - Corporate Member)

Activities

(1) Oversee the organization of the APFCB Congresses and report to APFCB EB and Council

For the 17th APFCB Congress, Sydney, 31st Oct-3rd Nov 2024, the C-CC worked closely with Congress Organising Committee (COC) of the 17th APFCB Congress.

APFCB 2024 ICC Site Inspection, 30 Oct 2023, C-CC Chair and APFCB President met with the COC and PCO at Congress venue, report submitted to the APFCB Executive Board

C-CC Chair participated APFCB Congress 2024 Scientifc Committee Meeting (Web meeting) on 24 Mar 2023, 3 May 2023, 31 May 2023, 16 Aug 2023, 24 Oct 2023, 15 Nov 2023, 13 Dec 2023, 10 Jan 2024, 8 Feb 2024, 18 Apr 2024, 6 Jun 2024, 17 Jul 2024, 21 Aug 2024, 25 Oct 2024. C-CC Chair also participated in the APFCB Congress Organising Committee Meeting (Web meeting) on 10 May 2023, 30 Nov 2023, 25 Jan 2024, 11 Mar 2024, 29 Apr 2024, 26 Jun 2024, 31 Jul 2024.

APFCB Congress 2024 Progress Report, 25 Jun 2024, prepared by the COC and PCO and submitted to the C-CC, then circulated among APFCB Executive Board and Council members.

(2) APFCB auspices 2024

One of the functions of the APFCB C-CC is the award of auspices of the APFCB for various scientific events like conferences, congresses, events organized by regional society members and corporate members. The provision of auspices is mutually beneficial: the APFCB lends its prestige to a meeting which should help it attract greater participation and in return the APFCB benefits from greater name recognition among the participating laboratory scientists. All applications for APFCB auspices are evaluated by the C-CC and treated on a case-by-case basis in an efficient and timely manner. The C-CC is careful to award auspices only to scientific meetings that are organized by learned bodies and vendors such as APFCB corporate members where the content is of scientific and educational value. In 2024, the committee members evaluated and granted APFCB auspices to the following scientific events.

	Conferences and events	Dates	City and country	Organizer
1	The 15th International & 21th National Congress on Quality Improvement in Clinical Laboratories	30 APR -3 MAY, 2024	Tehran-Iran	Iranian Association of Clinical Laboratory Doctors (IACLD)
2	International Symposium on Laboratory Medicine	25 FEB 2024	Shenzhen, China	Snibe Co., Ltd.
3	APAC-IRIDS	19-20 JUN 2023	HCM City, Vietnam	Roche Diagnostics Asia Pacific Pte Ltd
4	International Symposium on Laboratory Medicine	10 MAR 2024	Shenzhen, China	Snibe Co., Ltd.
5	International Symposium on Laboratory Medicine	14 APR 2024	Kathmandu, Nepal	Snibe Co., Ltd.
6	International Symposium on Immunoassay	27 APR 2024	Tbilisi, Georgia	Snibe Co., Ltd.
7	APFCB-ACBI Webinar on “Point of Care Testing (POCT)”	30 APR 2024	Online; Zoom platform	Clinical Biochemists of India (ACBI)
8	Annual Academic sessions CCPSL 2024	11-13 JUL 2024	Colombo, Sri Lanka	College of Chemical Pathologists of Sri Lanka
9	APFCB Travelling lecture: Patient-based Quality Control Lecture and Workshop	12 OCT 2024	Taipei, Taiwan	Chinese Association for Clinical Biochemistry (CACB)
10	Roche Experience Days 2024	12 OCT 2024	Taipei, Taiwan	Chinese Association for Clinical Biochemistry (CACB)
11	50th Annual Conference of the Association of Clinical Biochemists of India (ACBICON) 2024	4-7 DEC 2024	Chandigarh, INDIA	Association of Clinical Biochemists of ndia (ACBI)
12	AMBICON 2024 in	19-21 DEC 2024	Ahmedabad, INDIA	Association of Medical Biochemists of India
13	Vietnam Chemical Pathology Course XV 2024	28 NOV 2024	Webinar	Roche Vietnam Co., Ltd.

The committee also worked on updating the Congresses and Conferences webpage of APFCB to include the details of the major scientific events, which have been granted APFCB auspices. APFCB EB encourages all the Member associations to apply for APFCB auspices for their annual meeting.

(3) Date change of 18th APFCB Congress.

To avoid APFCB congress clashing with IFCC WorldLab Congress in the same year, through an extensive discussion in EB, the 18th APFCB Congress was decided to move from original planned year 2026 to 2027.

The 18th APFCB Congress 2027, Kuala Lumpur, Malaysia organized by Malaysian Association of Clinical Biochemists (MACB) and lead by Dr. Raja Elina Raja Aziddin the Congress Organizing Committee was established and Chairs of sub-committees were selected. A promotional website was established (apfcbcongress2027.org).

(4) Bidding for 19th APFCB Congress 2029

In late August 2024, APFCB C-CC evaluated materials from IACC and SACB for APFCB Congress 2029 bidding. According to the guideline criteria, no major deficiency was found in both applications, and all APFCB C-CC members granted very high scores to both applications. APFCB C-CC consider both bidders provide high quality venues and good organizers to ensure success of hosting APFCB Congress 2029. The final decision of the venue was sent to APFCB Council Meeting on 31 October to vote. Finally, IACC won by one vote and 19th APFCB Congress will be held in Bali, 2029.

(5) APFCB Council approval of the 20th APFCB Congress 2031 proposal by KSCC

During difficulty in COVID-19 pandemic period, KSCC provided generous service to APFCB. An assurance of was given to KSCC in 2021 by the then APFCB President to let KSCC to have a noncompetitive bidding right for organizing a future APFCB Congress. In May 2024, KSCC expressed their interest to host 20th APFCB Congress 2031. Then KSCC prepared a complete proposal and presented in APFCB Council Meeting on 31 October. The proposal was approved by the Council and the 20th APFCB Congress 2031 will be held in Seoul, Korea.

SCIENTIFIC COMMITTEE ACTIVITIES

1.Paediatric Clinical Biochemistry - Mass Spectrometry Harmonisation Working Group

Chair: Ronda Greaves

Members: 1. Ronda Greaves (Chair), AU 2. Trisha Andersen, AU 3. Brian Cooke, AU 4. Chung Shun Ho, Hong Kong, CN 5. Kirsten Hoad, AU 6. Wai-shan Lo, Hong Kong, CN 7. Tze Ping Loh, SG 8. Mai Thi Chi Tran, VN 9. Rosita Zakaria, AU 10. Peter Graham, AU

Consultants 1. Sjeord van den Berg, NL 2. Hartmann, Michaela, DE 3. Yolanda de Rijke, NL 4. Stefan Wudy, DE · 5. Bertrand van Zelst, NL

Following its success in harmonisation of testosterone measurement by mass spectrometry, the working group focused on 17-hydroxyprogesterone (17OHP) next. The working group has collaborated to survey the current state of practice in 17OHP measurement by mass spectrometry (PMID: 29397022). From the results of the practice survey, a study was conducted to examine the influence of choice of internal standards on 17OHP measurement by mass spectrometry (PMID: 32697750). This further led to another study on review of potential interfering isomeric hormones in the samples received for 17OHP measurement (PMID: 36457285), and together with SKML, RCPAQAP, performed a formal investigation of the influence of isomeric steroid on 17OHP measurement through spiked proficiency testing material in Asia Pacific and Europe (PMID: 38063179). A post-analytical practice survey on mass spectrometry is also being developed.

2. Patient Based Real Time Quality Control Systems in Clinical Laboratories Working Group

Chair: Tony Badrick

Members: 1. Tony Badrick, AU - Chair 2. Tze Ping, SG 3. Rui Zhou, CN 4. Joel Smith, AU 5. Guo Wei, CN 6. Ming long Zhang, – CN 7. Sollip Kim, KR, 8. Hyun-Ki Kim, KR

Young Scientist - observer Luke Duan, CN

Corporate representatives: Shane Brown – Abbott, Yan Liu – Mindray, Sung Jiyeon – Roche

Consultant - Chun Yee LIM - SG

The was formed with the objective of advancing the advancement and adoption of patient-based quality control in clinical laboratory. It conducted a survey on the knowledge, attitude and practice of patient-based quality control among Australasian laboratories (doi: 10.21037/jlpm-23-14). The survey has also been adopted and replicated by the Belgian counterpart with its results being submitted for publication. It also wrote a review article on the newer patient-based quality control models (PMID: 38835211). The working group also developed and published a spreadsheet tool for implementation of moving average and moving median models (eJIFCC, accepted). The working group hosted a APFCB webinar on patient-based quality control on Oct 4, 2023, and a workshop at the APFCB-AACB 2024 meeting.

3. Working Group on Harmonisation of Reference Intervals

Chair: Tze Ping LOH

Members: 1. Tze Ping Loh (Chair), SG. Samuel Vasikaran, AU Corey Markus, AU. Dian Nasuruddin, MY. Mai Nguyen, VN. Busadee Pratumvinit, TH

Consultant Rui Zhen Tan, SG

The working group produced several scientific articles focusing on examining the different statistical techniques in deriving indirect reference intervals and biological variation values (PMID: 35181292; PMID: 35489473; PMID: 35107229), the impact of analytical performance on the clinical performance of reference intervals (Pathology, accepted) and a review article on functional reference limit (PMID: 37080741). It also produced a document on the use of bone turnover markers in Asia Pacific populations (PMID: 37869778).

4. Working Group on Clinical Decision Support

Chair: Kay Weng CHOY

Members: 1. Kay Weng Choy, AU 2. Sang-Guk Lee, KR 3. Tze Ping Loh, SG

The working group produced a Q&A article on Clinical Decision Support in Laboratory Medicine (PMID: 38300892), which formed the basis of developing a joint-position statement with the RCPA Informatics Committee (https://www.rcpa.edu.au/getattachment/0516cd17-1db4-4eab-ae97-08519a3d8268/Joint-Position-Statement-by-the-Royal-College-of-P.aspx). It also conducted a literature review of clinical decision support system (under review). It jointly hosted a webinar on this topic with AACB Victoria Branch (Jan 16, 2024) and EFLM (Oct 17 2024).

5. Harmonised Reporting of Protein Electrophoresis and Biochemical Monoclonal Gammopathy Testing Working Group

Chair: Hyojin Chae

Members 1. Say Min, Lim, MY 2. Dr Barnali Das, IN 3. Dr Pu Chen, CN 4. Dr Joel D. Smith, AU 5. Dr Nilika Wijeratne, AU 6. Dr Lyana Setiawan, ID 7. Dr Lizhen, Ong, SG 8. Dr Nguyen Thi Thanh Hai, VN 9. Dr Asada Leelahavanichkul, TH 10. Dr Kay Weng, AU

The working group was newly formed with an intention to provide guidance and electronic proficiency testing for the interpretation of protein electrophoresis and biochemical monoclonal gammopathy testing. The founding chair had to step down due to personal and professional reasons and after a search Dr Hyojin Chae (KR) was appointed. Under her guidance, the working group will design and implement an electronic, education proficiency testing. The working group is working with an industry partner for (1) sharing of the knowledge base on Protein Electrophoresis and IT, for educational purposes pertaining to WG on myeloma PT program; (2) Providing an online platform for implementing and archiving electronic, educational PT program of APFCB WG on myeloma.

EDUCATION COMMITTEE ACTIVITIES

Committee Chair: Dr Wei Cui

Members:

Dr. Nada Syazana Zulkifli (Malaysia)

Dr. Mithu Bannerjee (India)

Dr. Aamir Ijaz (Pakistan)

Ms. Pearline Teo (BD Company)

Mr. Sum Li (Greiner Bio-One Company)

The mission of C-E is to provide APFCB members and the health-care community with educational activities relevant to the region in the field of Clinical Chemistry and Laboratory Medicine. It shall be concerned with developing an educational network within member Associations/Societies of the Federation for the sharing of educational materials and resources and in coordinating the activities of the national educational representatives of the member Associations/Societies.

1. APFCB Presence in Regions

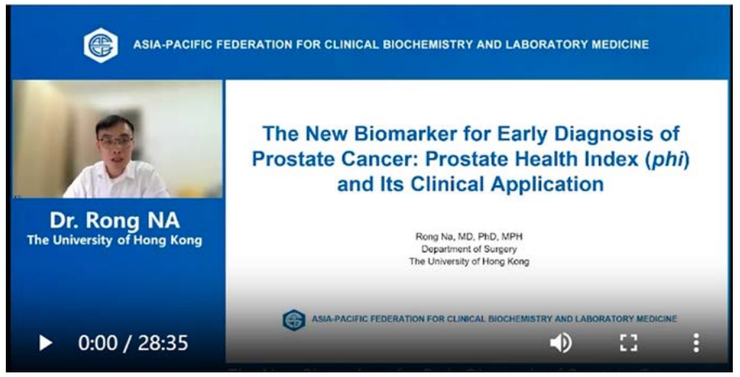
To raise the profile of APFCB in China, Dr. Tony Badrick was invited to attend the Annual Conference of Chinese Society of Laboratory Medicine and delivered a speech on March 31 in Changsha, China.

2. APFCB-AACB Travelling Scholarship

AACB 60th Annual Scientific Conference was held on 17-19 October,2024, Brisbane, Australia. APFCB offered two scholarships for qualified candidates to attend this meeting. After assessment based on the quality of all the participants' abstracts, Dr. Susruta Sen from India, and Dr. Mihika Fernando from Sri Lanka were awarded.

3. APFCB Online Education Program

As a part of C-E annual plan, we started an education column on the APFCB website, which is composed of a series of videos of lectures and webinars. As a first step, we collected two videos, one is from a HK professor, Dr Rony Na, and another is from a Chinese professor, Prof Wei Guo. These two videos have already been posted on APFCB website and can be visited. We will collect more videos and webinars to strengthen the educational capability of this column.



Lecture Video by Dr. Rong NA

4. APFCB - Becton Dickinson Flow Cytometry Workshop

On November 28, collaborated with Beijing Society of Laboratory Medicine and BD company, APFCB Education Committee organized a workshop: Summit of the Standardization of Clinical Flow Cytometry. Prof Wei Cui from Cancer Hospital, Chinese Academy of Medical Sciences, on behalf of APFCB Education Committee, delivered a welcome speech and a lecture of Standardization of Peripheral Blood Lymphocyte Subsets Detection by Flow Cytometry. Prof Sa Wang from MD Anderson Cancer Center, University of Texas, delivered a lecture titled Development of a 12-color Flow Cytometry Assay for the Detection of Minimal Residual/ measurable Disease (MRD) of Acute Myeloid Leukemia (AML). Prof Jianhua Pan from KingMed Independent Clinical Laboratory and Dr. Darci Gorgone Chavez from BD company also introduced the standardization and QC of clinical flow cytometry. Because of the increasingly wide application of clinical flow cytometry, the standardization and quality control of flow cytometry are getting more and more attention. More than 200 customers attended this meeting. This is the first workshop organized by APFCB education committee, which greatly improved the reputation of APFCB in Grand China.

5. APFCB Laboratory Medicine Case Contest

On December 15, the APFCB Laboratory Medicine Case Contest was successfully closed. This activity was launched on August 28. A total of 68 case reports were received during the first round. Among them, 50 cases were selected based on the quality of abstracts. Finally, 47 qualified video presentations were enrolled in the second round. After assessment of the Topic & content, Scientific & practicability, Originality & correctness, 10 winners participated in the finals on December 15. The final contest is an online presentation and discussion. Six distinguished professors were invited to be the judges. They are Dr. Tony Badrick, Dr. Leslie Lai, Dr. Sian Hwa, Dr. Helen Martin, and Dr. Goce Dimeski. According to the scores of each participant by every judge, 2 first prizes, 3 second prizes, and 5 third prizes were selected.

APFCB Laboratory Medicine Case Contest Poster

Screenshot of APFCB Laboratory Medicine Case Contest Finals

COMMUNICATION AND PUBLICATION COMMITTEE

The Communication and Publication Committee (C-CP) of the Asia Pacific Federation of Clinical Biochemistry and Laboratory Medicine (APFCB) bears the critical responsibility of shaping, monitoring, and refining the organization's communication strategies and online presence. This committee plays an instrumental role in formulating and overseeing system-wide policies, ensuring that all digital operations align with the federation's overarching objectives. It also spearheads the online publication of APFCB News and collaborates closely with member associations and corporate partners to foster broader engagement and dissemination of valuable educational materials and resources to professionals in laboratory medicine. In doing so, the C-CP significantly contributes to the advancement of innovative ideas, guiding member associations in the development of policies and strategies that support the federation's mission of enhancing patient care.

Members of the APFCB C-CP for the 2023-2025 Term:

- Chair: Dr. Pradeep Kumar Dabla
- Web Editor: Dr. Deepak Parchwani
- Social Media Coordinator: Dr. Vivek Pant

Members:

- Dr. Ryunosuke Ohkawa
- Dr. Mingma Lhamu Sherpa
- Dr. Alireza Lotfi Kian
- Dr. Mayank Upadhyay (Corporate - QuidelOrtho)

Since the appointment of the current committee, the C-CP has taken proactive steps to enhance the federation's online visibility through the APFCB e-newsletter, social media platforms, and the official website. Over the past year, the committee has maintained robust communication channels and employed digital tools to promote the APFCB's activities across member societies within the Asia Pacific region and beyond, reaching countries affiliated with the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC).

Key Activities and Achievements:

1. Regular APFCB Website update

The C-CP has overseen the creation, maintenance, and management of a new, dynamic APFCB website. This platform is regularly updated with the latest information on webinars, online courses, and virtual conferences hosted by APFCB, its member societies, and other international professional bodies. The website also features scientific publications, guidelines, and webinars (both live and recorded) on various topics of interest.

Significant enhancements have been made to the website, including improved webinar visibility, the addition of a quick link tab for APFCB Auspices on the homepage, upgraded sections for announcements, social media integration, visitor statistics, and a dedicated space for corporate partners.

The "APFCB Auspices Calendar" has been meticulously organized, reflecting the federation's commitment to fostering communication and information exchange in the field of laboratory medicine, which is essential for advancing patient care.

2. Active mode of APFCB Social Media Platforms:

Recognizing the pivotal role of social media in modern communication, the current C-CP has established new social media profiles and revitalized existing ones to effectively disseminate information regarding APFCB activities. The federation is now actively updating events and news on Facebook, Twitter, LinkedIn, Instagram, and YouTube, allowing it to reach a broader audience and engage more effectively with national societies and clinical laboratory professionals.

Social Media Links:

- Facebook: https://www.facebook.com/APFCB/
- Twitter: https://twitter.com/APFCB_LM
- Instagram: https://www.instagram.com/apfcb_lm/
- LinkedIn: https://www.linkedin.com/company/apfcb/
- YouTube: https://www.youtube.com/channel/UCoiicTsnVX-COjklgZHQ54Q

3. Promotion of Educational and Federation Activities:

The C-CP has utilized the APFCB website and social media platforms to publicize upcoming events. Members are notified of impending events through blast emails, ensuring broad participation. The committee continues to diligently update and expand its member database to enhance communication and engagement.

4. Publication of APFCB News:

The C-CP is responsible for the online publication of APFCB News, with the committee chair serving as the Chief Editor. In 2024, the newsletter was published twice, featuring a wealth of information, including annual reports from member societies, young scientist interviews, expert opinions and special reports.

5. DOI and ISSN Registration:

In the preceding year, the C-CP successfully completed the DOI (Digital Object Identifier) registration for the APFCB e-News. Additionally, the committee has initiated the ISSN (International Standard Serial Number) registration process, and by the end of mid-2025, we expect to receive this number. These steps are crucial in enhancing the credibility and accessibility of the federation's publications.

6. APFCB Webcast & e-Learning Programme:

The committee has launched the "APFCB Webcast & e-Learning Programme" as part of its efforts to promote global learning. This initiative is designed to provide accessible, high-quality educational content to laboratory professionals worldwide, furthering the federation's mission of advancing knowledge and practice in clinical biochemistry and laboratory medicine. In 2024, we successfully hosted two webinars. The first focused on biomarkers in the spectrum of glycemia in metabolic syndrome, while the second addressed lead poisoning, featuring expert speakers from Iran, India, Pakistan, and Nepal. We have made efforts to incorporate speakers from the Asia-Pacific region and will continue to prioritize their inclusion, ensuring that topics of regional relevance are addressed in future events.

Future Recommendations:

Stakeholder Engagement:

- Interactive Sessions with Member Associations: To organize virtual meetings or interactive sessions with member associations to gather their input. This will help tailor content and initiatives to better meet the needs of the broader community.

Survey and Feedback Mechanism:

- We conducted an online survey on the use of laboratory techniques for blood lead testing across the Asia-Pacific region, targeting webinar participants to enhance response rates. The findings will be published in the upcoming edition of our APFCB News and will be widely circulated. We plan to conduct and expand the surveys across our region.

Diversification:

- Special Issues of APFCB News: For September 2025, we plan to publish a special issue focused on in-house troubleshooting algorithms developed by laboratories across the Asia-Pacific region, including issues related to clinical laboratory mismatches. We will circulate information about this initiative among all member societies and aim to include as many algorithms as possible that will benefit APFCB community worldwide.
- Podcast: APFCB-C CP proposes to initiate podcast where APFCB C-CP working members will interview renowned figures in our region on key topics. We will pick the publication and will interview the author/expert. The guidelines for APFCB podcast is under construction.

Technology and Innovation:

- Adoption of New Tools: To adopt new digital tools and platforms that can enhance the APFCB's ability to produce and disseminate content, such as advanced analytics for social media, content management systems, or email marketing software, and anti-plagiarism software.
- Development of a Mobile App: To develop an APFCB mobile app to provide members with easy access to publications, event information, and educational resources on the go.

Featuring Clinical Cases:

- The committee plans to feature more clinical cases in the upcoming issues of APFCB News, recognizing their value in medical education and the potential to inspire new ideas and approaches in the field.

As members of the Communication and Publication Committee, we remain committed to advancing the APFCB's mission and look forward to continuing our efforts to enhance communication, education, and collaboration within the global laboratory medicine community.

1.Publications and Communications

The APFCB newsletter (2 issues per year) has a dedicated “Industry Voice” section that provides a platform for Corporate Members to contribute articles that are of educational or scientific relevance. Corporate Members can also place paid advertisements in the newsletter. We encourage Corporate Members to take advantage of this platform to reach out to a wide audience of laboratory professionals across the region.

2.Other administrative updates

The Corporate Representative is also assisting the Executive Board in various administrative matters in relation to the Registry of Societies (ROS) under the Singapore Ministry of Home Affairs. The ROS record has now been updated to reflect the current officers of the APFCB Executive Board.

Tony Badrick, President APFCB

COLABIOCLI

Latin-American Confederation of Clinical Biochemistry

No report received

EFLM

European Federation of Clinical Chemistry and Laboratory Medicine

Internal reorganization of EFLM Functional units was the principal EFLM EB activity throughout the year 2024. Instead of previous Committees, Working Groups (WG), Task Forces (TF), Task and Finish Groups (TFG) and Task Groups (TG), three new functional unit categories are defined. The four Divisions correspond to the previous Committees. The difference is that each Division is composed of an Executive Committee formed by the Chair (appointed by the EB) and four Members nominated by EFLM Full Member NSs and selected/appointed by the EB. There are no Corresponding Members nor Experts/Consultants in this functional unit.

The four Divisions are:

1. Science: Value Based Laboratory Medicine;
2. Education and Profession
3. Quality, Standards and Regulations; and
4. Communication.

Under each Division there are several Committees that correspond to the current WG / TF / TG / TFG. Each Committee has a Chair (appointed by the EB), 3 Full Members and 1 Young Scientist (YS) Member nominated by EFLM Full Member NSs and selected/appointed by the Division and Committee Chairs who notify the EB. Corresponding Members and Experts/Consultants can be part of a Committee. The rule of the geographical distribution applies for both Divisions and Committees. Technical Committee (TC) is a functional unit with technical tasks (e.g. EFLMLabX, EuSpLM Register, BV Database). Each TC has a Chair (appointed by the EB) and 4 Full Members directly identified by TC Chair; these are evaluated by the Division Chair and then notified to the EB. The rule of the geographical distribution does not have to apply. Experts/Consultants can be part of the Committee but there are no Corresponding Members in a TC. There must not be any duplication of roles for Chairs and Full Members of all Functional Units.

At the EFLM General Meeting (GM) held online on June 7th, 2024 the reorganization plan was presented to the NS National Representatives and the proposal of change of Articles of Associations was put to a vote. The GM unanimously approved all the proposed changes at the EFLM Articles of Associations. In addition, the GM unanimously approved the application from the Spanish Association of Medical Biopathology-Clinical Laboratory Medicine (AEBM-ML) to become EFLM Affiliate Member and the application from Radiometer Medical ApS to become an EFLM Corporate Member.

The activities of EFLM Functional Unites continued with great intensity resulting in 25 publications in total. The highlight is the publication of European Urinalysis Guideline which represent a great example of an integrated diagnostics, being jointly produced by laboratory medicine specialists, microbiologists, and clinicians. Furthermore, the EFLM Syllabus Course was supplemented with new lectures, thus completing 5 modules. EFLM session on WorldLab Dubai 2024 was dedicated to the Green and Sustainable Laboratories project, that continued to grow and left

the borders of Europe. In 2024, 15 new laboratories applied and received EFLM Green Labs Certificate. In total, up to now, 20 laboratories are certified by EFLM as “Green & Sustainable Laboratory”. During 2024, EFLM’s CPECS® - Continuing Professional Education Credit System was used for accrediting major educational events in 2024 – IFCC WorldLab 2024 in Dubai and EFLM Strategic Conference in Padova.

EFLM Strategic Conference 2024 “A Vision to the future: value-based Laboratory Medicine” was held in Padova on 23-24 September. It was a hybrid event, where EFLM Academy members could follow the presentations and discussions online. With over 300 registered participants attending in-person and about the same number of registered virtual attendees, the Conference was a great success, demonstrating great interest of the laboratory medicine community to be actively engaged in shaping the future of the profession.

After reviewing comments and suggestions received from Functional unit’s chairs, Presidents and National Representatives of EFLM National Society Members, EFLM EB finalized the EFLM Strategic Plan 2024–2025. Among the principal actions of the new Strategic Plan was establishing new FU that would facilitate reaching one of the major strategic goals of promoting and supporting the value-based laboratory medicine. The new FU that will be established are:

- "Value-score for clinical laboratories" dealing with the process of traceability (starting from pre-analytical steps), level of automation (number of manual procedures), performance on quality indicators and data management, quality of reported information and clinical interaction,
- "One health and exposome" dealing with the holistic vision of the relationship between human health and the environment, and
- "International standardized exchange of laboratory data" supporting efforts to standardize the exchange of laboratory data between laboratories and between countries in view of the future decision of the European Union on the format of standardized exchange of laboratory test results in Europe.

In 2024 EFLM continued strategic collaboration with other associations. The agreement with EQALM was renewed and the MoU with MedTech Europe was signed. The collaboration with BioMedAlliance (BMA) has intensified: Christa Cobbaert was appointed as the new liaison for EFLM and former EFLM President Michael Neumaier was appointed as the Chair of the BMA Task Force on IVD. Representatives of BMA participated at the EFLM Strategic Conference 2024 in Padova and it was agreed that a joint session be included into the Scientific Program of EuroMedLab 2025 in Brussels. In addition, MoU was signed between EFLM and Federation of European Biochemical Societies (FEBS) where it is agreed for both federations to participate in each other’s congresses. Furthermore, EFLM signed a MoU with the Chinese Society of Laboratory Medicine (CSLM) for 2025-2027.

During 2024, EFLM’s CPECS® - Continuing Professional Education Credit System was used for accrediting major educational events in 2024 – IFCC WorldLab 2024 in Dubai and EFLM Strategic Conference in Padova.

Also in 2024, 11 National societies applied for the program “Invite an Executive Board Member at Your National Society Congress”. The applications of seven NSs which had received minimum support in the previous 10 years were accepted. The EFLM EB members attended NSs meetings in Romania, Lithuania, Serbia, Bulgaria, Slovak, Turkiye and Ireland.

EFLM Academy continued to grow, surpassing the number of 10000 members by the end of 2024. All the benefits for Academy members were continued.

In 2024, EFLM continued with the EFLM Scholarship program in memory of Prof. Vic Blaton related to bursaries for meetings and conferences organized by EFLM. Also, the EFLMLabX professional exchanging program has been active and opened for applications.

COMMITTEES

Committee – Communication (C-C)

C-C has one working group (WG Promotion & Publications, WG-PP) and two task groups (TG European Laboratory Day, TG-ELD, and TG Young Scientists, TG-YS). In 2024, C-C EFLM initiated a comprehensive redesign, rebranding, and user experience upgrade of the EFLM website.

The WG-PP oversees the Federation’s primary communication channels, including the website, the bimonthly newsletter “EuroLabNews,” social media, the EFLM section in the IFCC e-Newsletter, the EFLM mailing list, and regular updates to National Societies (NSs). “EuroLabNews” features key sections such as The EFLM Executive Board Informs, EFLM Office Informs, Vacancies in EFLM Functional Units, YS Corner, News from the EFLM Functional Units, Updates on EFLM Publications, EFLM Events, and IFCC News.

In 2024, the TG-YS focused on supporting young professionals by holding a meeting at the EFLM Strategic Conference in Padova, expanding membership to over 120 individuals (with 60 members in a dedicated WhatsApp group), and conducting monthly meetings with active participation. Meeting recordings are available as unlisted YouTube videos. The TG-YS has also established criteria and selected a committee for the EFLM Young Laboratory Medicine Professional Award.

The TG-ELD is responsible for promoting public awareness of laboratory medicine, primarily through the annual European Laboratory Day on November 5. In 2024, the event engaged participants from more than 15 countries and generated nearly 38,000 social media impressions, more than 190 pieces of news coverage, and a total reach of 138 million. Social media impressions and engagement rose significantly compared with 2023, and email outreach for the event achieved a 49% open rate.

Committee – Education and Training (C-ET)

Working group on congresses and postgraduate education (WG-CPE). WG-CPE was involved in recruiting new and “old” teams for postgraduate courses. Accordingly, two PGC on Statistics in laboratory medicine was held in Tiblisi (Georgia), 12-13 Sept, and Helsinki (Finland), 16-17 May with Matteo Vidali as a lecturer. PGC course on how to write a good scientific and professional article was held in Dublin, Ireland, 2 Feb 2024 , with Ana Bronic and Daria Pasalis as lecturers.

WG-CPE granted 31 auspices for different educational events in 2024. WG was also involved in the organization of the EFLM course “Meet the expert" and realized four online lessons in Feb, May, Nov and Dec (Analysis and interpretation of tests for antiphospholipid syndrome, Analysis and interpretation of cardiac markers and deciphering of hs-troponin, M-protein diagnostics: analysis and interpretation of protein electrophoresis of srum, urine and cerebrospinal fluid, Interpretation of laboratory results of kidney function). For 2024, WG-CPE also prepared and planned to establish a new channel on the online platform for “educational interactive contents." This new channel should be used for interactive educational courses as well as for presenting and solving interactive clinical cases.

Working Group on Laboratory Medicine Credit Points (WG-LMCP). To institute an EFLM credit system, the WG-LMCP finalised a development of "Provider Application and Manual for EFLM Accreditation of Educational Programs" in conjunction with an administrative system called the Continuing Professional Education Credit System (CPECS). CPECS® accreditation was established for the XXVI IFCC WorldLab Congress, jointly hosted by the IFCC, the Arab Federation of Clinical Biochemistry, the Saudi Society of Clinical Chemistry, and the UAE Genetics Association, May 26–30, 2024. The completed materials, which include a manual for

providers, a manual for speakers, and different forms and documents, were uploaded to the EFLM website.

Working group on Distance Education (WG-DE). In cooperation with PCO (professional congress organizers), WG members were involved in planning and organization of 21 webinars in 2024. They already prepared a list of 22 new webinars for 2025.

In 2024, C-ET members were involved in EFLM bursary evaluation for the Strategic Conference Padova 2024. In addition, chairs of the C-ET and Science committees evaluated research grants that were previously established by the Executive Board. Two applications were granted, one for an applicant coming from a country enjoying the “Vic Blaton” scholarship program and the other for an applicant coming from any other country in Europe.

Committee – Profession (C-P)

The C-P activity in 2023 focused mainly in six objectives:

1. Progress with achieving recognition of Specialists in Laboratory Medicine
2. Growing the EFLM Register (EuSpLM)
3. Growing the EFLM Academy
4. EFLMLabX
5. TG: EFLM Syllabus Courses
6. Ethical issues: WG - Ethics (New)

According to the demand of Directive 2013/55/EC (Recognition of Professional Qualifications), our profession Laboratory Medicine fulfills and established all formal requirements for given profession to become automatic regulated and recognised on EU level, to move from General System (Chapter I and II) to Automatic System (Chapter III) recognition through prepared Common Training Framework for Specialists in Laboratory Medicine (CTF):

- Common name of profession: Laboratory medicine
- Common name of specialist: European Specialist of Laboratory Medicine (EuSpLM)
- Common education program: Syllabus and training (defined competences)(EoS)
- Common Training framework: CTF- confirmed by EFLM/EU NS members
- Common register: EFLM register (EuSpLM)
- Code of Conduct

In order to continue the process of achieving EuSpLM recognition, on September 29, 2023, we had an online meeting with the European Commission officer Olivier Lano, responsible for this directive and professional regulation, where we also presented our progress and the actual situation. Unfortunately, the meeting was not successful, because despite the facts presented, the EU commissioner did not recognize our coordination process and current situation as suitable for automatic regulation. Despite the disappointment, we have decided to continue our efforts to achieve our important goal and plan to find new connections and meet the EC again in person, together with the EFLM President.

In support of this process, the launch of the EFLM Academy, which is open to anyone (not just EFLM members) interested in laboratory medicine, proved successful. EFLM Academy offers a lot of benefits to its members, including free access to important Journals, free access to CLSI documents (for block enrolled members), free to access to EFLM Syllabus Courses with more than 350 lectures on all Syllabus topics, free access to EFLM webinars and much more. There are a few differences in the additional benefits of membership of the EFLM compared to non-EFLM Academy membership: enrollment in the EFLM EuSpLM register, which will only be possible by applying to the EFLM Academy and eligibility for EFLM grant applicants. All information about the Academy and its benefits is available on the EFLM website: https://www.eflm.eu/site/eflm-academy . Therefore, the number of Academy and EuSpLM register members is constantly growing, especially through block-enrolled NS. The number of registrants for the Academy increased steadily until the end of 2024 (+27% compared to 2023). The total number of members of the Academy is 9980 (with and without EuSpLM): through NS block enrollment (maximum share of registrants) (Total: 9164 (92%)) members, without EuSpLM certificate: 5140 (56%) members from total 9980; individual registration (Total: 621 (8%), without EuSpLM registration: 583). The total number of members of the Academy without EuSpLM, joined by both channels, moves from 4580 to 5140. In 2024 we got additionally 4 block enrolled NSs (Cyprus, Luxembourg, Sweden, Ukraine), together is now 40 block enrolled NSs members.

The WG-Register confirmed 800 more applications for EuSpLM Register in 2024 than in 2023 (total 4058), mainly achieved by block entry 4024 (99%) and 28 (1%) from individual applications. By the end of 2024, a Memorandum of Understanding (MoU) for Academy/EuspLM register group enrollment had been signed with 44/48 EFLM national societies (4 new in 2024: Poland, Denmark, Bulgaria and Switzerland, Cyprus.

In 2024, all registration **(block enrollment and individual registration)** for the Academy and EuSpLM register have been successfully managed through this platform, where all applicants can retrieve their certificates.

The EFLM Committee on Professions conducts **an occasional audit to check that submitted individuals for the EuSpLM** certificate by the National Society meet the EFLM Equivalence of Standards. In 2024, WG-Register also evaluated random check and ran the evaluation process of compliance of EuSpLM certificated candidates who have applied through NSs block enrollment way. For each NS with block enrollment, at the closure of the renewal process for 2023 (within Dec 10), the system automatically sends an e-mail with the name of the applicant for which the accurate personal documentation should be sent to WG-R for evaluation. 36 out Academy block enrolled NSs (EU Countries) in January 2024 were with applied EuSpLM members and were involved in this first evaluation process (one candidate from each NS). 34 out of 36 randomly checked EuSpLM individuals complied with EuSpLM criteria.

The EFLMLabX practice exchange project continues with many new applications for the practices. The rising interest in the project, especially from young scientists, has shown the need for its growth. TG-EFLMLabX is taking care of support and development on the project activities. One of the most critical tasks is to attract more institutions/laboratories as the offerers of new practices. In 2024 3, new institutions joined the project as offerers (CHU de Liege . Prof. Cavalier, France (January 2024) - no new practice created, Tel Aviv Medical Centre, Israel (tertiar hospital) – application, Lile Hospital University , Grzych, France (January 2024). We have now 27 active practices form 13 countries and 25 institutions. This year, 10 practices were implemented (in Spain, Germany, Greece, Belgium, Slovenia). The project achieved significant support through the introduction of an EFLM Bursaries programme. We got 12 applications, and 10 of them have been confirmed and received the bursary. We have been taking care for promotion of EFLMLabX activities through publications within EFLM e-news (through EFLMLabX corner), where we presented experiences of previous practices and new institutions as new offerers of the EFLMLabX project.

In 2024, the **TG: EFLM Syllabus Courses** continued the project of Syllabus Courses. Courses are available on the EFLM Academy website as a part of the new e-learning platform for Academy members only. In 2024, 6 modules (Biological variation, Vitamines and trace elements, General microbiology, Mycology, AI, Post-analytical phase) were finished and added on a platform.

Ethics Working Group address several questions and topics on ethics in laboratory medicine (in clinical settings, research and experimental medicine) in accordance with the EFLM Code of Conduct in Laboratory Medicine. In 2024 they published two papers in CCLM: 1. Clin Chem Lab Med. 2024 May 8;62(12):2388-2392. doi: 10.1515/cclm-2024-0525. Print 2024 Nov 26., 2 Clin Chem Lab Med. 2024 Sep 13;62(12):2373-2387. doi: 10.1515/cclm-2024-1022. Print

2024 Nov 26. The also have presentation on Ethics topic at NS Conference SiBIOC, Strategic Conference Padova 2024.

C-P updated the site accordingly with any changes.

Committee – Quality and Regulations (C-QR)

The committee operates with one active working group: accreditation and ISO standards (WG-A/ISO)

Activities can be summarized along 3 main objectives:

Objective 1: The EU IVDR and the new ISO15189:2022

Together with the EFLM Task Force on European Regulatory Affairs, the Working Group Accreditation and ISO/CEN standards earlier has published on ISO15189 sufficiency for the IVDR-conform validation of the production and the putting to use of laboratory developed tests meant for in-house use. In 2024 this work was updated by the preparation of a publication on the impact of the 2022 revision of ISO15189. In this document also references made to ISO 15189 in th publications below are updated to the 2022 revision.

ISO 15189 is a sufficient instrument to guarantee high-quality manufacture of laboratory developed tests for in-house-use conform requirements of the European In-Vitro-Diagnostics Regulation. Joint opinion of EFLM TF-ERA and WG-A/ISO

Vanstapel F.J.L.A, Orth M, Streichert T., Capoluongo E.D, Oosterhuis W.P, Can Çubukçu H, Bernabeu-Andreu F.A, Thelen M, Jacobs L.H.J, Linko S, Pal Bhattoa H, Bossuyt P.M.M, Meško Brguljan P, Boursier G, Cobbaert C.M and Neumaier M. Clin Chem Lab Med 2023. https://doi.org/10.1515/cclm-2023-0045

In-house diagnostic devices under the EU IVDR and unwanted side-effects of intentional transparency

Vanstapel F.J.L.A., Boursier G., Cobbaert C.M., on behalf of the EFLM Task Force on European Regulatory Affairs and the EFLM Quality and Regulations Committee. Clin Chem Lab Med 2023. https://doi.org/10.1515/cclm-2023-0750

Objective 2: Auditable and defendable implementation of ISO-15189 requirements

The WG-A/ISOhas published guidance on retention times of laboratory registrations:

EFLM Working Group Accreditation and ISO/CEN standards on dealing with ISO 15189 demands for retention of documents and examination objects, Adv Lab Med. 2024 Jan 30;5(2):103-108.

https://doi.org/10.1515/almed-2023-0053

In 2024 the WG-A/ISO has worked on:

- guidance on the impact of ISO15189 revision on laboratory Qualty management systems including impact on published EFLM guidance on previous versions of ISO15189. The work has been accepted for publication in CCLM.
- guidance on quality control policies to monitor that Analytical performance characteristics remain within analytical performance specifications, including guidance on the use of real time patient result based QC. This work will be continued to be presented as a manuscript for publication in 2025.
- guidance on how to evaluate performance of AI/ML-enabled medical devices in the light of IVDR, ISO 15189:2022 and ISO 23053:2022 documents: a laboratory medicine perspective. This work will be continued to be presented as a manuscript for publication in 2025.
- A follow up on guidance on method validation and verification of IVDs including a practical web-based tool (Verify My Lab) for calculation of method comparison as in CLSI EP9, precision, trueness as in CLSI EP15A3, LoD, and LoQ, etc. This work will be continued to be presented as a manuscript for publication in 2025.

Objective 3: The future of the Committee and WG

The 2023 Committee chair (cc) asked to be relieved of his task, and prepared the transfer of tasks to the newly (2024) appointed CC (Marc Thelen) and transfer of the European Accreditation Health Care group liaison activity to the WG ISO/A chair (Guilaine Boursier).

Together with all other EFLM bodies C-QR with WG-ISO/A has given input to the EFLM executive board to the new EFLM strategic plan. In this plan the commmittee is transformed into the division quality, standards and regulation (D-QSR) with the WG-ISO/A transformend into the committee accreditation and quality management systems (C-ISO). The terms of reference of division and committee are to produce guidance on implementation on the ISO and CEN standards on laboratory medicine and to stimulate the correct accreditation of such implementation. The division and committee also collaborate with other EFLM bodies in their work that affects implementation of such standards. The to be installed executive commitee of the D-QSR will be asked to take a role in liaisoning with the committees of the EFLM science division working on topics related to the ISO15189 standard. At the level of ISO and CEN, the D-QSR and C-ISO gave input to the development of standards. The complete terms of reference can be found on the EFLM website along with the current staffing of the D-QSR and C-ISO.

Committee – Science (C-S)

In 2024 large part of the Science Committee's activities was dedicated to the transition of the new Division: Science in the reorganization of the EFLM functional units. Despite this restructuring dominating the functional units' agendas and memberships, the scientific outcome was again impressive in 2024 and comprises 22 EFLM papers published (including the European Urinalysis Guideline) or accepted, 32 papers submitted or in preparation, 5 surveys conducted, and 39 invited lectures in webinars and symposia including IFCC WorldLab Dubai, EFLM Strategic Conference in Padua, SEQC-ML Quality Symposium in Barcelona, NFKK Nordic Congress Clinical Chemistry in Stockholm, and other congresses in 2024. New and updated biological variation data were published in the EFLM Biological Variation Database: www.biologicalvariation.eu. New collaborations and joint projects with clinical specialists' Societies are in the pipeline or initiated, including the European Society of Radiology and Working Groups of the European Renal Association and the International Osteoporosis Foundation. The Science Committee adds to strategic objectives and actions documented in the EFLM Strategic Plan 2024-2025: https://www.eflm.eu/upload/docs/EFLM-Strategic-Plan-2024-25-FINAL.pdf

The Terms of Reference (ToR) were updated. The new Division "Science: Value-based Laboratory Medicine" is responsible for scientific matters within the EFLM and projects which advance the scientific development and practice of Clinical Chemistry and Laboratory Medicine and improve patient outcomes through the appropriate use and applications of in vitro diagnostic (IVD) data in health services and medical practice.

The Division initiates and manages the scientific projects through its functional units, Committees (C) and a Technical Committee (TC). These functional units are classified in 3 main areas of work:

- AREA 1: Total Testing Cycle Harmonization
- AREA 2: Integrative Diagnostics
- AREA 3: Emerging Perspectives

The Division: Science will deliver the following specific objectives to achieve the goals of EFLM to promote science and value-based laboratory medicine: inside and outside the clinical laboratory:

- Identify scientific and technological areas of relevance to Clinical Chemistry and Laboratory Medicine and facilitate the translation of research evidence to the profession.
- Identify new and emerging IVD biomarkers and technological innovations, appraise evidence of their analytical and clinical performance, and provide recommendations and guidelines on how to implement them in clinical laboratory practice and integrative diagnostic strategies.
- Establish safety and quality standards to be met in delivering value to patients, clinicians, public health agencies and authorities through better test utilization, test-assisted clinical decision, integrated diagnostics, personalized (precision) diagnostics, and patient empowerment through remote monitoring, Direct-to-Consumer Testing (DTCT) and patient self-tests (PST).
- Promote harmonisation of the total testing process, through the production of guidance documents stating best practice in pre-analytical, analytical and post-analytical areas including (but not limited to) measurement units, reference intervals and decision limits, across the full continuum of the brain-to-brain loop of requesting, performing, reporting and using laboratory tests and test-based calculations for diagnosis and treatments through the full patient journey in the clinical pathway.
- Practical guidance to implement clinical and analytical test performance specifications, measurement uncertainty, and biological variation estimates in clinical laboratory practice. Deliver biological variation data to the global laboratory community.
- Facilitate digital transformation, Artificial Intelligence (A.I.) applications and standardized health data coding to enable novel approaches in the exchange and use of diagnostic data being shared between laboratories, healthcare professionals, healthcare providers and patients.
- Organize and participate in international collaborative projects between scientific and professional organizations within and outside Europe, and engage in guideline development in co-operation with relevant clinical specialists' scientific societies and multidisciplinary consensus initiatives. Maintain direct link to the Scientific Division of IFCC.
- Respond to scientific, clinical and technical needs, opportunities, or (pandemic) emergencies by translating expert scientific and clinical evidence into advice for EFLM Member Societies, IVD Industry, European Regulatory and other key stakeholders to ensure the clinical benefit and safety of IVD tests on the market, and education of patients/consumers to ensure safe use of DTCT and appropriate interpretation of self-tests.
- Produce criteria and recommendations to implement sustainable practices in the medical laboratories by decreasing their deleterious environmental impact without compromising patient safety.

To align the functional units with the ToR, the Division is restructured accordingly:

AREA 1: Total Testing Cycle Harmonization.

- C-BV: Biological Variation. Chair: Sverre Sandberg, Norway.
- TC-BVD: Biological Variation Database. Chair: Aasne Aarsand, Norway.
- C-H: Harmonisation. Chair: Martina Zaninotto, Italy.
- C-PRE: Preanalytical Phase. Chair: Alexander von Meyer, Germany.
- C-POST: Postanalytical Phase. Chair: Pieter Vermeersch, Belgium.
- C-PGIMU: Practical Guide to Implement Measurement Uncertainty. Chair: Abdurrahman Coskun, Turkey.
- C-CAPS: Clinical and Analytical Performance Specifications. Chair: Philip Monaghan, UK. This Committee is a merging of the former Working Group: Test Evaluation and the Task Group: Performance Specifications Based on Outcome Studies (chair: Rita Horvath, Australia).

AREA 2: Integrated Diagnostics.

- C-ID: Integrative Diagnostics. Chair: Jochen Lennerz, USA.
- C-AT: Autoimmunity Testing. Chair: Xavier Bossuyt, Belgium.
- C-BMTBI: Biomarkers of mild Traumatic Brain Injury. Chair: Vincent Sapin, France.
- C-BNOA: Biomarkers of Nitrous Oxide Abuse. Chair: Guillaume Grzych, France.
- C-CKD: Chronic Kidney Disease. Chair: Etienne Cavalier, Belgium.
- C-VRB: Vascular Risk Biomarkers. Chair: Karl Lackner, Germany.

AREA 3: Emerging Perspectives.

- C-AI: Digitalisation & Artificial Intelligence. Chair: Andrea Padoan, Italy.
- C-DCLTPE: Direct-to-Consumer Testing & Patient Empowerment. Chair: Matthias Orth, Germany. This Committee is a merging of the former Working Group: Patient Focused Laboratory Medicine (chair: Snezana Jovicic, Serbia) and the EFLM Task Force: Direct-to-Consumer Testing.

Other functional units in this area are former EFLM Task Forces repositioned under the Division:

- C-PLE: Preparation of Labs for Emergencies. Chair: Giuseppe Lippi, Italy.
- C-GSL: Green & Sustainable Laboratories. Chair: Tomris Ozben, Turkey.
- C-ERA: European Regulatory Affairs. Chair: Christa Cobbaert, Netherlands.

To coordinate the above functional units' activities, a new Executive Committee (EC) of the Division: Science is established to undertake the following tasks:

- Ensure that each of its functional units are functioning under clear terms of reference together with an agreed EFLM project proposal, aligned with the major objectives of the Division.
- Monitor and evaluate scientific outcome of activities and projects of functional units (publications, guidelines, lectures and symposia) in accordance to the plans.
- Annual report to the EB of the functional units' activities and achievements. Evaluate and make proposals to close and create new ones in identified areas of interest.
- Review and approve any documents that result from the work for publication as EFLM paper in scientific journals and dissemination to the National Societies.
- Validate European laboratory practice surveys planned by the functional units.
- Evaluate the National Societies' nominations and select applicants for Full Member and Young Scientist-Full Member vacancies in the functional units, based on scientific background and proposed contribution of the applicant, and ensuring equal gender and geographical representation in the Division.
- Evaluate and score applications for EFLM Scientific Awards and Research Grants.
- Contribute to the International Scientific Advisory Board of EuroMedLab congresses, to suggest topics for the scientific programme and evaluate submitted abstracts.

This EC is chaired by Michel LANGLOIS (Belgium) in continuation of his 2nd term of office as Chair of the former EFLM Science Committee. Following nominations by the National Societies in 2024, the EC members were selected and appointed: Olga CIEPIELA (Poland), Pilar FERNÁNDEZ-CALLE (Spain), Merve Sibel GÜNGÖREN (Turkey) and Tommaso TRENTI (Italy).

Coinciding with the EFLM reorganisation, 5 Chairs of functional units have finalized their term of office: Janne CADAMURO (Working Group: Preanalytical Phase), Rita HORVATH (Task Group: Performance Specifications Based on Outcome Studies), Snezana JOVICIC (Working Group: Patient Focused Laboratory Medicine) and Timo KOURI (Task & Finish Group: Urinalysis). The EFLM is forever grateful and indebted to their hard work and dedication, successful leadership, and important achievements for science and laboratory medicine for many years.

TASK FORCES

Task Force - Green and Sustainable Laboratories (TF-GSL)

Evaluation/assessment of labs applying for Green Lab certificates were started.
EFLM Green and Sustainable Lab Certificates were given to the laboratories fulfilling the EFLM Green Lab requirements from Belgium, Finland, France, Romania, Switzerland, Turkiye, Qatar (7 laboratories), Saudi Arabia and Netherlands.
IVD companies were invited to support financially EFLM Task Force–GSL and its activities. Beckman, Roche and Abbott provided a total fund of € 25 000.
Exams were performed for the Representatives of the National Societies to become Green & Sustainable Laboratory Experts and 29 of them successful at the exams became GSL experts.
Two manuscripts were published in Clinica Chimica Acta (CCA) and Clinical Chemistry and Laboratory Medicine (CCLM) in addition to the four manuscripts published one year ago.
TF-GSL Chair, Tomris Ozben attended 14 Congresses worldwide as an invited speaker to give information and promote EFLM GSL program.
It was decided to organize a GSL workshop in November 2025, in Antalya, Turkiye. Preparations are on-going.

Task Force - European Regulatory Affairs (TF-ERA)

The Task Force ERA holds 10 members, 8 regular members and 2 corporate members. Four out of the 8 regular members are also EFLM observers in either the MDCG IVD WG respectively in the MDCG Emerging Technology WG. On behalf of Medtech Europe both the CEO and another Medtech Representative participate. Regular two-monthly zoom meetings and one live meeting (organized during the strategic EFLM conference in Padua, Italy in September 2024) have taken place.

In 2024 the **strategic positioning of EFLM in BioMed Alliance in Europe** was strengthened. To accomplish this, Prof. Michael Neumaier became the chair of the IVD Task Force in BioMed Alliance in Europe (BMA), encompassing also other diagnostic disciplines such as EHA and ESHG. Michael Neumaier is still consultant in the EFLM committee on ERA. Christa Cobbaert became the official liaison between EFLM and BMA.

In 2024 the EFLM Task Force ERA **contributed to the joint application for an EU-horizon call entitled "HORIZON-HLTH-2024-IND-06-08"** with clinicians and laboratorians in an EU consortium led by BMA, named MUSE. The overall objective of MUSE was to develop specifications and frameworks for the evaluation of scientific evidence, based upon regulatory, clinical and scientific expertise, to improve clinical performance evaluation, to augment the predictability of clinical evidence requirements for health technology developers, and to increase patient trust and safety and support innovation. The TF-ERA acted as sounding board whereas the chair focused on recruiting Work Package leads for clinical evidence generation work package respectively for the Post Market Surveillance work package of medical tests. Periodic alignment on the content of the call and work packages was scheduled with the BioMed Alliance Principal Investigator, Board and IVD Work Package leads. The application was submitted in time. Yet, in August 2024 the message was received that BMA was not awarded the EU-call nor the funding, which was unexpected for the BMA board and EFLM. BMA will look for another EU- call/opportunity.

In 2024 EFLM TF ERA chair and members gave exposure and shared their IVDR activities and knowledge by lecturing or taking part in panel discussions at the following occasions:

A. MedTech Summit 2024, 10-14 June 2024, Brussels

Multi-Stakeholder Perspective: How IVDR is impacting Innovation & Industry & Lab Professionals.

B. IFCC Worldlab Symposium, Dubai, UAE, May 2024

Title: Thoughts on maintaining innovation and availability of medical tests or how to meet regulatory challenges for Lab-Developed-Tests?

Chairs: Michael Neumaier, Alexander Haliassos

1. Regulatory considerations for Laboratory-Developed Tests from an international perspective: Opportunities and risks for patient care, Folker Spitzenberger
2. Impact of diagnostic regulations on laboratory developed tests in the US, Tina Lockwood
3. Off-label Diagnostics - an analogy to individualized therapeutic medicine: the oncology case Michael Neumaier, Ralf Hofheinz

C. Regulatory Symposium on LDTs at ADLM, Chicago, USA, August 2024

Session overview: **International regulatory considerations for laboratory-developed tests: opportunities and risks for patient care**

1. The session highlighted the international role of lab medicine experts in diagnostic test regulation, including laboratory-developed tests. Faculty experts from the European Union described the EU's In Vitro Diagnostic Medical Device Regulation (IVDR) launch and its impact on clinical laboratories. Policymakers and regulatory agencies cannot maintain pace with the ever-increasing complexity of laboratory medicine and specialty testing. Understanding diagnostic innovations, emerging issues that impact lab operations, and advocating for lab medicine are critical aspects of laboratory medicine practice.
2. Faculty discussed how policies as proposed in the IVDR and US FDA regulations are likely to affect laboratories' day-to-day resources, management, and operations. The session included an interactive panel discussion that provided attendees with practical knowledge of the effect of policies on lab operations, and how to be involved to ensure their labs function optimally within the confines of said regulations to provide the highest quality patient care.
3. A notification d.d. 22 November 2024 was received from the ADLM senior director on education (Dennis Harris): this session was chosen to be a key part of a new online course titled "Navigating FDA Oversight of LDTs: Insights and Implications from ADLM 2024," which will be available starting December 16, 2024.

D. ISMD conference in Graz, Austria, June 2024:

Critical implications of the IVDR for continuation of essential tests and for innovation in diagnostics

E. SKML conference in Ede, the Netherlands, 4th June 2024:

Does the EU IVDR 2017/746 present a suitable framework for safe and effective medical tests?

F. EFLM strategic conference in Padua, September 2024:

The In-Vitro Diagnostic Regulation 2017/746: time to scrutinize!?

G. RBSLM annual conference, Dolce la Hulpe, Brussels, 15 November 2024:

The In-Vitro Diagnostic Regulation 2017/746: time to scrutinize!

H. VDGH congress, Frankfurt, Germany, 27-28 November 2024: Auf dem Weg zur IVDR 2.0?

IVDR aus Anwendersicht. Beyond Analytics: Impact der IVDR auf die Gesamtprozesskette des laborbefundes.

In 2024 quarterly update **meetings took place with Medtech Europe** as well as numerous stakeholder meetings with the **European Commission** were attended. E.g. a phlebotomy in healthy individuals is seen as surgical intervention!

In 2024 the European Commission started several **TARGETED IVDR VALUATIONS** among all stakeholders and evaluated the IVDR fitness-for-purpose as well as the opportunities for improvement.

There are undistinguished problems with the knowledge level of the Notified Bodies and the IVD-industry, especially SMEs and newcomers, regarding clinical evidence generation and clinical study designs for medical tests! Transversal collaborations between EFLM WG TE and TF-ERA to mutually work on this are key. Other opportunities for collaboration have to be explored:

1. Likely also a role for EFLM C-accreditation to give insight at the European level into which tests are suboptimal;
2. Collaboration with IFCC SD is also key and for sure complementary.

Need for IVDR reform!?

A white paper with recommendations was put together with BMA in the lead, to provide input to EC on topics demanding IVDR reform.

Education and training!?

Regulatory science should be structurally embedded in the education of trainees.

Task Force - Preparation of Labs for Emergencies (TF-PLE)

The EFLM Task Force – Preparation of Laboratories for Emergencies (TF-PLE) was established on January 1, 2023, as part of the EFLM Strategic Plan 2022–2023. As with other Task Forces, this functional unit will transition into a Committee (C) in 2025. Currently, its activities are paused pending the enrollment of new full members. Reflecting on its past initiatives, the Task Force aimed to foster extensive discussion and develop a series of documents to help clinical laboratories and healthcare systems in Europe prepare for critical scenarios arising from various emergencies. Chaired by Prof. Giuseppe Lippi, the new C operates in line with the structure of other EFLM functional units, retaining all former Task Force members as expert consultants. Key achievements in 2024 included conducting a specialized survey on cybersecurity, with results published in the official journal of the EFLM Clinical Chemistry and Laboratory Medicine (Clin Chem Lab Med): „Lippi G, Cadamuro J, Danese E, Favaloro EJ, Favresse J, Henry BM, Jovicic S, Ozben T, Thachil J, Plebani M. EFLM Task Force Preparation of Labs for Emergencies (TF-PLE) survey on cybersecurity. Clin Chem Lab Med. 2024 Jul 4;63(1):e1-e2. doi: 10.1515/cclm-2024-0727“. Following the survey, the Task Force organized a joint meeting to develop recommendations for preventing and managing cyberattacks in clinical laboratories. These recommendations were also published in Clin Chem Lab Med: „Lippi G, Akhvlediani S, Cadamuro J, Danese E, García de Guadiana Romualdo L, Delacour H, Favaloro EJ, Favresse J, Henry BM, Jovicic S, Kütt M, Moreno Y Banuls L, Ozben T, Peretz A, Perovic A, Thachil J, Yucel D, Plebani M. EFLM Task Force Preparation of Labs for Emergencies (TF-PLE) recommendations for reinforcing cybersecurity and managing cyber-attacks in medical laboratories. Clin Chem Lab Med. 2024 Jul 17;63(1):27-34. doi: 10.1515/cclm-2024-0803“. In addition to these publications, a special session on cybersecurity was held during the 56th National Congress of SIBioC (Italian Society of Clinical Chemistry and Laboratory Medicine; Bologna, October 8–10, 2024). Prof. Lippi also delivered a lecture titled „Task Force (Committee): Preparation of Laboratories for Emergencies (TF-PLE)“ during a webinar organized by the Ukrainian Association of Clinical Chemistry and Laboratory Medicine, Challenges in the Work of Medical Laboratories in Ukraine During the War (November 7, 2024). Further, Prof. Lippi gave an interview titled Out of Technology, but Not Options for the journal Mbiomed, detailing the Task Force's activities (now C-PLE). Plans for new initiatives in 2025 will commence once the composition of the Committee is finalized.

Task Force - Direct-to-Consumer Testing (TF-DTCT)

Focus of the work in 2024 was the concept of patient / consumer self empowerment and shared decision making. The framework of in vitro diagnostics was scrutinzed so that patients' safety is guaranteed und their health is improved by the use of in vitro testing while loopholes trying to evade safety regulations can be closed.

The TF held seven Webex meetings and two hybrid meetings (in Dubai (May 28, 2024) and Padova (September 22, 2025)).

The work of this taskforce will continue in 2025 after the merger with WG-PFLM into the C-DCLTPE.

Invited lectures were delivered on May 28, 2024 (IFCC Worldlab, Dubai, UAE), September 5, 2025 (SSCC/SGKC, Zürich, CH), September 24, 2025 (EFLM Strategic Conference, Padova, IT), September 27, 2025 (ADLM, San Diego, US), October 4, 2025 (ÖQUASTA, Igls, AUT) and October 8, 2025 (SIBIOC, Bologna, IT).

Publication

Shih P, Sandberg S, Balla J, Basok BI, Brady JJ, Croal B, De Vos N, Karlsson M, Kedars P, Ozben T, Pijanovic M, Plebani M, Orth M. Direct-to-consumer testing as consumer initiated testing: compromises to the testing process and opportunities for quality improvement. Clin Chem Lab Med. 2024 Aug 14. doi: 10.1515/cclm-2024-0876. Epub ahead of print. PMID: 39141796.

MEETINGS

These are the EFLM live events that took place in 2024:

• EFLM Postgraduate Course - Dublin (IE), 2 February 2024

How to write a good scientific and professional article

in collaboration with the Association of Clinical Biochemists in Ireland

• EFLM Postgraduate Course - Helsinki (FI), 16-17 May 2024

Biostatistics in Laboratory Medicine

in collaboration with the Finnish Society of Clinical Chemistry

• EFLM Postgraduate Course - Tbilisi (GE), 12-13 September 2024

Biostatistics in Laboratory Medicine

in collaboration with the Georgian Laboratory Medicine Association (GLMA)

• 4th EFLM Strategic Conference - Padova (IT), 23-24 September 2024

A Vision to the future: value-based laboratory medicine

WEBINARS

EFLM has organized several Webinars during 2024, thanks to the new EFLM e-learning platform:

- 24/01/2024 - Hunting Unicorns. Digital Pathology Transformation of the Catalan Health Institute Network of 8 Hospitals. The DigiPatICS Project (Catalonia, Spain)
- 30/01/2024 - Immunology of sepsis: diagnostic and therapeutic challenges

- 15/02/2024 - MEET THE EXPERT: Analysis and interpretation of testing for antiphospholipid syndrome
- 20/02/2024 - Current trends in transplant immunology in the global village
- 05/03/2024 - Functional biomarkers of Sepsis immunosuppression
- 12/03/2024 - Chronic Stress and Exosomes as key players in precipitation and diagnosis of Alzheimer's disease
- 26/03/2024 - Role of the Clinical laboratory in the implementation of non-invasive tests for screening and diagnosis of MASLD
- 09/04/2024 - EV associated Biomarkers in Liquid Biopsies-How to identify valid microRNA Biomarker Signatures in circulating extracellular vesicles
- 23/04/2024 - Prioritizing patients' safety by elevating standards in our laboratory processes
- 07/05/2024 - Application of proteomics in biomarker discovery
- 09/05/2024 - MEET THE EXPERT Analysis & interpretation of cardiac markers and deciphering of High sensitive troponin
- 22/05/2024 - AI and digital Pathology implications on the Pathologists and the Pathology Laboratory
- 04/06/2024 - Role of pharmacogenomics in the individual response to therapeutic drugs
- 18/06/2024 - Male and female hypogonadism - laboratory workup
- 23/07/2024 - Between analyzer and laboratory medicine professional
- 17/09/2024 - Infrared Spectroscopy in the Modern Clinical Laboratory: A spectrum of opportunities
- 03/10/2024 - Post analytical procedures
- 08/10/2024 - Global coagulation testing - Global fibrinolysis testing
- 17/10/2024 - Web based Clinical Decision support tools
- 29/10/2024 - Hydrogen and methane breath tests in the service of the Gastroenterology Laboratory
- 07/11/204 - MEET THE EXPERT: M-Protein diagnostics: analysis and interpretation of protein electrophoresis of serum, urine and cerebrospinal fluid
- 12/11/2024 - An evaluation framework for effective and safe Laboratory Information Systems
- 19/11/2024 - The ejaculate – problems and promises from proteomics and other investigations
- 09/12/2024 - MEET THE EXPERT Interpretation of laboratory results on kidney function
- 17/12/2024 - Calprotectin: diagnostic potential, challenges in analytics and application in inflammatory disorders

PUBLICATIONS

Recommendations for European laboratories based on the KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease

Cavalier E, Zima T, Datta P, Makris K, Schaeffner E, Langlois M, Plebani M, Delanaye P, on behalf of the EFLM Task Group on Chronic Kidney Disease (TG-CKD)

Clin Chem Lab Med https://doi.org/10.1515/cclm-2024-1082

Systematic review and meta-analysis of biological variation data of urine albumin, albumin to creatinine ratio and other markers in urine

Aslan B, Carobene A, Jonker N, Galior K, Boned B, Marqués-Garcia F, Ricos C, Bartlett W, Coskun A, Diaz-Garzon J, Fernandez-Calle P, Gonzales-Lao E, Simon M, Sandberg S, Aarsand A K, on behalf of the EFLM Task Group for the Biological Variation Database (TG-BVD)

Clinica Chimica Acta 2024 https://doi.org/10.1016/j.cca.2024.120032

A comprehensive survey of artificial intelligence adoption in European laboratory medicine: current utilization and prospects

Cadamuro J, Carobene A, Cabitza F, Debeljak Z, De Bruyne S, van Doorn W, Johannes E, Frans G, Özdemir H, Perez S M, Rajdl D, Tolios A, Padoan A, on behalf of the EFLM Working Group on Artificial Intelligence (WG-AI)

Clin Cem Lab Med 2024 https://doi.org/10.1515/cclm-2024-1016

Point-of-care testing, near-patient testing and patient self-testing: warning points

Banfi G, Božič B, Cihan M, Pašalić D, Pennestrì F, Plebani M

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0525

Data flow in clinical laboratories: could metadata and peridata bridge the gap to new AI-based applications? An investigation on behalf of the EFLM Working Group on Artificial Intelligence (WG-AI)

Padoan A, Cadamuro J, Frans G, Cabitza F, Tolios A, De Bruyne S, van Doorn W, Elias J, Debeljak Z, Perez S. M, Özdemir H, Carobene A

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0971

The final part of the CRESS trilogy – how to evaluate the quality of stability studies

Cornes M, Vermeersch P, Simundic AM, Von Meyer A, Salek T, Meyer B, Costelloe S, De Guire V, Gomez-Rioja R, Cadamuro J, on behalf of the EFLM Working Group for the Preanalytical Phase (WG-PRE)

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0527

A vision to the future: value-based laboratory medicine

Plebani M, Cadamuro J, Vermeersch P, Jovičić S, Ozben T, Trenti T, McMillan B, Lowe C. R, Lennerz J, Macintyre E, Gabelli C, Sandberg S, Padoan A, Wiencek J. R, Banfi G, Lubin I. M, Orth M, Carobene A, Zima T, Cobbaert C. M, van Schaik R. H.N, Lippi G

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-1022

Direct-to-consumer testing as consumer initiated testing: compromises to the testing process and opportunities for quality improvement. An opinion paper from the EFLM DTCT-Taskforce

Shih P, Sandberg S, Balla J, Isbilen Basok B, Brady J. J, Croal B, De Vos N, Karlsson M, Kedars P, Ozben T, Pijanovic M, Plebani M, Orth M

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0876

Preservation of urine specimens for metabolic evaluation of recurrent urinary stone formers

Šálek T, Musil P, Vermeersch P, Marrington R, Dikmen Z. G, Poláchová R, Kipman U, Kouri T, Cadamuro J, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group Preanalytical Phase and Task and Finish Group Urinalysis

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0773

EFLM Task Force Preparation of Labs for Emergencies (TF-PLE) recommendations for reinforcing cyber-security and managing cyberattacks in medical laboratories

Lippi G, Akhvlediani S, Cadamuro J, Danese E, de Guadiana Romualdo L. G, Delacour H, Favaloro E. J, Favresse J, Henry B. M, Jovicic S, Kutt M, Moreno y Banuls L, Ozben T, Peretz A, Perovic A, Thachil J, Yucel D, Plebani M

Clin Chem Lab Med 2024 https://doi/10.1515/cclm-2024-0803

The biological variation of insulin resistance markers: data from the European Biological Variation Study (EuBIVAS)

Carobene A, Kilpatrick E, Bartlett A. W, Fernandez Calle P, Coskun A, Diaz-Garzon J, Jonker N, Locatelli M, Sandberg S, Aarsand K. A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0672

A standard to report biological variation data studies – based on an expert opinion

Bartlett WA, Sandberg S, Carobene A, Fernandez–Calle P, Diaz-Garzon J, Coskun A, Jonker N, Galior K, Gonzales-Lao E, Moreno-Parro I, Sufrate-Vergara B, Webster C, Itkonen O, Marques-Garcia F, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group for the Biological Variation Database, and Biological Variation Working Group

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0489

Outcome-based analytical performance specifications: current status and future challenges

Horvath A. R, Bell J.L. K, Ceriotti F, Jones R.D. G, Loh Tze P, Lord S, Sandberg S, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group Analytical Performance Specifications based on Outcomes

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0125

Applying the Milan models to setting analytical performance specifications – considering all the information

Jones R.D. G, Bell J.L. K, Ceriotti F, Loh T. P, Lord S, Sandberg S, Smith F. A, Horvath A. R, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group Analytical Performance Specifications based on Outcomes

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0104

The EFLM European Urinalysis Guideline 2023

Kouri T, Hofmann W, Falbo R, Oyaert M, Schubert S, Gertsen J, Merens A, Pestel-Caron M, on behalf of the Task and Finish Group for Urinalysis (TFG-U), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

Clin Chem Lab Med 2024 https:// doi/10.1515/cclm-2024-0070

The European biological variation study (EuBIVAS): Biological variation data for testosterone, follicle stimulating hormone, prolactin, luteinizing hormone and dehydroepiandrosterone sulfate in men

Itkonen O, Jonker N, Aarsand AK, Sandberg S, Diaz-Garzone J, Fernandez-Calle P, Coskun A, Bartlett WA, Locatelli M, Carobene A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation

Chimica Clinica Acta 2024 https://doi.org/10.1016/j.cca.2024.117806

Assessing post-analytical phase harmonization in European laboratories: a survey promoted by the EFLM Working Group on Harmonization

Zaninotto M, Agnello L, Dukic L, Akhvlediani L, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group on Harmonization

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0308

Recommendations for blood sampling in emergency departments from the European Society for Emergency Medicine (EUSEM), European Society for Emergency Nursing (EuSEN), and European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for the Preanalytical Phase. Executive summary

Garcia-Castrillo L, Cadamuro J, Dodt C, Lauwaert D, Hachimi-Idrissi S, Van Der Linden C, Bergs J, Costelloe S, Grossmann F, Koca A, Palomäki A, Ruiz J.L, Stonys R, Thorsteinsdottir T.K, von Meyer A, Vermeersch P, Alvarez M.C.A, Eker P, Golea A, Kurland L, Lippi G, Zhilenkova Y, Sehmi K

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2024-0059

Biological variation of inflammatory and iron metabolism markers in high-endurance recreational athletes; are these markers useful for athlete monitoring?

Diaz-Garzon J, Itkonen O, Aarsand AK, Sandberg S, Coskun A, Carobene A, Jonker N, Bartlett WA, Buño A, Fernandez-Calle P, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation

Clin Chem Lab Med 2024 https:// doi/10.1515/cclm-2023-1071

Biological variation estimates of Alzheimer's disease plasma biomarkers in healthy individuals

Brum WS, Ashton NJ, Simrén J, di Molfetta G, Karikari TK, Benedet AL, Zimmer ER, Lantero-Rodriguez J, Montoliu-Gaya L, Jeromin A, Aarsand AK, Bartlett WA, Calle PF, Coşkun A, Díaz-Garzón J, Jonker N, Zetterberg H, Sandberg S, Carobene A, Blennow K

Alzheimers Dement. 2024 https://doi.org/10.1002/alz.13518

Sex-related differences in within-subject biological variation estimates for 22 essential and non-essential amino acids

Coskun A, Carobene A, Demirelce O, Mussap M, Braga F, Sezer E, Aarsand AK, Sandberg S, Fernández Calle P, Díaz-Garzón J, Erkaya M, Coskun C, Nur Erol E, Dag H, Bartlett B, Serteser M, Jonker N, Unsal I, European Federation of Clinical Chemistry, Laboratory Medicine Working Group on Biological Variation, Task Group for the Biological Variation Database

Chimica Clinica Acta 2024 https://doi.org/10.1016/j.cca.2023.117632

Analytical performance specifications based on biological variation data – considerations, strengths and limitations

Sandberg S, Coskun A, Carobene A, Fernandez-Calle P, Diaz-Garzon J, Bartlett WA, Jonker N, Galior K, Gonzales-Lao E, Moreno-Parro I, Sufrate-Vergara B, Webster C, Aarsand AK, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Task Group for the Biological Variation Database

Clin Chem Lab Med 2024 https://doi/10.1515/cclm-2024-0108

EFLM Working Group accreditation and ISO/CEN standards on dealing with ISO 15189 demands for retention of documents and examination objects

Mesko Brguljan P, Thelen M, Bernabeu-Andreu F, Kroupis C, Boursier G, Vukasovic I, Barrett E, Brugnoni D, Lohmander M, Sprongl L, Vodnik T, Ghita I, Vanstapel F, Vaubourdolle M, Huisman W

Adv Lab Med 2024 https://doi/10.1515/almed-2023-0053

APS calculator: a data-driven tool for setting outcome-based analytical performance specifications for measurement uncertainty using specific clinical requirements and population data

Cubukcu HC, Vanstapel F, Thelen M, van Schrojenstein Lantman M, Bernabeu-Andreu FA, Mesko Brguljan P, Milinkovic N, Linko S, Panteghini M, Boursier G

Clin Chem Lab Med 2023 https://doi/10.1515/cclm-2023-0740

A comprehensive review on PFAS including survey results from the EFLM Member Societies

Ozben T, Fragão-Marques M, Tomasi A

Clin Chem Lab Med 2024 https://doi.org/10.1515/cclm-2023-1418

Snežana Jovičić, EFLM Executive Board Secretary

NAFCC

North American Federation of Clinical Chemistry and Laboratory Medicine

The NAFCC represents two North American organizations on the IFCC Executive Board (IFCCEB), the Association for Diagnostics and Lab Medicine (ADLM) and the Canadian Society of Clinical Chemists (CSCC).

Dr. David Grenache stepped down from the position of NAFCC representative at the end of December 2024, and Dr. Shannon Haymond was selected to replace him beginning in January 2025 and serving until December 2026.

The CSCC conducted its 2024 joint scientific meeting with the Société Québécoise de Biologie Clinique (SQBC) in Mont Ste-Anne, Québec, from June 16-19, 2024, and the ADLM held its Annual Meeting and Clinical Lab Expo from July 28-August 1, 2024.

ADLM and CSCC will jointly hold a meeting in Chicago, USA, from July 27-31, 2025.

Members of the NAFCC maintain memoranda of understanding with several national societies for the purposes of mutually beneficial education exchanges, partnerships that include the Biomedical Society of Zambia (BSZ), Confederación Latinoamericana de Bioquímica Clínica (COLABIOCLI), Kazakhstan Association of Medical Laboratory Diagnostics (KAMLD), Association for Laboratory Medicine (ALM), and Korean Society for Laboratory Medicine (KSLM).

Some regional events include the following:

- 2024 ADLM Middle East (November 23 – 24, 2024) Dubai, United Arab Emirates
- 2024 ADLM International CPOCT Symposium (September 25-27, 2024) San Diego, CA, US
- CSCC has provincial sections that hold annual conferences
- NAFCC members have offered 5 online courses, 13 certificate programs, 41 webinars.

Shannon Haymond, NAFCC Representative

IFCC FULL AND AFFILIATE MEMBERS' SOCIETIES REPORTS

Full Member Societies

ALGERIA
SOCIÉTÉ ALGERIENNE
DE BIOLOGIE CLINIQUE (SABC)

Introduction: The ALAM, Algerian Association of Medical Analysis Laboratories, has conducted numerous seminars throughout the year 2024, both in person and via webinars. This rich and dynamic activity has contributed to the promotion of better quality of care and closer patient follow-up.

Theme	*Date*	*Sujets traités*	*Observation*
Séminaire	13/01/2024	La loi sur la protection des donnéès personnelles.	Présentiel National
Journées de formation	31/01/2024 01/02/2024	Cours de biologie moléculaire	Présentiel National
Workshop	04/05/2024	Les hépatites virales	Présentiel National
Workshop	27/06/2024	Les hépatites virales	Présentiel National
Journée de formation	21/09/2024	Cours d'hémostase	Présentiel National
Séance de formation	07/05/2024	Marqueurs du traumatisme crânien léger	Présentiel National
Séance de formation	30/01/2024	Recherche d'agglutinines irrégulières: comment réduire le risque fœto- maternel	Webinaire
Séance de formation	06/02/2024	CMV chez la femme enceinte: Quel(s) examen(s) biologique(s)	Webinaire
Séance de formation	08/02/2024	PCR ADNr 16S universelle au service du diagnostic en Bactériologie	Webinaire
Séance de formation	13/02/2024	Test HPV : une question d'âge	Webinaire
Séance de formation	20/02/2024	Diabète gestationnel: qui dépister et comment	Webinaire
Séance de formation	27/02/2024	Syndrome hémorragique : de la clinique à la biologie	Webinaire
Séance de formation	18/04/2024	Arboviroses: sérologie ou PCR	Webinaire
Séance de formation	25/04/2024	Monocytose: faut-il s'inquiéter	Webinaire
Séance de formation	15/05/2024	Herpès chez la femme enceinte: faut-il toujours prescrire les IgM	Webinaire
Séance de formation	25/06/2024	Drépanocytose: de l'électrophorèse à la génétique	Webinaire
Séance de formation	27/06/2024	Maladies d'origine Génétique:Nouvelles perspectives de diagnostic clinique en 2024	Webinaire
Séance de formation	02/07/2025	Bilan de thrombophilie et anticoagulants: les bons réflexes	Webinaire
Séance de formation	09/07/2024	Syndrome des ovaires polykystiques (SOPK): comment ne pas passer àcôté	Webinaire
Séance de formation	11/07/2024	Le syndrome de Cushing: un défi diagnostique	Webinaire
Séance de formation	16/07/2024	Décryptage du Dépistage Prénatal Non Invasif (DPNI)	Webinaire

Séance de formation	23/07/2024	Syphilis chez la femme enceinte: les défis dudiagnostic	Webinaire
Séance de formation	19/09/2024	La maladie d'Alzheimer du point de vue de la Biologie...	Webinaire
Séance de formation	03/10/2024	Décryptage de la maladie cœliaque: pour un diagnostic efficace	Webinaire
Séance de formation	17/10/2024	Syndrome des antiphospholipides: quand les anticorps brouillent les pistes...	Webinaire
Séance de formation	21/09/2024	Bilan étiologique de la maladie veineuse thromboembolique	Webinaire
Séance de formation	05/11/2024	Perturbateurs endocriniens et grossesse : le dosage au service de la prévention!	Webinaire
Séance de formation	12/11/2024	Helicobacter pylori: les clés d'un diagnostic et d'un suivi efficace	Webinaire
Séance de formation	19/11/2024	Hyperhomocystéinémie: quelle place dans le bilan thrombophilie	Webinaire
Séance de formation	26/11/2024	Polymorphisme du gène de la MTHFR: quel impact sur la fertilité	Webinaire

ARMENIA
ASSOCIATION OF MEDICAL LABORATORY DIAGNOSTICS SPECIALISTS (AMLDS)

NATIONAL MEETINGS

Name of the meeting	***Date***	***Topic***
AMLDS Annual Report Meeting	11.01.2024	Report of activities for 2023, election of the new president and new members of the board, decision on changes in the Association's charter
AMLDS new chapter	01.03.2024	Registration and announcing the new AMLDS charter
Enews article, AMLDS	N4. April 2024	Topic-«Association of Medical Laboratory Diagnostics Specialists (AMLDS) – Armenia A newly elected Executive Board to commence its activities».
International Day of Laboratory Diagnostic Specialists, AMLDS	15.04.2024	An informal meeting, entertainment event for AMLDS members. Yerevan, Armenia.
Credited conference devoted to the World Day of Immunology, AMLDS	29.04.2024	Topic-«Current issues of immunology».Yerevan, Armenia
IFCC World Lab 2024	26/30.05.2024	Participation AMLDS board members in 25th biennial meeting of council. Attending IFCC scientific programs and exhibition. Dubai. UAE
Signing of memoran-dum	25.06.2024	Signing of memorandum between the two associations, AMLDS and «Association of Biomedical Equipment Professionals». Yerevan, Armenia
Credited conference dedicated to he-mostasis problems, AMLDS&AMAS LLC	18.07 2024	Topic-« Hemostasis problems and modern solutions» Yerevan, Armenia
Series of Credited scientific seminars &workshops, AMLDS&AMAS LLC	10.08.2024	Topic-« Integration of ISO standards, regulation of laboratory activities in Armenia» Gavar, Armenia
Series of Credited scientific seminars &workshops, AMLDS&AMAS LLC	24.08.2024	Topic-« Integration of ISO standards, regulation of laboratory activities in Armenia» Goris, Armenia
Series of Credited scientific seminars &workshops, AMLDS&AMAS LLC	07.09.2024	Topic-« Integration of ISO standards, regulation of laboratory activities in Armenia» Dilijan, Armenia
Series of Credited scientific seminars &workshops, AMLDS&AMAS LLC	21.09.2024	Topic-« Integration of ISO standards, regulation of laboratory activities in Armenia» Yerevan, Armenia
Series of Credited scientific seminars &workshops, AMLDS&AMAS LLC	13.10.2024	Topic-« Integration of ISO standards, regulation of laboratory activities in Armenia» Gyumri, Armenia
Credited conference dedicated to microelements, AMLDS& Armenian Association of Osteoporosis	23.10.2024	Topic-«Microelements and human health» Yerevan, Armenia
Series of Credited scientific seminars &workshops, AMLDS&AMAS LLC	27.10.2024	Topic-«Integration of ISO standards, regulation of laboratory activities in Armenia». Yerevan, Armenia
Signing of memorandum	15.12.2024	Signing of memorandum between the two associations, AMLDS and «Association for Bioelement Research and Health Care». Yerevan, Armenia
Enews article, AMLDS	N12, December 2024	Topic-«Integration of ISO standards, regulation of laboratory activities in Armenia»
Participation in different workshops by collaboration with MoH, NIH, NCDC and YSMU- department laboratory medicine	N13, whole year	1. Revision of requirement of licensing activities in medical laboratories field. 2. Categorization of laboratories from the least to the complex testing. 3. Developing of In Vitro Diagnostic Devices Regulation. 4. Revision of medical laboratory specialists job description.

EDUCATION

QMS implementation principles
2. Challenges in Preanalytics
3. Quality and basic statistics
4. Practice seminar related to POC testing

REGIONAL MEETING

Name of the meeting	***Date***	***Topic***
Participation to KDL Weekend	November -2-3 2024	AMLDS+AAML+Russian Federetion of LabMedicine (FLM)

AUSTRALIA & NEW ZELAND

AUSTRALASIAN ASSOCIATION FOR CLINICAL BIOCHEMISTRY AND LABORATORY MEDICINE (AACB)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
RCPA AACB Chemical Pathology Course	5-10 February 2024	Chemical Pathology Course
AACB-RCPA Harmonisation Workshop	24-25 July 2024	Towards pathology harmonisation
Roman Lecture	July – Nov 2024	Evidence-based laboratory medicine – from essentialism to consequentialism
AACB 61st Annual Scientific Conference	31 Oct – 3 November 2024 (part of the 17th APFCB Congress)	Laboratory Medicine, Bridging Personalised Care and Public Health

EDUCATION

- RCPA-AACB Chemical Pathology Course –February 2025 – covered AACB Education curriculum topics for both the AACB and Royal College of Pathologists Australasia.
- Branch-based scientific events held throughout the year, either face-to-face or in webinar format.
- Roman Lecture series – Prof Andrea Rita Horvath provided presentations at venues across Australia for AACB Members and other interested members of the laboratory medicine community.
- AACB Virtual Study Group 2024 ran 20 very successful online tutorials between February and November for AACB Members.
- AACB Virtual Journal Club 2024 ran a number of successful online sessions between February and November.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
17th APFCB Congress	31 Oct – 3 November 2024	Laboratory Medicine, Bridging Personalised Care and Public Health

REGIONAL RELATIONS

AACB hosted the 17th APFCB Congress in Sydney, 31 October to 3rd November 2024. https://apfcbcongress2024.org.
The 17th APFCB Congress was an overwhelming success, attracting over 900 attendees over its four-day duration. The event featured a dynamic and comprehensive program, which included four distinguished plenary speakers, 75 invited speakers, four pre-congress workshops, a number of “Meet the Expert” breakfast sessions, and 300 accepted posters, creating a rich and engaging learning environment. Each day offered a variety of activities, from the pre-congress workshops, opening ceremony, concurrent sessions, oral presentations, posters, exhibition, congress dinner, and closing ceremony. The congress also fostered inclusivity, offering reduced registration fees for retired members, students, and those from low-income countries. Additionally, 36 scholarships were awarded by APFCB, AACB, and the congress itself, enabling more individuals to participate. This successful event exemplified the global collaboration and knowledge-sharing that the APFCB Congress is known for.

Conferenze highlights
- 905 Registrations
- 36 Scholarship Recipients
- 4 Plenery Speakers
- 28 Accepted Orals
- 300 Accepted Posters (3 Sessions)

Organising Committee
- Helen Martin - Chair
- Lisa King
- Tony Badrick (APFCB, Chair, Scientific Program Committee
- Fernando San Gil
- Graham Jones
- Ronda Greaves
- Woei- horng Fang

PCO
- ICMSA

AACB Members contributing to APFCB

APFCB Executive Board	
Tony Badrick	APFCB President Patient Based Real Time Quality Control Systems in Clinical Laboratories Working Group Working Group on Patient Based Quality Control
Samuel Vasikaran	Vice President
Tze Ping Loh	Chair, Scientific Committee
Ronda Greaves (Chair)	Paediatric Clinical Biochemistry - Mass Spectrometry Harmonisation Working Group Mass Spectrometry harmonization working group
Kay Weng Choy	Working Group on Clinical Decision Support

INTERNATIONAL RELATIONS

AACB Members contributing to IFCC in 2024	
	COMMITTEES:
Ronda Greaves	ETD Executive Committee
Ronda Greaves	Emerging Technologies in Paediatric Laboratory Medicine (C-ETPLM)
T. Badrick	Traceability in Laboratory Medicine (C-TLM)
	WORKING GROUPS:
Ronda Greaves Brian Cooke Corey Markus Tze Ping Loh Rosita Zakaria	Method Evaluation Protocols (WG-MEP)

Lindsey Mackay Ronda Greaves Mercy Thomas	Neonatal Bilirubin (WG-NB) in cooperation with IFCC Scientific Division – SD
Ronda Greaves	eJIFCC (WG-eJIFCC)
L Cullen	Committee on Clinical Applications of Cardiac Bio-Markers (C-CB)
G Jones	Standardisation of Albumin Assay in Urine (WG-SAU) - in collaboration with NIDDK
S Vasikaran	Standardization of Bone Markers Assays (WG-BMA) in collaboration with IOF
V. Vilaylath	Corresponding Member: Committee on Internet and Digital Communications (C-IDC)

ADDITIONAL INFORMATION

The year 2024 saw:

- Tina Yen finished her term as AACB Past President. Tina stepped down from the Executive after many years serving on the AACB Executive.
- Ronda Greaves was elected as President Elect.
- In 2024, AACB became a Company Ltd by Guarantee.

BELGIUM
ROYAL BELGIAN SOCIETY
OF LABORATORY MEDICINE (RBSLM)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
The Non-infectious Serology Symposium (organization: Royal Belgian Society of Laboratory Medicine in cooperation with Sciensano and the NIS expert committee)	March 8 21024	Symphony opf the heart
48th Annual Meeting	14 -15 November 2024	A Neurological Journey: Brain Teasers for Laboratory Medicine

ADDITIONAL INFORMATION

We prepare the next EFLM meeting in Brussels 2025

NATIONAL MEETINGS

On March 8 2024, the Non-infectious Serology Symposium took place (organization: Royal Belgian Society of Laboratory Medicine in cooperation with Sciensano and the NIS expert committee) at the Bruges Meeting & Convention Centre.

The Royal Belgian society for laboratory medicine held its 48th Annual Meeting on 14th to 15th November 2024 in La Hulpe (near Brussels). The topic this year was set as "A Neurological Journey: Brain Teasers for Laboratory Medicine". Over 265 registrtaions were recorded.

Another major activity of the society was the preparation of the 26th IFCC-EFLM EUROMEDLAB Congress of Clinical Chemistry and Laboratory Medicine (which well also served as 49th Annual Meeting of the Royal Belgian Society of Laboratory Medicine in Brussels which will be hosted by the RBSLM society (18 - 22 May 2025 in Brussels).

BOLIVIA
SOCIEDAD BOLIVIANA
DE BIOQUIMICA CLINICA (SOBOBIOCLI)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
1st national meeting of the presidents of the departmental branches of the bolivian society of clinical biochemistry	Cochabamba – Bolivia 05/01/2024	• Of the national executive council of the bolivian society of biochemistry. • Schedule of activities 2024. • Bolivian continuing education program (proboeco). • Ordinary national congress – santa cruz headquarters • Legal entity report • Bolivian society of clinical biochemistry. • Laboratory accreditation program (proboacrelab) • Update of the strategic plan of the bolivian society of clinical biochemistry 2020 – 2027. • Sobobiocli scholarship 2024 • Miscellaneous
Launch of the sobobiocli scholarship 2024	Cochabamba – Bolivia 05/02/2024	• Towards pathology harmonisation

National meeting of presidents of the departmental entities of bolivia "national consultative sobobiocli 2024" cochabamba	Cochabamba – Bolivia 19 – 20 de junio 2024	• Laboratory accreditation program bolivia. • Participation of 10 bolivian laboratories in the ifcc pilot program on ifcc tf-glq during the 2024 management. • Analysis and review of new regulations for clinical laboratories – report. • Presentation of the new computer application for the registration of members of the bolivian society of clinical biochemistry – sobobiocli provision to each branch. • Registration report for the latin american congress of clinical biochemistry colabiocli 2024 – cartagena de indias – Colombia. • Miscellaneous
Review of the laboratory accreditation manual in Bolivia ma 2 bo	Tarija – Bolivia 3 al 31 de marzo 2023	• Greement with the argentine biochemical foundation 2024 – 2026 to develop the laboratory accreditation program in bolivia. Through the laboratory accreditation program of the argentine biochemical foundation (pal) and the bolivian laboratory accreditation program (proboacrelab). • Review and approval of the laboratory accreditation manual in Bolivia
Launch of the bolivian laboratory accreditation program with the ma 2 bo manual	Cochabamba – Bolivia 01 de abril 2024	• Delivery of quality certificates for accredited laboratories to five laboratories in the country as laboratories accredited by manual ma 2 bo within the pilot program for laboratory accreditation in bolivia. • National course on laboratory accreditation. Speaker; dr. Carlos Peruzzetto
Quality control in quantitative tests	16 Y 17 mayo 2024	• Fee: Dr. Beatriz varela
Xv julias sobobiocli scientific conference la paz – Bolivia	11 Al 13 de julio 2024	• Speakers vlp ifcc - Sobobiocli
Autoanticuerpos en el laboratorio de autoinmunidad	22 Y 23 de agosto 2024	• Fee: Dr. Fernando Antunez - Uruguay

EDUCATION

- Preparation of training activities schedule for the bolivian continuing education program (proboeco)
- Agreement for support of the latin american confederation of clinical biochemistry (colabiocli)
- Agreement for support of the american association of clinical chemistry (aacc)

INTERNATIONAL RELATIONS

- International federation of clinical chemistry (ifcc) – latin american working groups (wg-iant)
- American association of clinical chemistry (aacc) - latin american working group
- Latin american confederation of clinical biochemistry (colabiocli) and national representations of latin America.
- Fundaccion bioquiímica Argentina
- Relationship between the brazilian society of clinical analysis (sbac) and the national quality control program (pncq)
- Permanent relationship with the international federation of clinical chemistry (ifcc), the spanish society of clinical chemistry (seqc)

REGIONAL RELATIONS

- Ministry of health and sports of bolivia.
- National coordination of laboratories – conalab.
- Scientific societies of medicine

ADDITIONAL INFORMATION

- International federation of clinical chemistry (ifcc) – latin american working groups (wg-iant)
- American association of clinical chemistry (aacc) - latin american working group
- Latin american confederation of participation of 10 bolivian laboratories in the ifcc pilot program on ifcc tf-glq during the 2024 management.
- Participation of Bolivia with a delegate in the 1st latin american meeting of the “latin american network of entities training biochemical professionals and equivalent titles in latin america and the caribbean” – red biolac natal – Brazil
- Participation of Bolivia xxvi latin american congress of clinical biochemistry colabiocli 2024 cartagena de indias - Colombia.
- Participation of bolivia ordinary assembly of the latin american confederation of clinical biochemistry colabiocli 2024 cartagena de indias - Colombia
- Participation of bolivia with a delegate in the 3rd latin american conference of young clinical laboratory professionals. Colabiocli 2024 cartagena de indias, Colombia.

CANADA
CANADIAN SOCIETY OF CLINICAL CHEMISTS (CSCC)
SOCIETÉ CANADIENNE DE CLINICO-CHIMISTES

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
CSCC Annual Conference 2024	June 16-19, 2024	CSCC Annual Meeting held jointly with La Société québécoise de biologie clinique (SQBC) Mont Sainte-Anne, Quebec
Upcoming meeting in 2025: CSCC Annual Conference	July 27-31, 2025	CSCC Annual Meeting held jointly with the Association for Diagnostics & Laboratory Medicine (ADLM) Chicago, Illinois, USA
Upcoming meeting in 2026: CSCC Annual Conference	May 3-6, 2026	CSCC Annual Meeting and 60th Anniversary of the CSCC, Halifax, Nova Scotia

EDUCATION

2024 Travelling Lectureship Series

Speaker: Emily K. Sims, MD, MS, Associate Professor of Pediatrics, Indiana University School of Medicine; Assistant Director, Wells Center for Pediatric Research; Associate Director, IU Medical Scientist Training Program, USA

Topic: Shifting Paradigms: It’s Time to Change the Way We Diagnose and Treat Type 1 Diabetes

Dr. Sims delivered her lectures to a number of different sites across Canada, both in-person and virtually, during Fall 2024.

The lectureship is sponsored by Bio-Rad Laboratories

CSCC Webinar Lectureship on Critical Care Medicine
Speaker: Ashraf Kharrat, MD, MSc, Staff Neonatologist, Mount Sinai Hospital; Assistant Professor in Paediatrics, University of Toronto, Toronto, Canada
Topic: Neonatal Sepsis: Integrating Hemodynamic Assessment and Biomarker Evaluation for Optimal Care
November 19, 2024
Lectureship sponsored by Roche

QuidelOrtho Industry Workshop
Speakers: Dr. Françoise Harlow, Consultant Obstetrician and Maternal Medicine Lead, East of England Regional Maternal Medicine Network, Norfolk and Norwich University Hospital, UK
Topic: Triage® PLGF test clinically validated for the urban and rural laboratory settings
April 24, 2024
Webinar sponsored by QuidelOrtho

2023-24 Education Roundtable Webinar Series
17 CSCC "Education Roundtables" in webinar format were held twice a month from September 2023 to June 2024. Over 100 participants attend each session.

2024-25 Education Roundtable Webinar Series
17 CSCC "Education Roundtables" in webinar format will be held twice a month from September 2024 to May 2025. Over 100 participants are anticipated to attend each session.

Special Interest / Working Groups
CSCC has 12 special interest / working groups which are communities with an interest in advancing a specific area of knowledge, learning, or technology where members cooperate to affect or to produce solutions within their particular field. The activities usually consist of communication between conferences and informal sessions within the CSCC conference. These groups also develop position statements and guidelines, and present educational webinars. In 2024, a new special interest group on Data Analytics was lauched.

Leadership In Quality Management Certificate Program
The purpose of this Program is to bring Clinical Biochemists, as laboratory leaders, to a level required to provide competent leadership and oversight to the quality management systems (QMS) in their laboratory. The certificate Program is presented as an on-line course in quality management. CSCC trainee members are offered the option to register in the program at no charge. This event is an accredited group learning activity as defined by the CACB/CSCC Professional Development Program.
Participants have two years to complete the program.

CACB Professional Development Program
The Maintenance of Competence Committee oversees the continuing professional development (PD) program designed by the Canadian Academy of Clinical Biochemistry to encourage and support the lifelong learning needs of its Fellows and other healthcare professionals who are in the practice of clinical chemistry. The program uses accreditation of continuing professional development events, establishes an ongoing PD program for continuing education credits, and conducts audits of PD credit submissions as a means of meeting this goal.

Clinical Biochemistry Journal
CSCC is the owner of the scientific journal Clinical Biochemistry, which is published by Elsevier. There are 12 volumes per year and the website is:
https://journals.elsevier.com/clinical-biochemistry

Clinical Chemistry Training Programs
The Canadian Academy of Clinical Biochemistry has accredited eight Postdoctoral Training Programs in Clinical Chemistry across Canada: University of Alberta, University of Calgary, University of Saskatchewan, University of Toronto, McMaster University, Université de Montréal, University of Manitoba, and Memorial University of Newfoundland. These programs are directed toward acquiring professional competence as well as a small research complement.

Clinical Chemistry Knowledge (CliCK) Study Tool
CSCC launched the CliCK Study Tool, a collection of Anki flashcard decks of short questions and answers, including several topics in laboratory medicine and clinical chemistry. The Anki software incorporates an evidence-based educational approach to recall information and is being specifically used in medical education and endorsed by education experts due to its effectiveness.

Support for Trainess and Young Scientists
CSCC provides support and professional encouragement for Trainees and Young Scientists, such as travel grant funding and a special reception at the annual conference. CSCC also provides Trainee Elective Visit Grants which support short-term elective visits to other labs to provide lab medicine trainees with a unique opportunity to augment their skill sets.

The Lab Report Podcast
CSCC has a Podcast program and in 2024 five podcasts were produced.
https://cscc-sccc.ca/education-scientific-affairs/the-lab-report-podcast/

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
Ontario Society of Clinical Chemists (OSCC) 2024 Annual Meeting	October 10-11, 2024 Toronto, Ontario	Hosted and planned by the Ontario regional society of CSCC
Alberta Society of Clinical Chemists (ASCC) 2024 Annual Meeting	October 18, 2024 Virtual	Hosted and planned by the Alberta regional society of CSCC

REGIONAL RELATIONS

CSCC has 8 Provincial Sections – British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, and Newfoundland & Labrador. Each Section holds its own meetings and regional conferences. The Sections report annually to the Society Council. A Provincial Grant is available for each section to help fund their activities.

CSCC held its annual conference as a joint meeting with La Société québécoise de biologie clinique (SQBC) in 2024 in Mont Sainte-Anne, Quebec.

INTERNATIONAL RELATIONS

In 2024 CSCC hosted an in-person consensus meeting of the IFCC Working Group Laboratory Errors and Patient Safety (WG-LEPS) to update international guidelines on Quality Indicators monitoring. CSCC received the IFCC-Abbott Visiting Lecturer Programme (VLP) funding to organize a symposium: "IFCC Expert Insights on Quality improvement in Laboratory Medicine and Patients' Safety".

CSCC will hold its annual meeting jointly with the American Association for Diagnostics & Laboratory Medicine (ADLM) in 2025 in Chicago, USA.

CSCC paid the IFCC membership dues of the Cuban Society.

CSCC, with ADLM, is a member of the North American Federation of Clinical Chemistry and Laboratory Medicine (NAFCC) of IFCC. The NAFCC is represented at the IFCC Executive Board meetings.

There are several Canadian members on IFCC committees and each of these members is asked to provide a report to CSCC Council at least annually.

ADDITIONAL INFORMATIONS

The CSCC has diverse representation on external professional groups, including IFCC, ADLM, EFLM, the Canadian Standards Association, and the JCTLM Working Group for Traceability, Education and Promotion. Additionally, CSCC participates in national bodies that advance public interests where shared aims exist with laboratory medicine including Choosing Wisely Canada, LabCanDx, and ToxLRN (Toxicology Laboratory Response Network).

CSCC Provides support and professional encouragement for Trainees and Young Scientists, such as travel grant funding and a special reception at the annual conference. CSCC also provides Trainee Elective Visit Grants which support short-term elective visits to other labs to provide lab medicine trainees with a unique opportunity to augment their skill sets.

CSCC Publishes a bi-monthly newsletter.

CHILE
SOCIEDAD CHILENA DE QUÍMICA CLÍNICA (SCHQC)

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
XXI Congreso Chileno de Quimica Clinica y Ciencias del Laboratorio	21-22 August 2024	Artificial Intelligence Applied to Precision Medicine from the Clinical Laboratory

EDUCATION

Pre-congress course:

- Rol del laboratorio clinico en medicina regeneratiava. Dr. Alicia Rinaldi, 20 August 2024
- Actualizacion clínica y morfológica en el análisis de sedimento urinario. Dr. Fiorella Anghileri. 20 August 2024
- Excelencia operacional aplicado al laboratorio clínico. Dr. Claudio Suarez, 20 August 2024

IFCC Live Webinar: Future Challenges of Laboratory Medicine: Maternal thyroid profile predicts gestational Diabetes Mellitus (GDM) using Machine Learning Dr. Enrique Guzman. 18 September 2024
Webinar: Implementación de examenes ajustado a estrategias: Antianticuarpos antinucleocitoplasmatico. Dr Carolina Valenzuela. 30 April 2024
V Conversatorio COLABIOCLI: Enfermedades autoinmunes: Una mirada desde el diagnostico laboratorial. Dr. Carolina Valenzuela. 14 May 2024
Webinar Colabiocli: Indicadores de Calidad: Diseño, Interpretación y Aplicación en el Laboratorio Clinico. Dr. Leticia Luna, 21 May 2024
Webinar COLABIOCLI: Grupo de trabajo Autoinmunidad. Dr. Carolina Valenzuela, 17 June 2024

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
XXVI Congreso Latinoamericano de Bioquimica Clinica, Cartagena, Colombia	3-6 October 2024	Lecturer: Dr.Leticia Luna, Natalia Serrano and Eduardo Aranda
XII Congreso Argentino de Calidad en el Laboratorio Clinico	6-8 November 2024	Speaker: Dr. Carolina Velenzuela

REGIONAL RELATIONS

- COLABIOCLI (Confederación Latinoamericana de Bioquímica Clínica)
- APTM (Asociación Panamericana de Tecnología Médica)
- WG Pre Analytic Phase -LATAM COLABIOCLI Eduardo Aranda (member) and Maria E. Arredondo (member)
- WG Accreditation Management COLABIOCLI Leonardo Aguirre (member) and Leticia Luna (corresponding member)
- WG Young Scientists Medical Laboratory COLABIOCLI Natalia Serrano (member)
- WG New paradigms and trans disciplines in the clinical laboratory COLABIOCLI Enrique Guzman (member)
- WG Ethics COLABIOCLI Carlos Fernandez (member)

INTERNATIONAL RELATIONS

- IFCC C-RIDL Marcelo Leon (corresponding member)
- IFCC EMD C-CMBC Cecilia Tapia (corresponding member)
- IFCC National representative Eduardo Aranda

COLOMBIA
COLEGIO NACIONAL DE BACTERIOLOGIA (CNB)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
XXVI Latin American Congress of Clinical Biochemistry and XXII International Congress of the National College of Bacteriology	3 to 6 October 2024	COLABIOCLI - CNB National College of Bacteriology

REGIONAL RELATIONS

The XXVI Latin American congress of clinical chemistry and XXII International Congress of the National College of Bacteriology was held from October 03 to 06 of 2024 in the Cartagena City, Colombia, called “the heroica” for its history and culture. A beautiful city, located in the Caribbean cost of Colombia, which was receive nearly 2.000 participants including attendees, speakers, special guest, exhibitors from commercial companies and delegates from relevant organizations of Bacteriology and Laboratory Medicine at Nacional, Latin America and world level that have been part of this congress.

We received attendees from more than 30 countries who witnessed an excellent academic agenda enjoying conferences, workshops, symposiums, as well as cultural exhibitions, integrations, social and sports activities, and fantastic commercial samples where science and the laboratory was united by a single Health. In Addition, parallel events to the congress were carried out such as: The Meeting of students of Bacteriology and clinical Laboratory of the Caribbean region, the 1st Latin American forum of Young Scientifics of the clinical Laboratory and the II Latin American and Caribbean meetings of academic and professional entities - VII forum of academic entities forming Biochemistry professionals and equivalent titles

The Latin American Confederation of Clinical Biochemistry (COLABIOCLI) and the National College of Bacteriology (CNB) joined forces in an outstanding event that captivated attendees, arousing considerable interest in the various professional topics related to the laboratory. Throughout the day, a variety of topics ranging from advances in diagnostic techniques to new perspectives in clinical research were addressed, allowing participants to update their knowledge and share experiences. The synergy between the two organizations fostered an enriching atmosphere, culminating in positive feedback that highlighted the relevance of discussing and disseminating up-to-date information in the field of biochemistry, bacteriology and laboratory medicine. This event not only strengthened the professional community, but also fostered a space for collaboration that will benefit the development of more efficient practices in the region's laboratories in the short, medium and long term. We hope that Colombia will continue to be a favorable scenario to gather around laboratory medicine, health and science at a global level where “the only risk is that you want to stay”

INTERNATIONAL RELATIONS

We would like to acknowledge and deeply thank the valuable support of the IFCC, their collaboration was fundamental to the success of the congress. We are very honored that they chose Colombia as the venue for the IFCC board meeting.

The three symposia with which the IFCC supported the congress were rewarding experiences for the attendees who appreciated the knowledge shared by the professors in the areas of quality management and science, technology and innovation. In addition, we would also like to express our sincere thanks for the support with the VLP programme, the professors who visited us thanks to this programme addressed topics that were exceptional and of great value to all attendees.

It was a privilege to share experiences and learnings with all the Board members as well as the symposium speakers who left a positive impression on all attendees; the input, knowledge and experiences they shared were invaluable to those who participated. Special gratitude to the IFCC board members who actively participated in the conferences, and special thanks to Dr. Tomris for her willingness and participation in the conferences of the event.

CROATIA
CROATIAN SOCIETY OF MEDICAL BIOCHEMISTRY AND LABORATORY MEDICINE (HDMBLM)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
11th Congress of the Croatian Society of Medical Biochemistry and Laboratory Medicine with International Participation, Vodice, Croatia	9.–12.10.2024	Providing an overview of the hot topics and novel technologies in the field of laboratory medicine (program-11thcongress-final.pdf)
35rd Symposium of the Croatian Society of Medical Biochemistry and Laboratory Medicine	11.5.2024	Laboratory Medicine and Sport - Where Are We Today

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
Branch of Dalmatia	15.12.2023	What do we expect from technology in the clinical laboratory of the future? Experiences with testing and introduction of new technology
	06.10.2023	(Pato)fiziologija ronjenja povezana s hiperoksijom
	26.04.2023	Preeclampsia today
Branch of the Istria, Primorje-Gorski Kotar and Lika region	28.11.2023	How to reduce the impact of stress on the development of the disease
	11.10.2023	How to test the stability of the analyte?
	20.04.2023	Challenges of privatization of MBL in primary health care
Branch of Zagreb	29.11.2023	Predictive equations for estimating glomerular filtration rate
	11.10.2023	UpToDate Clinical Guidelines Database
	03.05.2023	Insulin resistance
	03.04.2023	Pre-analytical preparation for specialist tests
Branch of Slavonia and Baranja	21.12.2023	Microbiota - the power of bacteria in preserving health
	29.11.2023	Clinical application of Rotem Sigma

INTERNATIONAL RELATIONS

CSMBLM members are active in CSMBLM voluntary activities in EFLM and IFCC also. More than 15 members are full/corresponding members or chairs of different EFLM and IFCC Committees and Working/Task Groups. Members are active in live and virtual meetings, and they are participating in educational and scientific activities. The calls for new members are regularly distributed to all CSMBLM members by mass mailing and posted on the official web page and on the official Facebook page. Moreover, CSMBLM is distributing in emails all organized activities under EFLM and IFCC auspices (congresses, webinars…).

ECUADOR
SOCIEDAD ECUATORIANA DE BIOQUIMICA CLINICA (SEBIOCLI)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
National Assembly	March, 9, 2024	Election of the new board of directors for the period 2024-2026.
First National Directory	April 12	Designation of international representations
National Assembly	April 20	Planning activities 2024
Second National Directory	May 5	Difficulties faced by Bq professionals in the country and planning responses
National Assembly	September 3	Review of activities, reports and decision making

EDUCATION

SEBIOCLI
Webinars:

Global Med Lab Week 2024:

Topic: TOPIC 1 EPIDEMIOLOGY AND CONTROL OF DENGUE AND CHAGAS
Dr. Amadeo Sáez Alquezar. Brazil.
TOPIC 2 EXPLORING THE BIOCHEMISTRY OF THE FUTURE
Dra.Maria Cecilia López. Argentina
Date and Time: Thursday, April 18, 2024 at 6:00 p.m. or 6 p.m. until 8:00 p.m.Time Ecuador.

Global Med Lab Week 2024:

Topic 1 DIAGNOSTIC CRITERIA FOR DIABETES ADA 2024
Dr. Luis Figueroa M. Perú
Topic 2. SPECIAL CYTOCHEMICAL STAINS AS AN AID IN THE DIAGNOSIS
OF MYELOID AND LYMPHOID LEUKEMIAS
Dr. Enrique de Jesús González. Mexico
Date and Time: April 27. 4 pm Ecuador.

SEBIOCLI Pichincha
Webinar:
- Topic: 9 steps of the quality route
- Date: May 22, 6 pm Ecuador
- Dr. Yuri Rodriguez. Colombia

Webinar:
Topic:Liquidate, grow or maintain the laboratory according to my risk. How do I know?
- Date: June 27, 6 pm Ecuador
- Dr. Maria del Carmen Pasquel. Ecuador

Webinar:
Topic: Helicobacter pylori in stool, IgG and IgM antigens and antibodies, explanation of their correct interpretation and reporting
- Date: July 25, 6 pm Ecuador
- Dr. Michelle Sanchez. Chile
- City: Quito. In Person

Topic: International Symposium on Quality, from theory to practice
- Place: Hotel La Quinta. Quito
- Date: September 19 to 21+

Speakers
- Dr. Amadeo Saez. Brasil
- Dr. Yuri Rodriguez. Colombia
- Dr. Luis Figueroa. Peru
- Dr. Maria del C, Pasquel. Ecuador

Webinar:
Topic: Interpretation and analysis of internal quality control. Analysis and interpretation of EQAs.
Workshop on evaluating analytical performance through the Internal Control and EQAs program

- Date: November Decembe, 2024.
- Dr. Yuri Rodriguez. Colombia

SEBIOCLI Nucleo el Oro

Topic Part 1: Quality Assurance Strategies. Good Practices in Clinical Laboratories

- Date: June 27, 28, 5 pm.
- City: Machala
- Speakers:
- BQ. Daysi Argurto
- Dr. Fabricio Loayza
- Dr.Paul Jaramillo
- Ing. Ana Amparo Jaen
- Dr. Celso Fernando Jarrin

Topic Part 2: Quality Assurance Strategies. Good Practices in Clinical Laboratories

- Date: September 23. 5 pm.
- City: Machala
- Speakers: Dr. Yuri Rodriguez. Colombia, Dr. Maria del C. Pasquel. Ecuador

SEBIOCLI Núcleo Guayas

Topic: The Quality Route in the Clinical Laboratory

- Date: September 24. 4 pm.
- City: Guayaquil
- Speaker: Dr. Yuri Rodriguez. Colombia

Topic:Equipment Qualification, what is it and how it is applied in the clinical laboratory, how should I do it?

- Date: September 24. 6 pm.
- City: Guayaquil
- Speaker: Dr. Maria del C. Pasquel. Ecuador.

REGIONAL MEETINGS

Name of the meeting	Date	Society's contribution for the meeting
WorldLab 2024 Dubai Ibero- Working Group on Nomenclature and Translation (WG-IANT) American	May 27	1st meeting, in person. SEBIOCLI participated with Dr- Maria Pasquel
Cartagena de Indias, Colombia VI CONGRESO LATINOAMERICANO DE BIOQUIMICA CLÍNICA II CONGRESO INTERNACIONAL DEL COLEGIO NACIONAL DE BACTERIOLOGÍA	October 3,4,5,6	Pre-congresses: Pre-analysis Dr. Patricia Ochoa Accreditation. Dr. Thamara Andrade
	October 3	SEBIOCLI : Opening ceremony. BqC. Patricia Erazo.
	October 4	I Forum for Young Professionals in the Clinical Laboratory. BqC. Cristian Bonilla. YS.Ecuadorian Representative Dr. María del Carmen Pasquel. C-PR Chair. Speaker-

COLABIOCLI Assembly 	October 5	Ecuador.third vowel of COLABIOCLI BqC. Patricia Erazo . Dr. Maria del C.Pasquel COLABIOCLI. National Representative
	October 6	Meeting of outgoing and incoming COLABIOCLI Board of Directors, with a representative from PAHO. SEBIOCLI, Ecuador was part of the Audit Committee and in the new BOARD OF DIRECTORS it occupies the third position- BqC. Patricia Erazo
Calilab congress, Argentina Ibero-American Working Group on Nomenclature and Translation (WG-IANT)	November 7	2nd meeting on zoom SEBIOCLI participated with Dr. Pasquel
	December 2	Inauguration of the new Board of Directors of COLABIOCLI. Panama. Panama City- SEBIOCLI. BqC. Patricia Erazo

REGIONAL RELATIONS

The ecuadorian society of clinical biochemistry (sebiocli) maintains very good relations with all the scientific societies that make up the latin american confederation of clinical biochemistry colabiocli.

New national representatives were appointed for the young professionals group of COLABIOCLI:

- Principal. Bqc. Cristian rivilla
- Substitute bqc. Mateo solorzano

Representatives for the tf-ys/ifcc:

- Principal. Mgst. Maria Viviana Araujo
- Substitute. Mgst. Byron Alejandro Villacis

INTERNATIONAL RELATIONS

The Ecuadorian Society of Clinical Biochemistry (SEBIOCLI) maintains very good relations with all scientific societies in the international context.
These relations are established through our representatives and their different international positions both with IFCC and in COLABIOCLI.
We congratulate Dr. Maria del Carmen Pasquel for her appointment as Chair of the Public Relations Committee of the Communications and Publications Division of IFCC.
Congratulate. BqC. Patricia Erazo on her new position as third member of the Board of Directors of COLABIOLCI

Congratulate
Global Med lab Week2024
Faculty of Chemical Sciences. Clinical Laboratory.
Prize: Third place in Labs Save Lives video
Director BqC. Giovanna Checa

C-PR
1st C-PR Meeting in Dubai, within the framework of Worldlab 2024. At the end, several young scientists from all over the world were invited and were also present to thank them for their very active participation in the World Clinical Laboratory Week.

2nd C-PR Meeting was held in Amsterdam from October 9 to 11, 2024.
At this meeting, Dr. María Pasquel as Chair of C-PR presents a plaque of recognition to Prof. Tahir Pillay at the end of his activity as Chair of the IFCC Communications and Publications Division in December 2024.

UNITED ARAB EMIRATES
EMIRATES CLINICAL CHEMISTRY SOCIETY (ECCS)

1. ECCS is currently working on organizing The First ECCS Annual Meeting and Digital Health & Laboratory Medicine Forum in Dubai 2025 in collaboration with IFCC 2025
2. The society organized two UAE symposiums during the WorldLab Dubai 2024
3. ECCS assisted in organizing IFCC WorldLab Congress organized jointly with the 17th Congress of the Arab Federation of Clinical Biology (AFCB); 10th Annual Meeting of the Saudi Society for Clinical Chemistry (SSCC) and 8th International and United Arab Emirates (UAE) and Genetic Disorders Conference in partnership with MZ Events held in Dubai World Trade Centre (WTC) from May 26 to May 30, 2024.
4. Organized the ECCS inaugural meeting. The board members introduced themselves to the members and discussed the objectives of the society followed by scientific presentation on updates in mass spectrometry in clinical laboratory
5. Conducting a monthly meeting and scientific webinar with the board members.
6. The board members have been participated as speakers in the following events:
   MedLab Middle East Dubai 2024 and 2025.
   EUROMEDLAB 2025: 26th IFCC-EFLM EUROMEDLAB Congress of Clinical Chemistry and Laboratory Medicine.
7. The scientific committee came out with the first ECCS Guidance on Interference in Laboratory Testing, which is currently under publication.

FRANCE
SOCIÉTÉ FRANÇAISE DE BIOLOGIE CLINIQUE (SFBC)

ADDITIONAL INFORMATION

SFBC Board

Executive Board:

• President	Pr. Katell **PEOC'H**
• Vice-President	Pr. Alain **CARRIE**
• Past-President	Pr. Vincent **SAPIN**
• General Secretary	Dr. Marie Christine **BEAUVIEUX** / Dr Caroline **MOREAU**
• Reasurer	Dr. Laurence **MOULY**

Scientific Committee:
Dr. Edith **BIGOT-CORBEL**
Dr. Camille **CHENEVRIER GOBEAUX**
Dr. Delphine **COLLIN-CHAVAGNAC**
Dr. Constance **DELABY**
Dr. Pierre-Jean **LAMY**

NATIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
International symposium	18.06.24	Immunochemistry

EDUCATION

- Educational Committee chaired by Pr V. Sapin then Pr K Peoc'h
- Continuous professional development (DPC) and continuous medical education (CME) through SFBC scientific meeting sessions. Pr K. Peoc'h is President of the National organism of Professional Development called "Biologie Clinique".
- Committee on Evaluation of Professional Practices (C-EPP): chaired by Dr I. Aimone-Gastin (Nancy)
- National Agreement SFBC as Validating Society for "Evaluation of Professional Practices (EPP)"
- Relations with the Federation of Medical Specialities (FSM): Dr I. Aimone-Gastin (Nancy), Dr PA Bihl (Mulhouse), JL Beaudeux (Paris), PJ Lamy (Montpellier)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
Webinar on Liquid Biopsy : Biomareuqurs circulants en Oncologie	14.03.2024	Conception and realisation
Webinar on Hereditary metabolism disease diagnosis Actualités sur le dépistage Néonat	27.06.2024	Conception and realisation

Sport Laboratory : Quand la medecine de laboratoire rencontre les jeux olympiques	28.11.2024	Conception and realisation
Webinar on Caprotectin: MICI et Calprotectine, une relation enflammée	06.11.2024	Conception and realisation
BiomedJ 2024	May 2024	Sessions and Scientifc Comitte
JFBM 2024	Octobre 2024	Sessions and Scientifc Comitte

REGIONAL RELATIONS

EFLM : Participation of SFBC members

Functional Unit	*Name*	*Surname*	*Position*	*Country*	*Nr. of term/ terms of office*
Quality and Regulations (C-QR)	Guilaine	BOURSIER	Member	France	see as WG Chair
WG: Accreditation and ISO/CEN standards (WG-A/ISO)	Guilaine	BOURSIER	Chair	France	3rd term: 2024-2025
TG: Chronic Kidney Disease (TG-CKD)	Laurence	CHARDON	Member	France	2nd term: 2024-2025
TG: European Laboratory Day (TG-ELD)	Emeline	GERNEZ	Member	France	1st term: 2024-2025
TG: Young Scientists (TG-YS)	Emeline	GERNEZ	Member	France	1st term: 2024-2025
TFG: Biomarkers of diagnosis and follow-up of nitrous oxide abuse (TFG-BNOA)	Emeline	GERNEZ	Member	France	term: 2023-2024
TG: European Laboratory Day (TG-ELD)	Bernard	GOUGET	Member	France	2nd term: 2024-2025
Science Committee (C-S)	Guillaume	GRZYCH	Member	France	see as WG Chair
TFG: Biomarkers of diagnosis and follow-up of nitrous oxide abuse (TFG-BNOA)	Guillaume	GRZYCH	Chair	France	term: 2023-2024
WG: Congresses and Postgraduate Education (WG-CPE)	Guillaume	GRZYCH	Member-Young Scientist	France	1st term: 2023-2024
WG: Biological Variation (WG-BV)	Carine	HELL	Corresponding Member	France	1st term: 2024-2025
TG: European Laboratory Day (TG-ELD)	Marie	LENSKI	Member	France	1st term: 2024-2025
TFG: Urinalysis (TFG-U)	Audrey	MERENS	Member	France	term: 2018-2024
TFG: Urinalysis (TFG-U)	Martine	PESTEL-CARON	Member	France	term: 2021-2024
TF: European Regulatory Affairs (TF-ERA)	Bernard	POGGI	NS Corresponding Member	France	2nd term: 2023-2024
Science Committee (C-S)	Vincent	SAPIN	Member	France	see as WG Chair
WG: Biomarkers of mild Traumatic Brain Injury (WG-BTBI)	Vincent	SAPIN	Chair Member	France	1st term: 2023-2024
Preparing laboratories to emergencies (C-PLE)	Katell	Peoc'h	Member	France	1st term: 2025-2026

INTERNATIONAL RELATIONS

SFBC Committee on International Relations

- Dr. Guilaine **BOURSIER** — Chair WG A-ISO
- Prof. Philippe **GILLERY** — IFCC Representative
- Dr. Bernard **GOUGET** — Chair IFCC – C-MHBLM, TF-H
- Prof. Damien **GRUSON** — Liaison RBSLM – EuroMedLab Brussels 2025
- Dr. Guillaume **GRZYCH** — Chair TFG-BNOA
- Dr. Charles **LEFEVRE** — Corresponding member IFCC - TF-YS
- Dr. Marie **LENSKI** — EFLM Representative and Core Member IFCC - TF-YS
- Prof. Vincent **SAPIN** — President FIFBCML

- Participation in the International Advisory Boards of IFCC/EFLM meetings
- FIFBCML : Fédération Internationale Francophone de Biologie Clinique et de Médecine de Laboratoire (SFBC founding member) ; Pr V. SAPIN, President ; Dr L Mouly (Tresurer) ; Dr E Pivert (Scientificc comittee), Dr M Lenski (Young scientist)
- Participation of SFBC members at National meetings of IFCC full member societies

Participation of SFBC members in IFCC Committees and Working Groups

- **ScientificDivision (SD)**
- **Executive Committee** — V.Delatour, Member, 2023-2025

Committees*:*

- Standardization of Thyroid Function Tests (C-STFT) — V. Raverot, Member 2023-2025
- Molecular Diagnostic (C-MD) — K. Peoc'h, Corresponding Member
- Traceability in Laboratory Medicine (C-TLM) — A. Vassault, Corresponding Member

Bone metabolism (C-BM) — V. Delatour, Consultant; J.P. Cristol, Corresponding Member

Working groups:

- Standardization of Procalcitonin assays (WG-PCT) — A. Boeuf, Chair, 2024-2026; V. Delatour, Member; C. Pease, Member; A.M. Dupuy, Member; P. Hausfater, Member
- Standardization of Carbohydrate-Deficient Transferrin (WG-CDT) — F. Schellenberg, Member
- Biomarkers of Neurodegenerative Diseases (WG-BND) — S. Lehmann, Member; V. Delatour, Member; F. Becker, Member

- Commutability in Metrological Traceability (WG-CMT) — V. Delatour, Member
- Apolipoproteins by Mass Spectrometry (WG-Apo MS) — V. Delatour, Member; C. Giangrande, Member; E. Angles-Cano, Consultant
- Standardisation of Albumin Assay in Urine (WG-SAU) — L. Pieroni, Corresponding Member
- Standardization of Troponin I (WG-TNI) — G. Lefèvre, Corresponding Member
- Standardisation of Hemoglobin A2 (WG-HbA2) — M. Arock, Corresponding Member

Education and Managment Division (EMD)

Committees:

- Education in the Use of Biomarkers of Diabetes (C-EUBD) — P. Gillery, Corresponding Member
- Kidney Disease (C-KD) — J.P. Cristol, Corresponding Member

Working group:

Flow Cytometry (WG-FC) — C. Lambert, Chair, 2022-2024

Emerging Technology Division (ETD)

Executive Committees: — B. Gouget, Secretary, 2024-2026

Committees:

Mobile Health and Bioengineering in Laboratory Medicine — B. Gouget, EC liaison (C-MHBLM)

Working groups:

- Neonatal Bilirubin (in cooperation with SD) (WG-NB) — A.Mailloux, Member; V. Delatour, Member
- Metabolomics (WG-M) — M. Lenski, Member

Task Forces (TF)

- History (TF-H) — B. Gouget, Co-Chair, 2022-2024
- Global Newborn Screening (TF-NBS) — E. Lebredonchel, Member (Y.S) 2024-2026
- Global Lab Quality (TF-GLQ) — A. Perret-Liaudet, Member, 2024-2026; A. Vassault, Member, 2024-2026
- Young Scientists (TF-YS) — M. Lenski, Member, 2023-2025; C. Lefevre, Corresponding Member
- Ethics (TF-E) — E. Bugni, Corresponding Member

Laboratory Medicine Practice Guidelines (TF-LMPG) — J. L'Hirondel, Member 2024-2026

Specific actions:

- SFBC IFCC Webinar: July 10, 2024
- IFCC Webinar with SFBC members: January 19, 2024, October 15, 2024
- IFCC eNews: SFBC members contribute to the IFCC eNews: Every month in 2024 except the July/August issue
- Participation in the 2024 GML: various podcasts have been proposed by the young biologists

GEORGIA
LABORATORY MEDICINE ASSOCIATION OF GEORGIA (GLMA)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
GLMA 6-th International Conference	30, November 2024	"Quality Management in Medical Laboratory – Goals and Results" Tbilisi, Georgia. 2 CECs

EDUCATION

1. IFCC Live webinar – "Diagnostics Efforts: Successes a Challenges to improve the management of patients with Chronic Hepatitis", 2024-07-05

2. EFLM Congresses and Postgraduate Education(WG-CPE) Curse "Biostatistics in Laboratory Medicine", 12- 13 September 2024, Tbilisi

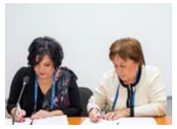
3. Webinars provided by GLMA Education Committee:
- 01.02.2024 Mass Spectrometry in Microboology
- 21.05.2024 Hemostasis research methods.
- 22.05.2024 Challenges of determining Rhesus status based on clinical cases and ways to solve them using modern standards of immunohematology

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Global MED Lab Week 2024 Final Activity with GLMA members	23-29 April 2024	Laboratory medicine professionals meeting ”LabWeek 2024”

REGIONAL RELATIONS

1. Signing of a Memorandum of Understanding between GLMA and AALM (Armenian Association of Laboratory Medicine) 2 November 2024, Erevan, Armenia



2. “Become a Member of GLMA”- Meeting with Laboratory Medicine Specialists, Batumi 21 June 2024

INTERNATIONAL RELATIONS

1. International Symposium on Laboratory Medicine by IFCC, GLMA and SNIBE. Tbilisi, Georgia April 2024

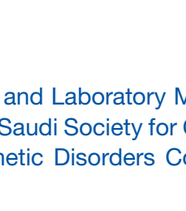
2. International confernce on Preanalitical phase of laboratory medicine-„Difficulties and responsibilities on the Preanalitical stage“. Shimkent, Kazakhstan. April 2024

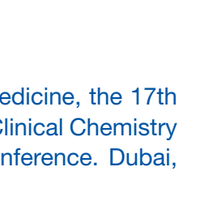
The Annual International Congress of Clinical Chemistry and Laboratory Medicine, the 17th Congress of Arab Federation of Clinical Biology, the 10th Saudi Society for Clinical Chemistry Annual Meeting and the 8th UAEGDA International Genetic Disorders Conference. Dubai, May 2024

3. Nino Maziashvili- EFLM Bursary resipient EFLMLabX The EFLM Laboratory Exchange Programme Aug.2024; EFLM Vic Blaton Bursary grant, which allowed her to attend the 4th EFLM Strategic Conference in Padua, held on September 23-24, 2024.

4. International Scientific Conference in Molecular Diagnostic and oncogenetics, Supported by GLMA, 15 June 2024 Tbilisi, Georgia.

5. EFLM Strategic Conference “A vision to the future: Value-based Laboratory Medicine”. Padova, Italy. September 2024.





6. Roche days and 6th National forum in Laboratory Medicine. Astana, Kazakhstan, September 2024

7. International Conference KLD 2-3 November 2024,Erevan, Armenia.

8. International Symposium on Laboratory Medicine – by SNIBE and IFCC, Shenzhen, P.R. China

9. IFCC Professional Scientific Exchange Programm (PSEP) On Aversi Clinic

IFCC Professional Scientific Exchange Program (PSEP): my experience at Aversi Clinic, Tbilisi, Georgia

By **Le Ha Phuong**, Biochemistry department, Hanoi Medical University Hospital, Vietnam

I am Le Ha Phuong- a resident doctor of the Biochemistry department of Hanoi Medical University Hospital. I had a great opportunity to go to Tbilisi, Georgia through the IFCC organization. My host laboratory was Aversi Clinic, under the guidance of Phd. Nana Dzneladze. Aversi Clinic is the first in Georgia to pass the accreditation for Medical Laboratory with ISO 15189 quality standard and certified with ISO 9001 Quality Mark. I learnt a lot of things during the training in the Lab.

During my process, I had the chance to participate in routine clinical biochemistry tasks, analyze test results, and support quality management activities. I also learnt and practiced performing IQC and EQA of for some specific tests in the laboratory. In addition, I learnt about controlling the common errors in the pre-analytical phase every day. Luckily for me, I was able to participate in the lab's ISO program in October. Everyone prepared their documents very diligently and the process was very successful. Furthermore, I also learned some new techniques that my current lab does not have, for example: ELISA, PCR.

After this program, I was able to spot some differences between my current lab and Aversi Clinic lab. I hope that shortly I will be able to scale up clinical tests and apply international standards for my laboratory quality management.

Although I only had 1 month to stay there, I had many valuable lessons as well as beautiful memories with my colleagues here. Thank you IFCC organization for your supporting on my journey.

Me at the lab entrance

Me and all the great team in the lab

ADDITIONAL INFORMATION

GLMA is the full member of the following international organizations: IFCC, EFLM

Ambassadors:

- Natia Bukhrashvili - Green & Sustainable Laboratories
- Nino Tabatadze - EFLM Task Force for the Continuing Professional Education Crediting System (TF-CPECS)

Full membership:

- Nino Tabatadze – IFCC Task Force on Global eLearning/eAcademy (TF-GEL)
- Sofo Jashiashvili – EFLM Working Group on Distance Education and e-Learning (WG-DE)
- Leila Akhvlediani - EFLM Working Group “Harmonisation” (WG-H)

Corresponding membership:

- Ekaterine Kupatadze – EFLM WG on Patients Focused Laboratory Medicine (WG-PFLM)
- Tamar Ramishvili – IFCC Task Force for Young Scientists (TF-YS)
- Maka Dakhundaridze – IFCC Committee on Evidence-Based Laboratory Medicine (C-EBLM)
- Maia Alkhazishvili – IFCC Committee on Clinical Laboratory Management (C-CLM)
- Manana Akhvlediani – IFCC Task Force on Ethics ,IFCC C-PR
- Ekaterine Kupatadze – IFCC Task Force on Global Reference Interval Database (TF-GRID)
  - Nana Dzneladze - EFLM Working Group “Accreditation and ISO/CE standards” (WG-AISO)
- Ekaterine Kupatadze – IFCC Taskforce on Global Lab Quality (TF-GLQ)
- Mariam Dekanoidze – IFCC Committee on Standardization of Thyroid Function Tests (C-STFT)
- Natia Bukhrashvili – IFCC Task Force Environmental Impact of Laboratory Medicine (TF-EILM)

HONG KONG - CHINA REGION

HONG KONG SOCIETY OF CLINICAL CHEMISTRY (HKSCC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
HKSCC Annual Scientific Meeting and Annual General Meeting	20th January 2024	(1) " Advancements in Generative AI and Implications for the Future of Work and Talent Cultivation” and (2) "Artificial intelligence in Chemical Pathology: sines of life, and cosines of diseases”
HKSCC Dinner Lecutre	4th May 2024	“Overview of Biomarkers for the Diagnosis of Alzheimer’s Disease”
HKSCC Dinner Lecutre	9th May 2024	“The Benefits of Traceable Results: Your Lab, Your Country, the World”
HKSCC Dinner Lecutre	4th September 2024	“Liver Pathology & Interpretation of Liver Function Tests Made Easy”

EDUCATION

The Hong Kong Society of Clinical Chemistry (HKSCC) actively organized a number of educational activities for our members for the past year. Just with the beginning of 2024, we arranged our Annual Scientific Meeting (ASM) cum Annual General Meeting on 20 January 2024. The theme of the ASM was “Current Advances in Artificial Intelligence”. There were two presentations by invited speakers: (1) " Advancements in Generative AI and Implications for the Future of Work and Talent Cultivation” by Prof. Helen ML MENG, Patrick Huen Wing Ming Chair Professor, Systems Engineering and Engineering Management; Director, Stanley Ho Big Data Decision Analytics Research Centre, the Chinese University of Hong Kong (CUHK), and (2) "Artificial intelligence in Chemical Pathology: sines of life, and cosines of diseases” by Dr Calvin YK CHONG, Consultant (Pathology), Toxicology Reference Laboratory, Department of Pathology, Princess Margaret Hospital, Hospital Authority. These were followed by six industrial presentations and fifteen industrial partners participating in the industrial exhibition.. The ASM was well attended by 250 HKSCC members and guests, followed by AGM and annual dinner.

Group photo of HKSCC Council Members

Snapshot of our Annual Scientific Meeting

We also hold three lectures by invited overseas speakers this year, with the first ones in May 2024 titled “Overview of Biomarkers for the Diagnosis of Alzheimer’s Disease”, by Dr Sebastian PALMQVIST, Senior Consultant Neurologist, Associate Professor & Senior Lecturer, Lund University and Skåne University Hospital, Sweden (co-hosted with Roche Diagnostics HK), and the next one “The Benefits of Traceable Results: Your Lab, Your Country, the World” by Prof. Graham JONES. Department of Pathology (SynPath), St. Vincent’s Hospital, Sydney, Australia (co-hosted with CUHK). The latest one in Sep 2024 was “Liver Pathology & Interpretation of Liver Function Tests Made Easy” by A/Prof Zhong X LU, Director of Chemical Pathology, Monash Health Pathology, Monash Health & A/Prof, Department of Medicine, Monash University, Vic, Australia (external examiner of Hong Kong College of Pathologists, co-hosted with Queen Elizabeth Hospital).

Dinner lecture by Prof Graham Jones

Dinner lecture by Dr Sebastian Palmqvist

Dinner lecture by A/Prof Zhong Lu

Group photo taken at Hong Kong Jockey Club Racing Laboratory

On top of these, we arranged a visit to our worldclass Hong Kong Jockey Club Racing Laboratory on 16th Aug 2024.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
17th Asia-Pacific Federation for Clinical Biochemistry (APFCB) and Laboratory Medicine Congress 2024	31st October 2024-3th November 2024	HKSCC attended the APFCB Council Meeting during the Congress, and hold one of the symposia with a theme on Pharmacogenetics at the Congress being hosted by the Australasian Association for Clinical Biochemistry and Laboratory Medicine, in Sydney, NSW, Australia.

HUNGARY

HUNGARIAN SOCIETY OF LABORATORY MEDICINE (MLDT)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
QualiCont Forum 2024	2nd February, 2024	Internal and external quality control, reference intervals, interpretation of liver function tests, transfusion medicine
XXVIII. Scientific Meeting of the “Korányi Frigyes szakkollégium (Semmelweis Medical University)”	9th-10th April, 2024	Scientific meeting for the medical students at the Semmelweis University, Budapest. Section translation medicine and laboratory diagnosis.
MLDT-MTHT Postgraduate Course on thrombophilia.	3rd October, 2024	Postgraduate Course on the hot topics in thrombophilia held by the Hungarian Societies of Laboratory Medicine and Thrombosis and Hemostasis.
XXVI. MIT-MLDT Postgraduate Course on immunology	10th October, 2024	Tumor immunology and the diagnostics of dermatology diseases.
Postgraduate meeting on laboratory medicine	7th November, 2024	Postgraduate meeting on laboratory medicine – actual issues, including postgraduate trainings, eGFR and proteinuria recommendations for the laboratory in chronic kidney diseases, laboratory informatical systems, LOINC
Beckman Coulter scientific days	14th-15th November, 2024	Actual issues in laboratory medicine focusing on automation
POCT Interdisciplinary Meeting	14th November, 2024	Meeting with representatives of General practicioners (GP) and Urology in order to support the use of GLP and quality assurance in POCT testing. Discussion about the preparation of a national guidline for the use of POCT in GP.
International Symposium on Laboratory Medicine	22nd November, 2024	Hot topics in laboratory medicine, including biomarker analysis, use of databases, continuous glucose monitoring

EDUCATION

Postgraduate course entitled “Laboratory diagnosis and methods in immunology and metabolic disorders”. 11th-13th, November, 2024, Szentágothai János Research Center, Pécs
Besides the above mentioned 3 days course, all national meetings (listed above) had educational and continuous professional development purposes.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
WG meetings on Arnold Beckman Award for young talents of Clinical Chemistry CZ, SK, HR, HU and other adriatic countries (managed through HR	2024 autumn	Preparation of contracts with BC and establishment of local award conditions.

REGIONAL RELATIONS

In the surrounding region, Hungarian specialists in laboratory medicine have good relationship with laboratory experts in Croatia, Austria, Slovenia, Serbia and Romania. There are collaborations in different scientific fields, eg. hemostasis, immunology, educational issues. As an example we take part in a Central EU collaboration between CZ, SK, HR, HU and other adriatic countries (managed through HR).

INTERNATIONAL RELATIONS

Members of our Society are involved in several international projects and have international roles in IFCC and EFLM:

- Bhattoa Harjit Pal (IFCC Chair of Publication and Communication Division),
- Zsuzsa Bagoly (EFLM Education and Training Committee, Working Group: Congresses and Postgraduate Education)
- Éva Ajzner (EFLM Science Committee, Working Group: Postanalytical Phase, Expert/ Consultant)

Members of our society are involved in scientific working groups in the field of thrombosis and hemostasis

- ISTH SSC on Factor XIII és
- ISTH SSC on Physiological Anticoagulants

INDIA
ASSOCIATION OF CLINICAL BIOCHEMISTS OF INDIA (ACBI)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
50th. Annual National Conference of Association of Clinical Biochemists of India	5 – 7t^{h}. December 2024	"From Laboratory to Life: Recent Advances in Basic and Medical Research for Global Healthcare

EDUCATION

ACBI National Conference – Chandigarh, India

Workshops:

1. Bioinformatics approaches for Transcriptome Data Analysis
2. digital PCR
3. Biochemical diagnosis of inborn errors of metabolism,
4. Basics of Next Generation Sequencing (NGS)
5. Fundamentals of High-Performance Liquid Chromatography (HPLC),
6. Effective implementation of Self-Directed Learning (SDL) in biochemistry
7. Workshop on Proficiency testing

AWADHESH SARAN MEMORIAL ORATION: Prof. Tapas K. Kundu, Transcription and Disease Laboratory, Molecular and Genetics Unit, Jawaharlal Nehru Centre for Advanced Scientific Research. Bangalore.
"Epigenetic Regulation of Neurological Disorders: Role of Lysine Acetyltransfereases p300/CBP."

DR T. N. PATTABIRAMAN ORATION AWARD: Dr. Jawahar Kalra, Department of Pathology and Laboratory Medicine, University of Saskatchewan, Saskatoon, Canada.
"Advancing Clinical Biochemistry: The Intersection of Innovation and Patient-centered care to provide the Best Practice Model for Medical error Disclosure."

K. L. GUPTA MEMORIAL ORATION: Dr. Sanjay Gupta, Professor, Translational Research, Scientific Officer 'H' and Principal Investigator, Advanced Centre for Treatment, Research and Education in Cancer, ACTREC-Tata Memorial Centre, Kharghar, Navi Mumbai
"Emerging Epigenomic Landscape of Gastrointestinal Cancer: Biology and Clinical implications in the period of Precision Medicine."

MRS. & DR G. P. TALWAR ORATION AWARD: Dr. Amitava Dasgupta, Professor, Department of Pathology and Laboratory Medicine, University of Kansas Medical Center, Kansas City. USA
"Alzheimer Biomarkers: Clinical Utility and How to Implement such a tests in your Laboratory"

DR PRAVEEN SHARMA ORATION: Prof. Subir Kumar Das, Professor, Department of Biochemistry, College of Medicine & JNM Hospital, WBUHS, Kalyani, Nadia. West Bengal.
''Influence of Soluble Factors and Total cell free DNA in the Development of Preeclampsia''

TARANATH MEMORIAL POPULAR LECTURE ORATION AWARD: Prof. Dr. Vivek Lal, Director, Postgraduate Institute of Medical Education and Research (PGIMER). Chandigarh & Head, Department of Neurology, PGIMER, Chandigarh.
''Biochemistry of Migraine''

SETH G. S. MEDICAL COLLEGE & KEM HOSPITAL ORATION: Dr Sadhna Sharma, Professor, Department of Biochemistry, AIIMS, Bilaspur.
"Understanding the Molecular Dynamics of Diabetes and Tuberculosis Copathogenesis"

SYMPOSIA'S: A total of 26 symposia's and 3 panel discussions were held over a period of 3 days. Some of the speakers were;

1. Visiting Lecturers under the IFCC-Abbott Visiting Lecturer Program (IFCC-VLP).
   - **Prof Sedef Yenice** (Turkey)- Clinical Laboratory Management
   - **Prof Bernard Gouget** (France) - identification, assessment, and translation of emerging diagnostic technologies and data analysis procedures—from academic laboratories to clinical settings.
2. Dr Qing Meng (USA), Performance of external quality assessments in ten countries in an IFCC global laboratory quality project.
3. Dr Khosrow Adeli (Canada), The IFCC's leadership in clinical laboratory standardization and harmonization.
4. Dr Tony Badrick (Australia), How external quality assessments (EQA) can reduce patient risk by comparing results across methods.
5. Dr Endang Hoyaranda (Indonesia), Sustainability concerns for medical laboratories.
6. IFCC Committee on Clinical Laboratory Management (IFCC-CCLM)
   - **Dr Sedef Yenice**, Turkey- challenges and strategies for continuous quality improvement in medical laboratories (South Africa), Dr Suresh Kumar Verma (USA) and Dr Shantanu Sengupta (India).
7. Dr Christa Cobbaert (Netherlands) (virtual talk) - clinical evaluation of a multiplex apolipoprotein panel in the Odyssey outcomes randomized control trial, addressing the residual cardiovascular risk with precision diagnostics.
8. IFCC Emerging technologies division (IFCC-ETD) - Dr Bernard Gouget from France, Dr Damien Gruson from Belgium and Dr Swarup Shah from India.

9. Artificial intelligence in lab medicine- Dr Sergio Bernardini (Italy)- machine learning is transforming lab and clinical decision support tools.

Free Paper Sessions by 80 delegates

Oral Award categories :Twenty two young investigators presented their work and vied for the awards.

200 poster presentations
AFMC Quiz contest : Was organized by the dept of Biochemistry, Armed Forces Medical College, Pune and a great success.
Industrial Workshop and Scientific activities: Abbott Healthcare Pvt Ltd , ROCHE Diagnostics, Beckman Ltd., DiaSys Ltd

Many Zonal and State level conferences were held during 2024:

1. **SOUTH ZONE CONFERENCE:**
   The SOUTH ZONE ACBI CONFERENCE was organized by the department of Clinical Biochemistry and the Tamil Nadu Chapter of ACBI on the 27 & 28 Jan 2023, to mark the Golden jubilee of the department.

ACBICON-Odisha 2024 REPORT
The Department of Biochemistry AIIMS Bhubaneswar, conducted the Second State Chapter conference of the Association of Clinical Biochemists of Odisha (ACBI) on “Transforming Trends in Cardiac Health”, on the 16th March 2024.

2. The Central Zone Conference of the Association of Clinical Biochemists of India (CZACBICON 2024), was held at the AIIMS Bhopal, from 19th to 20th January, 2024, on the theme “Innovations in Clinical Biochemistry”

3. The North Zone conference of Association of Clinical Biochemists of India was held successfully on 1st & 2nd February 2024 at All India Institute of Medical Sciences, Jodhpur. The conference was organized by Department of Biochemistry, All India Institute of Medical Sciences, Jodhpur with theme of "Biochemistry: Basics to Translational".

4. Department of Biochemistry, College of Medicine & JNM Hospital, WBUHS organized an outreach Conference “Immunomeet” covering immunesystem and immunodiagnostics at Baranti Village Resort, Baranti, Purulia, West Bengal on March 27-29, 2024.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
APFCB Congress 2024, ICC, SYDNEY, Australia	31st October to 3rd November 2024	Organized a symposia on " Diabetes Mellitus & Non Alcoholic Fatty Liver Disease – Cracking the Conundrum". Speakers – Dr Rajiv Sinha, Dr Mithu Banerjee & Dr Seema Bhargava.

REGIONAL RELATIONS

Many members of ACBI are also actively participating in the affairs of APFCB. Dr Praveen Sharma, Dr. Rajiv R Sinha, Dr. Pradeep Dabla, Dr Prasenjit Mitra, Dr Mithu Banerjee & Dr Barnali Das as chairpersons/members of various divisions & sub-committees.

INTERNATIONAL RELATIONS

Many members of ACBI are actively participating in the affairs of IFCC. Dr Praveen Sharma, Dr. Pradeep Dabla, Dr Prasenjit Mitra, Dr Seema Bhargava, Dr Barnali Das, Dr Sudip Datta, Dr Anurodh Gupta, Dr. Kannan Vaidyanathan & Dr Swarup Shah are chairpersons/members of various divisions & sub-committees of IFCC.
Large number of members participated as delegate at the 26th International Congress of Clinical Chemistry and Laboratory Medicine (WORLDLAB 2024) in Dubai.

ADDITIONAL INFORMATION

The 51st. Annual National Conference of the association will be held in Pune from 14th. to 17th October 2025. The organizing secretary is Dr. Sadanand Naik.

The following were elected as office bearers of ACBI for the year 2025:

PRESIDENT	Dr. **Indu Verma** Professor & Head Department of Biochemistry Postgraduate Institute of Medical Education & Research (PGIMER), Sector 12 Chandigarh - 160 012 Cell: 9815177700 Email: induvermabio@gmail.com
VICE PRESIDENT (I) & Organizing Secretary, 51st. ACBICON 2025	Dr. **Sadanand S. Naik** H.O.D. (Clinical Biochemistry) K.E.M. Hospital Rasta peth, Pune 411011 Cell : 8805375594 Email: dr.sadanandnaik@gmail.com
VICE PRESIDENT (II):	Dr. **Harsh Vardhan Singh** Senior Biochemist Department of Biochemistry, North Delhi Municipal Corporation Medical College & Hindu Rao Hospital, Delhi-110007 Email: hvsingh77@gmail.com Mobile: +91-9810910824 Office: 011-23905690 (Direct)
ADVISOR:	Prof. **K.P. Sinha**, Director, Biochem Lab, Budha Colony Main Road, East Boring Canal Road, Patna-800001, India Tel : 91-612-2531212; Mobile:09430061144 email: kpsacbi@yahoo.co.in
SECRETARY:	Dr. **Rajiv Ranjan Sinha**, Professor & Head, Department of Biochemistry, Nalanda Medical College , Kankerbagh Road, Patna-800023, Bihar, India Tel: 91-612-2531212 Cell: 09835067630, 09801800171 email: kpsacbi@yahoo.co.in Web: www.acbindia.org.in
TREASURER:	Dr. **Krishna Ranjan Prasad**, Professor, Dept.of Biochemistry, Katihar Medical College. A-12 Sector D, Kankerbagh Colony, Patna - 800 020. Bihar. Tel # : 91-612-2353461 Mobile: 09334330401 email: k_ranjan@msn.com
JOINT SECRETARY:	Dr. **Jyotdeep Kaur** Professor Department of Biochemistry Postgraduate Institute of Medical Education & Research (PGIMER), Sector 12 Chandigarh - 160 012 Cell : 7087008263 Email : jyotdeep2001@yahoo.co.in Dr. **Deepak Parchwani** Additional Professor and Head Dept of Biochemistry AIIMS Rajkot-360006, Gujrat Cell: 7600024672 Email : drdeepakparchwani@yahoo.com

Zonal council members

North Zone:	Dr. **Dharamveer Yadav** Additional Professor Department of Biochemistry AIIMS, Jodhpur-342005. Rajasthan E-mail : dharam1435@gmail.com
South Zone:	Dr. **Medha Rajappa**, Additional Professor of Biochemistry, Department of Biochemistry, Second Floor, Academic Centre, Jawaharlal Institute of Postgraduate Medical Education & Research(JIPMER), Dhanvantari Nagar, Puducherry-605006 Phone: 094863-98875
East Zone	Dr. **Vanita Lal** Professor & Head Department of Biochemistry AIIMS Panchayat Training Institute Daburgram, Jasidih Deoghar- 814142 Jharkhand. Mobile : 8003996875 Email : laldasvanita@gmail.com

West Zone:	Dr. **Barnali Das** Consultant, Laboratory Medicine, Kokilaben Dhirubhai Ambani Hospital & Medical Research Institute, Mumbai - 400053. Mobile : 9324349519 Email : drbarnalid@gmail.com
Central Zone:	Dr. **Sukhes Mukherjee** Associate Professor Dept of Biochemistry, All India Institute of Medical Sciences, Bhopal- 462020 Madhya Pradesh Mobile : 989780019 Email : sukhes.mukherjee@gmail.com

Immediate past president:	Dr. **Kannan Vaidyanathan**, MD, FRCP (Edin.) Professor & Head, Department of Biochemistry, Believers Church Medical College Hospital, St. Thomas Nagar, Kuttapuzha, Thiruvalla - 689103, Kerala, India Tel. Off. +469 2742800 Ext 2126; Mob - +919447286365 Email: drkannanvaidyanathan@gmail.com

ITALY
ITALIAN SOCIETY OF CLINICAL CHEMISTRY AND CLINICAL MOLECULAR BIOLOGY (SIBIOC)

The SIBioC is a diverse and dynamic organization with over 3,700 members. Its comprehensive organizational structure includes more than 25 specialized working groups (WGs), reflecting significant scientific activity and engagement, as detailed in the report. Additionally, SIBioC is structured around regional delegations, maintaining an extensive network of 19 regional delegates—one representing each Italian region. These regional delegates hold regular meetings, typically monthly, ensuring consistent communication and collaboration throughout the society.

As part of this structured approach, representation is managed by a dedicated division consisting of three distinguished members:

- Prof. Mario Plebani, President of the EFLM
- Prof. Sergio Bernardini, Secretary of the IFCC
- Dr. Anna Carobene, holding an executive position

These representatives, together with the society's President, Prof. Marcello Ciaccio, are designated as recipients of communications from the IFCC

NATIONAL MEETINGS

The 56th National Congress – Laboratory Medicine of SIBioC was held in Bologna from October 8-10, 2024, gathering nearly 1,000 participants. This significant event aimed to examine and discuss the evolving clinical significance of Laboratory Medicine within contemporary healthcare, featuring sessions with distinguished national and international experts, alongside contributions from young researchers.

A distinctive feature of this 56th Congress was the introduction, for the first time, of a dedicated strategic plenary session organized in collaboration with the European Federation of Laboratory Medicine (EFLM). This strategic session, co-chaired by Prof. Marcello Ciaccio, President of SIBioC, and Prof. Mario Plebani, President of EFLM, presented the European strategy for Laboratory Medicine to the Italian scientific community, covering themes such as value-based laboratory medicine, sustainability initiatives (Green Labs), and direct-to-consumer laboratory testing.

Moreover, the congress featured a dedicated session on Artificial Intelligence (AI) in clinical laboratories, chaired by Dr. Anna Carobene and Dr. Andrea Padoan, who jointly lead the EFLM Working Group on AI. This session attained notable international relevance due to the participation of invited speakers Prof. Damien Gruson and Prof. Janne Cadamuro, emphasizing global advancements and practical applications of AI in laboratory medicine.

EDUCATIONAL EVENTS

Event title	*Starting from*	*To*	*Event type*
Variabili preanalitiche e medicina di laboratorio: update 2023. (Preanalytical variables and laboratory medicine: 2023 update)	20/01/2023	19/01/2024	CORSO FAD
La trombocitopenia indotta da eparina e sindromi correlate: aspetti clinici e laboratoristici (riaccredito). (Heparin-induced thrombocytopenia and related syndromes: clinical and laboratory aspects (re-accreditation))	27/03/2023	27/03/2023	CORSO FAD
Il management dello scompenso cardiaco: il potenziale dei biomarcatori in un'ottica di value based healthcare. (Management of heart failure: clinical and laboratory aspects of biomarkers in a value-based healthcare approach)	30/11/2023	29/11/2024	CORSO FAD
Variabili preanalitiche e medicina di laboratorio: update 2024 (riaccredito). (Preanalytical variables and laboratory medicine: 2024 update. (re-accreditation)	10/02/2024	09/02/2025	CORSO FAD
Comprendere l'intelligenza artificiale (AI) generativa e le sue applicazioni. (Understanding generative artificial intelligence (AI) and its applications)	15/11/2024	14/11/2025	CORSO FAD

REGONAL MEETINGS

Event title	*Starting from*	*To*	*Event type*
Impara la statistica con R, impara R con la statistica. *(Learn statistics with R, learn R with statistics)*	24/01/2024	26/01/2024	MILANO
La fertilità nel XXI secolo. Sinergie tra clinica, laboratorio e ricerca - II edizione *(Fertility in the 21st century: Synergies among clinical practice, laboratory, and research – 2nd edition)*	17/04/2024	17/04/2024	MODENA

Malattie rare: collaborazione virtuosa tra laboratorio e clinica -V edizione *(Rare diseases: Synergies between clinical practice and laboratory medicine – V Edition)*	18/04/2024	18/04/2024	MODENA
Diagnostica delle sostanze psicoattive sulle diverse matrici biologiche, linee guida, protocolli e linee di indirizzo *(Diagnostics of psychoactive substances in various biological matrices: guidelines, protocols, and recommendations)*	09/05/2024	09/05/2024	SARZANA
L'intelligenza artificiale (AI) in medicina *(Artificial Intelligence (AI) in Medicine)*	23/05/2024	24/05/2024	NAPOLI
L'esame emocromocitometrico su sistemi automatizzati: nuovi biomarcatori e nuove prospettive *(Complete blood count on automated systems: new biomarkers and new perspectives)*	05/06/2024	05/06/2024	ALESSANDRIA
Il laboratorio clinico nella valutazione delle patologie determinate dai cambiamenti climatici. *(The clinical laboratory in the evaluation of pathologies determined by climate change)*	06/06/2024	07/06/2024	BARI
Updates in autoimmunità, allergologia e immunologia clinica 2024 *(Updates in Autoimmunity, Allergy and Clinical Immunology 2024)*	12/06/2024	12/06/2024	MODENA
2° convegno POCT e diagnostica decentrata innovazione e AI *(2nd conference POCT and decentralized diagnostics innovation and AI)*	20/06/2024	21/06/2024	LECCE
L'integrazione multidisciplinare nell'era della sanità intelligente *(Multidisciplinary Integration in the Era of Smart Healthcare)*	21/06/2024	21/06/2024	COSENZA
La MR-proADM nella valutazione diagnostica e prognostica dei pazienti con sepsi. It's time to act! *(MR-proADM in the diagnostic and prognostic evaluation of patients with sepsis. It's time to act!)*	05/09/2024	05/09/2024	BARI
Introduzione alla spettrometria di massa clinica *(Introduction to Clinical Mass Spectrometry)*	09/09/2024	09/09/2024	SALERNO
56° Congresso Nazionale Sibioc - Medicina Di Laboratorio *(56th Sibioc National Congress - Laboratory Medicine)*	08/10/2024	08/10/2024	BOLOGNA
Il POCT come modello organizzativo del laboratorio clinico: cosa dobbiamo sapere? *(POCT as an organizational model of the clinical laboratory: what should we know?)*	07/11/2024	07/11/2024	SAVONA
27° convegno multidisciplinare Abruzzo e Molise “digitalizzazione e intelligenza artificiale nella medicina di laboratorio” *(27th Abruzzo and Molise multidisciplinary conference “digitalization and artificial intelligence in laboratory medicine”)*	07/11/2024	08/11/2024	CHIETI
Presente e futuro nella personalizzazione della terapia farmacologica: ruolo del laboratorio *(Present and future in the personalization of drug therapy: the role of the laboratory)*	08/11/2024	08/11/2024	BRESCIA
Corso teorico-pratico di troubleshooting in cromatografia liquida e spettrometria di massa in ambito clinico *(Theoretical-practical course on troubleshooting in liquid chromatography and mass spectrometry in clinical settings)*	22/11/2024	22/11/2024	MILANO
La medicina di laboratorio: la cultura del rinnovamento *(Laboratory Medicine: The Culture of Renewal)*	04/12/2024	04/12/2024	PADOVA
I giovani e le sostanze d’abuso: le nuove molecole, le nuove abitudini ed i nuovi rischi per la salute *(Young people and substances of abuse: new molecules, new habits and new health risks)*	18/12/2024	18/12/2024	NAPOLI

INTERNATIONAL RELATIONS

Several members of SIBioC hold prominent positions within international federations, highlighting the Society's active involvement and leadership on the global stage. Notably, Prof. Mario Plebani serves as the President of the European Federation of Laboratory Medicine (EFLM), and Prof. Sergio Bernardini serves as the Secretary of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC).

In addition to these distinguished positions, numerous other SIBioC members actively contribute to international scientific dialogue through their involvement in Working Groups (WGs), Committees, and Task Groups under the auspices of the IFCC and EFLM. These members participate proactively in developing international guidelines, harmonization initiatives, and global standards. Such active participation not only fosters international scientific exchange but also significantly enhances the visibility and influence of SIBioC within the global scientific community.

ADDITIONAL INFORMATIONS

An additional notable initiative of SIBioC has been the management of the Italian website dedicated to laboratory medicine information, "Labtest online," previously overseen by the AACC. From 2024, this platform is directly managed by SIBioC, reflecting the society’s commitment to proactive communication and public engagement. The considerable success of the website, demonstrated by over half a million monthly visits, underscores the necessity and opportunity for Laboratory Professionals to actively engage in educational outreach and communication with the public.

Furthermore, SIBioC promotes the journal "Biochimica Clinica (BC)," which serves as the official publication of the society. "Biochimica Clinica" publishes official society documents in English and is indexed in reputable databases, including Scopus and EMBASE. The journal, accessible to SIBioC members and partly published as open access, offers a total of several open-access articles. It is indexed in notable databases such as Scopus and EMBASE, facilitating broad dissemination and visibility within the scientific community.

JAPAN
JAPAN SOCIETY OF CLINICAL CHEMISTRY (JSCC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
The 64th Annual Meeting of the Japan Society of Clinical Chemistry	2024/8/30-9/1	**International seminar:** Low-density Lipoproteins: Update from Basic Science to new therapeutics and diagnostics **Spe≤ial Lectures:** • Alzheimer's disease: The approaches to Disease Modification • Sociology of clinical testing: excessive expectations, discouragement, and misperceptions **Educational Lectures:** • Pharmaco-proteogenomics using patient-derived cancer model to overcome the limitation of genome medicine • The significance of measurement of NT-proBNP and salt excretion using spot urine in Ningen Dock. • Sterile inflammation and the inflammasome • Genetic Background of Multinodular Goiter. **Symposia:** • Laboratory tests reflecting the pathology of chronic kidney disease • The significance of inflammatory response tests in veterinary medicine • Think about future prospect of Therapeutic Drug Monitoring • Cutting-edge of clinical chemistry research using mass spectrometry • Research meeting for young members - A road to academic activities in the career development • What are the pitfalls of genetic and chromosome testing? • Amyloidosis and amyloid proteins Pitfall Case Reports and Discussion in Clinical Laboratory • Urinanlysis in animals: current status and challenges (with a focus on non-clinical experiments)

EDUCATION

In all annual meeting of JSCC and regional meetings in Japan, educational lectures on various clinical chemistry related subjects, such as standardization, analytical methods, and laboratory related trouble shootings were performed by the specialists of clinical chemistry. In addition, clinical chemistry related companies held various types of symposiums and educational meetings in all over Japan all the year round.
Lecture for Certified Clinical Chemistry and Immunochemistry Quality Assurance Medical Technologists and Professions was offered on an on-demand basis.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Hokkaido branch: The 34th branch general & regular metting	Sep 28, 2024	Each branch supervises the meeting of each region
Tohoku branch: The 35th branch general & regular meeting	Sep 21, 2024	Each branch supervises the meeting of each region
Each branch supervises the meeting of each region	Sep 1,2024	Each branch supervises the meeting of each region
Koshinetsu branch: The 42nd branch general & regular meeting	Jul 6-7,2024	Each branch supervises the meeting of each region
Tokai & Hokuriku branch: The 34th branch general & regular meeting	Aug 4,2024	Each branch supervises the meeting of each region
Kinki branch: The 33rd branch general meeting	Mar 9, 2024	Each branch supervises the meeting of each region
Chugoku & Shikoku branch: The 34th branch general & regular meeting	Feb 17-18, 2024	Each branch supervises the meeting of each region
Kyusyu branch: The 35th branch general & regular meeting	Mar 23, 2024	Each branch supervises the meeting of each region

INTERNATIONAL RELATIONS

SD Committees:
- Standardisation of Albumin Assay in Urine in collaboration with NKDEP (WG-SAU): Yoshihisa Itoh, Member
- Immunosuppressive Drugs (WG-ID): S Masuda, Member
- Pancreatic Enzymes (WG-PE): Shigeru Ueda, Member
- Fecal Immunochemical Testing (WG-FIT): S Takehara (Member), Y. Doi, M. Ito, Y. Masuda, K. Nishimura, Corp. Member

Education Management Division (EMD) Committees:
- Committee on Kidney Disease - (C-KD) :Takashi Wada, Member

Emerging Technologies Division (ETD) Committees:
- Committee on Mobile Health and Bioengineering in Laboratory Medicine (C-MHBLM): Kazuhiko Kotani, Member

Molecular Diagnostics in Infectious Diseases (C-MDID) Committees:
- Committees on Molecular Diagnostics in Infectious Diseases (C-MDID): Hideki Niimi, Member

International Journal Editor:
- Associate Editors for Annals of Clinical Biochemistry: Kazuhiko Kotani

Editorial Board of Clini Chimica Acta:
- Nobuo Okumura, Editorial Board
- Masato Maekawa, Editorial Board
- Takashi Miida, Editorial Board
- Minoru Tozuka, Editorial Board
- Katsuyuki Nakajima, Editorial Board
- Akihiro Inazu, Editorial Board

ADDITIONAL INFORMATION

About 2,000 members including MD and PhD belong to JSCC and 9 blocks were divided as each centre of JSCC.
The annual meeting is held once a year and more than 300 papers are discussed in the meeting and the regional meetings were held once a year in each region and interesting symposiums and special lectures are planned by an annual president of the meeting.

KOREA
KOREAN SOCIETY OF CLINICAL CHEMISTRY (KSCC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
KSCC 2024 Biannual Spring Meeting	April 11-12, 2024	**Session 1.** Practical Aspects of POCT (Point-of-Care Testing) and Quality Management **Session 2.** Guidelines for Clinical Performance Evaluation of Clinical Chemistry Tests **Session 3.** Updates on Clinical Chemistry Tests Related to Kidney Diseases **Session 4.** Recent Insights into Thyroid Hormone Tests **Session 5.** Current Status and Future Trends of Laboratory Operations using Artificial Intelligence **Workshop 1**. Assay Performance Evaluation II **Workshop 2**. Getting Started with Large-Scale Data Analysis
KSCC 2024 Biannual Fall Meeting	October 16–17, 2024	**Session 1.** The Present and Future of Internal Quality Control **Session 2.** Revisiting Tumor Markers: Prostate Cancer **Session 3.** Standardization and Harmonization of Hormone Testing **Session 4**. Laboratory Medicine in Geriatric Care **Workshop 1.** Assay Performance Evaluation II **Workshop 2.** Clinical Practice Guidelines for Diagnostic testing **Workshop 3.** Clinical Chemistry Data Analysis Challenge **Workshop 4.** Current Perspectives and Case Practices in Therapeutic Drug Monitoring

EDUCATION

Spring Review Course (Online; April 13 - May 10, 2024)
RC1. General Clinical chemistry
1. The Basics of Clinical Performance Evaluation for Measurement Procedures: Precision
2. Risk Management-based Quality Control in the Clinical Laboratory
3. Major Interfering Factors in Clinical Chemistry Tests

RC2. Special Clinical chemistry
1. Urine Analysis: Dipstick and Sediment Examination
2. Biomarkers for Myocardial Injury
3. Biomarkers for Heart Failure
4. Clinical Applications of Cardiovascular Biomarkers

Fall Review Course (Online; October 18 - November 15, 2024)
RC1. General Clinical chemistry
1. External Quality Assessment and Alternative Assessment Procedures in Clinical Chemistry
2. Basic Requirements for Total Laboratory Automation
3. Point-of-Care Testing: Concepts, Applications, and Management
4. Management of Reagent Water, Waste, and Equipment in Clinical Chemistry Labs
5. Useful Resources for Information in Clinical Chemistry

RC2. Special Clinical chemistry
1. Body Fluid Analysis
2. Bone Turnover Markers

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
20th APFCB COUNCIL MEETING	October 31, 2024	The representative of KSCC (Dr. Yong-Wha Lee, Sang-Guk Lee) participated in the meeting.

REGIONAL RELATIONS

KSCC is a member society of the Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB).
Several board members of KSCC participated in the working groups of the APFCB.

- Dr. Sollip Kim, Hyun-Ki Kim, Ji Yeon Sung in the working group (WG) on Patient Based Quality Control
- Dr. Sang-Guk Lee in the WG on Clinical Decision Support
- Dr. Hyung-Doo Park in the WG on Harmonisation of Reference Intervals
- Dr. Yong-Wha Lee in the WG on Newborn Screening
- Dr. Hyojin Chae, Jooyoung Cho in the WG on Protein Electrophoresis and Biochemical Monoclonal Gammopathy Testing

INTERNATIONAL RELATIONS

On May 26, 2024, the representative of KSCC (Dr. Sollip Kim) participated the IFCC Council Meeting held in Dubai, UAE.
Several board members of KSCC participated in the committee or the working groups of the IFCC.

- Dr. Woochang Lee in the Executive Committee of the Emerging Technologies Division
- Dr. Sollip Kim in the Committee on Evidence-Based Laboratory Medicine
- Dr. Sang Hoon Song in the Committee on Standardization of Thyroid Function Tests
- Dr. Hyung-Doo Park as corresponding member in the Committee on Point of Care Testing
- Dr. Sang-Guk Lee in the Committee on Bone Metabolism
- Dr. Yeo-Min Yun in the working group on Tumor Marker Harmonization
- Dr. Sang-Guk Lee in the working group on Apolipoproteins by Mass Spectrometry
- Dr. Sun Min Lee in the working group on Standardization of Fetal Haemoglobin

ADDITIONAL INFORMATION

KSCC will hold the national biannual meetings on April 16-17 (spring meeting), 2025 and October 16-17 (fall meeting), 2025 at Sejong University, Seoul, Korea.

The Officer Bearer of KSCC (2025)

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LEBANON
LEBANESE SOCIETY OF CLINICAL BIOLOGY SYNDICAT DES BIOLOGISTES DU LIBAN (SDBLB)

In a year marked by profound regional turmoil, the Syndicat des Biologistes du Liban (SDBL) demonstrated remarkable resilience and unwavering commitment to the profession. Despite the war that erupted in October 2023, the SDBL succeeded in maintaining its strategic mission: supporting clinical biologists, safeguarding the continuity of diagnostic services, and fostering scientific progress.

Professional Advocacy During Conflict (January–April 2024)

Amid power outages, supply chain disruptions, and safety threats affecting laboratory operations—particularly in southern Lebanon—the SDBL actively engaged with public health authorities and media to advocate for the protection and continuity of clinical laboratory services. Regular TV interviews and newspapers articles emphasized the indispensable role of medical biologists in crisis response.

Virtual Scientific Engagement and Education

To ensure continued scientific exchange during the height of the conflict, the SDBL pivoted to virtual platforms, organizing a series of thematic webinars:

" Emergency Diagnostics and Resilient Practices " (10 February 2024)
"Chronic Kidney disease: the lab point-of - view" (13 April 2024)
These sessions offered timely insights and practical guidance.

EDUCATION SESSIONS FOR YOUNG SCIENTISTS AND LAB TECHINCIANS

We successfully organized three scientific lectures in 2024, focusing on hematology (February 17th), microbiology (March 10th), and parasitology (April13th). Each lecture featured experts who shared the latest updates, best practices, and new trends in their fields. These sessions aimed to improve professional knowledge, promote collaboration between disciplines, and highlight recent research. They provided an important opportunity for learning, discussion, and scientific development within our community.

INTERNATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
IFCC WorldLab Dubai	26-30 May 2024	At the AFCB session Speaker Dr Christian Haddad Impact of wars, earthquakes and migration on emerging infection diseases
JNBC Tunisia	3-6 October 2024	Speaker Dr Christian Haddad POCT objectives and limitations
JIB Paris	7-8 November 2024	

ADDITIONAL INFORMATION

The challenges of 2024 tested the limits of Lebanon's healthcare infrastructure, yet the clinical biology sector, led by the SDBL, stood firm. By embracing adaptability, leveraging digital tools, and reinforcing professional solidarity, the SDBL ensured that the voice of Lebanese medical biologists remained heard—both nationally and internationally.
In addition to its advocacy and outreach, the SDBL actively provided scientific guidance and technical support to the profession.

- We offer an External Quality Assessment (EQA) program at cost, in order to promote a culture of quality among all laboratories (Biochemistry, Hematology and Microbiology)
- Particularly in the absence of a national accreditation policy, we have developed the necessary reference texts and launched online training modules. A number of hospitals and urban laboratories voluntarily joined this quality initiative, reflecting their strong professional commitment.
- We also place great emphasis on supporting young scientists, through continuous engagement, access to educational material, and long-term partnerships with universities training the next generation of clinical biologists.

Moreover, in response to the humanitarian crisis triggered by the conflict, the SDBL helped implementing:

- A Point-of-Care Testing (POCT) system to serve displaced populations, A Point-of-Care Testing (POCT) system supported by mobile clinics was established to respond to the urgent needs of displaced populations. These mobile medical units traveled across numerous regions, particularly those hosting large numbers of people displaced by the conflict. Clinical care was reinforced by on-site laboratory testing, enabling rapid diagnosis and immediate management of common health conditions. Basic laboratory analyses were conducted directly within the clinics, while more specialized tests were referred to hospital laboratories equipped to handle them. This system made a tangible difference on the ground, significantly alleviating the suffering of the most vulnerable and ensuring essential access to care and diagnostics in a time of crisis
- A blood collection and analysis mechanism, which became critical during wartime, to meet local transfusion needs when national centers could no longer respond to the growing demand. The blood collection system, spanning from phone-based donor recruitment to public donation campaigns, proved highly effective during the crisis. As voluntary blood donations declined—with many individuals remaining at home for safety—demand surged dramatically due to the high number of injured patients requiring urgent care.

REGIONAL RELATIONS

We actively collaborate with the Syrian Clinical laboratory Association SCLA: They participate in our main scientific meetings. We have established connections with other regional societies such as the Iraqi Society of Clinical chemistry and the Egyptian Society of Clinical Biology. The collaboration with other societies within the AFCB is still ongoing, such as the Algerian, the Moroccan, Tunisian, Saoudi societies with great impact and benefit for all.

INTERNATIONAL RELATIONS

Sustained Collaboration with International Networks:
Throughout 2024, the SDBL maintained strong partnerships with regional and international bodies including the AFCB, IFCC, and various European laboratory societies.
The SDBL has a partnership with the Syndicate of Biologists in France (SDBIO)
The SDBL has a partnership with the EFLM
The SDBL has a partnership with the french group GEHT (Groupe d'etude de l'hemostase et des thromboses)

LITHUANIA
LITHUANIAN SOCIETY OF LABORATORY MEDICINE (LLMD)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
16th Annual Conference of the Lithuanian Society of Laboratory Medicine (LLMD)	18-04-2024	Current trends of science and practice of laboratory medicine
National LLMD Conference	22-05-2024	Selected Topics of Laboratory Diagnostics for Medical Practitioners in Outpatient Healthcare Services
National LLMD Conference (hybrid)	17-10-2024	What clinicians need to know and the laboratory needs to do (dedicated to World Thrombosis Day)
National LLMD Conference (on-line)	19-11-2024	Current news in laboratory diagnostics
Regional LLMD Conference of Klaipėda Branch	14-03-2024	Principles, methods, and interpretation of urine tests according to European Urinalysis Guidelines 2023
Regional LLMD Conference of Šiauliai Branch	05-04-2024	Syndromic diagnostics of respiratory viral infections
Regional LLMD Conference of Kaunas Branch	10-04-2024	Laboratory Diagnostics News 2024
Regional LLMD Conference of Klaipėda Branch	04-12-2024	Laboratory Medicine Fall Session 2024
Regional LLMD Conference of Kaunas Branch	09-12-2024	Importance of Microbiological Diagnostics in clinical practice

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
XVII Baltic Congress of Laboratory Medicine	5–7 September 2024	Organizer of the Congress
XXXIX Nordic Congress in Clinical Chemistry	17–20 September 2024	Co-organizer of the Session by BALM

REGIONAL RELATIONS

The Lithuanian Society of Laboratory Medicine (LLMD) is a member of the Baltic Association of Laboratory Medicine (BALM). The other two members of BALM are: the Latvian Society of Laboratory Medicine and the Estonian Society of Laboratory Medicine. The main task of the Association – organization of Baltic Congresses of Laboratory Medicine, held every second year in one of the Baltic Countries.

INTERNATIONAL MEETINGS

LLMD is a member of IFCC and EFLM and a partner of the Global World Thrombosis Day Movement.

MOROCCO
SOCIÉTÉ MAROCAINE DE CHIMIE CLINIQUE (SMCC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
24th Moroccan Days of Clinical Biology	26-28 September 2024	Clinical Biology and Predictive Medicine

EDUCATION

23 February 2024: Winter Day of SMCC-BM for the young scientists

- Lecture 1: Immunological Markers of Connective Tissue Diseases: When, why, and How to Investigate Them?
  Dr Oumama BENJELLOUN, Department of Internal Medicine A, Military Hospital of Rabat
- Lecture 2: Immunological Assessment of Connective Tissue Diseases
  Pr Jalila EL BAKKOURI, Head of Lab Cheikh Khalifa Hospital and department of Immunology, Casablanca

REGIONAL RELATIONS

With AFCC and AFCB

REGIONAL RELATIONS

With FIFBCML

NORWAY
NORWEGIAN SOCIETY OF MEDICAL BIOCHEMISTRY (NSMB)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Vårmøte	March 26th-28th	Future of lab medicine

INTERNATIONAL RELATIONS

Nordic collaboration – arranges a conference every second year.

PAKISTAN
PAKISTAN SOCIETY OF CHEMICAL PATHOLOGISTS (PSPC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
ChemCon 2024 by PSCP	22nd – 23rd November 2024	Diagnostic Endocrinology- Recasting Clinical Cre

EDUCATION

Participation of PSCP Members at IFCC webinars

PSCP Speaker	*IFCC Webinar Held*	*Topics*
Sibtain Ahmed	December 2023	Diagnostic Endocrinology- Recasting Clinical Cre
Lena Jafri	May 2024	Management of Non-Integrated Point-of-Care Testing (POCT): Challenges and Solutions"
Lena Jafri	October 2024	Integration of POCT in undergrads curriculum at AKU

PSCP conducted a local post-graduate educational series with international collaboration

Title	*Date*	*National Speaker*	*International speaker*	*Country*
Updates on Diabetes Mellitus	Feb 10, 2024	Dr. Matiullah Khan	Dr. Bettina Chale-Matsau	South Africa
Updates on Diabetes Mellitus	May 11, 2024	Dr. Maryam Rafiq	Dr. Udara Senarathne	Sri Lanka
Updates on Cardiac Biomarkers	June 8, 2024	Dr. Ghufran Adnan	Dr. Kannan Vaidyanathan	India
Biomarkers in Rheumatology	Aug 10, 2024	Dr. Zain Mushtaq	Dr. Sean Campbell	USA
Biomarkers of Lipid Disorders	Sep 14, 2024	Dr. Saad Bin Zafar	Dr. Busadee Pratumvinit	Thailand
Laboratory Accreditation	Oct 12, 2024	Dr. Muhammad Zubair	Dr. Ola Elgaddar	Egypt

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
IFCC Congress Dubai	May 2025	• More than 15 abstracts submitted to IFCC congress-2024 from PSCP • Prof. Dr. Aysha Habib and Dr. Sibtain Ahmed represented PSCP- invited speakers • Attended by Prof. Dr. Adnan Zuberi Prof. Dr. Aysha Habib Khan Prof. Dr. Sahar Iqbal Dr. Fatima Khanani Dr. Sibtain Ahmed Ms. Hira Azeem • Poster presented by Ms. Hira Azeem on Roche Travel Scholarship

REGIONAL RELATIONS

Participation of PSCP in APFCB Annual meeting, Sidney, Oct 31st -Nov. 3rd, 2024

PSCP Members	*Partecipation*
Prof. Dr. Aamir Ijaz Prf. Dr. Imran Siddiqui Dr. Sameena Gufran Dr. Hafsa Majid	Conducted Workshop on “Rejuvenating health professional education in Laboratory Medicine”

INTERNATIONAL RELATIONS

A total three Clinical Chemistry Pathologists participated at ChemCon 2024 for workshops and visiting lectures. Two of the following were sponsored from IFCC VLP programs.

Presenters	*IFCC support program*	*Events*
Dr. Dianne Webster New Zealand	EMD- VLP	ChemCon 2024 international Speaker
Dr. Mehdi Mirza Zaden London	EMD- VLP	ChemCon 2024 international Speaker
Dr Tze Ping Loh Singapore	N/A	ChemCon 2024 international Speaker

PALESTINE
PALESTINIAN MEDICAL TECHNOLOGY ASSOCIATION (PMTA)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Council Meeting	29/3/2024	National week activities
Council Meeting	9/8/2024	The Scientific Conference for 2025 / Holding the General Conference
Council Meeting	19/12/2024	Preparing for the general conference and all of the news from AFCP/IFCC
General Conference	20/12/2024	Discuss the plans for all of the PMTA committees for the upcoming six months.

EDUCATION

Throughout 2024, we successfully organized sixteen scientific lectures, covering a diverse range of topics across various medical and scientific disciplines. These lectures featured esteemed experts and researchers who shared the latest advancements, best practices, and emerging trends in their respective fields. The sessions were designed to enhance professional knowledge, encourage interdisciplinary collaboration, and provide valuable insights into cutting-edge research. By offering a platform for discussion and knowledge exchange, these lectures played a vital role in fostering continuous education and scientific growth within our community.

A Scientific Research Committee has been formed to oversee research activities, promote innovation, and enhance the quality of scientific studies. This committee will support researchers in their projects and ensure alignment with the latest advancements in the field.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
Dubai	26-30/5/2024	• President of PMTA / IFCC meetings • AFCP meeting
Tunisia	3-6/10/2024	• President of PMTA /AFCP meeting

REGIONAL RELATIONS

We actively contributed to three regional conferences held in Tunisia, Dubai, and Jordan, with around 75 participants representing our institution in the field of Medical Laboratory Sciences. Our contributions included scientific lectures and poster presentations, showcasing research findings and advancements in laboratory diagnostics, clinical chemistry, hematology, microbiology, and molecular biology. Through these engagements, we fostered knowledge exchange, strengthened professional collaborations, and reinforced our presence in regional scientific discussions. These conferences provided a platform to highlight our expertise, share innovative laboratory techniques, and contribute to the advancement of medical laboratory sciences.

INTERNATIONAL RELATIONS

1. Executive Board Meeting in Milan 14-16/2/2024 (Dr. Osama Najjar / PMTA President) / IFCC
2. Online Executive Board Meeting on 12/3/2024 (Dr. Osama Najjar / PMTA President) / IFCC
3. Executive Board Meetings in Dubai 26-30/5/2024 (Dr. Osama Najjar / PMTA President) / IFCC
4. Contribution of PMTA for IFCC webinars: more than 500 audiences from our National society for each webinar.

- Omics in LM: Genomics, proteomics, metabolics
- Machine learning in laboratory medicine Recommendation of the IFCC Working Group part -1
- Machine Learning in Laboratory medicine part ii: case study analysis
- Artificial intelligence in the clinical laboratory implementation ,bioethics and legislation
- Quality system in labs and accreditation challenges of new ISO 15189
- The evidence of lab tests used in the managment of DM
- "Troponin assays with higher clinical specificity; a novel future option"
- Management of non integrated point care testing (POCT)
- Global supply chain Issues in health care
- Method evaluation in the laboratory
- Diagnostic Efforts : successes and challenges to impromanagement of patients
- Different approaches to Bioethics
- Minimum quality specifications based on the state of the art
- Future challenges of Laboratory Medicine
- Current and Future perspectives on measuring natriuretic peptides
- Derived lipid profile parameters: navigation the data
- Point of care testing: the never ending challenges and their resolutions
- international perspectives on estimating glomerular filtration rate equations
- Intelligent Biosensors in Medical Diagnostics

PARAGUAY
ASSOCIATION OF BIOCHEMISTS OF PARAGUY (ABP)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Virtual meeting with biochemists from the field of aesthetic medicine	March 2024	Invitation received from the Senate Health Committee's technical panel on the bill "REGULATING THE PRACTICE OF AESTHETIC MEDICINE"
Assistance at the Crowne Plaza Hotel	7-03-2024	Event: Tourism Leaders Breakfast
Participation of Dr. Carmen Troche in the invitation to the Protocolary Act in Commemoration of the 86th Anniversary	08-05-2024	Formal Ceremony in Commemoration of the 86th Anniversary of the Founding of the Faculty of Chemical Sciences of the National University of Asunción
Attendance as a delegate at the Extraordinary General Assembly of the Federation of Chemists of Paraguay	10-05-2024	Election of Authorities
Virtual Meeting on the Biochemical Residency	19-06-2024	With the Directors of the IPS Central Laboratory, the Lab of the National Hospital of Itauguá and the Central Laboratory of Public Health (LCSP)
Attendance at the virtual meetings of the Federation of Chemists of Paraguay	29-Jun, 01-Jul, 22-Jul, 24-Jul, 02-Agos y 06-Agos/2024	
Meeting at DNERHS, attendees: Bioq. Carmen Troche and Bioq. María Eugenia León.	22-07-2024	Regarding the Catalogue of the Minister of Public Health and Social Welfare for Clinical Specialties in Biochemistry Degrees
Participation in the LCSP auditorium	31-07-2024	"Competency Assessment for Health Professionals with Foreign Degrees to Access Professional Accreditation by the Ministry of Public Health and Social Welfare"
Biochemist Melisa Florntin's assistance at the Crowne Plaza Hotel	01-08-2024	Official presentation of the National Policy on Ethics in Health Research
Assistance from Biochemist Carmen Troche	05-08-2024	"Zoonosis Week 2024" Symposium

Dr. Carmen Troche attends the opening ceremony	14-11-2024	New headquarters for Bioanalisis SRL
Attendance at the Infotec Update Day	08-11-2024	In the framework of its 25th anniversary
ABP virtual meeting	21-11-2024	ANA nomenclature standardization consensus.
Assistance from Dr. Carmen Troche	20 y 21-11-2024	Symposium on Research, Education, and Biotechnology Applied to Health, in the auditorium of the FOCEM Biotechnology Laboratory
Attendance of the Board of Directors at the Gran Hotel del Paraguay	14-12-2024	109th Anniversary Dinner of the Federation of Chemists of Paraguay
In-person meeting at the Faculty of Chemical Sciences – UNA	19-12-2024	Signing of the inter-institutional cooperation agreement between ABP and FCQ-UNA in a solemn and formal ceremony

EDUCATION

- Clinical Biochemistry and Regenerative Biochemistry Update Conference - Encarnación, July 26 and 27, 2024 (In-person), Speakers: Biochemist María Emilia Maciel, Dr. Marcelo Arango, Biochemist Mariana Villalba, Biochemist Bibiana Martin, and Biochemist Daisy Sanabria.
- Clinical Biochemistry and Regenerative Biochemistry Update Conference, October 4 and 5, 2024, (In-person), Speakers: Dr. Marcelo Arango, Dr. Idalina Dalles, Biochemist Silvina Monteverde and Biochemist Daisy Sanabria.
- Biochemical Update Conference (Virtual Mode), held on November 1 and 2, 2024, Speakers: Dr. Marcelo Arango, Dr. Idalina Dalles, Biochemist Silvina Monteverde, and Dr. Laura Mujica.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
Virtual Meeting via zoom of the Latin American Confederation of Clinical Biochemistry (COLABIOCLI)	16-05-2024	
Virtual meeting of presidents of national COLABIOCLI entities	25-07-2024	
Attendance at the virtual meeting with Dr. Perusetto, coordinator of the laboratory accreditation program of the Argentine Biochemical Foundation	17-12-2024	

REGIONAL RELATIONS

- "Strategic Planning in Laboratories and Leadership of Young Professionals Course", held from May 9 to 30, 2024. Scholarship recipient: Rocio Alejandra Lesme de Ramirez
- COLABIOCLI 2024 internship grant, awarded to: Dr. Helena Ortiz, at the National Institute of Infectious Diseases (ANLIS) "Dr. Carlos G. Malbrán," related to the course "Salmonella, Shigella, and Vibrio Cholerae: Diagnostic Tools." Theoretical and practical training is available.
- Attendance of President Dr. Carmen Troche at the Ordinary General Assembly of COLABIOCLI that took place during the XXVI LATIN AMERICAN CONGRESS OF CLINICAL BIOCHEMISTRY in the city of Cartagena-Colombia, on October 5, 2024, from 8:30 a.m. to 4:00 p.m. in the HALL: "NUEVO HORIZONTE 1" of the "LAS AMÉRICAS" CONVENTION CENTER.
- Attendance of the Paraguayan Biochemists Association at the protocol ceremony of the new period of the Executive Committee of the LATIN AMERICAN CONFEDERATION OF CLINICAL BIOCHEMISTRY – COLABIOCLI, Dr. Carmen Troche as Member 1: PARAGUAY of the COLABIOCLI Executive Committee 2024-2026

Report by Dr. María Eugenia León, representative on the COLABIOCLI Scientific Committee

- **1st Meeting:** Presentation of members, dissemination of the Scientific Committee regulations, and schedule of scientific activities. Date: 20-02-2024
- **2nd Meeting:** Evaluation of the proposed scientific activities to be carried out in 2024. Countries are requested to provide a list of experts on different topics for training and to conduct a country-level survey of topics of interest for future courses. Date: 12-03-2024
- **3rd Meeting:** Evaluation and analysis of the list of experts and topics to be included in future training sessions. Date: 05/22/2024
- **4th Meeting:** Report on activities carried out and suggestions for the development of scientific activities. Date: 18-09-2024

Report by Dr. Diana Estigarribia, Representative of the COLABIOCLI 2024 Young Professionals Working Group

- Presentation of the 1st Latin American Forum of Young Clinical Laboratory Professionals in Cartagena, Colombia, within the XXVI Latin American Congress of Clinical Biochemistry and XXII International Congress of the National College of Bacteriology, Cartagena, Colombia.
- Participation in the 3rd meeting of representatives of Young Clinical Laboratory Professionals from Latin American countries that are members of the Latin American Confederation of Clinical Biochemistry (COLABIOCLI).
- Planning of the clinical case discussion panel with specialists in the areas of Biochemistry, Hematology, Immunology, Microbiology and Molecular Biology within the framework of the 15th Uruguayan Congress of Clinical Biochemistry and the 3rd COLABIOCLI Young Professionals Conference to be held from June 5 to 7, 2025.
- Planning of the 4th meeting of representatives of Young Clinical Laboratory Professionals from the Latin American member countries of the Latin American Confederation of Clinical Biochemistry (COLABIOCLI) in Uruguay 2025.
- Schedule of various activities Management 2024-2025.

Actividad Académica

- Participation in all COLABIOCLI YOUNG PROFESSIONALS WORK activities, meetings, and projects. Discussion on personalized medicine in each country in the region and updates on point-of-care equipment legislation.
- Keynote address as a national representative: Prescription of genetic studies and their accessibility in Latin America.
- Participants: 125 registered, full capacity for the day.

Administrative Activity

- Planning of the clinical case discussion panel with specialists in the areas of Biochemistry, Hematology, Immunology, Microbiology and Molecular Biology with the 15th Uruguayan Congress of Clinical Biochemistry and the 3rd COLABIOCLI Young Professionals Conference to be held from June 5 to 7, 2025.
- Planning of the 4th In-Person Meeting of representatives of young clinical laboratory professionals from COLABIOCLI member countries.

Informe de la Dra. Marta Ascurra, representante ante el Grupo de Trabajo de Bioética COLABIOCLI

- 12 virtual meetings of the working group were held, one per month, all of which have minutes.
- Participate in two of the three webinars organized by the BE Working Group, one as a speaker and the other as a moderator.
- COLABIOCLI Webinar on Values, Opportunities, and Challenges of Bioethics in the
- Clinical Laboratory. July 28, 2024. Panelists: Dr. Marta Ascurra (Paraguay), Dr. Francisco Remes (Argentina), Dr. Miguelina Rosario (Dominican Republic). Moderators: Dr. Nilda Flick and Dr. Graciela Queiruga.
- COLABIOCLI Webinar on the Status of National Bioethics Committees Online 08/20/2024.
- Panelists: Dr. Constanza Ovalle (Colombia), Dr. Selma Zapata (Dominican Republic), Dr.
- Ignacio Maglio (Argentina). Moderators: Dr. Miguelina Rosario and Dr. Marta Ascurra.
- COLABIOCLI Webinar on Ethics in Scientific Communication from a Human Rights
- Perspective, Challenges, Recommendations, and Professional Responsibility. December 2, 2024.
- Participation as organizer and instructor of the Introductory Course in Research and Healthcare Activity, held virtually from September 9, 2024 to November 4, 2024.

INTERNATIONAL RELATIONS

- Video from Paraguay for the "IFCC Global Med Lab Week" 2024, made by Biochemists Melisa Florentin and Amiliana Pineda, April/2024

Report by Biochemist Melisa Florentin, ABP representative at the International Congress of Clinical Chemistry and Laboratory Medicine and the IFCC Young Scientists Forum, held in Dubai from May 26 to 30, 2024.
This event brought together professionals and scientists from around the world, providing a unique platform for knowledge exchange, collaborative networking, and the promotion of research in the fields of biochemistry and laboratory medicine.

Activities carried out

1. Presentation of IFCC Young Scientists Members
   During the event, the members of the IFCC Young Scientists group were introduced, where the group's activities and work schedule were shared. This opportunity provided an opportunity to learn about the global initiatives being developed to promote the participation of young scientists in the IFCC.
2. Integration and Training Activities
   Various integration and training activities were carried out, focusing on topics such as:
   - Leadership in the scientific field.
   - Mentorship and career paths.
   - The purpose and objectives of the IFCC Young Scientists group.

   These sessions were enriching, as they allowed us to strengthen key skills for professional and scientific development.
3. Meeting with IFCC President, Prof. Tomris Ozben had the opportunity to participate in a meeting with Professor Tomris Ozben, President of the IFCC, who shared words of motivation and encouragement with the young scientists. During this meeting, certificates of participation were awarded, recognizing the commitment and dedication of those attending.
4. Presentation of Research Papers
   Thanks to the scholarship awarded by the IFCC to participate in the event, I was able to present three research papers at the conference. These presentations not only allowed me to disseminate the scientific advances made locally, but also to receive valuable feedback from international experts.
5. Representation of the ABP and Establishment of Collaborative Networks
   My participation in this event was not only an opportunity to represent the ABP internationally, but also to establish connections with professionals and scientists from various countries. These collaborative networks open doors to future projects and joint research, thus strengthening the impact of Paraguayan biochemistry on the global stage.

Report by Dr. Marta Ascurra, representative of the Global Neonatal Screening Working Group – IFCC.
As a member of the Task Force on Global Newborn Screening (TF-NBS), I have participated virtually in the general meetings with the members representing the different regions on the following dates: March 4, 2024; May 27, 2024; and November 11, 2024. Minutes are available for all meetings.
I have also participated in the monthly meetings of the Latin American Working Group, comprised of Dr. Van Pineda and myself as members, along with Dr. Gustavo Borrajo and Dr. Cecilia Queijo as corresponding members. I have also participated in the meetings with representatives of the countries where we are promoting newborn screening: Bolivia, Nicaragua, and the Dominican Republic.

In the latter country, work began in 2022, with the first in-person meeting in February 2023. On April 9, 2024, a law requiring neonatal screening for all was announced, with approval on first reading by the Chamber of Deputies.
As part of the Working Group's support, I was invited to participate as a speaker at the 21st National Congress of Clinical Laboratory Professionals: Technology and Innovation: Transforming Health for a Better Future, which took place on November 28, 29, and 30, 2024, in the Dominican Republic. This event was organized by the Dominican College of Bioanalysts (CODOBIO). 2023-2025 biennium.
During my stay, I attended meetings with Professor María Esther Santos, the current President of CODOBIO, who expressed her gratitude for the support she received from the IFCC, allowing her to participate in the event. The event was attended by approximately 1,200 people, and the meetings have continued throughout 2025.
I also met with members of the Neonatology Society of the Dominican Republic and with members of the National Bioethics Commission of the Dominican Republic to promote a webinar, which took place in February 2025, to further promote neonatal screening with other stakeholders in the country.
Recalling that the main objective of the trip was to establish contact with key stakeholders to promote neonatal screening in that country.

Report by Dr. Milva Ibarrola, representative to the IFCC Working Group on "Normalization of Fetal Hemoglobin (WG-HbF)."
During 2024, as part of the implementation of the protocol for the standardization of fetal hemoglobin (HbF) measurement, two meetings were held. One was held virtually on May 22nd, and the other was held in a hybrid, in-person and virtual format on September 25th, 2024, in Milan, Italy. The meeting agendas and minutes are attached.
In general terms, during this period, the expert group has decided to evaluate and develop the reference method for Hb F, as well as for HbA_2. In addition, a call for proposals will be issued to evaluate biotechnology companies that could provide primary calibration materials.
For the current year, meetings will be held using the same dynamics and methods, and the meeting conclusions will be reported to the ABP Board of Directors on a regular basis.

Report by Dr. Montserrat Blanes, representative and member of the Committee Clinical Laboratory Management (C-CLM) EMD, IFCC Liason member and News, CPD, IFCC.

- International IFCC Congress Dubai May 2024, attendance at the IFCC EMD Lab Management Committee meeting, the IANT CPD WG meeting and the CPD e-news WG meeting, May 2024.
- Bolivian Society of Clinical Chemistry in La Paz, Bolivia, at the 10th Julias Scientific Conference - 5th International Conference!, Speaker as a member of the speaker bureau within the framework of the IFCC Visitor Lecturer Programme.
- X Julias Scientific Conference - V International Conference! as President of the Evaluation Committee for the oral presentation of scientific papers and awards, from July 11 to 13//2024.
- Recognition of academic career at FCQ UNA. Designation of professor emeritus, July 2024
- International Symposium on Laboratory Medicine in Shenzhen -China, participating as a member of (C-CLM) IFCC, August 26/2024.
- Visiting Lecturer Programmer at the XLVI National Congress of CONAQUIC in Morelia, Mexico, September 11 and 13, 2024.
- 26th Latin American Congress of Clinical Biochemistry and 22nd International Congress of the National College of Bacteriology, Cartagena, Colombia; as Coordinator of the SNIBE Symposium on Scientific and Technological Advances, and as a member of the CLM IFCC; October 5, 2024.
- Within the framework of CALILAB, the WG IANT meeting and attendance at the Rectorate of the UBA prior to a meeting at the dean's office with authorities of the Faculty of Chemistry, for the appointment of Professor MARIO PLEBANI of the University of Padua, Italy, and President of the EFLM, member of the EB IFCC as Honoris Causa Professor, November 6 and 8, 2024.
- CODOBiO Dominican Republic Congress: Intra-congress course on leadership in clinical laboratories developed based on the publication of the book by the CLM IFCC, of which CODOBiO is a member. The plenary conference on natriuretic peptide determination was sponsored by Snibe and its local representatives. November 28, 29, and 30, 2024

SAUDI ARABIA
SAUDI SOCIETY FOR CLINICAL CHEMISTRY (SSCC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Lifestyle Wellness Summit	Feb. 24, 2024	The impact of lifestyle factors such as diet, exercise, and stress management on overall health and wellness.
Cardiometabolic Health	Feb 29, 2024	Women's cardiometbolic health.
1st Journal Club	Apr. 27, 2024	Laboratory accreditation preparation.
Bone Biomarkers and Lab Accreditation	May 9, 2024	Use of bone biomarker in the diagnosis of osteoporosis and best practices for successful accreditation.
POCT Workshop	May 15-16, 2024	Basic POCT training for POCT coordinators in Ministry of Health (MOH).
Key Blood Collection Challenges and New Generation of Safety (Riyadh)	May 20, 2024	Prevention of needlestick injuries and laboratory safety at preanalytical stage.
Key Blood Collection Challenges and New Generation of Safety (Jeddah)	May 21, 2024	Prevention of needlestick injuries and laboratory safety at preanalytical stage.
Participation in the LCSP auditorium	31-07-2024	"Competency Assessment for Health Professionals with Foreign Degrees to Access Professional Accreditation by the Ministry of Public Health and Social Welfare"
10th Annual Conference SSCC 2024 & 6th International Meeting on Clinical Chemistry and Laboratory Medicine	May 26-30, 2024	Inborn errors of metabolism in Saudi Arabia and Dysglycemia
Liver and Bone Biomarkers	Sept 2, 2024	Liver marker in the diagnosis of liver fibrosis and bone biomarkers in the diagnosis of osteoporosis
Procalcitonin	Oct 7, 2024	Clinical use of procalcitonin and the role of POCT in procalcitonin analysis.
Attendance at the Infotec Update Day	08-11-2024	In the framework of its 25th anniversary
Plasma Protein Science Day	Nov 7, 2024	Role of Lipoprotein(a) [Lp(a)] in cardiovascular disease risk assessment, and exploring serum free light chain testing in diagnosing monoclonal gammopathies, particularly in patients with renal impairment.
Pre-analytical Working Group Workshop (Riyadh)	Dec 10, 2024	Preanalytical process and its impact on laboratory results.
Pre-analytical Working Group Workshop (Jeddah)	Dec 12, 2024	Preanalytical process and its impact on laboratory results.
2nd Journal Club	Dec. 14, 2024	Method comparability.

BOOTH AWARENESS

NAME	*DATE*
Jed fit Expo	Jan 18-20, 2024
7th SAMBS Annual conference	Feb. 7-9, 2024

Global Health	Oct. 22-24, 2024
International conference new era of genetics analysis	Oct. 26, 2024
Annual Conference Saudi Society for Clinical Laboratory Sciences	Dec 21, 2024

AWARENESS

NAME	*DATE*
Understanding the types of fasting: Ramadan fasting, intermittent fasting, prolonged fasting and using Ramadan to benefit from them	Mar. 18, 2024
4th Keto Seminar: Diabetes and Food Plans with Low Carb	Oct. 3, 2024
Prostate Cancer Awareness Month	Nov. 10, 2024
World Diabetes Day	Nov 21-22, 2024
AIDS Awareness	Dec. 1, 2024

EDUCATION

MAGAZINES - AWARENESS	*DATE*
The first issue of the awareness magazine of the Saudi Society for Clinical Chemistry	Mar. 2024
The second issue of the awareness magazine of the Saudi Society for Clinical Chemistry	June 2024
The third issue of the awareness magazine of the Saudi Society for Clinical Chemistry	Dec. 2024

REGIONAL MEETINGS

Name of the meeting	*Date*
IFCC WorldLab Congress 2024 – Dubai, UAE (10th Annual Conference SSCC 2024 & 6th International Meeting on Clinical Chemistry and Laboratory Medicine)	May 26-30, 2024

Society's contribution for the meeting:

The Saudi Society for Clinical Chemistry (SSCC) played a key role, hosting its 10th Annual Meeting alongside the 26th International Congress of Clinical Chemistry and Laboratory Medicine, the 17th Congress of the Arab Federation of Clinical Biology and 8th UAEGDA International Genetic Disorders Conference. The IFCC WorldLab Congress 2024, held in Dubai, UAE from May 26-30, brought together 4,600 attendees, including 2,045 international delegates from 107 nations, fostering global knowledge exchange in clinical chemistry and laboratory medicine.

SSCC showcased Saudi Arabia's advancements in clinical chemistry at the IFCC WorldLab Congress 2024, emphasizing the country's growing global scientific presence. Through sessions, presentations, and posters, Saudi scientists and clinicians demonstrated their commitment to advancing and shaping the future of laboratory medicine to achieve the goals of the Saudi Government of 2030 vision. For moe details about the IFCC WorldLab 2024 visit: ***https://www.dubai2024.org/***

Saudi Delegation Participation:

- Saudi Delegates: Out of the total international delegates, 170 were from Saudi Arabia, making up approximately 8.3% of the total participation. This significant presence underscores Saudi Arabia's growing influence in the global clinical chemistry community.
- Speakers and Moderators: Saudi Arabia was represented by 21 distinguished speakers and moderators, who contributed to a wide range of topics and facilitated critical discussions during the 5-day event.
- SSCC Sessions: The SSCC organized two specialized sessions focusing on pivotal topics relevant to the region:
  -Inborn Errors of Metabolism in Saudi Arabia: This session highlighted the unique metabolic disorders prevalent in Saudi Arabia, presenting latest research findings and discussing strategies for early diagnosis and management.
  -Dysglycemia – Novel Biomarkers for Diagnosis and Monitoring Prognosis: This session addressed the rising concern of dysglycemia in Saudi Arabia, encompassing diabetes and pre-diabetes, and explored innovative diagnostic and therapeutic approaches.
- Research Presentations:
  -Posters and Abstracts from Saudi Arabia: Saudi scientists and clinicians presented a total of 86 posters and abstracts, contributing significant insights and data to the scientific discussions at the Congress.
  -SSCC Members' Posters: Among these, 20 posters were authored by members of the SSCC, showcasing the depth of research and clinical advancements within the society.

REGIONAL MEETINGS

1. Arab Federation of Clinical Biology (AFCB)
2. Emirates Clinical Chemistry Society (ECCS)

INTERNATIONAL RELATIONS

1. International Federation of Clinical Chemistry and Laboratory Medicine (IFCC)
2. American Society for Clinical Pathology (ASCP)

ADDITIONAL INFORMATION

SERBIA
SOCIETY OF MEDICAL BIOCHEMISTS OF SERBIA (DMBS)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
INTERNATIONAL XXIII SERBIAN CONGRES of Medical biochemistry and Laboratory medicine	September 16-18, 2024, Belgrade	New perspectives in Laboratory Medicine
The 24th Annual Scientific Conference in memory of Professor Ivan Berkeš Society of Medical Biochemist of Serbia	December 6, 2024, Belgrade	Scientific Foundation
Report from the XX INTERNATIONAL CONFERENCE ON QUALITY JUSK ICQ – 2024	June 6, 2024, Belgrade	Quality control in laboratory

EDUCATION

International XXIII Serbian Congress of Medical Biochemistry and Laboratory Medicine

Constant professional development and continuous education is the basis of a successful profession of laboratory medicine. For this reason, the Serbian Congress of Medical Biochemistry and Laboratory Medicine with international participation was organized for the 23rd time by the Society of Medical Biochemists of Serbia (SMBS) and the Faculty of Pharmacy, University of Belgrade, Serbia. The congress was held September 16–18th, in Belgrade, Serbia, under the auspices of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), European Federation for Clinical Chemistry and Laboratory Medicine (EFLM), and Balkan Clinical Laboratory Federation (BCLF), as well as the Ministry of Education and Science and Technological Development, and the Ministry of Health of the Republic of Serbia.

The distinguished guests of the Congress were Prof. Mario Plebani, the EFLM President, and Prof. Tomris Ozben, the IFCC President, who both addressed and greeted the delegates on behalf of EFLM and IFCC Executive Boards. Also, the Dean of the Faculty of Pharmacy, University of Belgrade, Prof. Slađana Šobajić, and the President of the Association of Pharmaceutical Associations of Serbia, Prof. Dr. Branislava Miljković, joined the welcome address. During the opening ceremony, prof. Mario Plebani presented the EFLM's recognition to Prof. Nada Majkić-Singh, as sign of appreciation for her dedication to the development of laboratory medicine profession on national and international level. This recognition was awarded to Prof. Majkić-Singh being a long-year President of the Society of Medical Biochemists of Serbia, one of the founders of the Balkan Clinical Laboratory Federation, and its past president. Also, Prof. Majkić-Singh actively took part in the EFLM activities as a member of several EFLM functional units and was the initiator of the Belgrade Symposium for Balkan Region, which was jointly organized annually from 2005 until 2018 by EFLM and the SMBS. Prof. Plebani said that her commitment to advancing medical biochemistry in Serbia and the Balkan region was widely recognized and will remain a significant milestone.

On the occasion of national congresses, the SMBS traditionally awards its Honorary Diploma, the highest recognition presented to foreign colleagues for promoting clinical chemistry and laboratory medicine in Europe and globally, and for significant contribution to the work and development of the Society of Medical Biochemists of Serbia. It was awarded so far to Prof. Victor Blaton (2010), Prof. Stoyan Danev (2012), Prof. Simone Zerah (2015), and to Prof. Mario Plebani (2017). This years' laureate of the Honorary Diploma of the Society of Medical Biochemists of Serbia was Prof. Dr. Tomris Ozben, current president of IFCC and past president of EFLM.

The SMBS also awarded an award of the "Magistra Milica Marković" Foundation to the most dedicated professional who contributed to the development and growth of laboratory medicine service in their institution. This year's laureate was Dr. Jon Čoban, a specialist in clinical biochemistry, Head of the Laboratory Diagnostics Service at the Vršac General Hospital, who recently retired.

The scientific program of the congress was dedicated to innovations and trends that shape the future of laboratory diagnostics. It was opened with a plenary lecture by Prof. Abdurrahman Coskun entitled "Personalized reference intervals: the road to personalized laboratory medicine", and with the opening session on the practical application of artificial intelligence, delivered by Prof. Mario Plebani and the members of the EFLM Working Group on Artificial Intelligence – Prof. Andrea Padoan, Dr Anna Carobene, and Dr Salomón Martín Pérez.

Two workshop sessions were organized by companies Vivogen (distributor of Thermo Fisher Scientific) and Makler (distributor of Beckman Coulter) in Serbia.

Poster session gathered 32 poster presentations from Serbia and abroad, while many of them were the work of students and young scientists. The Congress attended over 200 participants mostly from Serbia, but also from neighbouring countries –Republic of Srpska and Bosnia and Herzegovina, North Macedonia, Montenegro, and Croatia.

The closing session presented the novelties related to the influence of microbiota on health and disease pathogenesis, with lectures covering the influence of microbiota on human health (by Prof. Brankica Filipić), probiotics as natural innovative and unique strategy for cell-aging deceleration (by Dr Nataša Golić), the antidepressant potential of postbiotics (by Dr Miroslav Dinić), and an approach of microbiota modification to the treatment of multiple sclerosis (by Dr Jelena Đokić).

Two workshop sessions were organized by companies Vivogen (distributor of Thermo Fisher Scientific) and Makler (distributor of Beckman Coulter) in Serbia.

Poster session gathered 32 poster presentations from Serbia and abroad, while many of them were the work of students and young scientists. Poster's vivid discussion closed the XXIII Serbian Congress of Medical Biochemistry and Laboratory Medicine. The congress was successful, with up-to-date topics currently discussed in the scientific community, which have a significant impact on global health structures. The Congress attended over 200 participants mostly from Serbia, but also from neighbouring countries –Republic of Srpska and Bosnia and Herzegovina, North Macedonia, Montenegro, and Croatia.

The 24th Annual Scientific Conference in memory of Professor Ivan Berkeš

Neda Milinković, Nada Majkić-Singh
Society of Medical Biochemist of Serbia

The 24th Annual Scientific Conference »Professor Ivan Berkeš« was held in 2024 in memory and gratitude to Professor Ivan Berkeš, who established medical biochemistry as a scientific and healthcare discipline in Serbia. The conference is organized traditionally by the Society of Medical Biochemist of Serbia (SMBS), and this year it was co-organized and hosted by the Faculty of Pharmacy, University of Belgrade. This traditional meeting of students and professors of the Faculty of Pharmacy, honouring the legacy of one of its most distinguished professors was held on 5 December 2024. Prof. Nada Majkić-Singh, the President of the Scientific Foundation "Professor Ivan Berkeš", greeted the participants with her opening words and reminded audience of the history and the idea behind the scientific foundation, the significance of the conference, as well as of the life and work of Professor Ivan Berkeš, in whose honour it was established.This year, chairs of the conference were Prof. Nada Majkić-Singh, Assistant Prof. Snežana Jovičić and Assistant Prof. Neda Milinković. After an opening address of Assistant Prof. Snežana Jovičić, the President of SMBS, followed by the welcoming address of the Dean of the Faculty of Pharmacy, Prof. Nataša Bogavac Stanojević and the President of the Association of Pharmaceutical Associations of Serbia Prof. Branislava Miljković, Prof. Nada Majkić-Singh, presented annual awards of the Foundation. Diplomas and monetary awards were traditionally

presented to the best graduate students of the Faculty of Pharmacy, University of Belgrade, and this year's recipients were Jovana Jerotijević (Master of Pharmacy-Medical Biochemist) and Dušica Kušljević (Master of Pharmacy).
Traditionally, the scientific part of the conference followed the award ceremony. It is consisted of presentations of selected results of Ph.D. thesis research presented by the Doctors of Medical Sciences-Pharmacy who defended their doctoral theses in the previous academic year. The first lecture, entitled "HDL subclasses and the distribution of paraoxonase 1 activity in patients with ST-segment elevation acute myocardial infarction," was presented by Dr Saška Đekić who received her doctorate at the Department of Medical Biochemistry, Faculty of Pharmacy, University of Belgrade. The second lecture, entitled "Analysis of antibiotic consumption and antimicrobial resistance in the Republic of Serbia: the immediate and long-term effect of COVID-19", was presented by Dr Tanja Tomić, who received her doctorate at the Department of Social Pharmacy and Pharmaceutical Legislation, Faculty of Pharmacy, University of Belgrade. The third lecture, entitled "Effects of supplementation with gliadin complex with melon extract standardized to superoxide dismutase content on parameters of oxidative status and physical performance of categorized athletes", was presented by Dr Olina Dudašova Petrovičova, who received her doctorate at the Department of Bromatology, Faculty of Pharmacy, University of Belgrade. The closing lecture was held by Azra Guzonjić, who presented the results of her final thesis of the specialist academic studies, entitled "Economic evaluation of lipid scores in risk assessment for the development of cardiovascular diseases in patients with type 2 diabetes", defended at the Department of Medical Biochemistry, Faculty of Pharmacy, University of Belgrade. The conference was closed after the discussion of presented results.
The continuity of this conference is based on respect for the past, but also on the awareness that young PhDs in the scientific field of medical biochemistry of the Faculty of Pharmacy, University of Belgrade are the pillars of the future of pharmacy and medical biochemistry science in Serbia.

REPORT FROM THE XX INTERNATIONAL CONFERENCE ON QUALITY JUSK ICQ – 2024

Quality control in laboratory medicine is performed as a continuous process and contributes to the reliability of results and safety of laboratory diagnostics, as well as to the overall well-being of the patient. The method and application of quality control depend on the field of laboratory medicine for which they are specific, but the postulates of quality control are universal. The Society of Medical Biochemists of Serbia (SMBS) recognizes the importance of continuous education, including quality control, and traditionally participates actively within the Unified Association of Serbia for Quality (JUSK), which provides important logistical support to SMBS for this meeting. SMBS has been a member of JUSK for many years, and the continuity of the annual meetings under the auspices of JUSK speaks for their quality.
Although there was no separate conference of the Scientific and Technical Committee of the accredited laboratory on 6 June 2024, two expert lectures were held on behalf of the Serbian Society of Medical Biochemists. The first lecture was given by Prof. Dr. Ana Ninić, who works at the Department of Medical Biochemistry, University of Belgrade - Faculty of Pharmacy, Belgrade, Serbia. She participated in the establishment of a PCR laboratory for the detection of SARS-CoV-2 and the performance of analyses during the coronavirus pandemic in the Directorate for National Reference Laboratories, Ministry of Agriculture, Forestry and Water Management of Serbia within the working group "KOVID-19", where she made an outstanding professional and scientific contribution and selflessly helped in the fight against the coronavirus. In her lecture entitled "Quality Control in the PCR Laboratory", she addressed the quality control challenges that professionals face when working with this specialized technique. The second presentation, entitled "Verification of urinalysis - implementation of ISO 15189 requirements", was given by Dr Biljana Glišić, a specialist in medical biochemistry who works at the Beo-Lab Plus Polyclinic in Belgrade, Serbia. Biljana Glisic has many years of intensive experience in the field of urinalysis.

The meeting emphasized the importance of implementing standards in practice in two specific areas of laboratory medicine: PCR-specific techniques and urinalysis. It also emphasized the importance of applying standards and the importance of continuous quality implementation for the ultimate goal of a sustainable laboratory profession.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
XXXI BCLF Meeting	October, 2004. Antalya, Turkie	Three lecturers participate

SLOVENIA
SLOVENIAN ASSOCIACTION FOR CLINICAL CHEMISTRY AND LABORATORY MEDICINE (SZKKLM)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Prenatal genetic testing	12. 3. 2024	Biochemical tests, Clinical genetics, Cell-free DNA, quantitative fluorescent PCR, Molecular genetic tests, Molecular karyotyping, Cytogenetic tests, Exome and genomic sequencing, Preimplantation genetic diagnostics
70 years of the Department of Laboratory Diagnostics, University Medical Center Maribor	7. 6. 2024	Regulatory T-lymphocytes, Biochemical markers in the management of traumatic brain injury, Macrotroponin, High dose hook effect, Exogenous influences on hematological parameters, Reference change value
Hematopoietic stem cell transplantation and legislative challenges	2. 10. 2024	Unrelated hematopoietic stem cell transplantation and rejection, CART cell therapy, Accreditation and IVDR in laboratory hematology
Recent findings and recommendations in the diagnosis and treatment of oncological patients	9. 12. 2024	Systemic treatment of lung cancer, Molecular diagnostics in oncology, Determination of circulating tumor cells, Tumor markers, Cases

EDUCATION

1. Laboratory diagnostics of thyroid diseases (May 2024)
2. Laboratory diagnostics of diabetes (May 2024)
3. Managing the post-analytical factors of the laboratory process (September 2024)
4. Platelets (September 2024)

REGIONAL RELATIONS

1. **EFLM National Representative:** Lidija Gobec
2. **EFLM Division - Education and Profession**: Evgenija Homšak - president
3. **EFLM Committee Accreditation and ISO/CEN Standards:** Pika Meško Brguljan - full member
4. **EFLM Committee - EFLM-CPECS:** Mojca Božič Mijovski - member
5. **EFLM Committee - Ethics in Laboratory Medicine:** Borut Božič - full member
6. **EFLM Technical Committee:** EFLMLabX: Evgenija Homšak - chair

7. **EFLM Technical Committee:** Register: Greta Štrakl - corresponding member
8. **EFLM Committee - Postanalytical Phase:** Alenka Trampuš Bakija - corresponding member
9. **EFLM Committee - Autoimmunity Testing:** Manca Ogrič - full member
10. **EFLM Committee - Green & Sustainable Laboratories:** Lidija Gobec - full member

INTERNATIONAL RELATIONS

1. **IFCC National Representative:** Blaž Krhin
2. **IFCC Committee on Molecular Diagnostics:** Katarina Trebušak Podkrajšek - corresponding member
3. **IFCC Committee on Mobile Health and Bioengineering in Laboratory medicine:** Evgenija Homšak - corresponding member
4. **IFCC Task Force on Global Newborn Screening:** Barbka Repič Lampret - corresponding member

ADDITIONAL INFORMATIONS

Publication of the sixth (6th) issue of the Slovenian Association for Clinical Chemistry and Laboratory Medicine journal "Laboratorijska medicina (Laboratory Medicine)".

SPAIN
SPANISH SOCIETY OF LABORATORY MEDICINE (SEMEDLAB)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
XVIII National Congress of Clinical Laboratory (LabClin). (Co-organizer)	Bilbao, Nov. 20-22, 2024	Current topics in medical laboratory sciences
XXI Meeting of Scientific Committees.	Seville, February 29 and March 1, 2024	Current topics in medical laboratory sciences
IV External Quality Assurance Programs Conference	Virtual meeting. November 6th 2024	• News on SEQC-ML Programs. • Lpa • Preanalytical programme. • SCR-RCV Programme.
III Conference for Residents and New Clinical Laboratory Specialists	Valencia, February 23rd 2024	• The residence. • Communication strategies. • Career opportunities.
VIII International Symposium Laboratory Medicine and Quality	Barcelona, April 15 -16, 2024	• Sample stability • External Quality Assurance Prgrams • Harmonization of laboratory reports • IVD regulation • Personalized medicine
I Conference for R4 Residents	Toledo, June 6 - 7, 2024	• Leadership Management in Laboratory Medicine

EDUCATION

Virtual courses:

- General Educational Program 2023- 2024 *696 participants*
- Clinical Cases in Hematology Program 2023- 2024 *456 participants*
- Clinical Cases. General Educational Program 2023- 2024. *487 participants*
- Clinical Cases in Microbiology. Program 2023- 2024 *210 participants*
- Nutrition and vitamins. Program 2023- 2024 *378 participants*
- Hereditary neurological diseases *313 participants*

Classroom-based course:

- Course on Analytical Validation of measurement procedures in the Clinical Laboratory. Madrid, October 2024 *45 participants*
- SEQCML Academy: Virtual courses and webinars. Total of *4,891 participants*
- Análisis de RNA en el diagnóstico de enfermedades hereditarias. January 17th *247 participants*
- Clinical Cases in Hematologic Biology. January 31st *268 participants*
- Interhospital Sessions. March 3rd *184 participants*
- Importance of the laboratory in clinical diagnosis. May 21st *235 participants*
- III Edition – Practical Workshop of the Analytical Quality Commission. June 18th. *167 participants*
- Welcome to the Emergency Laboratory (3rd Edition). June 6th, 12th, 20th *398 participants*
- Interhospital Sessions. June 4th *149 participants*
- The importance of early diagnosis of multiple myeloma. How can it be improved? June 27th *409 participants*
- Machine Learning and Data Science in the Clinical Laboratory. September 9Th *254 participants*
- The total analysis process: introduction to extra-analytical phases. September 25th *268 participants*
- Systematic reviews and/or meta-analyses. 7 and 14 October. *230 participants*
- Interhospital Sessions. October 22th *201 participants*
- Biochemical markers for the diagnosis of Alzheimer's disease. November 26th *406 participants*
- New recommendations for measuring serum vitamin D concentration. November 28th *438 participants*
- Utility of Flow Cytometry in the Clinical Laboratory. December 7th *88 participants*
- ISO 15189 Accreditation for Trace Element Laboratories. December 16th *150 participants*
- Extra-analytic phases, 43 years after the brain to Brain Loop. December 17th *222 participants*

REGIONAL RELATIONS

SEMEDLAB (formerly SEQCML) has relationships with:

- The European Federation of Clinical Chemistry and Laboratory Medicine (EFLM).
- The Federation of European Societies on Trace Elements and Minerals (FESTEM).
- The European Organization for External Quality Assurance Providers in Laboratory Medicine (EQALM).

INTERNATIONAL RELATIONS

SEQCML (formerly SEQCML) has relationships with:

- The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC).
- The Clinical and Laboratory Standards Institute (CLSI).
- The International Council for Standardization in Hematology (ICSH).
- The Ibero-American Working Group WG IAN through “Radio Microscopio”.
- The Latin-American Confederation of Clinical Biochemistry (COLABIOCLI).

ADDITIONAL INFORMATIONS

SEQCML organizes 75 EQAS programs (12 programs accredited according to ISO 17043) with 443 magnitudes (177 accredited). Participation is high with over 9,600 registrations per year. EQAS programs include both analytical and extraanalitical phases. SEQCML- EQAS Programs and Educational Programs are expanding to Latin-American countries.

SEMEDLAB (formerly SEQCML) maintains the Spanish version of Lab Tests Online with more than 300 tests and a glossary with more than 500 contents. The LTO ES website has received an average of 500,000 visits per month last year.

Advances in Laboratory Medicine / Avances en Medicina de Laboratorio (Adv Lab Med) is the official journal of the Spanish Society of Laboratory Medicine (SEMEDLAB). Created in 2020 is a quarterly publication (4 issues per year), Open Access format, bilingual English and Spanish. Indexed in PMC, Scopus and PubMed from 2022.

SEMEDLAB (formerly SEQCML) is committed to multidisciplinary work and maintains agreements with other medical societies such as Spanish Society of General and Family Physicians, Spanish Society of Internal Medicine, Spanish Society of Cardiology and Spanish Society of Nephrology among others.

SEMEDLAB has more than 4,000 memberships (January 1st 2025), of which nearly 400 are members of more than 30 Commissions/ Committees/ Working Groups and more than 40 are Representatives in International Federations (IFCC/EFLM/FESTEM/CLSI/ICSH). It is worth highlighting the SEMEDLAB commitment to promoting the participation of young scientists in both national and international groups.

SUDAN
SUDANESE SOCIETY OF CLINICAL BIOLOGY

NATIONAL MEETINGS

Name of the meeting	*Date*
Mobilization of members and affiliated groups to provide continuous medical support to displaced individuals/refugees	May 2023 to date
Preparation and submission of a proposal for mobile clinics and laboratories to help Returning individuals	December 2024
Lab Saves Lives IFCC	21 to 27 April 2025

REGIONAL RELATIONS

* Institute of Endemic Diseases, University of Khartoum, Sudan
* Leishmaniasis Research Group,Sudan
* Leishmaniasis East Africa Platform, East Africa

ADDITIONAL INFORMATIONS

The war in Sudan has been a devastating crisis that has crippled every aspect of Sudanese society. Countless individuals have been forced to flee their homes, with many crossing borders in search of safety. For many, this has meant the loss of loved ones, homes, and all personal belongings
Rebuilding will require the collective efforts od the entire community. Although the society was not prepared for a disaster of this magnutide, it is striving to provide support and assistance to the best of its ability.

SWITZERLAND
SWISS SOCIETY OF CLINICAL CHEMISTRY (SSCC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Brains On 2024, Berne	29.01.2024	Laboratory diagnostics of emergency medicine, How to define and verify laboratory reference values?
Molecular Diagnostics 2024, Zurich	07. - 08.03.2024	Dry Eye Disease and the Microbiome, Microbiome Therapies, News from GWAS on IgA Nephropathy, Genetics of Celiac Disease, Geolocalization for Studying Gene-Environment Interactions, State of the Art and Real-World EGFR Testing Practices for Non-Small-Cell Lung Cancer, New Technologies to Interrogate Cancer Genomes, Phenoscore for Rare Genetic Diseases, Genetics of Neurodevelopmental Disorders, The Genetics of Inflammatory Bowel Diseases, Genetic Heterogeneity and Clinical Variability of Cardiomyopathies and Cardiac Arrhythmias, Epigenetic Gene Regulation: Genomic Imprinting in Plants
SSCC Annual Assembly 2024, Zurich	04. - 06.09.2024	Sustainability in laboratory medicine, Near Patient Laboratory Medicine, Novel Biomarkers and Diagnostic Algorithms, Importance of Laboratory Medicine in Academia, Digital Medicine, Diversity in Laboratory Medicine: sex vs gender and ethnicity in lab reports, New Technologies, Interactions between lab and clinicians or practitioners to solve a clinical problem

EDUCATION

26 days of further education as a CAS in laboratory medicine, which is part of the further education curriculum in laboratory medicine in Switzerland. This CAS is offered in German at the University of Zurich (https://www.cas-labmed.uzh.ch/de.html) and in French at the University of Geneva (https://www.unige.ch/formcont/cours/medecine-labo).

SYRIAN ARAB REPUBLIC
SYRIAN CLINICAL LABORATORY ASSOCIATION (SCLA)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Syndicate of Pharmacists	March 2024	Special session on laboratory Management of Diabetes & Thyroid
Syrian Clinical Laboratory Association	May 2025	Special Training on the use of AI in Laboratory Medicine
Syrian Clinical Laborfatory Association	October 2025	Zoom meetin to discuss some professional and organisational issues

EDUCATION

Monthly lectures on various topics in Damascus & Aleppo

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
WorldLab, Dubai	May 2024	11 Papers had been accepted. 6 of them had won grant from IFCC & AFCB to participate in the event
WorldLab, Dubai	May 2024	Dr. Shannan had delivered a presentation at AFCB Symposium. Dr. Alkhatib had chaired a session of Newborne screening.

THAILAND
THAI SOCIETY OF CLINICAL PATHOLOGY (TSCP)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
TH NEQAS (Precision Molecular Pathology) annual meeting	30 January 2024	Precision molecular pathology
Seminar	24 February 2024	Public Procurement and Supplies Administration Act and Techniques for Drafting the Terms of Reference (TOR) or Specific Requirements for Laboratory Instrument
TSCP annual meeting	22 March 2024	Update in Clinical Laboratory
Continuous Quality Laboratory Improvement by Sigma meeting	8 November 2024	IQC to CQI academy

TUNISIA
SOCIÉTÉ TUNISIENNE DE BIOLOGIE CLINIQUE (STBC)

Scientific Conferences

1. **First Tunisian Forum of Medical Biology / 37th National Days of Clinical Biology (JNBC 2024)**
   The STBC, in partnership with the STBP, co-organized the inaugural Tunisian Forum of Medical Biology, merging the 37th edition of the JNBC and the 2nd STBP Scientific Days. This joint initiative aimed to foster dialogue among medical biology professionals amid the global reshaping of the field, both technologically and organizationally. The scientific program featured:
   - 3 round tables
   - 10 workshops
   - 10 sessions
   - 2 oral communication sessions
   - 6 industrial symposia organized by our partners

Four live-streamed debates were hosted via the "FTBM Live Studio." In parallel, the general assemblies of both the Francophone and Arab federations of clinical biology were held.

2. **4th Tunisian Days of Practical Biology – May 17, 2024, Laico Hotel, Tunis**
   The 2024 theme focused on ***"Biology and Male Infertility".*** This clinicobiological symposium highlighted national and international expert speakers, offering deep insights into the complex issue of male infertility. Attendees engaged in multidisciplinary learning through conferences, workshops, and roundtable discussions, facilitating the integration of cutting-edge technological advances into everyday practice.

International Course

1. **15th Arab Course in Molecular Biology**
   Held as a pre-conference event for JNBC 2024 (September 30 – October 1, 2024), in collaboration with our partner MEDIBIO. This year's focus: "The Role of NGS in Medical Biology: Applications in Oncology and Oncohematology"
   Location: MEDIBIO Headquarters, Tunis.

Continuing Education Days

1. **Chronic and Reactive Hyperlymphocytosis** – December 6, 2024 Faculty of Pharmacy, Monastir & Children's Hospital, Tunis
2. **Sperm Analysis Workshop** – October 5, 2024 Laico Hotel, Tunis
3. **Emergencies in Clinical Biochemistry** – June 21, 2024 Sousse Palace
4. **Biological Diagnosis of Digestive Parasitosis** – May 30, 2024 Faculty of Medicine, Tunis
5. **Quality Management in Microbiology** – May 16, 2024 Headquarters of the Tunisian Pharmacists' Council
6. **Prenatal Screening for Trisomy 21** – April 19, 2024 Laico Hotel, Tunis
7. **6th Kebili Clinical Biology Day 2024** – February 3, 2024 In partnership with the Regional Health Directorate of Kebili and the "Biologie Clinique et Vie" Association El Mouradi Hotel, Douz

8. Challenges in Interpreting Antibody Screening (RAI)
9. Diagnostic and Prognostic Biomarkers in Cardiovascular Emergencies

STBC Young Biologists Group
"Tuesdays for Biologists"
Held at the Tunisian Pharmacists' Council HeadquartersThese sessions showcased clinical and biological case presentations by residents and junior assistants, followed by open discussions. The initiative—led by STBC's Young Biologists Group—revitalized the scientific community's engagement, enhancing the training of future clinical biologists through collaborative learning. Two sessions were held in 2024: April 30 and February 20.

International Engagement
1. National Union of Hospital Biologists (SNBH)
   STBC contributed to the program of a FIFBCML session during the Francophone Days of Medical Biology (JFBM), organized by SNBH from October 9–11, 2024, in Troyes. The session focused on "Ethics and Professional Confidentiality in Medical Biology," presented by Dr. Sarra Fekih Salem, Associate Professor of Hematology.

2. Arab Federation of Clinical Biology (AFCB)
   STBC was represented at IFCC WorldLab 2024, co-hosted by AFCB and IFCC (May 26–30, 2024, Dubai), by two leading Tunisian speakers in virology and immunology: Prof. Abdelhalim Trabelsi and Prof. Ridha Barbouche.

RTBC – Special Edition: "Autoantibodies: The Mystery Revealed"
In collaboration with the «Revue Tunisienne de Biologie Clinique» the official journal of the STBC, the Tunisian Association of Young Internists (TAYI) launched a special educational initiative designed to foster collaboration between clinicians and biologists. This edition, titled "Autoantibodies: The Mystery Revealed," focuses on improving the diagnostic and therapeutic management of connective tissue diseases—among the most prevalent systemic autoimmune conditions.

The project united young internists and immunologists around a shared goal: the joint creation of thirty-nine mental maps covering thirty-six key antinuclear antibodies (ANA) frequently encountered in daily clinical practice. Each map synthesizes essential biological and clinical information and was co-produced by a resident duo—one internist, one immunologist—under senior supervision from both specialties.

This initiative highlights RTBC's commitment to interdisciplinary dialogue, hands-on learning, and knowledge accessibility across specialties.

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TURKIYE
TURKISH BIOCHEMICAL SOCIETY (TBS)

NATIONAL MEETINGS

Name of the meeting	***Date***	***Topic***
Symposium: Immunochemistry in Diabetes and the Renin-Angiotensin-Aldosterone System: Clinical and Laboratory	12 June 2024	This symposium focuses on the clinical and laboratory evaluation of the Renin-Angiotensin-Aldosterone System and diabetes, addressing current diagnostic approaches, preanalytical processes, and result interpretation.
Pre-Analytical Phase Symposium 2024	18 September 2024	This symposium focuses on optimizing pre-analytical processes in clinical laboratories, covering sample collection, preanalytical error management, and international guidelines.
XXXI International Balkan Clinical Laboratory Congress // 35th National/ International Biochemistry Congress,	28 October – 1 November 2024	**Scientific Program** 28 October, Monday Opening Speeches Doğan Yücel (President of the Turkish Biochemical Association, Lokman Hekim University, Turkey) Dobrin Svinarov (President of BCLF, Sofia Medical University, Bulgaria) Tomris Özben (IFCC President, Former EFLM President, Akdeniz University, Turkey) Tomáš Zima (President-Elect of EFLM, Charles University, Czechia) **Keynote 1** Current and Future Advances and Challenges in Laboratory Medicine - Tomris Özben Alcohol - Epidemiology, Metabolism, and its Clinical Consequences - Tomáš Zima 29 October, Tuesday **Session** Understanding Biological Variation, Its Importance for the Laboratory and the Clinician - Graham Jones Analytical Performance Specifications: Moving from Models to Practical Recommendations - Mauro Panteghini How Allowable Bias Becomes Part of Imprecision and What That Means for Your Laboratory - Marc Thelen Laboratory Medicine: Advancing Diagnostics and Data Analytics for Better Health for All - Octavia M. Peck Palmer Satellite Symposium-Roche Chair: Oğuzhan Zengi **Data and Digitilization in Laboratory Processes** - Habib Özdemir How EQA Can Be Used to Study the Impact of Analytical Performance on Clinical Classification - Marc Thelen

		Data Analytics and Digitalization in Clinical Laboratory Moving Average as an Additional Quality Control Tool - Vera Lukic Digital Solutions for Quality Control and Verification - Hikmet Can Çubukçu **Satellite Symposium-Mindray** Chair: Mehmet Fatih Alpdemir Recent update on educational recommendations from the IFCC Committee on Clinical Application of Cardiac Bio-Marker - Kristin Moberg Aakre Improvement of Quality and Patient Experience - Soycan Mızrak Managing Patient and Clinician Experience - Merve Sibel Güngören Clinical Performance and Diagnostic Sensitivity under ISO 15189 - Mihaela Zlei Specific IgE Testing and Food Allergy Status - Verica Jakjimoska 30 October, Wednesday **Diagnostic Techniques in Hematology and Coagulation** Coagulation Markers in Non-Hodgkin Lymphoma - Snezhana S. Stoen cheva D-Dimer Testing: Laboratory Aspects - Milena Velizarova Advanced Clinical Parameters in Anemia Diagnostics - Meltem Kilercik Oxidative Stress in Type 2 Diabetes and Severe Psychiatric Diseases - Henrik Poulsen Satellite Symposium - Sysmex Chair: Serkan Bolat A Case Study Illustrating A Better Patient Health Care Journey - Clare Weir
		Satellite Symposium - Sysmex Chair: Serkan Bolat A Case Study Illustrating A Better Patient Health Care Journey - Clare Weir **Satellite Symposium – Snibe** Chair: Kamil Taha Uçar Current Immunoassay Methods and Their Applications as Clinically Used Biomarkers of Cancer - Tomris Özben A Novel Solution for Immunoassay - Sedat Abuşoğlu Analytical Quality in the Traceability Era - Mauro Panteghini Biomarkers and Metabolic Indicators Inflammation and Oxidative Stress in Hemodialysis Patients - Tanja Antunovic Serum Cystatin C in Pediatric CKD - Olivera Jordanova Lipid Metabolism in Gestational Diabetes - Jovana Stojic 31 October, Thursday **Integrative Approaches in Clinical Laboratory Medicine** Gut-Brain Axis in Multiple Sclerosis - Adina Hutanu Impact of Trace Elements in COVID-19 Patients - Tamer Bego Prognosis in Sepsis Patients - Yana Bocheva Pharmacological Modulation of Oxidative Stress - Luciano Saso Panel 8: Reference Intervals Based on Biological Variation Navigating Regulatory Landscape for Laboratory Developed Tests - Sedef Yenice AI-Assisted Prediction of Antimicrobial Resistance - Silva Tafaj Awards and Closing Ceremony Nazmi Özer Science Award Presentation Poster Awards (FEBS Open Bio, TJB Innovation Award, UBK Poster Award)
Blood Gases and Clinical Laboratory Symposium	6 November 2024	This symposium focuses on the clinical and analytical evaluation of blood gas analyses, covering topics such as bedside testing, optimization with innovative technologies, personnel training, and the assessment of metabolic parameters.

EDUCATION

- Practical Flow Cytometry Course in Acute Lymphoblastic Leukemias, 11 May 2024
- Requirements for Quality and Competence in Medical Laboratories Training: Process and Risk-Based Approach, 27-28 June 2024 – Izmir Branch
- Internal Audit Training for Laboratories, 29 June 2024 - Izmir Branch
- Basic Mass Spectrometry Course, 28 October 2024, (within the scope of the BCLF Congress)
- Advanced Mass Spectrometry Course, 28 October 2024, (within the scope of the BCLF Congress)
- Analytical Performance Specifications Course, 28 October 2024, (within the scope of the BCLF Congress)
- Use of Mass Spectrometry in Clinical Laboratory Practice Workshops, 29 October 2024, (within the scope of the BCLF Congress)
- Molecular Laboratory Techniques Applied Training Course Used in Research and Medical Practice, 18-22 November 2024
- TBS Academy Article Discussion Time – Webinar10 September 2024 - Reference Intervals Revisited: A Novel Model for Population-Based Reference Intervals, Using a Small Sample Size and Biological Variation Data
- TBS Academy Article Discussion Time – Webinar8 October 2024 - Urine analysers and method comparison statistics
- TBS Academy Article Discussion Time – Webinar12 November 2024 - A 15-Gene-Based Risk Signature for Predicting Overall Survival in SCLC Patients Who Have Undergone Surgical Resection
- TBS Academy Article Discussion Time – Webinar3 December 2024 - QC Constellation: a cutting-edge solution for risk and patient-based quality control in clinical laboratories
- TBS Academy Article Discussion Time – Webinar14 January 2025 - No link between type I interferon autoantibody positivity and adverse reactions to COVID-19 vaccines
- TBS Academy Article Discussion Time – Webinar4 February 2025 - Comparison of lipemia interference created with native lipemic material and intravenous lipid emulsion in emergency laboratory tests

REGIONAL RELATIONS

- Turkish Medical Association Proficiency Board Participation

INTERNATIONAL RELATIONS

Kaan Kuzu, Emel Çolak Samsum, Rabia Tan, and Kübra Katipoğlu, actively participated in EFLM LabX, a prestigious European platform for laboratory professionals.
Labs Save Lives Project – Video Competition Participation
European Laboratory Day2024 – Participation
Kamil Taha Ucar Assoc. Prof. was elected as a member of the EFLM European Lab Day Task Group
Ebru Saatci Prof. Dr. was elected IFCC Committee on Mobile Health and Bioengineering in Laboratory Medicine, C-MHBLM
Deniz Ilhan Topcu Assoc. Prof. was elected EFLM Biological Variation Working Group – Consultant

ADDITIONAL INFORMATIONS

- Scientific support was provided to the studies of Ministry of Health and Social Security Institution. Scientific support was provided for the studies of The Turkish Medical Association (TMA) and TMA- Coordination Committee of Medical Specialty Societies.

UNITED KINGDOM
ASSOCIATION FOR LABORATORY MEDICINE (FORMERLY ACB)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
LabMed scientific meeting (online)	23 February 2024	Talks on the following: EGFR, CKD, LDL cholesterol. FIB4 calculations, calcium calculations, IVDR
LabMed scientific meeting (online)	21 March 2024	Harnessing routinely collected data for clinical trials in the UK
LabMed audit meeting (online)	25 April 2024	Topics included: Cortisol, teicoplanin, AKIs, serum osmolality, fluid prescribing, macroprolactin requesting, procalcitonin
LabMedUK24	10-12 June 2024	Annual National Scientific Conference. Topics included: Paediatrics, faecal testing, laboratory management, vitamin B12 deficiency, myeloma, mass spec, home self testing, specialist endocrinology, AI, clinical cases
LabMed scientific meeting (online)	5 September 2024	Topics included: Testosterone, menopause and HRT, endocrine cases
Trainees' Day	14 November 2024	Unusual samples, FRCPath exam, trainee presentations and cases
Freddie Flynn lecture	14 November 2024	Lipoprotein (a), atypical fluids, sample release
National Audit Meeting	15 November 2024	Annual National Audit Meeting. Topics included: Diabetes, ACR requesting, immunoglobulin monitoring, Wilson's disease, iron overload, hyperferritinaemia and haemochromatosis, metabolic dysfunction-associated steatotic liver disease.
LabMed scientific meeting (online)	19 November 2024	Green pathology

EDUCATION

1. LabMed webinar – What Next? Clinical Scientist in Microbiology Careers – 6 March 2024
2. Training Day for Clinical Biochemistry and Microbiology – 10 June 2024 (at LabMedUK)
3. Leadership and Management Training Course – 19-23 August 2024

Development of Learning Academy as online education and continuing professional development resource. New modules included:

- Laboratory method evaluation
- HbA1c
- Protein electrophoresis
- ALP isoenzymes
- A1AT
- Obesity
- Cardiology

In 2024 lectures from our successful course Clinical Interpretation and Implementation of Microbiological Sequencing Techniques course were made available online via the Learning Academy, as well as a popular session on Dynamic Function Testing from LabMedUK in Brighton, and interactive clinical cases for thought.

REGIONAL RELATIONS

We submitted bid for IFCC EFLM EuroMedLab27 to be held in London

LabMed is a full national society member of both the IFCC and EFLM. We currently have over fifty members actively involved in various groups and committees within both organizations, in various capacities including chairs, members, young scientist members, and experts/ consultants.

In 2024, 1305 of our members were signed up to the EFLM Academy via our block enrolment and many have taken advantage of the resources and bursaries opportunities this includes

INTERNATIONAL RELATIONS

ADLM President Octavia Peck Palmer delivered the opening address at our national conference LabMedUK in Brighton. During the event we also held a hybrid meeting with senior officers from LabMed and ADLM to discuss matters of mutual interest.

URUGUAY
ASOCIACIÓN BIOQUÍMICA URUGUAYA (ABU)

February 2024: Creation of an Autoimmunity Working Group. Proposal to propose COLABIOCLI as the conclusion of the table on the subject, which took place at the XIV Congress of Clinical Biochemistry (2023). In June 2024, the Group was formed under the coordination of the QF. BC Fernando Antúnez.

March 2024: Public list of ABU professional partners with their areas of expertise

May 2024: The invitation of the Uruguayan Institute of Technical Standards (UNIT) is received for ABU to affiliate as an Adherent Member (honorary), which is accepted

July 2024: The publication of the ABU supplement so far published in conjunction with the journal of the Association of Chemistry and Pharmacy in digital format individually was approved and on August 8 the first edition of the ABU digital magazine was launched and it is aspired that they will be quarterly editions

October 2024: Launch of the ABU 2025 congress.

October 2024: Entry of Romina Medeiros as a Corresponding Member of the IFCC in the Committee on Clinical Applications of Cardiac Biomarkers.

NATIONAL MEETINGS

Name of the meeting	*Date*	*Theme*
World Medical Laboratory Week 2024	April 28, 2024	Glycaemic measurement by POCT in the Agricultural Market of the City of Montevideo. Dissemination of the tasks of the Clinical Biochemist in Society within the field of Health through videos and networks.
ABU Strategic Plan Evaluation Day	May 11, 2024	Evaluation and proposals for the next 4 years.
Agreement with the SLEIMPN 2024 to facilitate the holding of its XIII Congress in Uruguay until they obtain Legal Personality	October 22-25, 2024	Advances in Inborn Errors of Metabolism-

EDUCATION

Call for ABU 2024 scholarships for students and graduates , from March 20 to April 20, 2024. Three qualified members are proposed to be part of the Scholarship Evaluation Commission.

Five applications:

1. **Mariana Testuri:** Scholarship awarded U$S 113 and discount for being a member of ABU. Online course at the Argentine Biochemical Association on "Autoimmune Diseases: Clinical and Laboratory Approach" to be held from May to November 2024. Amount requested: U$S 250.
2. **Camila Cal.:**Postgraduate degree in Quality Assurance for Toxicological Clinical Laboratories, Forensic and Blood Services. Universidad de Santiago de Chile between April and December of this year, hybrid modality Amount granted U$S 1500. Amount requested U$S 5300 (covers registration and ticket fees),
3. **Carolina Rosas:** Online Diploma in Inborn Errors of Metabolism, Universidad Austral. Argentine Rep. Partial scholarship. Amount granted: U$S1500. Amount requested: U$S2708
4. **Camila Gaiero:** Master's Degree in Pharmaceutical Sciences/Pharmacogenetics, University of Pittsburgh, Pennsylvania (USA) August 2024-May 2026, face-to-face modality. Partial scholarship. Amount granted: U$S1200. Total scholarship U$S 30000.
5. **Paula Gómez:** Diploma in Quality Management Specialist UNIT Uruguay for the period from May to November 2024, Partial scholarship. Amount requested: U$S 3600. Amount granted: U$S 500.

Total amount dedicated to scholarships 2024: U$S 4813

Meeting organized by the Network of University Entities Training Biochemical Professionals and equivalent degrees of Latin America and the Caribbean (BIOLAC Network) that took place between June 16 and 19 of this year in Natal-Brazil, assisting Drs. Patricia Esperón and Graciela Borthagaray for the career of Clinical Biochemist in the Faculty of Chemistry. University of the Republic with expenses covered by ABU.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
CALILAB 2024	November 6-8, 2024	The participation of Uruguayan colleague Beatriz Varela in the table on Quality and Laboratory was requested, which was accepted by all according to minutes 5 of June 10, 2024
CALILAB 2024	November 6-8, 2024	Four registration scholarships were awarded to ABU and its beneficiaries presented four free works in CALILAB

REGIONAL RELATIONS

Creation of the COLABIOCLI Autoimmunity Working Group with a request for notes of support from Argentina, Brazil, Chile and Spain.
Agreement signed by the Uruguayan Biochemical Association and the Argentine Biochemical Foundation (FBA) for ACCREDITATION issues.

INTERNATIONAL RELATIONS

- Q.F B.C. Fernando Antúnez's attendance at the WORLDLAB 2024 Congress covered by the IFCC to integrate a workforce of the same entity. He has also been appointed coordinator of the Autoimmunity activity at the XXVI IFCC-EFLM, EUROMEDLAB 2025, May 2025-Brussels, Belgium.

- BC José Larramendi's attendance at the XXVI IFCC WorldLab 2024 (May 26-30, 2024), and the Third Edition of the IFCC FORUM for Young Scientists (May 26, 2024) to be held in Dubai through a scholarship awarded by the IFCC after being nominated for this purpose by the ABU and meeting the requirements established by the IFCC.

USA
ASSOCIATION FOR DIAGNOSTICS & LABORATORY MEDICINE - ADLM (FORMERLY AACC)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
2023 AACC Annual Scientific Meeting & Clinical Lab Expo	July 28 - August 1, 2024 Chicago, IL United States	Every year, the ADLM Annual Meeting (formerly the AACC Annual Scientific Meeting & Clinical Lab Expo) gives laboratory medicine professionals the opportunity to: • Connect with global leaders in clinical chemistry, molecular diagnostics, mass spectrometry, translational medicine, lab management, and other areas of breaking science in laboratory medicine. • Hear vital research and learn about important changes in the field with more than 250 educational opportunities in the conference program. Participants can join Plenaries, Scientific Sessions, and Roundtables designed to keep them ahead of changes in the field. • Learn about cutting edge technology in the ADLM Clinical Lab Expo with over 850 exhibitors and more than 200 new product introductions each year. The meeting theme for 2024 ADLM Annual Scientific Meeting & Clinical Lab Expo was "Bold Move".

EDUCATION

ONLINE COURSES

1/1/2024 – 12/31/2024:

- Improving Quality in Point-Of-Care Testing and Advancing Your Career
- Quality Management Systems: A Course on Cultivating Quality and Addressing Common Challenges in the Laboratory
- Reducing Inefficiencies and Advancing Your Career at the Bench
- Navigating FDA oversight of LDTs: Insights and implications from ADLM 2024
- Advancing patient care with data science in clinical laboratories: Highlights from ADLM 2024

CERTIFICATE PROGRAMS

1/1/2024 – 12/31/2024:

- Basic Concepts and Clinical Applications of Flow Cytometry
- Basic Principles and Architecture of Laboratory Information Systems
- Clinical Laboratory Leadership and Management
- Fundamentals of Molecular Pathology
- Introductory Liquid Chromatography Mass Spectrometry for the Clinical Laboratory
- Laboratory Operational Management
- LC-MS/MS Troubleshooting for the Clinical Laboratory
- Point-of-Care Specialist
- Practical Approaches to Quality Control in the Clinical Laboratory
- Principles of Clinical Toxicology
- Regulatory Affairs for Laboratory Compliance
- Statistical Methods for Clinical Laboratorians

WEBINARS

Note that all webinars are also available on demand for a year following the program date.

Title	*Date*
Value of Lab Medicine: Technology is Changing the Delivery of Care	Jan 30, 2024
Classification of Brain Tumors by Nanopore Sequencing of Cell-Free DNA from Cerebrospinal Fluid	Feb 28, 2024
Preparing Your Laboratory for CLIA 2024	Mar 14, 2024
Enhancing Patient Safety: Exploring Clinical Implications for the New CDC/NHSN Metric - Hospital Onset Bacteremia	Mar 20, 2024
High Sensitivity Cardiac Troponin Point of Care Assays in Clinical Practice	Apr 23, 2024
Investigating the Current Harmonization Status of Tumor Markers Using Global External Quality Assessment Programs: A Feasibility Study	May 15, 2024
Value of Lab Medicine: Impactful Best Practices to Improve Patient Diagnosis and Reduce Healthcare Costs	May 23, 2024
Novel Tools to Detect Pre-Analytical Errors and Improve Specimen Quality: The Impact of Accurate Laboratory Results on Patient Care	May 30, 2024
Analytical Detection of Fentanyl Exposure	Jun 11, 2024
Unlocking Accuracy: Rapid Serum Tubes Revolutionize High Sensitivity Troponin T Testing	Jun 20, 2024
Clinical Use of Point-of-Care High-Sensitivity Cardiac Troponin for Early Diagnosis of Myocardial Infarction	Jun 25, 2024
Point-of-Care Screening for Diabetes and Microvascular Complications in Outreach Settings for People Who Face Social Disadvantage	Jul 9, 2024
Pediatric Lab Puzzles: Approaches to Challenges From Ordering to Collections to Result Interpretation	Jul 18, 2024
Urine Trouble? Opportunities to Improve Urine-Based Diagnostics for Infectious Diseases	Aug 28, 2024
Leveraging Lessons From 3 Decades of Procalcitonin Testing: Procalcitonin Dos and Don'ts	Sep 5, 2024
Value of Lab Medicine: The Laboratory's Contribution to Value-Based Care	Sep 23, 2024
Improving Blood Collection Outcomes Through Interdisciplinary Collaboration	Oct 16, 2024
Enhancing laboratory workflow through automated immunoassay testing: Focus on chromogranin A	Oct 21, 2024
Diagnosing myocardial injury in an acute chest pain cohort	Oct 31, 2024
Alzheimer's disease blood-based biomarkers: A clinical and laboratory perspective	Nov 12, 2024
Awareness and application: DEI and health equity basics for laboratory professionals	Nov 21, 2024
The Need For Speed…in Phenotypic Antimicrobial Susceptibility Testing	Dec 4, 2024
The Power of Identifying the Cause of Upper Repository Tract Infections	Dec 11, 2024

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
2024 ADLM Middle East	November 23 – 24, 2024 Dubai, United Arab Emirates	ADLM Middle East is a two-day conference held in partnership with Life Dx that brings the latest in laboratory medicine to the Middle East region and showcases diagnostic innovations at a dynamic exposition. The conference covers a range of timely topics from infectious diseases to big data to prenatal emerging technology, as well as core laboratory areas in sample transport, lab management, and quality assurance. Each session is presented by experts in ADLM's scientific leadership. ADLM Middle East attendees have the opportunity to network with their peers and experts from the U.S. and the Middle East to share knowledge on new breakthroughs in laboratory medicine.
2024 ADLM International CPOCT Symposium	September 25-27, 2024 San Diego, CA, US	The Association for Diagnostics & Laboratory Medicine (formerly AACC) held the 29th International CPOCT Symposium: Quality Beyond the Lab: Navigating POCT Excellence in Patient Care, September 25-27 in San Diego, California. Over two and a half conference days, attendees learned the latest in POCT from interdisciplinary experts, engaged with companies in the exhibit hall, and networked with peers during poster hall receptions. The symposium delivered stimulating discussions on the latest science and cutting-edge technological advances through a keynote lecture, scientific sessions, panel discussions, and interactive poster receptions.

REGIONAL RELATIONS

Member of the North American Federation of Clinical Chemistry and Laboratory Medicine.

INTERNATIONAL RELATIONS

ADLM maintains memoranda of understanding with several national societies for the purposes of mutually beneficial education exchanges. Some of our joint activities have been conducted with Biomedical Society of Zambia (BSZ), The Qinghai Medical Association and the Chinese Society of Laboratory Medicine, Ethiopian Medical Laboratory Association (EMLA), Confederación Latinoamericana de Bioquímica Clínica (COLABIOCLI), Kazakhstan Association of Medical Laboratory Diagnostics (KAMLD), Association for Laboratory Medicine (ALM), and Korean Society for Laboratory Medicine (KSLM).

Affiliate Member Societies

ARMENIA
ARMENIAN ASSOCIATION OF LABORATORY MEDICINE (AALM)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Second meeting	02.04.2025	Meet bord members Director election The purpose of the association's work, current ongoing activities Collaboration with other associations Discussion of meeting frequency and format Determination of membership fees and payment procedure Formation of working groups
Third meeting	05.06.2025	Summary of the IFCC conference results Description of the working groups' activities by the leaders Selection of topics for the November conference Vision for the development of the website and social media networks

EDUCATION

3 CME accredited conference:

1. Endocrinology from the perspective of laboratory diagnosis
2. Laboratory medicine: Achievements and prospects
3. Features of PCR testing

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
Laboratory medicine: Achievements and	02.11.2024	AALM invited GLMA for the meeting and sining the memorandum of cooperation
Quality Managment in Medical Laborato-ry-Goals and Results	30.11.2024	Meeting in Georgia to strengthen relationships between 2 associations

REGIONAL RELATIONS

Cooperation with Georgian Laboratory Medicine Association

INTERNATIONAL RELATIONS

Cooperation with Federation of laboratory medicine in Russia
Cooperation with Kazakhstan Federation of Laboratory Medicine

FRANCE
FRENCH NATIONAL NETWORK OF ACCREDITED LABORATORIES OF MEDICAL BIOLOGY (LABAC)

ADDITIONAL INFORMATION

LABAC Board
Executive Board:

President	Dr. Jean Marc **GIANNOLI**
Vice-President	Dr. Mickael **PARIS**
Vice-President	Dr. Ivan **MONNERET**
Vice President	Dr. Florian **SCHERRER**
General Secretary	Dr. Elizabeth **GUIBOURGE**
Treasurer	Dr. Brigitte **SAVIE**

Members of the board of directors:

Dr. Thierry **AVELLAN**
Dr. Nathalie **COLARD**
Dr. Jean-Louis **GALINIER**
Dr. André **HEIM**
Dr. Jean Michel **VIALLE**
Dr. Claude **BOSI**
Dr. Luc **ESSEMILAIRE**
Dr. Jacques **DE GRAEVE**
Dr. Julien **L'HIRONDEL**

The Labac association is dedicated to undertaking actions aimed at:

- Facilitating the exchange of experiences and best practices related to quality assurance.
- Serving as a think-tank and a key interlocutor for COFRAC, professional unions, and regulatory organizations.
- Promoting quality in the evolution of Lab Medicine
- Strengthening collegial ties among its members.

To achieve these objectives, we organize two annual conferences focused on sharing practical experiences, expert advice, and fostering a "quality culture" in the daily practice of Medical Biology within laboratories.

Additionally, we disseminate relevant information through continuous training modules, working groups, or discussion forums.

Approximately fifteen years after its establishment, the association has successfully hosted conferences featuring some of the most renowned experts in the field of biology, including Nader Rifai, Tony Badrick, Mario Plebani, Sverre Sandberg, Tomris Ozben, Tomas Zima, and many members of the IFCC functional units.

Members have direct access to all past conferences on our website. (https://www.labac.eu/)

As an affiliate member of the EFLM and IFCC, we actively contribute to task forces and working groups We have established functional relationships and joint actions with IFCC members at the global level, as well as concrete collaborations with its regional federations.

Labac maintains functional relationships with IVD companies, IT firms, and medical scientific societies. Several members collaborate with and serve as assessors for COFRAC, the national accreditation body.

NATIONAL MEETINGS

LABAC National Conference - Clinical Chemistry, Friday, June 13, 2025
Hotel Novotel Paris Bercy85 rue de Bercy, 75012 PARIS
Protein electrophoresis: technical aspects and interpretations
Biochemistry in the elderly W. Gana (CHU Tours)
Reference values: calculation methods and interpretation – Claire Visseaux (Cerba)
Interpretation of cancer markers

- Lunch: 12:30 PM - 1:45 PM
- Afternoon: 2:00 PM - 4:00 PM

Management of thyroid disorders: the role of clinician-biologist communication – Prof. Jean-Michel Petit, Department of Endocrinology-Diabetology, CHU F. Mitterrand, Dijon
Detection of blood in stool: technical aspects and diagnostics – Dr. Bernard Denis, Pasteur Hospital, Colmar

LABAC National Conference - ANOFEL Conference, Wednesday, September 11, 2024,
Hotel Novotel Bercy, 85 rue de Bercy, 75012 PARIS
Introduction & Welcome Address: JM GIANNOLI (LABAC)
PARASITOLOGY of STOOL SAMPLES

What is a Parasitological Stool Examination?

- Prof. F. Robert-Gangneux (CHU Rennes), President of the National Association of Parasitology and Mycology Teachers (ANOFEL),
- Prof. L. Favennec (CHU Rouen), Head of the National Reference Center (CNR) for Cryptosporidiosis, Microsporidiosis, and Other Digestive Protozoan Infections)
- Prof. P. Poirier (CHU Clermont-Ferrand), Co-Head of the CNR

1. **Pre-analytical Phase:**
   Patient preparation, sample transport time, temperature, and preservation
   N. Coron (Bioesterel, Biogroup), E. Pernot-Marino (CAB, Biogroup), and F. Gabriel (CHU Bordeaux)
2. **Analytical Phase:**
   Microscopic Examination: Quality control strategies, operator certification
   N. Coron (Bioesterel, Biogroup), E. Pernot-Marino (CAB, Biogroup), and Prof. L. Favennec (CHU Rouen)
   PCR Testing: Minimum required panel, sampling, quality control strategies, potential inte ferences in protozoan PCR, method validation criteria, correlation with microscopy, and handling discrepancies
   X. Iriart (CHU Toulouse) and F. Gabriel (CHU Bordeaux)
3. **Post- Analytical Phase:**
   Result interpretation (low-pathogenic parasites), PCR/direct examination discrepancies, avisory services, role of the biologist, collaboration with the Reference National Center (CNR)
   Prof. F. Robert-Gangneux (CHU Rennes) and Prof. P. Poirier (CHU Clermont-Ferrand)

Afternoon: 2:00 PM - 4:30 PM
MALARIA

1. **Pre-analytical phase:**
   Importance of clinical information and emergency management
   Prof. S. Houze , bichat hospital, APHP
2. **Analytical phase:**
   Latest recommendations (SPILF), role of different tests, operator certification and continuous training, quality control strategies for simplified unit tests
   Prof. A. Berry (CHU TOULOUSE)
3. **Post-analytical phase:**
   Result interpretation, reporting time for diagnosis and follow-up, challenges of distant pre/post sites from technical platforms, advisory services, and the role of the biologist
   M.Thellier (CHU PITIÉ-SALPÊTRIÈRE, APHP)

MYCOLOGY

1. **Pre-analytical Phase:**
   Requirements for high-quality sample collection (clinical guidance, patient preparation, clinical information, sample preservation, etc.)
   C. Miossec (CHU Lyon) and N. Ait-Ammar (Cerballiance)
2. **Analytical Phase:**
   Microscopic Examination: Role of direct examination, selection of culture media, turnaround time, specifics on dermatophytes, and the role of mass spectrometry versus macroscopic/microscopic identification
   PCR Testing: Positioning of PCR in conventional diagnostics and minimum required panel
   A.Fekkar (Pitié-Salpêtrière, APHP) and H. Guegan (CHU Rennes)
3. **Post-analytical Phase:**
   Result interpretation (contaminants, yeasts), advisory services, and examples of medical biologist consultations A. Moreno (Saint Antoine Hospital, APHP) and N. Coron (Bioesterel, Biogroup)
   Closing Remarks (4:30 PM) Prof. F. Robert-Gangneux (CHU Rennes, President of the National Association of Parasitology and Mycology (ANOFEL)

Result interpretation (contaminants, yeasts), advisory services, and examples of medical biologist consultations A. Moreno (Saint Antoine Hospital, APHP) and N. Coron (Bioesterel, Biogroup)
Closing Remarks (4:30 PM) Prof. F. Robert-Gangneux (CHU Rennes, President of the National Association of Parasitology and Mycology (ANOFEL)

LABAC National Conference and French Society of Microbiology
Paris 12 November 6th 2024
Morning: 9:30 AM - 12:30 PM

- **Pre-analytical delays in urgent bacteriological samples:** between the ideal and the acceptable
  Agnès Ferroni (CHU Necker-Enfants Malades, APHP, Paris) and Frédérique Canis (GCS SHAB CH Valenciennes).

- **PCR:** CQI strategy, critical points, and approach to measurement uncertainty (qualitative methods in virology and bacteriology)
  Stéphanie Marque-Juillet (CH Versailles) and François Guerin (CHU Pontchaillou, Rennes).
- **Business continuity plan for microbiology technical platforms**
  Jean-Louis Galinier (Inovie, CMB, Muret) and Jean-Marc Giannoli (LABAC).
- **Outsourcing by fragmenting the analytical phase in another laboratory**
  Line Legrand (DGS, Ministry of Health).

- **Lunch Break:** 12:30 PM - 1:45 PM
- **Afternoon:** 2:00 PM - 4:00 PM

- **Antibiogram:** In which situations and for which germs is it essential or optional?
  François Guerin (CHU Pontchaillou, Rennes) and Laetitia Beraud (Hôpital Croix-Rousse, HCL, Lyon).
- **Clarifications on indicators for monitoring blood culture examination**
  Brigitte Lamy (Hôpital Avicenne, HUPSSD, APHP, Paris, and Université Sorbonne Paris Nord).
- **Review of incubation temperature for mycobacteria culture machines in liquid medium**
  Frédérique Canis (GCS SHAB CH Valenciennes).
- **Implementation of new techniques adapted to medical service rendered and NABM**
  Stéphanie Haim- Boukobza (Cerballiance).

EDUCATION

LABAC is organizing a monthly online event, "EXPERT EXCHANGES," free for LABAC members.
Each month, specialists and experts share their expertise on a current topic in the Lab Med field. This is an opportunity to compare practices, explore areas for improvement, and engage in collaborative discussions.

Added Value: These sessions not only enhance knowledge but also promote an integrative approach to expertise by fostering cross-disciplinary exchanges and encouraging innovative solutions.
Goal: Encourage knowledge sharing and foster a culture of continuous improvement among professionals in the Lab Medicine sector.

LABAC is the leading organization for the French translation of the ADLM Learning Lab program.
Thanks to this adaptive technology, each course is tailored to the objectives, learning pace, and knowledge gaps of laboratory medicine professionals. The program allows students to focus on areas for improvement and acquire the specific training they need. Although complex to translate, it's an experience that anticipates teaching methods for years to come. Many Labac biologists are involved in this project, initiated by Professor Nader Rifai.

INTERNATIONAL MEETINGS

LABAC Committee on International Relations

1. Dr Jean-Marc GIANNOLI	President LABC, IFCC TF- Global Lab Quality Management
2. Dr Bernard GOUGET	Chair IFCC – C-MHBLM, TF-H, EFLM Labac representative
3. Dr Mikael FORTUN	Corresponding member IFCC - TF-YS

Participation in the EFLM strategic conference 2024,
A vision to the future: value-based Lab Medicine

Participation of LABAC members at National meetings of IFCC full member societies
1. LAB QUALITY DAYS 2024, Helsinki , FI
2. DX Summit, Washington DC, USA August 2024
3. 15th International Health Sciences Conference, Pristina Kosovo, September 15th
4. 21st PCQACL annual convention, Manila, October 8-11

Participation of LABAC members in IFCC Committees and Working Groups
1. IFCC TF Global Lab Quality Jean Marc Giannoli

INDIA
ASSOCIATION OF MEDICAL BIOCHEMISTS OF INDIA (AMBI)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
31st AMBICON 2024	19.12.2024 to 21.12.2024	Through The Lens of a Biochemist: Advancing Medicine. Breakthrough Innovations
31st AMBICON 2024 Pre-conference Workshop	18.12.2024	• LC-MS/MS QTOF and MALDI-TOF • Proteomic and Metabolomics characterization of body fluids for biomarker discovery using High resolution mass spectrometry • Basic genomic techniques • Nucleic acid extraction and PCR techniques • Isolation, enumeration, and characterization of umbilical cord and cord Blood-derived stem cells. • Internal Quality Control (IQC) in Clinical Laboratory • HPLC for HbA1c estimation and hemoglobinopathies screeningand its application • Electrophoresis and its application • Instrumentation- photometry and potentiometry • Entrustable Professional activities -MEU (EPA)
Visting Lecture Programme Grateful to IFCC for granting the same	19.12.2024 to 21.12.2024	

IFCC-Abbott Visiting Lecture Program (VLP) Report: AMBICON 2024

Compiled by: Dr Ashish Agravatt, Dr Ramesh Pradhan, Dr Shanti Naidu

The IFCC-Abbott Visiting Lecture Program (VLP) successfully took place during the 31st Annual National Conference of the Association of Medical Biochemists of India (AMBICON 2024), held in Ahmedabad, Gujarat, India, from December 19 to 21, 2024. The conference served as a dynamic platform for knowledge exchange, skill enhancement, and networking among clinical biochemists and laboratory medicine professionals, with over 522 attendees, including 184 faculty members, 167 postgraduate students, 120 AMBI life members, and 51 organizing committee members.
The program featured three distinguished international speakers who delivered lectures on critical and contemporary topics in clinical laboratory medicine:

1. **Prof. Sedef Yenice delivered two insightful lectures:**

- Precision in Practice: Utilizing Data-Driven Decision-Making in Clinical Laboratories emphasized the integration of big data and analytics to improve diagnostic accuracy and patient care. Prof. Yenice highlighted how laboratories can implement precision-based approaches to enhance operational efficiency.
- Navigating the New Regulatory Landscape for Laboratory-Developed Tests explored the evolving regulations for laboratory-developed tests (LDTs) and their implications for clinical laboratories, underscoring the importance of compliance and innovation in the face of regulatory changes.

2. **Prof. Rajiv Erasmus presented:**

- Impact of Point of Care Testing on Patient Outcomes: Challenges and Prevention of Errors, which outlined the advantages of point-of-care testing (POCT) in improving patient outcomes while addressing potential sources of error and proposing preventive strategies.
- Leadership in the Medical Laboratory for Effective Patient Care provided an in-depth discussion on the role of leadership in fostering effective teamwork and implementing quality management systems to enhance laboratory performance.

3. **Prof. Tahir Pillay contributed with:**

- Practical Considerations for Performing Lipid Profiling in the Assessment of Cardiovascular Risk, which detailed best practices in lipid profiling and their importance in cardiovascular risk stratification.
- Challenges with Immunoassays: Dealing with Standardization, Harmonization, and Interferences, addressing technical challenges in immunoassays and offering strategies to achieve standardization and harmonization in clinical testing.

The lectures stimulated engaging discussions, offering practical insights and actionable recommendations for enhancing laboratory practices. Participants praised the speakers' ability to bridge theory with real-world applications, making the sessions highly relevant to their clinical and academic responsibilities.

The conference's objectives of fostering knowledge exchange, collaboration, and capacity building were effectively met. The sessions enabled participants to gain a deeper understanding of advanced topics, including the role of precision medicine, leadership in laboratory settings, and the technical nuances of POCT and lipid profiling.

The event's success was evident from the positive feedback received from attendees, who appreciated the opportunity to interact with global experts and discuss challenges faced in the field of laboratory medicine. The IFCC-Abbott VLP played a crucial role in enriching the scientific and educational content of AMBICON 2024 and contributed significantly to the professional development of the participants.

We express our gratitude to the IFCC and Abbott for their support in making this program a remarkable success and look forward to continued collaboration in future initiatives.

EDUCATION

AMBI has regular programmes that favour education in various aspects of Laboratory Medicine. Over the past 2 years and continuing an exclusive academic committee responsible for virtual seminars and webinars are being done.

Year	*Month*	*Name of Speaker*	*Designation*	*Topic*
2023	January	Dr G Jeyachandran	Professor & Head, PSG Institute of Medical Education and Research, Coimbatore, Tamil Nadu	***Understanding Automation in Diagnostics Lab***
	February	Dr S M Patel	Prof & Head , Govt Medical College, Surat	ABC of molecular visualisation
	March	Dr Syeda Mohsina Rohman	Professor , State Cancer Institute, Gauhati Medical College and Hospital, Guwahati	Hallmarks of Cancer
	April	Dr.Syyeda Anees	Professor and Head, Deccan Medical COllege, DMRL 'X' Road, Kanchanbagh, Hyderabad	Application of Beer Lambert Law in analytical chemistry
	May	Dr.Parul Singla	Consultant, Sir Ganga Ram Hospital , New Delhi	Significance of Calibration Verificationand evaluation in Clinical Biochemistry
	June	Dr. Kinjalka Ghosh	Professor and Consultant Biochemist, Tata Memorial Hospital, Mumbai	Role of the Clinical Biochemistry Lab in Management of Plasma Cell Dyscrasia
	June	Dr Vinodh Kumar	Assistant Professor , Institute of Child Health , Madras Medical College, Chennai	Establishment of Age-Specific Reference Interval for Aminoacids In Dried Bloodspot By Tandem Mass Spectrometry
	July	Dr Debapriya Rath	Associate Professor , Pt JNM Medical College, Raipur	Proteomics toolkit for biomarker discovery
	August	Dr Qazi Najeeb Ahmad	Professor & Head, Dept. of Biochemistry Government Medical College & Associated Hospital, Rajouri (J&K)	Diagnostic approach of the Thalassemia's
	September	Dr Debojyoti Bhattacharya	Professor and Head of The Department of Biochemistry at Bankura Sammilani Government Medical Collge, Bankura.	HLA Typing
	October	Dr Rebecca James	Associate Professor Dept of Biochemistry, Govt Medical College, Kozhikode.	Familial Hypercholesteremia
	November	Dr Sumita Sharma	Associate Professor AIIMS, Bilaspur	Solving the Out of Control Situations in Clinical Biochemistry

2024	January	Dr Suvarna Prasad	Additional Professor, IIMS, Deoghar	Inborn Error of metabolism: An Update
	February	DR ANUJ PARKASH	Senior Consultant & Head - Biochemistry,Medanata Hospital, Gurugram	Unveiling the Genomic Wonders in Biochemistry with Next-Generation Sequencing (NGS)
	March	Dr Prakruti Dash	Addl Professor , AIIMS , Bhubaneswar	Diversity in PD-1/PD-L1 pathway exploring its role in immunotolerance-is it a double edged sword
	April	Dr Minakshi	Associate Professor and HOD Biochemistry,GMC Dausa Rajasthan	Preanalytical variables affecting biochemical investigation
	May	Dr Haren Baruah	Professor and Head , Zoram Medical College , Mizoram	Cells Sensitization and Adaptation to O2 availability
	June	Dr RamaDesikan	Senior consultant Clinical laboratory services Clinical biochemistry ,Sundaram Medical Foundation Dr Rangarajan Memorial hospital Annanagar Chennai 40	MEASUREMENT UNCERTAINTY
	June	Dr Puneet Nigam	Chief Quality Officer , Metropolis	Method Comparison
	June	Dr Mousumi Saikia	Consultant Biochemist, Quality Incharge, Laboratory Medicine, Apollo Hospitals Guwahati	moushumi.saikia@gmail.com
	June	Dr Ashishkumar Agravaat	Associate Professor, PDU Medical College Rajkot	Role of AI in smart implementing of Quality in a clinical lab
	July	Dr. Anikha Bellad	Physician Scientist, Institute of Bioinformatics, Bangalore	Integrative Bioinformatics: An essential tool leveraging Multi-Omics in Clinical Laboratory
	August	Dr Kavitarati Dharwadkar	Prof and Head, Director, CLinical Biochemistry, Sri Aurobindo Medical COllege, Indore, Madhya Pradesh	Interesting CAse Scenario where Biochemistry made a Difference
	November	Dr Barnali Thakur	Professor and Head, Nagaon Medical College	Obesity – Molecular and Biohemical Aspects . Fight the fat , Choose Health

The 3rd national Post Graduate update is now an Annual event and is conducted by the Biochemistry Department, Government Medical College, Chandigarh, under the leadership of Dr.Jasbinder Kaur and Dr.Shivani.

Flagship Journal of Association of Medical Biochemists of India – Indian Journal of Medical Biochemistry
Indian Journal of Medical Biochemistry, peer-reviewed journal is published three issues in 2024. Journal is indexed in DOAJ

NATIONAL MEETINGS

Name of the meeting	***Date***	***Topic***
1st State level CME by Jharkand chapter,AMBI was organized by Dept. of Biochemistry, RIMS, Jharkand	27.01.2024	A newer insight of glucose –A novel Biomedicine
State Level Symposium of Gujarat Chapter – AMBI was organized by Dept. of Biochemistry, GMERS, Gandhinagar	18.02.2024	Analytical & Clinical Validation of Laboratory Investigations
State level CME organized by GMERS, Gujarat Chapter	30.06.2024	Awareness towards laboratory-based screening and diagnosis of genetic & Inborn Metabolic disorders
3rd National PG Update cum CME organized by Department of Biochemistry, Govt Medical College and Hospital, Chandigarh	26.04.2024 to 28.04.2024	National PG Update
CME organized by Dept. of Biochemistry, Lt. Shri Lakhiram Agrawal Mem. Govt. Medical College, Raigarh	22.04.2024	Information regarding molecular diagnosis in medicine
CME organized by Dept. of Biochemistry, GMCRH, Patiala	04.05.2024	Laboratory Medicine Update
6th State Conference of Telangana Chapter –AMBI was organized by Osmania Medical College, Hyderabad, Telangana	01.07.2024 to 02.07.2024	Tiny treasures, Big Impact: Micronutrients revolutionizing Diabetes Care
6th State level Workshop of Telangana Chapter –AMBI was organized by Osmania Medical College, Hyderabad, Telangana	01.07.2024	Exploring protein structure, prediction and primer design: An In Silico approach
CME organized by Dept. of Biochemistry, Deccan College of Medical Sciences, Hyderabad	02.03.2024	Biochemical Markers in Liver Disorders & Orientation to Molecular diagnostic Procedures
Workshop organized by Dept. of Biochemistry, Deccan College of Medical Sciences, Hyderabad	02.03.2024	Basic techniques of molecular diagnostics
2nd Annual conference of AMBI Kerala State Chapter	29.09.2024	
AMBI State Chapter Karnataka (AMBKC) at Adichuncunagiri Institute of Medical Sciences, Belur	10.07.2024 to 12.07.2024	Revolutionizing Renal Disease Diagnostics: The lab's pivotal role in precision healthcare
State level Conference and Pre-conference workshop of Andhra Chapter–AMBI was organized by AIIMS, Mangalagiri	11.07.2024 to 13.07.2024	Molecular insights into immune regulation
Workshop was organized by West Bengal Chapter, AMBI	10.07.2024	Indirect Immunofluorescence
CME organized by Dept. of Biochemistry, under the aegis of AMBI – Rajasthan Chapter	01.08.2024	Biochemistry Update
State Conference of Maharashtra Chapter – AMBI	17.10.2024 to 19.10.2024	Foundation to foster Clinical Biochemistry Basics and Beyond.
14th State Conference of Odisha Chapter – AMBI	29.09.2024	
State level CME organized under the aegis of AMBI – Assam Chapter	10.09.2024	To create awareness about urbanization and its impact on Mental health
State level CME organized under the aegis of AMBI – Assam Chapter	07.06.2024	SEPSIS – The Silent Killer
J&K State Chapter's First CME under the aegis of AMBI – J & K Chapter	12.11.2024	Recent trends in laboratory practices

19 Meetings were held under the aegis of AMBI in different states of the country. Majority of the attendees are the young post graduate students of this speciality, after their medical degree. Younger faculty of this speciality attend in large numbers. Senior and professors interact and exchange of ideas takes place with newer aspects and understanding the working of different institutes. In progress of this speciality.

REGIONAL RELATIONS

The central AMBI has an executive body under whose umbrella the large number of members now numbering more than 4000 (all medical graduates embracing this speciality).interact through their elected/nominated state and zonal representatives.
Constant interaction of updates on any statutory regulations are conveyed and feedback on performance or any difficulties arising are discussed and represented to authority. Regular meetings with members and representatives are held for administrative and other logistics.

INTERNATIONAL RELATIONS

Large number of members of AMBI are in the task force of various committees and few very senior experienced members are committee members such exposure of the young generation gives them a wider appreciation of experience and international competitiveness.

Over the recent years many travel fellowships have been awarded and recently travel fellowships to Dubai and Sydney conference of APFCB were awarded.

Recent years have seen larger numbers attending the IFCC conferences.

Over the years members of the young scientific task force was appreciated for their contributions in paper presentations and in activities of TF-YS.

AMBI is indeed grateful for the recognition and we hope that from affiliate member we are granted full membership of IFCC.

MEXICO
FEDERACIÓN NACIONAL DE QUÍMICOS CLÍNICOS (CONAQUIC A.C.)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Conferences on clinical chemistry	March–April 2024	Clinical Chemist
VII CONQUILAB INTERNATIONAL CONGRESS AND TECHNOLOGIC EXPO INNOVATION 2024	May 23rd – 25th, 2024. Nuevo Vallarta, Nayarit.	Hematology, parasitology, immunology, urinalysis, preanalytical phase, molecular biology, microbiology, genetics, clinical chemistry, microscopy, mycology, quality control, parasitology.
VIII CONQUILAB INTERNATIONAL CONGRESS AND TECHNOLOGIC EXPO INNOVATION 2024	October 10th – 12th, 2024. Guadalajara, Jal.	Hematology, parasitology, immunology, urinalysis, preanalytical phase, microbiology, genetics, clinical chemistry, microscopy, mycology, quality control, forensic genetics, newborn screening.

EDUCATION

Participation in the Global Medlab Week 2024.

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
The impact of chemistry professionals in society	January 16, 2024	Auspice given to the Colegio Potosino de Químicos Farmacobiólogos, A.C.
Serum electrolytes and arterial blood gases	February 23 and 24, 2024	Auspice given to the Colegio de Químicos Clínicos del Norte de Veracruz
Diabetes and reproductive challenges	April 13, 19, 20, 26, and 27, 2024	Auspice given to the Colegio de Químicos Clínicos de Izúcar de Matamoros, A.C.
Specialized updates in clinical laboratories	March–November 2024	Auspice given to the Colegio de profesionales de laboratorio clínico del Sureste A.C. IFCC Auspice.
Lipid updates	April 11, 12, and 13, 2024	Auspice given to the Sección de Químicos Clínicos Veracruz, Centro
Topics on laboratory administration and responsiveness	June 14, 15, and 16, 2024	Auspice given to the Colegio de Químicos Clínicos del Norte de Veracruz
"Morphological alterations of the erythroid lineage, their association with pathologies, and how to report them"	June 21 and 22	Auspice given to the Colegio de Químicos Clínicos del Sureste del Estado de Veracruz A.C.

REGIONAL RELATIONS

- Mexican Association of Pathologists AC
- Mexican Council of Certification for Professionals in Chemical Pharmaceutical Sciences (COMECEF)
- National Association of Faculties and Schools of Chemistry (ANFEQUI, Mexico)
- Autonomous University of Guadalajara, Campus Tabasco (UAG Tabasco)
- Meritorious Autonomous University of Puebla (BUAP)
- Autonomous University of Baja California (UABC)
- Autonomous University of Guadalajara (UAG)
- Autonomous University of Nayarit (UAN)
- Autonomous University Benito Juares of Oaxaca
- Autonomous University of Chihuahua (UACh)
- Autonomous University of Durango (UAD)

INTERNATIONAL RELATIONS

IFCC
Infobioquimica – Radio El Microscopio Radio / Podcast
Latin America Confederation of Clinical Biochemistry (COLABIOCLI)

Latin American Society for Forensic Genetics (SLAGF)
Alba Cecilia Garzón García, PhD
ACG's Scientific Director
IFCC WG-IANT Member.

Jorge Eugenio Vidal Graniel PhD

Associate Professor of Cell and Molecular Biology at University of Mississippi Medical Center.

PHILIPPINES
PHILIPPINE COUNCIL FOR QUALITY ASSURANCE IN CLINICAL LABORATORIES (PCQACL)

The Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL) continuously strengthen its diplomatic relationship and collaboration with the IFCC for continuing educational activities and development with its regular application to the IFCC Visiting Lecturer Program. With this program, the PCQACL is privileged to invite renowned Speakers in the field of Laboratory Medicine and other relevant medical fields during the PCQACL Annual Convention. Hence, we are so grateful to the IFCC for being able to invite the following IFCC- VLP Speakers for the 21st PCQACL Annual Convention.

Pradeep Kumar Dabla, MD, PGDHM, PGDBA, MAMS, FRSPH, FACBI, FIMSA, Hon. FGAPIO

As the APFCB Chair on Communication & Publication Committee & APFCB eNews Chief Editor, a Member of the IFCC Scientific Division Executive Committee and Corresponding Member of the IFCC C-MHBLM (Emerging Technologies Division), Dr. Pradeep Kumar Dabla has graced with his presence the 21st PCQACL Annual Convention Opening Ceremonies as the Keynote Speaker addressing over a thousand delegates comprising Pathologists, Medical Technologists, clinical laboratory Supervisors and Managers with his Keynote Message on “Mobile Health Technologies and Sustainability ” Mobile health (mHealth) technologies, including mobile apps, wearable devices, telemedicine, and health information systems, have emerged as powerful tools for enhancing healthcare delivery, especially in resource-limited settings. These technologies promise significant benefits such as real-time monitoring, personalized treatment, and enhanced patient engagement, which are vital for sustainability. The sustainability of mHealth technologies depends on robust technological infrastructure, data security, user acceptance, and regulatory frameworks. Dr. Dabla is also the Resource Speaker on the topic “Total Quality Management of Medical & Molecular Laboratories”. Total Quality Management (TQM) is an essential approach for ensuring the highest standards in medical and molecular laboratories. This comprehensive management emphasizes continuous improvement, customer satisfaction, and the involvement of all employees in the quality process. In medical and molecular laboratories, TQM is vital for enhancing accuracy, reliability, and efficiency in diagnostic testing, which directly impacts patient care and treatment outcomes.

Bernard Gouget, Ph.D, MSc, LL.D.

As the President of the National Committee for the Selection of Reference Laboratories (LBMR), Ministry of Health and Prevention, past- President National committee on human health section COFRAC, Chair IFCC Task force on History and the Secretary of the IFCC Emerging Technologies Division, Dr. Bernard Gouget shared his knowledge and valuable insights with the PCQACL convention delegates on the topic “POCT and Quality management systems: impact of normative changes” giving emphasis on the advantage of POCT which is designed to reduce turnaround time and enhance efficiency, facilitating direct reporting to healthcare providers and integrating results into the patient's medical record. Dr. Gouget presented as well his lecture on the topic “Ethics and Artificial Intelligence (AI)” presenting the following most pressing ethical concerns about AI; data confidentiality and patient privacy, the need for informed and voluntary consent, the limitations on the analysis of large-scale health data, and the risk of bias in the collected data, which could impact individual health outcomes. Ethical considerations surrounding AI highlight the need for transparency in systems and human-machine interactions. AI systems must be designed with ethical principles in mind, from their inception to their deployment and use.

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
Serum electrolytes and arterial blood gases	October 9 -11, 2024	”Inducing Change and Global INITiatives for Laboratory Education”

The **first day** of the main Convention on October 9, 2024 started with the Opening Ceremonies on the introduction of the PCQACL Officers and Board of Trustees as well as the recognition of the VIP Guests, PCQQACL Charter members, Corporate members, and the Exhibitors of the 21st PCQACL Annual Convention. The event was highlighted with the Inspirational Message and Keynote Address of Dr. Pradeep Kumar Dabla on “Mobile Health Technologies and Sustainability". The Opening Ceremonies also featured the presentation of the PCQACL Institutional member Awardees, Corporate member Awardees, and highlighted with the presentation of the following Individual Awardees; 1) Outstanding Service Award: Dr. Godwin N. Hernaez, 2) Outstanding Leadership Award: Dr. Anacleta P. Valdez, and 3) Lifetime Achievement Award: Dr. Ariel Vergel De Dios. This was followed by the morning scientific sessions covering the Block 1 on “Changing the Landscape of Cancer Diagnosis and Management “with the following presented plenary lecture topics: 1) Utilization of Immunostains and Genomic Testing for Oncology, and the topic 2) Quality Issues in Diagnostic Immunohistochemistry for Tumors. The Morning sessions ended with the Q & A portion with the AM Moderator and followed by the lunch break. The scientific sessions presented in the Afternoon were the following:1) Panel Discussion on “Genomic Cancer Testing: Are We Ready?, followed by the sessions on Block 2 on “Initiating Advances in Transplant and Hematology” with the presentation of the following topics; 1) The Platelet H: Beyond Impedance and Optical” , and on the topic 2) Basics of HLA Typing” followed by the Q & A portion with the PM Moderator. Another highlight on the first day of the convention is the PCQACL Best Laboratory Practices Contest participated competitively by five Institutional members of PCQACL namely; 1) Medical Center Manila presented by Mr. Rannaire Mx P. De Leon, RMT with the Entry entitled “Feel Better” A Pre and Post Donation Care Project, 2) Health Serv Los Banos Medical Center presented by Ms. Joan Rubia Anis with the Entry entitled “ Real Time Viber Critical Result Reporting” , 3) Mary Mediatrix Medical Center presented by Ms. Nikki L. Castillejos, RMT with the Entry entitled “ Elevating Employee Excellence through Competency Development”, 4) The Medical City- Ortigas presented by Ms. Nina Theresa Balarag-Hernandez, RMT with the Entry entitled ” Turn Around Time (TAT) Improvement on STAT Extractions: A lean six sigma and multi-tool approach” , and 5) Cotabato Regional and Medical Center presented by Ms. Rhea Lim- Macion with the Entry entitled “ SOCCSSARGEN Regional Blood Center Best Practices in Quality Control of Blood Component: Packed Red Blood Cell and Platelet Concentrate”

The **second day** of the convention on October 10, 2024 focused the presentations under Block 3 on “Changing Mindset in Laboratory Management” with the following topics

“***Quality Indicators and KPIs construction made ridiculously simple and easy”,*** and on the topic ***“Adapting to the demands of the corporate world in the laboratory setting”***. Then, it was followed by the presentations under Block 4 on “***Global initiatives for Standardization and Quality Assurance”*** with the following topics “ ***Total Quality Management of medical and molecular laboratories”*** presented by the esteemed IFCC-VLP Speaker, Dr. Pradeep Kumar Dabla and followed by another renowned IFCC-VLP Speaker, Dr. Bernard Gouget on the topic ***"Quality Assurance of Point of Care Testing”.*** The scientific session on the second day of the

convention ended with the CAP session on the topic "***Quality Assurance in the Laboratory: local experience".*** After the very informative scientific sessions, everyone was so happy and excited to relax and have fun during the Fellowship Night.

Onward to the **third day** on October 11, 2024 were the presentations under Block 5: "Risk Management in the Post COVID era" with the following topics "Quality Risk Management in Laboratory Operations: managing reagent recalls and other product issues" and "Laboratory Safety Issues that Put You at Risk". Then, followed by the presentation under Block 6: "Precision Medicine in the Clinical Laboratory" on the topic "Use of Diagnostics in Lifestyle and Functional Medicine".

This **last day** of the convention was highlighted with the culminating activities of the 3-day convention and the Closing Ceremonies graced with the honorable presence of the Recipient of the PCQACL Lifetime Achievement Award, Dr. Ariel Vergel De Dios as the Guest of Honor and Inducting Officer of the newly elected Members of the PCQACL Officers and Board of Trustees. It was on this last day of the convention that the winners of the Best Laboratory Practices have been announced to the excited participants. Ms. Nikki Castillejos, RMT of Mary Mediatrix Medical Center was the First prize winner with Entry entitled "Elevating Employee Excellence through Competency Development", Mr. Rannaire Max P. De Leon, RMT of Medical Center Manila was the Second prize winner with his Entry entitled "Feel Better": A Pre and Post Donation Care Project", and Ms. Nina Theresa Balarag-Hernandez, RMT of The Medical City – Ortigas was the Third prize winner with her Entry entitled " Turn Around Time (TAT) Improvement on STAT Extractions: A lean Six Sigma and multi-tool Approach".

The **PCQACL Continuing Education, Training & Research (CETR) Committee** has successfully conducted the Hybrid 21st PCQACL Annual Convention and the Virtual presentations were made possible via Zoom App online platform through the technical assistance of our IT Provider (Progressive Productivity Solutions). The technical issues, queries and concerns of the participants have been addressed accordingly by the PCQACL official IT Provider (PPS) with the guidance and supervision of the PCQACL Committee on Information, Communication & Technology System (ICTS).

EDUCATION

The PCQACL Committee on Continuing Education, Training & Research of PCQACL has conducted the following Free Webinars and Masterclass series seminars in 2024**:**

Webinar title	*Speaker/s*	*Date*	*Nr. of Participants*	*In Collaboration with Diagnostic Industry Partner*
P.O.W.E.R 13 Diagnostic Challenges in Autoimmune Diseases	Dr. Ramon Miguel M. Molina	April 4, 2024	1,025 participants	SNIBE
P.O.W.E.R 14 Introducing New Strategies in Laboratory Medicine Global Laboratoy Professional Week Celebration	Professor Nader Rifai	June 27, 2024	190 participants	SNIBE
Masterclass series seminar 1 – Raising Quality in Immunology and Beyond 1. Updates in Immunology laboratory 2. Understanding Interferences and Biological Variations in Laboratory Testing 3. Internal Quality Control and EQAS: Immunology section and Beyond 4. Leadership in the Laboratory: Key Strategies for Laboratory Management Success 5. Laboratory Management Topic: Application on Genchi Genbutsu: Go see for yourself principles in Laboratory Medicine 6. Taking the Lab to the next level: the challenge of accreditation	Dr. Rodelio D. Lim Dr. Sarah Jane L. Datay-Lim Dr. Paulo Enrico P. Belen Dr. Anacleta P. Valdez Dr. Estela Marie C. Tanchoco Ms. Josefina S. Soriano, RMT	August 1, 2024	190 participants	BIOSITE Medical Instruments, Inc.
Masterclass series seminar 2 – Achieving Global Standards through EQAS 1. Basic Laboratory Statistics 2. Understanding Clinical Chemistry NEQAS: Perspectives from the NRL 3. Optimizing Quality: Exploring Controls, Proficiency Testing, and QC Software Solutions 4. Updates in Hematology NEQAS 5. Improving Quality in Hematology Laboratory using Inter-Laboratory Quality Control	Dr. Emilio Q. Villanueva Dr. Catherine Kaori S. Calingo Mr. Chan Yi Chun Dr. Giovanni L. Mendoza Ms. Laurie Anne M. Reyes, RMT	August 16, 2024	319 participants	EVERLIFE and SYSMEX

REGIONAL RELATIONS

- Member of Asian Network for Clinical Laboratory Standardization and Harmonization (ANCLS)
- Member of Asian - Pacific Federation of Clinical Biochemistry and Laboratory Medicine (APFCB)
- PCQACL was a previous Member of Clinical and Laboratory Standards Institute (CLSI) and this has given PCQACL the authority to be the distributor of their books and other documents in the Philippines, procuring of such in bulk and distributing them to facilitate their adoption and implementation by the clinical laboratories nationwide.

INTERNATIONAL RELATIONS

- The PCQACL is an active member of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) through the years.

The IFCC-Visiting Lecturer Program has always been requested to provide Speakers / Panel Discussants at the Plenary lectures / Panel discussions of the PCQACL's Annual Conventions, Seminar-Workshops and other Scientific sessions.

- PCQACL has participated in the Global Med Lab Week celebration in collaboration with The Medical City for free Webinars on Anatomic Pathology and Clinical Pathology with CPD units. There was also week-long celebration of activities such as: Holy Mass, Face to Face multidisciplinary presentation on Next generation sequencing, free lab tests for patients, mass blood donation, free food for the staff, and a recognition day for laboratory professionals.
- Batangas Medical Center has also submitted a lab video with the theme "Labs Saves Lives" in line with the celebration of the Global Lab Professional Week.
- In support of the PCQACL to the IFCC Live Webinars, Dr. Sarah Jane L. Datay-Lim, Co-Chair of the PCQACL Committee on Advocacy and International Relations has attended the following IFCC Live Webinars:
  1. The evidence of tests used in the management of Diabetis Mellitus - April 17, 2024.
  2. Critical Results Reporting and Interpretive Comments – December 11, 2024
  3. Integrated Diagnostics: a New Vision for the future of Diagnostic Specialties- April 30,2024
  4. Machine Learning in Laboratory Medicine Part 2: Case Study Analysis – Feb. 20, 2025
  5. Machine Learning in Laboratory Medicine: Recommendation of the IFCC Working Group Part – Feb. 13,2024
  6. Artificial Intelligence (AI) on the clinical laboratory: implementation, bioethics, and legislation- March 6, 2024
- PCQACL has conducted P.O.W.E.R.14, a Free Webinar featuring Prof. Nader Rifai on the topic "Introducing New Strategies in Laboratory Medicine" held on June 27, 2024.
- PCQACL helped in the promotion of AACC learning lab app of Prof Nader Rifai here in the Philippines.

SERBIA

SERBIAN SOCIETY FOR CLINICAL LABORATORY MEDICINE AND SCIENCE (SCLM)

NATIONAL MEETINGS

Name of the meeting	*Date*	*Topic*
CLAQ365: ISO 15189: 2022 – Examination processes and ensuring the validity of examination results	January 23, 2024, Belgrade, Serbia	Symposium President Invited lectures
CLAQ365: ISO 15189: 2022 – Post/examination processes and risk management	February 21, 2024, Belgrade, Serbia	Symposium President Invited lectures
Laboratory hemostasis in praxis	March 25, 2024, Belgrade, Serbia	Seminar Orgniser Invited lectures
11th Congress of the Association of Preventive Pediatrics of Serbia with international participation	April 05-07, 2024, Kopaonik, Serbia	Scientific Comitee Member, Invited lecture
EU IVD Regulation (EU) 2017/746: challenges and impact of the implementation	April 19, 2024, Belgrade, Serbia	Meeting Orgniser Invited lectures
Method evaluation in the clinical laboratory	April 25, 2024, Belgrade, Serbia	Seminar Orgniser Invited lectures
Quality Control in a Clinical Laboratory	April, 2024, Belgrade, Serbia	Seminar Orgniser Invited lectures
The Fifth Congress of Private Sector Health Workers	May 7-8, 2022, Belgrade, Serbia	Scientific Comitee Member
IV Symposium of rare disease Association of Preventive Pediatrics of Serbia	November 15-17, 2024, Divčibare, Serbia	Invited lecture

REGIONAL MEETINGS

Name of the meeting	*Date*	*Society's contribution for the meeting*
22th CardioS International congress of clinical cardiology and heart failure	January 23, 2024, Belgrade, Serbia	Symposium President Invited lectures
IFCC Worldlab 2024 • 26th International Congress of Clinical Chemistry and Laboratory Medicine, 17th Congress of Arab Federation of Clinical Biology • 10th Saudi Society for Clinical Chemistry Annual Meeting, • The 8th UAEGDA International Genetic Disorders Conference and UAEGDA International Genetics Disorders Prevention Awards 2024	May 26-30, 2024, Dubai, UAE	Poster presentations
2024 SERBIS: Promoting health for women's empowerment	September 30-October 01, 2024, Belgrade, Serbia	Oral presentation
XXXI Meeting of Balkan Clinical Laboratory Federation and 35th National Biochemistry Congress	October 28 – November 01, 2024, Antalya, Türkiye	Poster presentations
International Congress Public health – achievements and Challenges	October 15-16, 2024, Belgrade, Serbia	Oral presentation
5th Congress of Serbian Society for Endocrinology of Gender and Serbian menopause society	October 03-05, 2024, Belgrade, Serbia	Invited lectures
The 15th National Conference of the Romanian association of Laboratory Medicine.	May 15-17, 2024, Eforie Nord, Romania	Invited lectures
The 10+1 Santorini Conference - Systems Medicine and Personalised Health & Therapy – The Odyssey from Hope to Practice.	May 21-24, 2024, Santorini, Greece	SAC Membership Invited lecture
VIII International Congress of Coronary Care Unit Society of Serbia, Belgrade	October 03-04, 2024, Belgrade, Serbia	Scientific Comitee Member
Serbian conference on Interventional cardiology, cardiovascular Imaging and drug therapy-SINERGY 2024	September 12-23, 2024,Belgrade, Serbia	Invited lecture
Roche DNAi Day	March 27, 2024, Belgrade, Serbia	Invited lecture
Roche Digital Day	November 30, 2024, Belgrade, Serbia	MDT panel Invited lecture
Macedonian Society for Medical Biochemistry and Laboratory Medicine Meeting	December 12, 2024, Skopje, Northern Macedonia	Invited Lecture

REGIONAL RELATIONS

Scientific cooperation of West Balkan countries.
Society also has very good cooperation with Societies of Croatia, Slovenia, Italy and Hungary.

INTERNATIONAL RELATIONS

IFCC Affiliate Membership

IFCC Communications and Publications Division (CPD)
eJIFCC (WG-eJIFCC), Sanja Stankovic
IFCC ETD Committee on Mobile Health and Bioengineering in Laboratory Medicine (C-MHBLM), Sanja Stankovic
EFLM Working Group: Biomarkers of Mild Traumatic Brain Injury, Corresponding Member Sanja Stankovic
EFLM Task Force: Green and Sustainable Laboratories (GSL) Member Sanja Stankovic
EFLM Task & Finish Group: Biomarkers of Diagnosis and Follow-up of Nitrous Oxide Abuse, Member Sanja Stankovic
EFLM Task Group: Chronic Kidney Disease, National representative, Sanja Stankovic

EFLM Communication Committee
Task Group “European Lab Day” Sanja Stankovic

European Society of Pharmacogenomics and Personalised Therapy (ESPT)
General Secretary/Board Member Sanja Stankovic

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