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Editorial

Dear colleagues

Let's say that spring is ante portas and we are looking forward to spring or Easter holidays. IFCC Worldlab in Dubai is approaching and every few days you all get a relevant message full of promises in your email.

This issue begins with our new IFCC President Prof Tomris Ozben's important message. In her message Prof Ozben offers us a lot of information about the new IFCC EB first meeting. She mentions the importance of meeting with all IFCC officers, old and new Chairs and of being in touch with all the IFCC members, even the National societies members. She is describing the draft strategic action plans for the years ahead as well.

In this issue we pay tribute to an important IFCC lady Dr Elizabeth R. Nuqui, who passed away last year, and we learn about her life and her important contribution to her national society (Philippines) and to IFCC. We say goodbye to the old Chairs, thanking them for their services to their committees and IFCC in general, wishing them every success in their new positions and we welcome and get to know the new chairs. Don't forget, dear colleagues, to read the interview of Prof. Sergio Bernardini, IFCC Secretary, by Dra Maria del Carmen Pasquel, where you will learn a lot about his past and new positions and his commitment to IFCC.

And of course, we have reports from the young scientists and their dedication to learn everything about digital transformation of our labs and our lives, reports from many national societies from all over the world, and from the scientists, who had the opportunity to visit other labs and gain a lot from this experience.

And last but not least, I invite you to read articles about the UNIVANTS awarded teams, where the cooperation between clinicians and laboratories offers so much to global health.

Go ahead dear colleagues, read and enjoy!



Katherina Psarra, MSc,
PhD, eNews Editor

Katherina

The voice of IFCC

Message from the new IFCC President – Prof. Tomris Ozben

March 2024
By Tomris Ozben

Dear Colleagues and Friends,

Dear Colleagues and Friends,

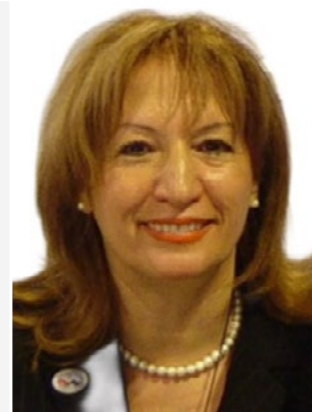
The initial meeting of the IFCC Executive Board (EB) with the newly elected members for the term 2024-2026 occurred on February 14th and 15th at the IFCC office in Milan. The agenda for the first day, February 14th, was dedicated to the Chairs of the four IFCC Divisions, Executive Board Committees (Congresses and Conference Committee, Nominations Committee and Awards Committee) and Executive Board Task Forces (Task Force on Ethics; Task Force for Young Scientists; Task Force on History; Task Force-Corporate Members; Task Force on Global Newborn Screening; Task Force on Global eLearning/eAcademy; Task Force on Outcome Studies in Laboratory Medicine; Task Force on Global Reference Interval Database; Task Force Environmental Impact of Laboratory Medicine) who convened meetings representing their respective functional units.

Virtual presentations were conducted with designated time slots allocated from 09:00 to 18:00 CET on the first day of the EB Meeting (February 14th). The objective of these virtual meetings was to enable the Chairs serving during the 2021-2023 term to deliver presentations, furnishing information to the incoming Executive Board members and newly appointed Chairs of functional units (in cases of chairmanship changes). The presentations encompassed comprehensive details regarding their Members, Terms of Reference, ongoing and completed tasks over the preceding 3 years, and recommendations for future plans concerning the functional units.

During the second day of the closed Executive Board Meeting (February 15th), the IFCC President presented the draft Strategic Action Plans (2024-2026) that she had prepared and engaged in discussions with the EB members. The IFCC Strategic Action Plans were developed across four areas:

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

Following the Executive Board review, the draft IFCC Strategic Action Plans will be finalized submitting it in the following sequence to the IFCC Functional Units, IFCC Regional Federations, IFCC Member Societies, and Corporate Members to gather their comments, proposals, and criticisms.



Prof. Tomris Ozben
EuSpLM, Ph.D.

After addressing the draft Strategic Action Plans on February 15th, Executive Board members engaged in discussions regarding regular EB matters in accordance with the agenda and documents distributed in advance.

In recent years, IFCC's activities have seen consistent growth. Consequently, the IFCC Executive Board has decided to conduct online meetings monthly to address the needs of IFCC functional units and member societies.

The IFCC Executive Board has decided to convene Council meetings annually preceding the opening ceremonies of EuroMedLabs and WorldLabs.

Given that IFCC organizes either EuroMedLab or WorldLab annually, the IFCC General Conference will coincide with either EuroMedLab or WorldLab. To gauge support and preferences, a survey will be conducted among IFCC regional federations, member societies, corporate members, IFCC committees, and working groups to ascertain their preference and backing for IFCC's organization of the General Conference, with a commitment to attend both the General Conference and the IFCC Congress organized in the same year. The aim is to ensure that the organization of the General Conference does not diminish attendance at the major IFCC Congresses. It should be noted that IFCC covers only the accommodation expenses of the representatives of the member societies for the General Conference and the expenses of one annual meeting for the IFCC committees and working groups.

I am delighted to share with you that the new CLSI Country-Based Pricing Model, effective January 2024, will offer significant discounts for IFCC members from low and low-middle income countries (90%), as well as middle-income countries (50%). We have extended this fantastic opportunity to the IFCC community in numerous countries.

It is my immense pleasure and great honor to extend to you an invitation to attend the 26th International Congress of Clinical Chemistry and Laboratory Medicine (ICCLM)-IFCC WorldLab Congress 2024 which will be 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 UAE Genetic Disorders Conference in partnership with MZ Events to be held in Dubai World Trade Centre (WTC) in May 26-30, 2024. Additionally, the 3rd IFCC Forum for Young Scientists is scheduled to take place before the congress.

I eagerly anticipate meeting all IFCC members worldwide from the six IFCC Regional Federations who will participate in this exciting IFCC WorldLab Congress 2024 Dubai. I am confident that you will find your time rewarding and worthwhile, enjoying an inspirational scientific program, engaging presentations, discussions, exhibitions, networking opportunities, and social activities.

I am looking forward to fostering productive cooperation with the IFCC Executive Board members and IFCC officers, as well as establishing collaborations and efficient bridges with the IFCC Regional Federations, National Societies and Corporate Members in the ongoing and future activities of IFCC. I sincerely appreciate your cooperation and extend my best wishes for a healthy and successful new term.

With my best regards

Prof. Dr Tomris Ozben
IFCC President

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- Sample Positions: 72
- Reagent position: 20

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- Reagent positions: 30

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- Sample Positions: up to 300
- Reagent positions: 42

Broad CLIA Test Menu with 236 Parameters

Thyroid

| | | |
|--|-----------------------------|----------|
| TSH (3rd Generation) STAE[™] | FT3 STAE[™] | TRAb |
| T4 STAE[™] | Tg (Thyroglobulin) TMA | |
| T3 STAE[™] | TGA (Anti-Tg) Rev T3 | |
| FT4 STAE[™] | Anti-TPO | T-Uptake |

Bone Metabolism

| | | |
|-------------|---|------------|
| Calcitonin | 25-OH Vitamin D STAE[™] | β-CTx |
| Osteocalcin | Intact PTH | total P1NP |
| *PTH (1-84) | | |

Hepatic Fibrosis

| | | |
|-----------|---------|--------------|
| HA | C IV | Cholyglycine |
| PIIIP N-P | Laminin | GP73 |

Immunoglobulins

| | | | |
|-----|-----|-----|-----|
| IgM | IgA | IgE | IgG |
|-----|-----|-----|-----|

Glyco Metabolism

| | | |
|-----------|--------------------|------------|
| C-Peptide | Anti-IA2 | Proinsulin |
| Insulin | ICA | *Glucagon |
| GAD 65 | IAA (Anti Insulin) | *Anti-ZnT8 |

Tumor Markers

| | | |
|-----------|------------|-----------|
| AFP | PAP | SCCA |
| CEA | CA 50 | TPA-snibe |
| Total PSA | CYFRA 21-1 | ProGRP |
| f-PSA | CA 242 | HE4 |
| CA 125 | CA 72-4 | HER-2 |
| CA 15-3 | NSE | PIVKA-II |
| CA 19-9 | S-100 | *AFP-L3% |

Anemia

| | | |
|-------------|------------|------------------------|
| Vitamin B12 | EPO | *Anti-Intrinsic Factor |
| Ferritin | RBC Folate | *Active B12 |
| Folate (FA) | | |

STAE[™]

| | | |
|------------------------------------|------------------------------------|------------------------------|
| *hs-cTnI STAE[™] | *Myoglobin STAE[™] | *PCT STAE[™] |
| *NT-proBNP STAE[™] | *D-Dimer STAE[™] | *CRP STAE[™] |

Hypertension

| | | |
|--------------|----------------|----------|
| Direct Renin | Angiotensin I | Cortisol |
| Aldosterone | Angiotensin II | ACTH |

Fertility

| | | |
|-----------------------------------|--------------------|-----------------|
| FSH | free Testosterone | SHBG |
| LH | DHEA-S | Androstenedione |
| HCG/β-HCG STAE[™] | Progesterone | PIGF |
| PRL (Prolactin) | free Estriol | sFlt-1 |
| Estradiol | 17-OH Progesterone | *Inhibin A |
| Testosterone | AMH | *Inhibin B |

Infectious Disease

| | | |
|-----------------------------------|------------------|--------------------|
| Respiratory | Hepatitis | Others |
| 2019-nCoV IgG | HBsAg | HIV Ab/Ag Combi |
| 2019-nCoV IgM | Anti-HBs | Syphilis |
| SARS-CoV-2 S-RBD IgG | HBeAg | Chagas |
| SARS-CoV-2 Neutralizing Antibody | Anti-HBe | HTLV I+II |
| SARS-CoV-2 Ag | Anti-HBc | H.pylori IgG |
| <i>Mycoplasma Pneumoniae</i> IgG | Anti-HBc IgM | H.pylori IgA |
| <i>Mycoplasma Pneumoniae</i> IgM | Anti-HCV | H.pylori IgM |
| * <i>Chlamydia Pneumoniae</i> IgG | Anti-HAV | *H.pylori Ag |
| * <i>Chlamydia Pneumoniae</i> IgM | HAV IgM | Dengue Virus IgG |
| *Respiratory Syncytial Virus IgM | *HBV Pre-S1 Ag | Dengue Virus NS1 |
| *Coxsackievirus B IgM | *HEV IgG | *Dengue Virus IgM |
| *Adenovirus IgM | *HEV IgM | Monkeypox Virus Ag |
| *Influenza A Virus IgM | | |
| *Influenza B Virus IgM | | |
| *Legionella Pneumophila IgM | | |
| *Human Parainfluenza Virus IgM | | |

TORCH

| | | |
|-------------|-------------|-------------------|
| Toxo IgG | CMV IgM | *HSV-2 IgM |
| Toxo IgM | HSV-1/2 IgG | *HSV-1 IgM |
| Rubella IgG | HSV-1/2 IgM | *Toxo IgG Avidity |
| Rubella IgM | HSV-1 IgG | *CMV IgG Avidity |
| CMV IgG | HSV-2 IgG | |

EBV

| | | |
|-------------|-------------|------------|
| EBV EA IgG | EBV VCA IgM | EBV NA IgG |
| EBV EA IgA | EBV VCA IgA | EBV NA IgA |
| EBV VCA IgG | | |

Prenatal Screening

| | | |
|--------------------------|------------|------------|
| AFP (Prenatal Screening) | free β-HCG | *Inhibin A |
| free Estriol | PAPP-A | |

Cardiac

| | | |
|------------|-----------|------------------------------------|
| CK-MB | NT-proBNP | *sST2 |
| Troponin I | BNP | *hs-cTnI STAE[™] |
| Myoglobin | D-Dimer | *NT-proBNP STAE[™] |
| hs-cTnI | Lp-PLA2 | *Myoglobin STAE[™] |
| hs-CRP | MPO | *D-Dimer STAE[™] |
| H-FABP | HCY | |

Autoimmune

| | | |
|----------------------------------|---------------------------------|----------------------|
| Connective Tissue Disease | Rheumatoid Arthritis | Endocrinology |
| ANA Screen | Anti-CCP | Anti-TPO |
| ENA Screen | *RF IgM | TGA (Anti-Tg) |
| Anti-dsDNA IgG | *RF IgA | TRAb |
| Anti-Sm IgG | *RF IgG | TMA |
| Anti-Rib-P IgG | *RF Screen | GAD 65 |
| Anti-SS-B IgG | | Anti-IA2 |
| Anti-SS-A IgG | | ICA |
| Anti-Jo-1 IgG | Celiac Disease | IAA (Anti Insulin) |
| Anti-Scl-70 IgG | Anti-tTG IgA | *Anti-ZnT8 |
| Anti-Centromeres IgG | Anti-tTG IgG | |
| Anti-Histones IgG | DGP IgA | Vasculitis |
| Anti-nRNP/Sm IgG | DGP IgG | Anti-MPO IgG |
| *Anti-Ro-52 IgG | | Anti-PR3 IgG |
| *Anti-PM-Scl IgG | Autoimmune Liver Disease | *Anti-GBM IgG |
| *Anti-Nucleosome IgG | Anti-M2-3E IgG | |

Antiphospholipid Syndrome

| | |
|--------------------------|---------------------------|
| Anti-Cardiolipin IgG | β2-Glycoprotein I IgG |
| Anti-Cardiolipin IgM | β2-Glycoprotein I IgM |
| *Anti-Cardiolipin IgA | *β2-Glycoprotein I IgA |
| *Anti-Cardiolipin Screen | *β2-Glycoprotein I screen |

Inflammation Monitoring

| | | |
|---------------------|-----------------------|------------------------------|
| CRP | IL-6 (Interleukin 6) | *PCT STAE[™] |
| PCT (Procalcitonin) | SAA (Serum Amyloid A) | *CRP STAE[™] |
| TNF-α | *VEGF | |

Metabolism

| | | |
|---------------|------------|---------|
| Pepsinogen I | Gastrin-17 | IGF-I |
| Pepsinogen II | GH (hGH) | IGFBP-3 |

Kidney Function

| | | |
|--------------------|---------|-------|
| β ₂ -MG | Albumin | *NGAL |
|--------------------|---------|-------|

Drug Monitoring

| | | |
|---------|----------------------|---------------------|
| Digoxin | CSA (Cyclosporine A) | FK 506 (Tacrolimus) |
|---------|----------------------|---------------------|

Coagulation Markers

| | | |
|---------|-----|-------|
| D-Dimer | TM | tPAIC |
| TAT | PIC | *FDP |

Veterinary Testing

| | | |
|-------|-------|-------|
| *cTSH | *cTT4 | *vFT4 |
|-------|-------|-------|

*Available soon

My experience with the IFCC Professional Scientific Exchange Programme (PSEP) – Fall 2023

By **Dr. Gramos Begolli**, IFCC National Representative, Kosova Association of Clinical Chemistry (KACC), Specialist of Clinical Biochemistry, Clinic of Medical Biochemistry, University Clinical Center of Kosova, Prishtina Kosovo

I wanted to take a moment to write and tell you how much I appreciated being considered for the IFCC Professional Exchange program – fall 2023.

I had the good fortune to be selected to work at the University Hospital Osijek from September 17th to December 15th, 2023. While working under the supervision of Prof. Željko Debeljak, I had the opportunity to train on LC-MS/MS and how to incorporate it into my everyday work life. My training included quantitative and qualitative examination of MS's mechanism, which includes ion generation and fragmentation, creation of LC-MS/MS procedures, including, but not limited to, calibration, tuning, sample preparation, etc.

The fundamental LC-MS/MS training was overseen by Professor Ž. Debeljak and his colleagues from the Clinical Institute of Laboratory Diagnostics at University Hospital Centre Osijek, who frequently do steroid research utilizing LC-MS/MS. This introductory theoretical study of clinical LC-MS/MS applications was followed by the training conducted using a LCMS 8050 (Shimadzu, Japan) and the LC-MS/MS Steroids kit (Chrom Systems, Germany).

Given the state of laboratory diagnostics in Kosovo, these opportunities to be educated and develop clinical biochemistry specialists are vital. As a clinical biochemistry specialist at Kosovo's main hospital center, I will be able to apply what I learnt during my time at the Clinical Institute of Laboratory Diagnostics in Osijek, Croatia, to assist in enhancing the healthcare system there.

On the other hand, working with such a high-quality and well-managed host organization has been an honour and a remarkable experience. I would like to express my gratitude to Prof. Zeljko Debeljak, Prof. Vratislav Šerić, Head of the Laboratory and Mag. Tara Rolic for their great support regarding this professional exchange program, and of course the rest of the staff at the Clinical Institute of Laboratory Diagnostics in Osijek for all the assistance they provided me throughout my stay. I am indebted to you with my deepest gratitude.



Dr. Gramos Begolli in the Laboratory with Prof. Debeljak

My Professional Exchange Management Program Experience at the Department of Clinical Biochemistry University Hospital in Olomouc, Czech Republic

By Nguyen Thi Ngoc Bich (Jade Nguyen), Department of Biochemistry, Hanoi Medical University, Hanoi - Vietnam

Hanoi Medical University
Department of Biochemistry



University Hospital Olomouc Department
of Clinical Biochemistry



First of all, I would like to extend my sincere gratitude to the IFCC and the Department of Clinical Biochemistry at the University Hospital Olomouc in Olomouc, Czech Republic. The support and conducive environment provided me with the valuable opportunity to experience this course.

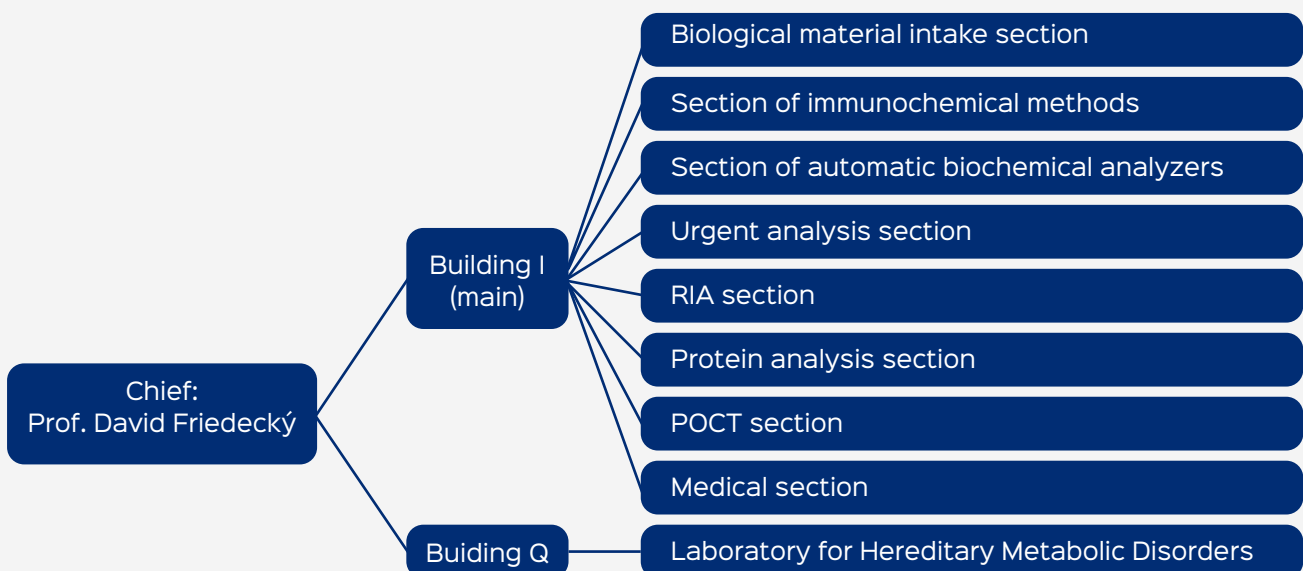
Especially, I would like to express my deepest thanks to Prof. David Friedecký, Head of the Department of Clinical Biochemistry at the University Hospital Olomouc, and all friends and colleagues at the Clinical Biochemistry Department for kindly guiding and helping me a lot during my practice and study here.

Through practical learning at the Department of Clinical Biochemistry of University Hospital Olomouc, I have acquired a lot of knowledge, skills and valuable experiences, especially with other practical experiences compared to Vietnam.

Finally, I would like to thank Hanoi Medical University Board, Graduate Education Management Department of Hanoi Medical University for facilitating my study and research.

1. General introduction to department of clinical biochemistry

1.1. Organization



1.2. Quality Accreditation

The Department of Clinical Biochemistry at the University Hospital Olomouc follows the ISO 15189 standard and has been accredited since 2013.

2. Compare ISO 15189 implementation between Department of Clinical Biochemistry of University Hospital Olomouc (OKB) and Laboratory Department of Hanoi Medical University Hospital (HMHU'S LAB)

Both departments adhere to the ISO 15189 standard, and fundamentally, their ISO 15189 implementations are similar. However, there are some key differences as follows:

Table 1. Compare ISO 15189 implementation between OKB and HMUH's Lab

| No. | Content | OKB | HMHU's Lab |
|-----|---|--|--|
| 1 | Infrastructure and facilities | Dividing into multiple sections, each with its own responsible person | Centralizing in a single testing room, divided into different specialized groups based on the machine system |
| 2 | ISO 15189:2012 Certified Tests | All tests | Only selected Biochemical and Immunological tests |
| 3 | Laboratory equipment | Using automation systems. Utilizing a single biochemical-immunological testing system - Atellica Integrated Automation. Having software to manage the quality of Point of Care Testing (POCT) systems. | No automation system has been implemented. Utilizing multiple biochemical-immunological testing machine systems concurrently, such as Cobas, Atellica, Alinity. No tool is in place to manage the quality of Point of Care Testing (POCT) systems. |
| 4 | Test method validation and verification | Since there are in-house methods available, it is advisable to implement both validation and verification procedures. | Not utilizing in-house methods, there is only a verification procedure in place. |
| 5 | Document control | Mainly managed through software (level 1, 2, 3 documents) and paper documents (level 4 documents).* | Mainly managed with paper documents. |
| 6 | Environmental conditions control | Not tracking humidity Managed and monitored through automatic recording devices linked to software, providing automatic alerts when temperature conditions exceed permissible limits. | Monitoring both temperature and humidity . Managed and monitored manually. |

| | | | |
|---|-------------------------------------|--|--|
| 7 | Internal quality control management | Biochemistry: 3 levels, performed every day, and plan to extend to twice a day. Immunology: 3 levels, conducted daily. Quality control (QC) range establishment and Six Sigma in quality management have not been implemented yet. | Biochemistry: 2 levels, conducted daily. Immunology: 3 levels, frequency of QC depends on the number of samples per day. Quality control (QC) range establishment and Six Sigma have been implemented in quality management. |
| 8 | Laboratory information management | The Laboratory Information System (LIS) effectively handles most tasks within the laboratory | The Laboratory Information System (LIS) currently does not fulfill some tasks within the laboratory. Internal and external quality control are managed manually by Excel. |

3. Test method validation and verification at Department of Clinical Biochemistry of University Hospital Olomouc

Method validation and verification are crucial steps in quality management for laboratory, not only according to ISO 15189 standards but also in compliance with the IVD Directive 98/79/EC. This directive outlines the requirements for in vitro diagnostic medical devices intended for the European market. Validation focuses on confirming the capabilities of a new diagnostic tool and is the responsibility of the manufacturer, while verification assesses the performance characteristics before implementing a test system for patient testing. The below table outlines the study design for method validation and verification at the Department of Clinical Biochemistry of University Hospital Olomouc:

Table 2. Test method validation and verification study design

| Test method validation | Test method verification | Choose samples | Number of samples | Study design |
|--------------------------------------|--------------------------------------|--|---|---|
| Repeatability (within-run precision) | Repeatability (within-run precision) | Patient samples or commercial samples | At least 2 different concentration levels (one sample within the reference range, the second above or below the upper/lower reference limit). | 10 x 2 or 10 x 1 depends on financial conditions. |
| Bias | Bias | | | Calculate Mean, SD and CV |
| | | 10 x 2 or 10 x 1 (for some immunological tests or depending on financial conditions). Calculate Bias | | |

Table 2. Test method validation and verification study design

| Test method validation | Test method verification | Choose samples | Number of samples | Study design |
|-------------------------|--------------------------|--|---|--|
| Reportable range | - | | At least 5 different concentration levels. Sample 1 and sample 5 each have concentrations near the lower and upper limits of the reportable range. | Run each sample three times. Plot the graph and calculate R: $R(\%) = \text{Measured Value/Expected Value} \times 100$ |
| LoD | - | Blank sample or "zero" calibrator sample | 01 | Run sample at least 10 times. Calculate LoD: $\text{LoD} = 3 \times \text{SD}_{\text{blank}}$ |
| LoQ | - | - | - | LoQ is calculated based on LoD: $\text{LoQ} = 3 \times \text{LoD}$ |
| Measurement uncertainty | Measurement uncertainty | - | - | The measurement uncertainty must be carried out by calculations based on data provided by the manufacturer and data obtained during the validation/ verification process |
| Method comparison | - | Patient samples | For method verification, a minimum of 10 samples is required, and for method validation, at least 40 samples are needed. Sample collection need to cover the entire reportable range. | Run each sample simultaneously on both the standard system and the comparison system. Create a Bland-Altman plot and analyze the results. |



– PATIENTS –

61% INCREASE

in the diagnosis of previously undetected HCV-infections¹



– CLINICIANS –

11% INCREASE

in clinical satisfaction³



– PAYORS –

19,109,800

Kenyan Shilling in recovered revenue per half annum⁵



– ADMINISTRATION –

5-FOLD REDUCTION
in medical errors with laboratory led point-of-care program⁷

80% REDUCTION
in patient wait times²

100% INCREASE

of surveyed clinicians had increased decision confidence through use of the nodule risk model for risk stratification⁴

€250K

in mitigated costs and procedures⁶

\$80K

of incremental revenue over 3 years⁸

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IFCC: the people

Farewell to Elizabeth R. Nuqui

February 4, 1946 - August 22, 2023

With deepest sorrow, the Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL) would like to let everyone know that our dear “Beth” Nuqui passed away last year. She was a champion of laboratory quality assurance, a past president (2015) and headed the Committee on External Relations of PCQACL for the longest time. She was also part of International Federation for Clinical Chemistry and Laboratory Medicine (IFCC-LM) task force Ethics (2014-2016) and instrumental to strong international relations of the Philippines in the field of laboratory medicine. She has held various prominent positions and awards in the Philippines from different professional organizations, educational institutions, and hospitals, including the Lifetime Achievement Award from PCQACL in 2022. Dr. Nuqui also loved poetry, music, arts, literature, Philippine handcrafts, and plants...a loving wife to Bong, caring mother to her four children (Anissa, Ian, Corinna and Martin) and doting grandmother to her grandchildren. Her brilliance, dedication and compassion profoundly impacted not just the institutions where she practiced pathology but also the broader medical community. She leaves behind a legacy that is monumental yet personal, expansive yet intimate. As we move forward, her teachings, ideals and spirit will continue to guide and inspire every facet of our mission.



Elizabeth Y. Arcellana-Nuqui, MD, FASCP, FPSP

Welcome and thanks to the Chairs

The IFCC extends a warm welcome to the new Chairs of its functional units while expressing gratitude to those who have concluded their tenure in office.

We present here the first group of IFCC Chairs who began their time in office in 2024. A second group of them will be presented in the next issue of our eNews.

Working Group on Standardization of Procalcitonin assays (WG-PCT)

Welcome to the new Chair, **Dr. Amandine Boeuf** (France) and thanks for his commitment to **Dr. Vincent Delatour** (France), who led the committee until December 2023 and now is a member of the Scientific Division Executive Committee.

Dr. Amandine Boeuf is a research scientist at Laboratoire National de Métrologie et d'Essais (LNE), the French National Metrology Institute. She is a project leader involved in bioanalysis and manages projects aiming at the production of certified reference materials and the development of reference methods for the absolute quantification of peptides, proteins and hormones by mass spectrometry. She also coordinates the European project ProMET on fundamental protein metrology to support the definition of measurands, analytical targets, and their associated measurement uncertainty. This project has received funding from the European Partnership on Metrology and will start in the summer of 2024.

In the domain of sepsis protein biomarkers, she has supervised two PhD students and the work that led to the publication of the candidate reference method for quantifying procalcitonin in human serum using a characterized recombinant protein as a primary calibrator. She is a member of the WG-PCT since its creation in 2018.



Dr. Amandine Boeuf, new Chair of the Working Group on Standardization of Procalcitonin assays (WG-PCT)



Dr. Vincent Delatour, Chair of the Working Group on Standardization of Procalcitonin assays (WG-PCT) for two terms (2019-2023)

Task Force Corporate Members (TF-CM)

Welcome to the new Chair, **Dr Jean-Sébastien Blanchet** (Beckman Coulter) and thanks to **Tricia Ravalico** (Abbott) for her commitment and leadership of the Task Force until December 2023. Congratulations for her new role as Corporate Representative within the IFCC Executive Board.

Dr Jean-Sébastien Blanchet, PhD is Director Global Medical and Scientific Affairs at Beckman Coulter Diagnostics. He holds a PhD in Immunology, awarded by the University of Toulouse in France, in recognition of his research contributions to the development of an immunotherapeutic approach for melanoma. Subsequently, he dedicated five years of his career as a Clinical Immunologist at the GlaxoSmithKline Medical Research Center in the United Kingdom, where his primary focus was on the early clinical development of DNA therapeutic vaccines. His professional journey led him to Beckman Coulter, where he has been a dedicated member of the European medical and scientific affairs team for the past 17 years. He currently holds the position of Director of Global Medical and Scientific Affairs. In conjunction with global leadership, he is defining and executing the medical evidence generation strategy necessary for the clinical adoption of the company's IVD test portfolio. He acts as an expert and represents the medical and scientific point of view when defining the strategy for the identification and development of new IVD products in various medical fields. Dr Blanchet also contributes to product development and lifecycle management processes through involvement in development and clinical trials, in coordination with R&D and clinical affairs.

Additionally, he has been Beckman Coulter's corporate representative at the International Federation of Clinical Chemistry (IFCC) since 2010. In this capacity, he actively oversees and coordinates Beckman Coulter's participation in various IFCC committees and working groups dedicated to advancing the standardization of laboratory medicine practices on a global scale.



Dr Jean-Sébastien Blanchet (Beckman Coulter) new Chair of the Task Force Corporate Members (TF-CM)



Tricia Ravalico (Abbott) new Corporate Representative within the IFCC Executive Board, chaired the Task Force Corporate Members (TF-CM) until December 2023.

Within the Task Force Corporate Members we also welcome the new Task Force's Secretary, **Dr Yan Liu** (Mindray) and thank the previous TF-CM Secretary, **Dr Alessandro Ortisi** (Siemens).

Dr Yan Liu, Ph.D., holds the position of Senior Medical and Scientific Affairs Manager at Shenzhen Mindray Bio-medical Electronics Corporation, bringing over ten years of research expertise from academia in the United States to her role. She has worked both domestically and internationally in research and development for clinical research collaborations, managing trial sites, strategizing research initiatives, and overseeing both study management and publications. Dr. Liu also serves as Mindray's representative to professional societies worldwide. Having represented Mindray at the IFCC for two years, she has now been named the secretary to the TF-CM and her involvement also extends to the IFCC Emerging Technologies Division (ETC EC) to explore the application of emerging

technologies for clinical advancements. Dr. Liu is interested in enhancing collaboration between IFCC and its Corporate Members, addressing their unique needs and challenges. She is also passionately advocating for the integration of Chinese experts with the IFCC community.



Dr Yan Liu (Mindray), new Secretary of the Task Force Corporate Members (TF-CM).

Task Force on Ethics (TF-E)

Welcome to the new Chair, **Dr Joesph Wiencek** (US) and thanks to **Dr Nilda Fink** (Argentina) for her outstanding results in leading the Task Force until December 2023. Congratulations on her new role as Member of the Awards Committee on behalf of the Latin American Confederation of Clinical Biochemistry (COLABIOCLI).

Joe Wiencek, PhD, D(ABCC), is an associate professor in Pathology, Microbiology, and Immunology at Vanderbilt University School of Medicine. Additionally, he serves as Vanderbilt's Service Line Medical Director of the Core Laboratory and Co-Director of their ComACC-accredited clinical chemistry fellowship program.

Dr. Joe Wiencek is an active member of the laboratory medicine community. Currently, he serves the Task Force on Ethics Chair for the International Federation for Clinical Chemistry and Laboratory Medicine as well as the document development Chair for the first edition of the Clinical and Laboratory Standards Institute's (CLSI) PRE06-Ed1 document, which will emphasize best practice recommendations for external specimen transport systems. Moreover, he is a member of the Policy and External Affairs Core Committee (PEACC) of the Association for Diagnostics and Laboratory Medicine (ADLM).

Dr. Wiencek has authored over 40 indexed articles on various topics such as preanalytical variation, sustainability, and ethical considerations in laboratory medicine. He has received numerous awards recognizing his excellence in teaching and research, including his prestigious acknowledgement as an American Society of Clinical Pathology 40 under Forty honoree.



Dr Joesph Wiencek, Vanderbilt University School of Medicine, The Vanderbilt Clinic Nashville, TN (US), new Chair of the Task Force Ethics (TF-E).



Nilda Fink (Argentina) , chaired the Task Force on Ethics (TF-E) until December 2023.

Emerging Technologies Division (ETD)

Welcome to the new Chair of the Emerging Technologies Division Executive Committee (ETD EC), **Prof. Damien Gruson** (Belgium) and thanks for his commitment to **Prof Sergio Bernardini** (Italy), who initiated the project and led the Group until December 2023. We are grateful to Prof Bernardini who continues to serve the IFCC as IFCC Secretary.

Prof. Damien Gruson serves as the Head of the Department of Laboratory Medicine at the Cliniques Universitaires Saint Luc in Brussels. Additionally, he holds teaching position and a membership in the research unit focusing on Endocrinology, Diabetes, and Nutrition at UCLouvain.

He holds the esteemed position of Chair within the division on Emerging Technology at the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). Furthermore, Professor Gruson serves as a board member for the Royal Belgian Society of Laboratory Medicine and of the Belgian Thyroid Club. Prof. Gruson holds fellowships in the European Society of Cardiology, the Heart Failure Association, and the American Association of Clinical Chemistry Academy.

Notably, Professor Gruson is the President of the upcoming Euromedlab Congress scheduled to be held in Brussels in 2025.



Prof Damien Gruson (BE), new Chair of the Emerging Technologies Division (ETD-EC).



Prof Sergio Bernardin (IT), past Chair of the Emerging Technologies Division (ETD-EC) and current Secretary of the IFCC

Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM)

Welcome to the new Chair, **Dr. Lianna Kyriakopoulou** (Canada) and thanks for to **Dr. Tim Lang** (UK) for his commitment as Chair of the committee until December 2023.

Dr. Lianna Kyriakopoulou is a Clinical Biochemist and a Clinical Molecular Geneticist. She led the Metabolic Diseases laboratory for almost 10 years before she became a director of Genome Diagnostics at the Hospital for Sick Children. She is an Associate Professor at the Department of Laboratory Medicine and Pathobiology at the University of Toronto, Project Investigator at the Research Institute at the Hospital for Sick Children and a member of the Translational Genomics Program.

Her research interests are focusing on the development of functional genomic platforms and translation of high complexity omics-testing in the clinical laboratory. Her more recent research has focused on developing a clinical RNA seq platform which is validated to be used in the clinical space as a new tool for precision diagnostics. The assay and the bioinformatic pipelines are currently used for the diagnosis of rare diseases and to identify biomarkers in pediatric cancers and are carving a path for Precision Child Health initiatives within the Hospital for Sick Children.

Dr. Kyriakopoulou is a CSCC representative to the International Organization for Standardization (ISO) and the Canadian Standards Association. In this capacity, she has co-led and participated in several initiatives to provide guidance for the validation of Laboratory Developed Tests, Emerging Technologies and Incidental Findings.

She has also served as the Chair of the board of the Canadian Academy of Clinical Biochemistry and in several other positions within the board of the CACB and the Canadian Society of Clinical Chemists.

Dr. Kyriakopoulou joined the Committee on Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM) in 2022 and assumed the role of the committee Chair in 2024.



Lianna G Kyriakopoulou, Laboratory Director, Genome Diagnostics, Hospital for Sick Children, Toronto Canada, Chair of the IFCC Committee on Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM)



Dr Tim Lang, Royal Victoria Infirmary, Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK, Chair of the IFCC Committee on Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM) until December 2023.

INTERVIEW WITH PROF. SERGIO BERNARDINI IFCC SECRETARY 2024–2026



Prof. Sergio Bernardini, (MD, PhD), IFCC Secretary



*Dra .BQF. María Pasquel-Moxley
Chair C-PR/CPD-IFCC
Member WG-IANT/RIA-CPD
-Interviewer*

Prof. Sergio Bernardini, is a full professor of Clinical Biochemistry and Clinical Molecular Biology at the Department of Internal Medicine of The University of Rome Tor Vergata, and the head physician of the Clinical Molecular Biology Unit at the Tor Vergata University Hospital.

He received his degree in Medicine in 1986 and the PhD in Pediatric Sciences in 1995. He has specialized in Pediatrics (1990) and in Clinical Chemistry and Biochemistry (1998).

Professor Bernardini serves as the president of the undergraduate course in “Diagnostic laboratory techniques in the medical field” and as a clinical laboratory research consultant in Bambino Gesù Children’s Hospital in Rome.

He is a member of (1) the Italian Society of Clinical Biochemistry (SIBioC), (2) the SIBioC Committee of Clinical Molecular Biology, (3) the Italian Society of Biochemistry (SIB) and (4) the Italian Society of Allergology and Immunology (SIAIC). His international activities include membership of the Editorial Advisory Board of The Encyclopedia of Life Sciences.

Prof Bernardini served his first term on IFCC EB between 2012 and 2014 as IFCC Secretary and as Chair of the Emerging Technologies Division (ETD) from 2018 to 2023.

As a professor he has several teaching responsibilities including a Bachelor’s course in diagnostic laboratory techniques in the medical field, degree courses in medicine, medical biotechnologies, movement sciences and postgraduate courses in Clinical Biochemistry, Gastroenterology, Neurology, Medical Genetics, Allergology and Immunology, and Pediatrics. Professor Bernardini’s research interests are diverse in nature and have included work in pediatric endocrinology with particular interest in growth hormone and insulin like growth factors and their binding proteins. He has also worked on apoptotic pathways in oncology, in particular neuroblastoma, as well as on glutathione transferases, a family of enzymes involved in cell detoxification and in the control of the programmed cell death. Also, he has collaborated in the application of molecular biology and proteomic methods and techniques in research applied to neurodegenerative diseases, oncology and pharmacogenetics. Since 2009 he has collaborated in the application of molecular biology and biochemical methods in monitoring of sport training and performance.

Sergio is married to Elisabetta since 1998 and has a son, Andrew 21 years old, and a daughter Marta aged 19. His personal interests include football, theatre and travelling.

information taken from [IFCC Executive Board: 2012-2014 Biographies - IFCC](#)

INTERVIEW:

Dear Dr. Sergio Bernardini, we congratulate you on your new position in the Executive Bureau (EB) IFCC, and we wish you the best success in the performance of this important position. We also appreciate your time for this short interview.

1. Could you please give us a short summary of your activities carried out at IFCC?

I'm serving IFCC in the last 12 years, in particular I was Secretary of the Executive Board from 2012 to 2017, then Chair of the Emerging Technology Division from 2018 to 2023 and then to date I'm honored to start a new term as Secretary of the EB.

I attended the Executive Boards under the Presidency of great Scientists like Graham Beall, Howard Morris and Maurizio Ferrari. I made many friends and I improved my knowledge thanks to them.

2. You have had very pleasant experiences in all these years at IFCC, would you like to tell us about one of them?

Of course, I had so many pleasant experiences, for sure the most exciting has been the Presidency of the Rome WorldLab/EuroMedLab with more than eleven thousand attendants in presence and many others by distance.

The way to realize a joint WorldLab/EuroMedLab in my City, Rome, was very long and engaging but also very rewarding.

3. IFCC is growing more and more every day in the global context of Laboratory Medicine. As Chair of the Emerging Technologies Division, what could you tell us about the contribution that IFCC has made in this novel and important field.

When six years ago I was honored to be nominated Chair of the ETD, Artificial Intelligence and Mobile Health were not topics of Laboratory Medicine Conferences and debates. To date in every Conference about Health and/or Laboratory Medicine there are sessions related to those topics.

There are many opportunities and pitfalls, IFCC can play a leading role. Moreover in the context of Emerging Technologies, Ethics and Equality will be great challenges and again IFCC can be a land marker.

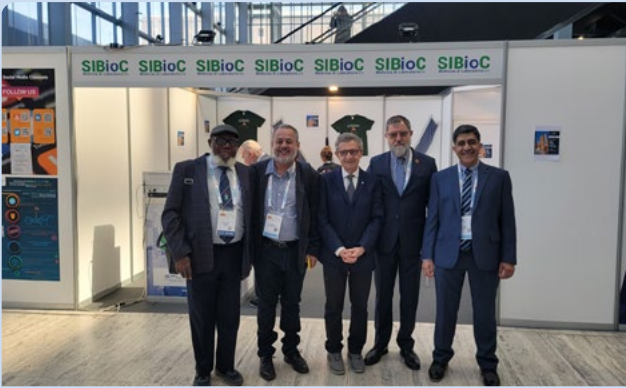
4. What is your message to the readers of this important IFCC electronic magazine, from your new position at IFCC?

During my second experience as IFCC EB Secretary, I would like to increase the global mission of IFCC and encourage the participation in IFCC activities and functional units by Professionals from every Country, even Countries that, to date, are not so involved. IFCC is a Federation of Countries and each of them has a great value that should be further enhanced. We need more Young Scientists, more participation, more inclusivity.

Dear Prof. Dr. Sergio Bernardini, we are pleased to meet you and learn about your successful professional career and your valuable human qualities.

Thank you very much and congratulations again on your new activity at IFCC.
Maria Pasquel-Moxley.

Interview with Prof. Sergio Bernardini



*Prof. Sergio Bernardini with authorities during WorldLab/
EuroMedLab, Rome 2023*



*Prof. Sergio Bernardini during the opening ceremony,
WorldLab/EuroMedLab, Rome May 21, 2023.*



*Prof. Sergio Bernardini at the dinner offered during WorldLab/
EuroMedLab, at the beautiful Villa Dino, Rome on May 22,
2023*

IFCC Calls for Nominations

Participate in IFCC activities and give your contribution! Review the open positions and, if interested, contact your National or Corporate Representative. Currently following calls for nomination are open:

Task Force on Global Lab Quality (TF-GLQ)

1 position: Member - [Call for nominations letter](#)

Please send TF-GLQ nominations to cardinale@ifcc.org by 29th February 2024

EMD Committee on on Clinical Molecular Biology Curriculum (C-CMBC)

1 position: Member - [Call for nominations letter](#)

Please send the C-CMBC nominations to cardinale@ifcc.org by 10th March 2024

Task Force Corporate Members (TF-CM)

1 position: Member - [Call for nominations letter](#)

Please send TF-CM nominations to paola.bramati@ifcc.org by 15th March 2024

Committee on Traceability in Laboratory Medicine (C-TLM)

2 positions: Members - [Call for nominations letter](#)

Please send C-TLM nominations to paola.bramati@ifcc.org and elisa.fossati@ifcc.org by 25th March 2024



www.dubai2024.org



IfCC WORLDLAB 2024 MAY 26-30

In cooperation with



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

8th UAEGDA International Genetic
Disorders Conference

More than 1700 abstracts submitted

15 March 2024

Deadline for reduced registration fees

DO NOT MISS THIS OPPORTUNITY!

Dubai World
Trade Centre (DWTC)

IFCC: the Young Scientists

Activities of the young scientists' group on digital competence in laboratory medicine

Marie Lenski, IFCC-TF-YS member

Jakob Adler, IFCC-TF-YS corresponding member

This initiative was initiated after EuromedLab Munich 2022 by Jakob Adler (Germany) and Marie Lenski (France), and supported by the IFCC Task Force – Young Scientists. A first survey was distributed by IFCC in June 2022 to assess needs of young scientists regarding digital competence on a global scale. The results, published in 2023 in Journal of Laboratory Medicine, highlighted the necessity of establishing an international working group on digital competence. The aim is to build a learning environment and propose common international resources such as tutorial articles, videos, exercises, technical articles to enhance digital skills in laboratory medicine. Using a dedicated mailing list with nearly 120 subscribers, a second survey was conducted in September 2022. This survey allowed young scientists to express their expectations and needs to improve their digital competence. Results included:

- Programming language and version control (R, Python, Git...)
- Statistics and data science
- Collaborative work
- IT Buzzword Bingo (short explanation of IT buzzwords)
- Concrete application for laboratory medicine (reference intervals...)

After an intensive creation of the platform and resources by Jakob Adler, the first online meeting of the young scientists' group on digital competence in laboratory medicine took place on January 24th, 2024. Twelve young scientists participated in the launch of the activities, engaging in collaborative work and setting future objectives on:

- GitHub: An online platform for code hosting and collaborative work, featuring a dedicated group focused on digital competence in laboratory medicine
- Markdown Language: An article covering the Markdown markup language, accompanied by a toolbox of Markdown tools was presented
- R Programming: An introduction to R programming and resources covering basic operations and functions
- CryptPad: A presentation of this collaborative office suite, which is end-to-end encrypted and open-source

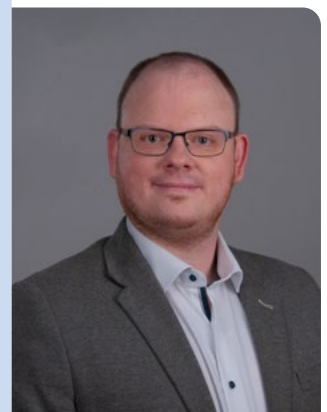
The group of young scientists aims to combine Markdown and R, hosting its work on GitHub, and covering various topics such as programming, data analysis, and practical applications in laboratory medicine.

The next online meeting of this young scientist group on digital competence in laboratory medicine is scheduled for March and will continue monthly thereafter. The mailing list now serves as a newsletter tool. To stay informed, you can visit [the Digital Competence in Laboratory Medicine page on pageflow.io](#) and subscribe by sending an email to digcomplabmed@gmx.de.

Information on all mentioned activities, objectives and projects of the TF-YS are available on IFCC website <https://ifcc.org/task-force-young-scientists-tf-ys/>, or follow us on instagram ([/ifcc_tfys](#)), facebook ([/ifccYOUNG](#)), linkedin ([/groups/3049837/](#))



Marie Lenski,
French YS
(Société
Française de
Biologie Clinique
SFBC), IFCC-TF-YS
member



Jakob Adler,
German YS
(Deutsche
Gesellschaft für
Klinische Chemie
und Laboratoriums-
medizin DGKL),
IFCC-TF-YS
corresponding
member

Contribute to IFCC eNews

Improved and accelerated diagnostic pathway for patients that present to the emergency department with suspected mild traumatic brain injury

Everyone has experienced, in one way or another, the uncertainty associated with a head injury, whether from a bump to the head to something more serious. The ability to triage head injuries or traumatic brain injuries (TBI) quickly and safely, is a crucial step for not only reducing patient anxiety in the emergency department (ED), but for helping to accelerate patient flow and mitigate resource utilization. The gold standard to assess TBIs in the ED to determine severity and the need for additional care is through computed tomography (CT scan). CT scans use radiation as part of the imaging process to identify intracranial injury. In milder TBI cases (mTBI), widespread use of CT scans may not be necessary as CT-detected intracranial injury is <10% for patient with mTBI, and may unnecessarily expose patients to radiation, put unnecessary strain on hospital resources and increase costs of care.

Recognizing that newly available blood biomarkers can help rule-out the need for head CT in patients with suspect mTBI, an integrated clinical care team from Hospital Universitario Virgen de las Nieves, in Spain implemented a novel TBI panel [GFAP (Glial fibrillary acidic protein) and UCH-L1 (Ubiquitin C-Terminal Hydrolase L1)] for use in conjunction with other clinical information to assist in determining the need for a head CT scan in patients ≥ 8 years, who present with suspected mild traumatic brain injury (mTBI, Glasgow Coma Scale score 13-15) within 12 hours of injury.

Implementation of this new panel has dramatically changed the way mTBI patients are managed and triaged through the ED at Hospital Universitario Virgen de las Nieves. Within the first 3 months of implementation there has been a 10% reduction in CT scans for patients with suspected mTBI, enabling €4568.85 in mitigated healthcare costs, within 9 months of implementation. It has also enabled a 2-fold reduction in wait-times for patients who have been ruled-out for TBI, saving a total of 132 patient hours over 9 months. Lastly, clinicians noted that the added insights from the panel helped reduce the uncertainty related to the absence of brain lesions, particularly in the non-elderly.

For their efforts, this integrated clinical care team was awarded the UNIVANTS of Healthcare Excellence Recognition of Achievement. Congratulations to Gemma Álvarez Corral, Clinical Laboratory Specialist, Maria Isabel Romero Manjon, Radiologist. Department Director, Francisco Ruiz-Cabello Osuna, Clinical Laboratory Specialist, Department Director, Eva Gutierrez Pérez, Emergency Medicine Specialist, Maria Molina Zayas, Clinical Laboratory Specialist.

For more information on this best practices and others please visit www.UnivantsHCE.com



From left to right: Gemma Alvarez Corral, Maria Isabel Romero Manjon, Francisco Ruiz-Cabello Osuna, Eva Gutierrez Pérez

A noninvasive serologic model using an intelligent informatic solution to enhance clinical decision-making and improve patient safety.

Cancer. That 5-letter word that can change everything. Now imagine that a cancer diagnosis doesn't have to be a death sentence because it was caught early. An integrated clinical care team at the Second Norman Bethune Hospital of Jilin University has that vision, where hepatocellular carcinoma (HCC) can be screened for and identified early in high-risk patients, enabling early treatment and better outcomes.

In China, HCC is 4th most common malignant tumor, with a 5-year survival rate of only 12.1%. Recognizing that early identification and treatment of patients at risk of HCC and/or those with early stage cancer can improve survival, the integrated clinical care team at the Second Norman Bethune Hospital of Jilin University sought to implement a new screening program using the ASAP model to maximize identification of high-risk patients, while protecting precious healthcare dollars.

The ASAP model is a risk stratification tool that uses serological tests and demographics (age, sex, AFP, and PIVKA-II) to predict the presence of HCC. The model itself was validated in a large, multi-center Chinese cohort study in 2019, and is considered a convenient, relatively noninvasive, and easily available tool that has been shown to accurately predict the presence of HCC.

Following implementation of the ASAP model into their new diagnostic pathway, this team was able to improve patient safety and reduce unnecessary invasive examinations, while also maximizing the diagnosis and treatment for patients, all at reduced costs. For their efforts and outcomes, this integrated clinical care team was awarded the UNIVANTS of Healthcare Excellence Recognition of Achievement. Congratulations to Chunmei Hu, Vice Director, Oncology/Hematology, Yang Yongsheng, Director Hepatobiliary and Pancreatic Surgery, Zhenjin Jin, Director, Hepatobiliary & Pancreatic Medicine Yinlong Zhao, Director, Nuclear Medicine, Yan Zhao, Director, Physical Examination.

To learn more about this best practice and others, please visit www.UnivantsHCE.com



From left to right: Chunmei Hu, Yang Yongsheng, Zhenjin Jin, Yinlong Zhao, Yan Zhao

CLSI announces a new Country-Based Pricing Model



On 4th January 2024, CLSI announced an historic initiative. Starting from that date a [new Country-Based Pricing Model](#) will be implemented.

The [Country-Based Pricing Model](#) offers substantial discounting on all CLSI products and services for customers from low and middle income countries. CLSI standards and guidelines are in use in more than 150 countries around the world, and clinicians, laboratorians, IVD manufacturers, and regulators rely on CLSI standards to provide practices and procedures that are critical for ensuring public health and safety.

Dr Barb Jones, CEO CLSI, said: “This initiative is incredibly important for fulfilling our mission to develop and promote global laboratory practices by dramatically increasing access to expert guidance and best practices”.

The tiered pricing structure, based on World Bank GNI tiers, adds transparency and fairness to the pricing model and will benefit organizations and individuals in 136 countries. Users from low and low-middle income countries will receive a 90% discount on all CLSI products, those from middle-income countries will receive a 50% discount.

Prof Tomris Ozben, IFCC President commented: “I am happy for this new initiative of CLSI “Country-Based Pricing Model” that will provide a great discount for the IFCC members from the low and low-middle income countries (90%) and middle-income countries (50%). We have informed all these countries. I hope that our members from these countries may benefit from this opportunity”.

More information about the policy and FAQs can be found [here](#).

News from Regional Federations and Member Societies

News from the Hong Kong Society of Clinical Chemistry

By Iris Chan, HKSCC President

HKSCC Dinner Lecture – 16th November 2023

Assessment of Analytical Characteristics of New High Throughput Immunoassay Analyzer The Clinical Application of phi on Prostate Cancer Diagnosis

A dinner lecture was held on 16th November 2023 by Hong Kong Society of Clinical Chemistry and Beckman Coulter Hong Kong Limited. There were two presentations by invited speakers: 'Assessment of Analytical Characteristics of New High Throughput Immunoassay Analyzer' by Mr. Bobby TAGORE, Laboratory Manager, Pathlab Bay of Plenty, Tauranga Hospital, New Zealand, and 'The Clinical Application of phi in Prostate Cancer Diagnosis' by Prof. Peter CHIU, Associate Professor, Urology, CUHK. The lecture was attended by 120 members and guests.



Dinner Lecture (16 November 2023): Mr Bobby Tagore



Dinner Lecture (16 November 2023): Prof. Peter Chiu



Audience participating in Q&A session

HKSCC Annual Scientific Meeting and Annual General Meeting – 20th January 2024
Advancements in Generative AI and Implications for the Future of Work and Talent Cultivation
Artificial intelligence in Chemical Pathology: signs of life, and cosines of diseases

The year 2024 was started with the Annual Scientific Meeting (ASM) held 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; and (2) “Artificial intelligence in Chemical Pathology: signs of life, and cosines of diseases “ by Dr Calvin YK CHONG, Consultant (Pathology), Toxicology Reference Laboratory, Department of Pathology, Princess Margaret Hospital. These were followed by six industrial presentations by Abbott Laboratories Ltd., Grandtech Scientific Hong Kong Ltd., QuidelOrtho, Roche Diagnostics (Hong Kong) Ltd., Waters Corporation and Radiometer. The ASM was well attended by 174 HKSCC members and guests. There were also sixteen industrial partners participating in the industrial exhibition.



ASM 2024 (20 Jan 2024): Prof. Helen ML Meng



ASM 2024 (20 Jan 2024): Dr Calvin YK Chong



Industry exhibition



HKSCC Council Members (Term 2024 - 2025)



TF-YS

IFCC FORUM For Young Scientists 3^o Edition

United Arab Emirates, Dubai
26th May, 2024



Registrations will open soon

News from Japan Society of Clinical Chemistry (JSCC)

2023 JSCC Outstanding Young Investigator Award.

By **Hideo Sakamoto**, Ph.D. International Exchange Committee of JSCC

The Outstanding Young Investigator Award of the Japan Society of Clinical Chemistry (JSCC) is given to a person who has made outstanding academic research in clinical chemistry. In 2023, Kai Kudo, Ph.D. and Yasunori Tokuhara, Ph.D. were winners of the Outstanding Young Investigator Award. At the 63rd Annual Meeting of JSCC in Tokyo, Japan from October 27 to 29, 2023. Award winners Dr. Kudo and Dr. Tokuhara were congratulated by Dr. Takashi Miida, President of JSCC for their outstanding work in clinical chemistry. In this issue, we would like to introduce Dr. Kudo one of the winners of the Outstanding Young Investigator Award to distribute his outstanding work.

Kai Kudo, Ph.D. (Department of Innovative Medical Science, Tokai University School of Medicine) is the winner of the 2023 JSCC Outstanding Young Investigator Award, entitled “Discovery of New Roles of Phospholipids in Extracellular Vesicles - Modification of Extracellular Vesicles by Secreted Phospholipase A2”.

Extracellular vesicle (EV)-mediated crosstalk in microenvironment is of interest in a wide variety of biological phenomena and diseases. In the field of oncology, EVs are known to be utilized for tumor formation and expansion in various types of cancers. In malignant lymphoma, one of the hematopoietic tumors, many reports indicate that EVs are deeply involved in pathogenesis. However, the mechanism of its action, especially the function of EV-lipids, has not been fully clarified. Dr. Kudo and his colleagues focused on the composition of EV-lipids and found that EVs derived from lymphoma cells are rich in ω -3 unsaturated fatty acids (PUFAs) in their phospholipids. [Ito M and Kudo K et al. FASEB J. 2021.] Interestingly, they found that tumor-derived EVs are hydrolyzed in the extracellular milieu by sPLA₂-X, and that this hydrolysis leads to the production of fatty acids, lysophospholipids, and their metabolites, resulting in a dramatic increase in the functions of EVs, such as cytokine induction, anti-inflammatory effects, and promotion of tumorigenesis through the lipid-driven non-canonical mechanism. Then, EV hydrolytic products enhance G protein-coupled receptor signaling, suggesting the existence of a novel mode for the action of EV biology. In addition, pharmacological inhibition of endogenous sPLA₂ suppressed lymphoma growth in Epstein-Barr virus (EBV)-infected humanized mice, a model that mimics lymphoma development in humans, whereas treatment with sPLA₂-modified EVs reversed this phenotype. Furthermore, they revealed that EVs derived from EBV-positive patient sera (including patients with diffuse large B-cell lymphoma) are easier to hydrolyze by sPLA₂-X compared with those of healthy individuals, and sPLA₂ expression in human large B-cell lymphomas is inversely correlated with patient survival. [Kudo K et al. Cell Metabolism, 2022.] This study demonstrated that non-lymphoma-derived EVs are also hydrolyzed by sPLA₂. Therefore, further investigation of the detailed mechanism of the new immune checkpoint “sPLA₂-EV axis” is expected to lead to the development of new therapeutic and diagnostic tools for a variety of cancers.



Kai Kudo Ph D, winner of the 2023 JSCC Outstanding Young Investigator Award

Is there an elephant in the room? A workshop to develop a framework for integrating AI into clinical practice.

By **Dr Lena Jafri and Mr Aqueel Kapadia**, Section of Chemical Pathology, Department of Pathology and Laboratory Medicine, Karachi - Pakistan

This report presents a recap of the insightful workshop held on January 30, 2024, at the Aga Khan University (AKU) in Pakistan. The workshop was conducted in collaboration with the Network of Quality, Teaching and Learning (QTL_Net) at AKU. The primary objective of the workshop was to thoroughly examine the impact of Artificial Intelligence (AI) on healthcare. The focus extended beyond theoretical discussions, delving into the practical aspects of implementation challenges, and emphasizing the essential competencies required by healthcare providers in this rapidly evolving landscape.

A varied assembly of 22 individuals, spanning from research analysts and faculty to PhD students, and undergraduate and postgraduate medical students of AKU, from diverse departments such as information technology, internal medicine, oncology, pathology, and psychiatry, were thoughtfully chosen to provide their unique perspectives. The interactive format of the event promoted open dialogue and collaborative activities, strategically crafted to stimulate the generation of ideas for the effective implementation of AI in healthcare.

The workshop commenced with a compelling introduction by Ayesha Mansoor and Dr. Lena Jafri, who shared her experiences and insights from AI implementation studies. A fun energizer activity followed, shedding light on the complexities of adapting to change and underlining the substantial efforts needed for sustainable AI incorporation.

A highlight of the workshop was the engaging World Café activity, facilitated by Dr Hafsa Majid, Dr Sibtain Ahmed, Aqueel Kapadia and Ayesha Mansoor. The dynamic format encouraged participants to move between 'café-style' tables, fostering discussions on specific questions related to AI implementation. Despite the challenges posed by the movement of participants, this approach proved fruitful, unveiling numerous new insights. The World Café session scrutinized critical aspects of AI integration in healthcare, focusing on educators' pivotal role and identifying key stakeholders for successful implementation. Participants emphasized the need for cultural shifts and accountability mechanisms within hospitals to fully embrace AI, highlighting the importance of fostering a collaborative and adaptive educational environment.

The workshop further introduced the switch change management method, challenging participants to craft their management plans based on the rider, the elephant, and the path concept. In the discussion, participants identified successful or promising areas of AI integration within the hospital and brainstormed strategies to cultivate positive emotional responses to AI integration. Additionally, concrete steps were proposed to ensure smooth transitions and competency in using AI tools, while considerations were made for establishing ethical policies and procedures. Furthermore, participants explored methods to acknowledge and celebrate small wins and success stories in AI implementation.

This workshop not only offered a platform for knowledge exchange but also fostered a collaborative spirit among diverse healthcare professionals. The shared insights and action plans generated during the workshop lay a strong foundation for navigating the complexities of AI in healthcare.

Is there an elephant in the room?



Workshop Participants and Facilitators



World Café Small Group Discussions Among Participants



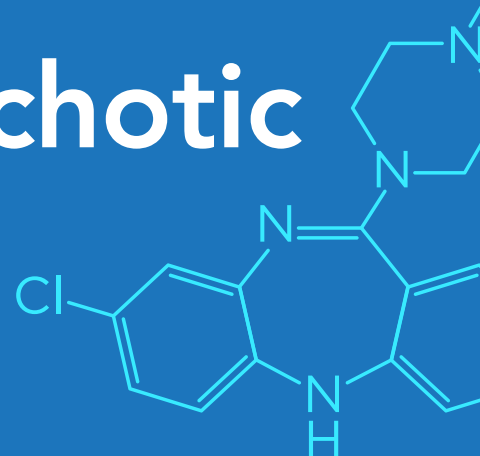
Small Group Discussion Amongst Workshop Participants to Chalk Out The Action Plan For AI Integration



Large Group Discussion to Draft the Collaborative Action Plan for AI integration in education, research and service for healthcare industry in Pakistan



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New IFCC Members

IFCC WELCOMES A NEW CORPORATE MEMBER: Greiner Bio-One



Greiner Bio-One specializes in the development, production and distribution of high-quality plastic laboratory products. The company is a technology partner for hospitals, laboratories, universities, research institutes, and the diagnostic, pharmaceutical and biotechnology industries.

The **Preeanalytics** business division, with headquarters in Kremsmünster (Austria), develops and produces innovative collection systems for human and veterinary blood and urine samples, with the aim of making day-to-day, routine tasks in hospitals, laboratories and doctors' practices easier and safer.


Greiner Bio-One's **BioScience** division, with headquarters in Frickenhausen (Germany), is one of the leading providers of specialist products for the cultivation and analysis of cell and tissue cultures. Based on decades of experience in the cryopreservation of samples, Greiner Bio-One also offers solutions for automated storage systems in biobanks. In addition, the division also develops and produces microplates for high-throughput screening, which ensure the quickest and most efficient testing of substances and materials in both industry and research.

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News from the IFCC Website

**IFCC Live Webinar on
Machine Learning in Laboratory Medicine – Recommendation of the
IFCC Working Group - Part 1**



Moderator /
The IFCC Guidelines Document


How to evaluate machine learning
models in Laboratory Medicine?



Prof. Tony Badrick
[Australia]
CEO
Royal College of Pathologists of Australasia
Quality Assurance Programs

Dr. Andreas Bietenbeck
[Germany]
Medical Director
MVZ Ärztliche Laboratorien München-Land
GmbH

Date: February 13, 2024
Time: 3 AM (Eastern Standard), 9 AM (Central European), 4 PM (Beijing)



Machine Learning in Laboratory Medicine Part I – Recommendation of the IFCC Working Group

[The On Demand content is now available](#)

**IFCC Live Webinar on
Machine Learning in Laboratory Medicine – Recommendation of the
IFCC Working Group - Part 2**



Moderator /
Case Study and Analysis, Part I

Case Study and Analysis, Part II



Dr. Stephen Master
[USA]
Chief
Division of Laboratory Medicine
Children's Hospital of Philadelphia

Dr. Shannon Haymond
[USA]
Vice-Chair for Computational Pathology
Ann and Robert H. Lurie Children's Hospital of
Chicago

Date: February 20, 2024
Time: 10 AM (Eastern Standard), 4 PM (Central European), 11 PM (Beijing)



Machine Learning in Laboratory Medicine Part II:
Case Study Analysis

Tuesday 20th February 2024

[The On Demand content is now available](#)

IFCC's Calendar of Congresses, Conferences & Events

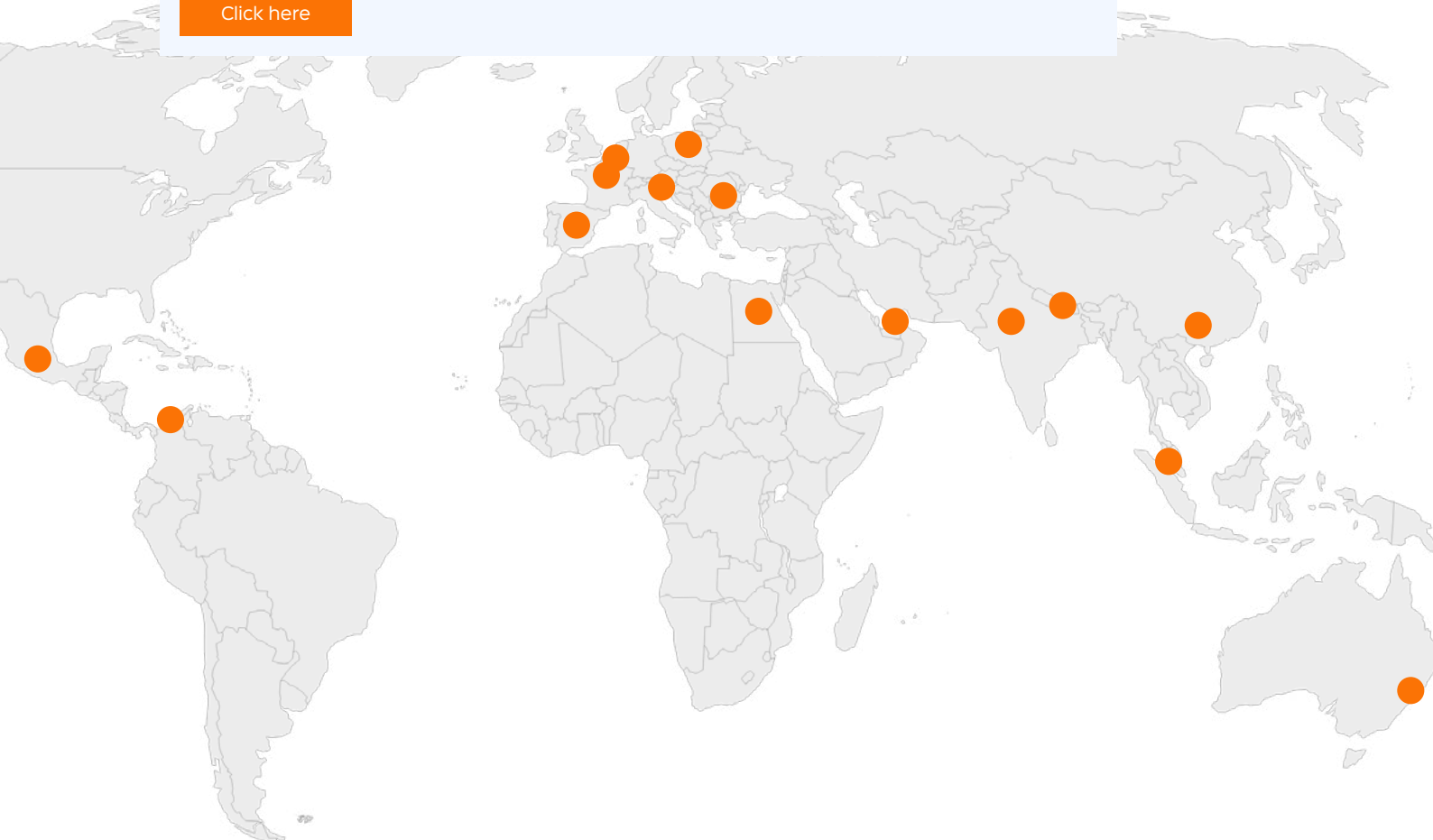
| IFCC and Regional Federation Events | | | |
|-------------------------------------|---|--|------------------|
| Date | | Title | Place |
| March, 2024 |  | AFCC CONGRESS 2024 | Cairo, EG |
| May 25, 2024 |  | XVII ICPLM - INTERNATIONAL CONGRESS OF PEDIATRIC LABORATORY MEDICINE | Dubai, UAE |
| May 26 - Jun 30, 2024 |  | XXVI IFCC WORLDLAB - Dubai 2024 | Dubai, UAE |
| May 26, - Jun 30 2024 |  | AFCB Congress in conjunction with the XXVI IFCC WorldLab Dubai 2024 Congress | Dubai, UAE |
| Oct 3 - 6, 2024 |  | XXVI COLABIOCLI 2024 | Cartagena, CO |
| October 31 - Nov 3, 2024 |  | APFCB 2024 Sydney | Sidney, AU |
| May 18 - 22, 2025 |  | XXVI IFCC-EFLM EUROMEDLAB 2025 | Brussels, BE |
| October 25 - 30, 2026 | | XXVII IFCC WORLDLAB 2026 | New Dehli, IN |
| October 10 - 13, 2027 | | APFCB 2027 KUALA LUMPUR | Kuala Lumpur, MY |

Corporate Member Events with IFCC Auspices

| Date | Title | Place |
|----------------------|--|-------------------------------|
| Feb 25, 2024 | International Symposium on Laboratory | Snibe, Shenzhen, CN |
| Mar 8, 2024 | International Symposium on Laboratory | Snibe, Warsaw, PL |
| Apr 4 - 5, 2024 | Point-of-Care Testing: State-of-the Art and Perspectives | Venice, IT |
| Jun 2 - Mar 26, 2024 | Quality Management for Clinical Laboratories according to ISO 15189:2022 | Quality Academics, online, MX |

Other events with IFCC auspices

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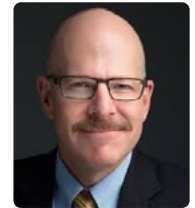
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 United Arab Emirates: Genetic Diseases Association (UAEGDA)

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