



Communications and Publications Division (CPD) of the IFCC

Editor: Katherina Psarra, MSc, PhD

IFCC Office, Via C. Farini, 81

20159 Milano, Italy E-mail: enews@ifcc.org

International Federation of Clinical Chemistry and Laboratory Medicine







In this issue

□ EDITORIAL	
■ Message from the eNews Editor	4
☐ THE VOICE OF IFCC	
■ IFCC President's message – September 2021	5
Published resources on clinical laboratory ethics& the new IFCC Code of Ethics	7
■ IFCC Townhalls 2021	9
☐ IFCC: THE PEOPLE	
► In memoriam: Vale Ian Goodall	14
☐ IFCC: THE YOUNG SCIENTISTS	
■ IFCC Professional Scientific Exchange Programme (PSEP)	15
☐ CONTRIBUTE TO THE IFCC eNEWS	
■ The unbearable summer with Delta	17
Strategic SARS-CoV-2 testing for risk mitigation and optimal healthcare workers and patients	20

In this issue (cont'd)

and/or HIV via Opt-Out ED screening with active education and linkage to care	23
 Using data, innovation and collaboration to support better patient outcomes during the COVID-19 pandemic 	24
 Recognizing additional advocates of the UNIVANTS of Healthcare Excellence Program 	26
■ 10 Tips for success for UNIVANTS of Healthcare Excellence Awards	32
NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES	
News from the Spanish Society of Laboratory Medicine (SEQC ^{ML}): Second Inter-hospital Conference	36
➤ XXV COLABIOCLI CONGRESS	39
 Conclusions and recommendations of the Conference Reframe Rare in Pakistan: 'Bringing Synergies and Breaking Silos' 	40
Surfing on the wave of POCT innovations and m-Health in Biarritz	44
■ Updates on EFLM publications	49
IFCC WELCOMES A NEW MEMBER	
■ GenScript Biotech Corporation	51
IFCC'S CALENDAR OF CONGRESSES, CONFERENCES & EVENTS	
 Calendar of IFCC Congresses/Conferences and Regional Federations' Congresses 	52
Other events with IFCC auspices	54

EDITORIAL

Message from the eNews Editor

by Katherina Psarra eNews Editor

Dear colleagues,

Was it really such an unbearable summer with Delta, fires, heat wave—as Dr. Gouget explains in his very interesting article in this issue? It is true that for the first time all these consequences of the climate crisis, in addition to the Delta variant, were present at the same time in many places around the world. We all witnessed this unprecedented summer. But at the same time, thanks to the vaccines, we had the chance to enjoy some moments of real holidays, the countryside, the sun, the sea, meeting with friends (not big gatherings, of course)—to enjoy peaceful moments.

Within the IFCC there is a lot to anticipate during the coming months. The Townhalls, the new meetings, where our voices can be heard, are explained and presented by our president in this issue. We are all looking forward to Euromedlab in Munich at the end of November and we hope to attend in person after a period of "untouchable" meetings.



In this issue, additional advocates of the UNIVANTS of Healthcare Excellence Program are presented. It is really unimaginable not to praise this effort by UNIVANTS.

The articled entitled 'Surfing on the wave of POCT innovations and m-Health in Biarritz' offers a description of that beautiful city together with interesting scientific news from the meeting.

Let's hope that we will have a peaceful fall and winter waiting for us.

Warm regards, Katherina

News from the IFCC Website



TF-E: Code of Ethics

The IFCC announces that its Task Force on Ethics prepared the "Code of Ethics of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC)". The code sets forth the ethical principles and standards by which clinical laboratorians practice their profession. The requirement to practice to the highest achievable ethical standards equally challenges practitioners at all levels of expertise and work experience.

Read more

THE VOICE OF IFCC

IFCC President's message – September 2021

by Khosrow Adeli

IFCC President



Prof. Khosrow Adeli PhD, FCACB, DABCC, FAACC

My sincere greetings to you all. I hope everyone has had an enjoyable summer and a great time with family and friends. Here at IFCC, we are very excited for the Fall, with many important events planned.

First, I am delighted to announce a new strategy to enhance internal communications within the IFCC community, the annual IFCC Regional Town Halls, starting this fall in regions around the world.

The first IFCC Regional Town Hall took place virtually on **September 15th in the European, African, and Middle Eastern time zones** and all regional federations and national societies affiliated with EFLM, AFCC, and AFCB have been invited to participate.

Two other IFCC Regional Town Halls are planned on October 6 for the Americas (NAFCC & COLABIOCLI) and on October 20 for Asia-Pacific (APFCB). More detailed information will be circulated soon to IFCC Regional Federations and National Societies by the IFCC Office.

These regional IFCC Annual Town Halls aim to bring the IFCC community together, including the Executive Board, IFCC Office Staff,

Regional Federation Executive Board Members, National Society Presidents, and all Society Members, for the purpose of *improving internal communication* within IFCC. More specifically, the new IFCC Town Halls will:

- Inform the IFCC community about ongoing and emerging plans that are vital to the organization,
- Prepare the IFCC community to take action with respect to ongoing and emerging plans,
- Give the IFCC community a voice and a chance to connect with the organization
- Allow us to plan for the future together with input from all stakeholders across the organization

Hopefully, by increasing internal communication, we can increase confidence and trust in the IFCC organization, boost motivation and morale in the IFCC community, and reinforce the IFCC's mission, current goals, and future directions. Each regional IFCC Annual Town Hall will take place over 3 hours, starting with 1 hour of presentations from the IFCC President/Board and Regional Federation Presidents. The remaining 2 hours will serve as an open forum for discussion. I encourage all members to participate and sincerely look forward to your questions and comments.

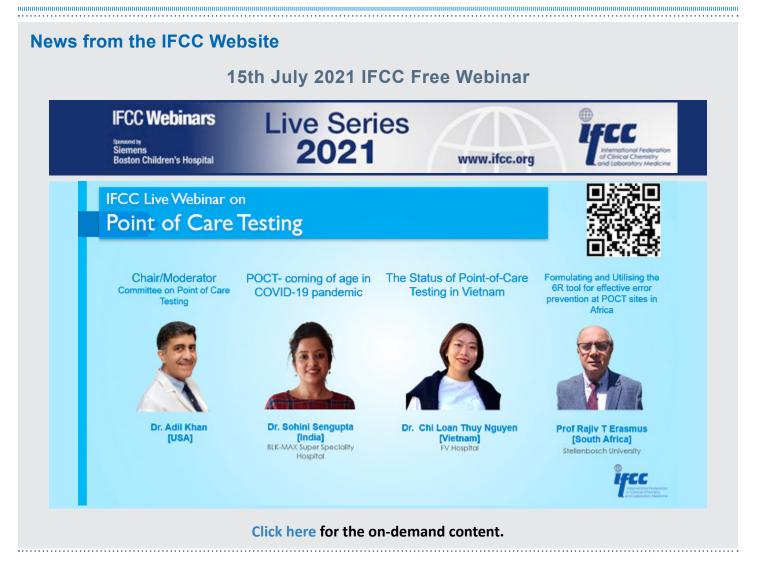
Alongside the regional IFCC Annual Town Halls, there will be a special **IFCC Town Hall for Corporate Members on September 21, 2021**. The corporate IFCC Annual Town Hall will include the Executive Board, IFCC Office, Taskforce on Corporate Members (TF-CM), and representatives from all 49 Corporate Members, with the

same aims mentioned above. Similarly, the corporate Town Halls will be scheduled for 3 hours, with one hour of presentations by the IFCC President/Board, IFCC Corporate Representative, and Chair of TF-CM to start and 2 hours of open forum discussion thereafter. More detailed information will be circulated to all corporate members soon by the IFCC Office.

In addition, I would like to remind everyone of the 24th IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine (EuroMedLab 2021), which will be taking place in Munich from November 28th to December 2nd. I encourage all IFCC members to participate in this important scientific conference and hope to see many of you there in person. For those who are worried about travel restrictions due to the ongoing pandemic, considerations are being made regarding a virtual option to allow remote attendance. Of note, the XV International Congress of Pediatric Laboratory Medicine is also planned as a satellite meeting, taking place from November 26th to 28th. You will not want to miss out on the excellent scientific programmes for both this satellite meeting and main EuroMedLab 2021, which will surely set the tone for a wonderful week of presentations from global experts from Europe and around the world.

With these exciting opportunities, I hope we can look forward to a lively and active Fall season. Should you have any feedback, questions, or concerns, please feel free to email me at president@ifcc.org.

Till next time ☺ Khosrow



Published resources on clinical laboratory ethics & the new IFCC Code of Ethics

by Professor Nilda Fink Chair, IFCC Taskforce on Ethics

Since the 1970s, ethical issues have been a topic of concern in clinical laboratory practice that have been reflected in several pioneering publications (e.g., AACC, Guide to Ethics Governing the Conduct of Clinical Chemistry, 1975; Editorial, Brit Med J 1984; McQueen M. Clin Chem 1990;36:1404-1407). In different regions of the world, individual professional organizations were raising awareness of ethics-related dilemmas among their members. It became clear that there was a need at the international level to create a structure for ethical issues in Laboratory Medicine. Thus, during the term 1997-1999, the Executive Board of the IFCC accepted the task of establishing an Ethics Committee. Since then, several documents have been produced addressing some of the key ethical issues.

- IFCC Position Paper. Report of the IFCC Taskforce on Ethics: Introduction and framework. Clin Chem Lab Med 2007;45:1098-1104.
- IFCC Guideline. Ethics in Science: Background and Resources on Publication Ethics. November 2012.
- Variability of ethics education in laboratory medicine training programs: Results of an international survey. Clin Chim Acta 2015;442:115-118.
- IFCC Report. Ethical Considerations in Clinical Chemistry and Laboratory Medicine. January 2016.
- IFCC Taskforce on Ethics (TF-E). TF-E Toolkit: A list of topics and articles related to Ethics in Laboratory Medicine. March 2019 (Updated frequently).
- IFCC Report. A survey of extant Ethics Policies. April 2020.
- Ethics in Laboratory Medicine. EJIFCC 2020;31:260-325.
- IFCC Taskforce on Ethics (TF-E). IFCC Code of Ethics 2021. August 2021.

IFCC CODE OF ETHICS 2021

https://www.ifcc.org/media/479114/ifcc-code-of-ethics 2021.pdf

In 2021, Members of the Task Force on Ethics (TF-E) developed the IFCC Code of Ethics. This document was then edited and approved by the IFCC Executive Board and subsequently published in August 2021 on the IFCC website. The IFCC Code of Ethics 2021 contains a preamble and three targets (Patients, Colleagues, and Profession and Society), with duties fundamentally based on the principles delineated in the Belmont Report created in 1978 by the then U.S.A. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. All stakeholders involved in the development and publication of the IFCC Code of Ethics 2021 endorse principles of ethical conduct in laboratory medicine profession, including laboratory procedures, research and development, teaching, management, and other forms of professional service.

Clinical laboratorian organizations have a responsibility to promote and anticipate the interest of their members; however, the IFCC mission and vision state that the organization's main goal is to benefit the health and well-being of the patients and communities we work for. The recent approval of this Code of Ethics clearly shows the commitment of IFCC as an international organization to support laboratory professionals regarding Ethical standards. The aforementioned documents should also be useful to organizations that would like guidance on how to develop Ethics documents in the field of laboratory medicine.



Snibe Dual Solution for Assessing COVID-19 Immunity after Vaccination

More than one choice for assessing COVID-19 vaccine efficacy

MAGLUMI® SARS-CoV-2 Neutralizing Antibody

- Fully automatic CLIA quantitative detection
- Assess COVID-19 immunity in individuals
- Evaluate the immune response of vaccine receivers
- Screen convalescent plasma for immunotherapy

MAGLUMI® SARS-CoV-2 S-RBD IgG

- Fully automatic CLIA quantitative detection
- Assess COVID-19 immunity in individuals
- Evaluate the immune response of vaccine receivers
- Screen convalescent plasma for immunotherapy
- Assist to diagnose COVID-19 infection
- Help to determine patients' infection stage of COVID-19



High correlation with gold standard Virus Neutralization, Test (VNT)

- MAGLUMI® SARS-CoV-2 S-RBD IgG showed satisfactory analytical and clinical performances, and an elevated correlation with VNT50 titers (R=0.712) [1].
- MAGLUMI® SARS-CoV-2 Neutralizing Antibody showed 100% positive agreement and a good correlation coefficient when compared with VNT50 titers (R=0.7364) [2].

Test results above manifest MAGLUMI® SARS-CoV-2 S-RBD IgG and Neutralizing Antibody kits both have good clinical diagnostic value and can be used for the quantitative determination of the neutralizing antibody concentration.



- [1] Padoan A, Plebani M, et al. Analytical and clinical performances of a SARS-CoV-2 S-RBD IgG assay: comparison with neutralization titers[J]. Clinical Chemistry and Laboratory Medicine (CCLM), 2021.
- [2] Quoted from the clinical sensitivity study in MAGLUMI® SARS-CoV-2 Neutralizing Antibody IFU.



The IFCC announces its Annual Townhalls, starting this fall!

The IFCC Townhalls are a new initiative aimed to significantly enhance internal communications within the IFCC organization and between the IFCC Board and all IFCC member societies and Regional Federations.

The Townhalls aim to

- **Update the membership** on current and upcoming IFCC programs and new initiatives globally or in specific regions
- Provide a platform for an open communication forum between the IFCC board members and the board members of IFCC regional federations and national societies, as well as all laboratory professional and scientists in each region
- Receive feedback from the membership on IFCC programs particularly the new initiatives planned to directly contribute to advancing excellence in laboratory medicine towards a better healthcare worldwide

They will be a three-hour Interactive Virtual LIVE event that will be held in different time zones around the world.



September 15, 2021 09.00 am - 12.00 pm - Central Europe time zone (Rome, Cape Town)

The first Townhall was held in the Central European Time Zone and the IFCC Executive Board invited the Executive Board members and National Society Presidents of AFCB, AFCC and EFLM to join us. It was a a unique opportunity to bring everyone together in these regions and allow for exchange of ideas and free communication between various organizations.

EFLM, AFCC, and AFCB Regional Federations and National Societies in these Regions showed high interest and participated in this open communication forum that significantly enhanced communication within our laboratory medicine community. Many participants asked question in the Discussion Forum via chat.

- Prof. Khosrow Adeli IFCC President
- Dr. David Kinniburgh IFCC Secretary
- Dr. Alexander Haliassos IFCC Treasurer
- Mr. Joe Passarelli IFCC Corporate Representative
- Dr. Osama Najjiar AFCB President
- Prof. Rajiv Erasmus AFCC President
- Prof. Ana-Maria Šimundić EFLM President

Gave brief presentations to update the membership on current and upcoming IFCC programmes and new initiatives globally or in specific regions.



September 21, 2021

09.00 am-12:00 pm (Eastern Standard Time (EST) zone – New York)

03.00 – 06.00 pm Central European time (Rome/Paris)

06.30 - 09.30 pm (Delhi)

09.00 pm - 12.00 am (Beijing)

 $10.00 \, pm - 01.00 \, am \, (Tokyo)$

The second Townhall is planned in the Eastern Standard Time (EST) zone and the IFCC Executive Board would like to invite all IFCC Corporate Members to join. It will be a unique opportunity to hear directly from the IFCC leadership on those areas of most interest to all our member companies.

Participants will listen to brief presentations on behalf of below IFCC Executive Board Members, who will appear on video together with the Corporate Members' Representatives.

- Prof. Khosrow Adeli IFCC President
- Dr. David Kinniburgh IFCC Secretary
- Dr. Alexander Haliassos IFCC Treasurer
- Mr. Joe Passarelli IFCC Corporate Representative

will update the membership on current and upcoming IFCC programmes and new initiatives globally or in specific regions.

Participants will have the possibility to ask questions and participate into the Discussion Forum via Chat, along with the Corporate Members' Representatives who will also appear on video.

We hope that you will be interested in participating actively in this open communication forum to significantly enhance communication within our laboratory medicine community.

Two other Townhalls are planned in October for the Americas (NAFCC and COLABIOCLI), as well as for Asia-Pacific (APFCB), in their own time zones.



News from the IFCC Website

20th July 2021 IFCC Free Webinar



Click here for the on-demand content in Spanish
Click here for the on-demand content in English



Hemolysis free blood sampling.

Point of care detection of hemolyzed blood samples can increase patient safety and create major time and cost savings



Hemcheck has developed a CE-marked solution for fast detection of hemolysis in whole blood samples in vacuum tubes and blood gas syringes



The v-Test enables hemolysis detection and direct sample retake in connection with blood collection in vacuum tubes and aims to improve the flows of samples and patients, reduce waiting times and patient length of stay, decrease staff workload, increase patient safety and save costs.

The s-Test is compatible with syringes and enables hemolysis detection either in connection with blood sampling or blood gas analysis, and aims to contribute to more informed, reliable and timely clinical decisions and thereby improved patient safety.

For more information on our unique and user-friendly concept

For further details, a free demonstration or a trial free of charge, please send your request to peter.andersson@hemcheck.com





SAVE THE DATE

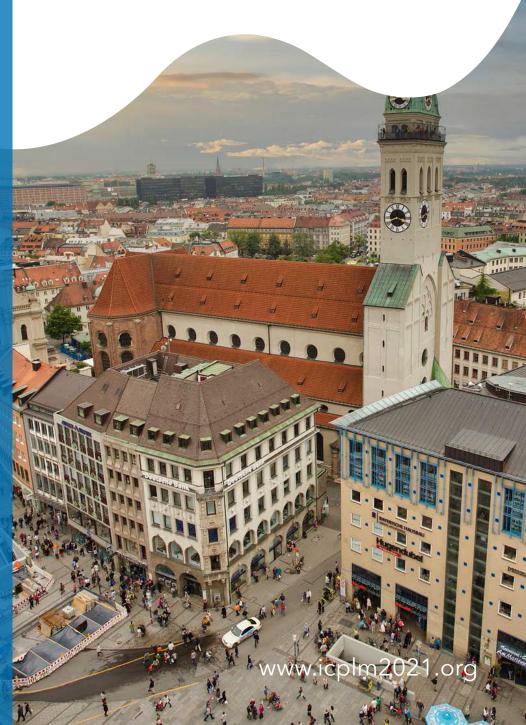
26-28 November 2021

MUNICH, GERMANY



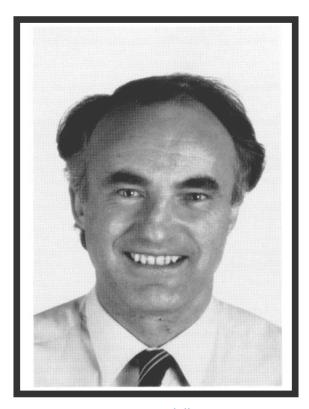






IFCC: THE PEOPLE

In memoriam: Vale Ian Goodall



Ian Goodall

It is with great sadness that the AACB reports the recent passing of Ian Goodall. He was a friend and colleague to many in the AACB and the wider scientific community, and will be missed.

Ian Goodall was born in Huddersfield, Yorkshire and migrated to Melbourne, Australia in 1957. He graduated from Melbourne University, majoring in Biochemistry and Chemistry in 1966 and commenced employment in 1967 in the Department of Biochemistry at the Austin Hospital in Melbourne, eventually rising to become its Senior Biochemist.

During his career Ian was awarded a number of respected professional qualifications, including MAACB, FAACB and FAIMLS. Throughout his entire career Ian was an active member of the AACB, working in various committees, participating in special interest groups, presenting at national and international conferences and authoring many scientific papers in peer-reviewed journals.

His interests in Clinical Biochemistry were wide-ranging, but his special area of interest was the long-term monitoring of diabetes, glycated haemoglobins and fructosamine. Ian was an active member of the IFCC Working for standardisation of glycated haemoglobin throughout his career.

IFCC: THE YOUNG SCIENTISTS

IFCC Professional Scientific Exchange Programme (PSEP)

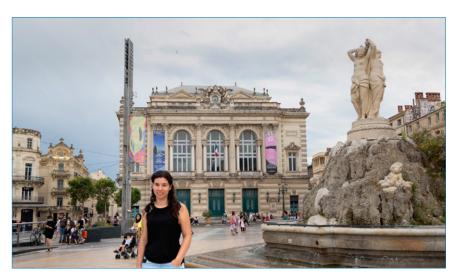
My internship at the Unit of Auto-inflammatory Diseases of the Arnaud de Villanueve Hospital, in Montpellier (France)

by Natalia Mª García Simón Residente Laboratorio Bioquímica Clínica Hospital Universitario Puerta de Hierro Majadahonda - Madrid

I was granted with the IFCC Professional Scientific Exchange Programme to do my international rotation at the Unit of Auto-inflammatory Diseases of the Arnaud de Villanueve Hospital, in Montpellier (France), during my residency at the Puerta de Hierro Majadahonda University Hospital (Spain).

The unit works as a National Reference Centre for the diagnosis of hereditary systemic auto-inflammatory diseases from a genetic point of view. The main tool they use is massive sequencing from blood samples, although they also perform Sanger sequencing and can use other type of samples such as tissue or saliva. The aim of my stay was to learn about next generation sequencing (NGS), from library preparation to interpretation of the results. Luckily, while I was there, they were trying different kits to prepare the libraries, so I learned to do so using three different kits, both manually and semi-automatically. They taught me about possible types of errors during the preparation and the ways to prevent and control them in the different steps. Furthermore, they showed me how to prepare and introduce the samples in the sequencing machine and the technology it was based on. Finally, once the data was available, they taught me how to read and interpretate the results, and how to elaborate a report with the final conclusions.

The project I was requested to do was to compare the current software they were using to interpretate the

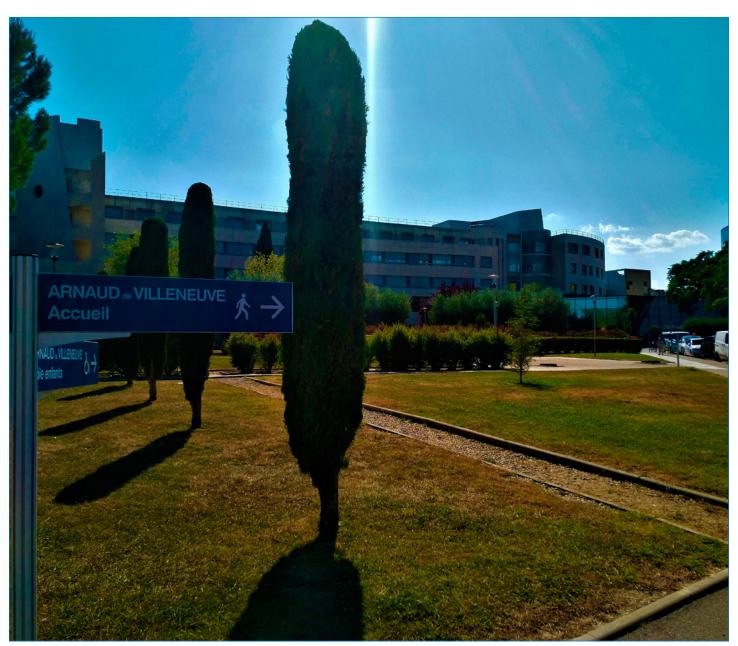


Natalia García Simón

results with a new one they wanted to implement. One of the most positives aspects during my stay in this unit was that they have their own bioinformatics team and do their own data analysis, so I was able to follow the data from its raw origin to the final presentation that was handed to the biologists. During my project, I could detect and resolve mistakes and the loss of data that can happen during the processing affecting the final conclusions and, therefore, the diagnosis of the patients and their relatives.

From a personal point of view, I am very happy with my stay at the hospital, and I would do it again without hesitation. They made me feel as part of the team and everyone was very kind and always willing to teach and answer all my questions. It has been a very positive experience, because, apart from the new techniques I have learned, I have acquired new knowledge of the techniques I was already familiar with, which I can introduce in my laboratory to improve and make it more efficient. Moreover, I have seen other ways of working, organising, and managing a laboratory which have broaden my views.

For all that, I would like to thank Dr. Guilaine Boursier, who took me under her guidance, and Dr. Guillaume Sarrabay, both supervisors of the laboratory, and Professor Isabelle Touitou, head of the laboratory for accepting me in her team. Secondly, I would like to thank my supervisors at my hospital who encouraged me to do the rotation, especially the head of the laboratory, Dr. Francisco Bernabeu, who helped me along the way and made this possible. Finally, I would like to thank the IFCC for the help and support they have given me that made the process a lot easier.



Arnaud de Villanueve Hospital

CONTRIBUTE TO THE IFCC eNEWS

The unbearable summer with Delta

We th are cle we ha is not worse

Bernard Gouget

COVID-19 deaths are on the rise once again. The number of cases is rising quickly due to the Delta variant. This variant exhibits two characteristics: a higher infectiousness and mutations of some of the antibody binding sites on the spike protein, which can be associated with immune escape. Some projections are cold-sweat inducing and impel a new turn of the screw in the face of the variant in the most affected areas. A continued arms race against the virus is inevitable.

Governments are passing legislation to adapt their tools to the evolution of the health crisis. Nonessential sectors are operating remotely, and new travel restrictions are reappearing. Health control measures are imposed with the implementation of the "pass sanitaire" as in France and vaccine requirements for some occupations, with potential sanctions for those who refuse. The engagement of everyone is a vital component to be able to live as normally as possible after experiencing the trials of curfew and lockdown.

by Bernard Gouget

Chair-IFCC Committee on Mobile Health and Bioengineering
in Laboratory Medicine (C-MHBLM)
co-Chair IFCC-TF on History
SFBC-International Committee
President-Human Health Care Committee-Cofrac
President-National Committee for selection of the French
Reference Laboratories, Ministry of Health

We thought the summer would be quieter, but new epidemic flares are clearly still with us. Delta variant has snuffed out the optimism we had in the spring and disturbed the summer reveries. COVID-19 is not going away so quickly, and the pandemic situation could get worse. At the same time, disastrous environmental events are converging like never: extreme heat, out-of-control wildfires, droughts, flood. The climate catastrophes are just part of the weather now. The crisis is becoming routine. Finding happiness under fraught circumstances can be challenging and ruminating over what might have been and what might happen just deliver unhappiness.

The pandemic continues to shake up our lives, our relationship to freedom, our conception of civic duty. If the epidemic becomes out of control again, all economic and social activity will be disrupted again.

A more vaccinated world creates a more hostile global environment for SARS-CoV-2. Mutations will still occur, but fewer of them will be of consequence. Globally, it is a race between vaccine delivery and virus transmission. These two sides are interconnected. The untrammeled spread of COVID-19 through large, vulnerable populations worldwide increases the risk that new variants will emerge.

Every new variant carries with it the possibility of a devastating turn in the pandemic, a mutation that further weakens the efficacy of the vaccines, or that causes the disease to be more severe in children and young adults. Vaccines are still beating the variants, but the unvaccinated world is being pummeled.

While several measures have boosted vaccination, we must not forget the hesitant minority not yet convinced by this almost civic obligation to get vaccinated, while there is a strong demand in low-income countries where populations have not been vaccinated much. Given a more contagious virus, pharmaceutical companies and medical laboratories are mobilizing. The idea of a third dose would certainly have a positive effect regardless of the vaccine, insofar as it would strengthen the protection of individuals who have already been vaccinated by cross immunity. It has become difficult to say if herd immunity can be attained. It has become a very ambitious challenge; vaccination in the name of the community remains completely relevant.

In the meantime, even highly vaccinated countries should continue investing in other measures that can control COVID 19 but have been inadequately used: improved ventilation, widespread rapid tests, smarter contact tracing, better masks, places in which sick people can isolate, and policies like paid sick leave. Such measures will reduce the spread of the virus among unvaccinated communities, creating fewer opportunities for an immune-escape variant to arise. Vaccines remains our most powerful tools. Immunization against diseases is among the most successful global health efforts of the modern era, and substantial gains in vaccination coverage rates have been achieved worldwide.

The COVID-19 vaccine is one of the most spectacular embodiments of this scientific, technical and political progress thanks to which we have a better quality of life today than ever before in human history. Even as many countries do not yet have sufficient access to the vaccines, antivaccine crusades strangely resemble medieval witch hunts with the same references to absolute evil, the same fear of hybrid beings seeking to alter nature. It is characteristic of great crises to accelerate the march of progress while mixing hope and horror. The success of the messenger RNA vaccines reminds us that catastrophes stimulate human ingenuity, and necessity dissolves the most deeply entrenched beliefs. How can we not be amazed by the discoveries of genetics, a very young discipline! The RNA currently dominating the news is called messenger RNA but is also a messenger of hope! This amazing molecule deserves recognition of its potential, and scientists have been thoroughly inspired. The superiority of mRNA is due to its ability to rapidly adjust to virus mutations. The work around RNA is a saga populated with anonymous researchers who have ploughed forward come what may. A chance meeting in front of a photocopier, a beautiful analogy for RNA, which copies DNA sequences, allowed Katalin Kariko to meet her partner, Drew Weissman. Together and with their team, they succeeded in removing the obstacles that prevented messenger RNAs from triggering adequate immune responses.

While the race for vaccines, the main weapon against COVID-19, already has its champions, the race for treatment is still looking for its winners. There is no shortage of candidates. Researchers, biotech companies and major pharmaceutical companies have all been mobilized. There are still more than 1600 clinical trials underway worldwide. One of the difficulties is that, due to the number of clinical trials in progress, the chance of finding patients lengthens the time for developing treatments. The therapeutic arsenal is still meager in the treatment market that directly addresses the virus. However, research is progressing, and we are hopeful that several drugs will arrive in the coming months. Treatments are an additional tool that can serve to anticipate the next crises. The stakes are not trivial, because while vaccines have so far provided an effective shield, nothing excludes new, more dangerous variants from escaping their protective net in the future. It is also a matter of protecting immunocompromised patients for whom vaccination is less effective and who are at greater risk of developing a severe form of the disease. The competition is vigorous on the monoclonal antibody and antiviral market, in which big pharma is well positioned.

We can see that the magic of the precious ribonucleic acid molecule is not limited to COVID. This technique makes it possible to hope that our cells will learn how to make effective shields against other serious diseases themselves. An extraordinary leap has taken place over the past two years. It has been demonstrated that knowledge of living organisms at the level of molecules and DNA-RNA relationships could prove to be fundamental in the fight against certain diseases.

However, RNA should not be seen as a miracle drug; in biology nothing is won in advance and treatments do not always work. mRNA technology could become an additional weapon in the field of cancer treatment. One of the projects operates in a way very close to the method for COVID vaccines. It consists of introducing mRNA into cancer cells and having them produce a protein that will be recognized very efficiently by the immune system.

By injecting mRNA that codes for tumour neoantigens, cells can produce them. In reaction, the immune system specifically attacks tumour cells that produce these neoantigens, and therefore the tumour mass. The strength of these new technologies is their potential action against all types of cancer.

In addition, they allow personalized care. Mutated proteins are specific to each tumour and each patient. By means of a biopsy it is possible to sequence its genome, identify the mutations present and rapidly produce the corresponding mRNA. The potential of mRNA in oncology is not limited to immunotherapy. These new technologies could also make it possible to induce cells to produce the drug proteins they need themselves.

It is vital to instill trust in innovation. Progress needs us as much as we need it. It must be supported by science education, appropriate communication and refined legal devices. Saving lives is urgent. The world has a moral obligation to do so, and solidarity is needed more than ever. No one is safe until everyone is.

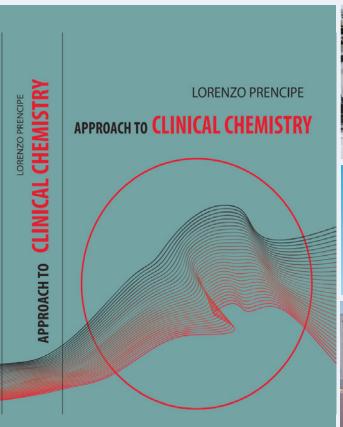
Quality laboratory testing starts with operator training. This book can help with that. You can buy it on https://amzn.to/2SRqtVM

Brief news about the author

Lorenzo Prencipe acquired his professionalism at the Clinical Biochemistry Laboratory of the of Milano Niguarda Hospital. Here he had the opportunity to develop analytical methodologies related to blood components, then adopted worldwide. He has published over thirty works in international journals.

The dominant themes of his publications are: development and improvement of analytical methodologies, quality control.

The method for the *Determination of Uric Acid*, today globally accepted has obtained the "Classical Citation" in the prestigious American Journal of Clinical Chemistry, while another one has had over 2400 bibliography citations.









A clinical chemistry text written by a laboratory scientist who had lived through the evolution of the medical laboratory from the days when there was no such thing as a laboratory with its instrumentation to the new, faster tests for Covid 19



Strategic SARS-CoV-2 testing for risk mitigation and optimal healthcare workers and patients



Picture (from left to right): Marcus Bauer, Matthias Orth, Sr. Karin Johanna, Stefan Reineck

The COVID-19 pandemic has triggered substantial changes in the way we live, the way society works and of course, in our healthcare systems. It is common in all geographical areas that the fight against the virus remains. The need to track, trace and quarantine infected individuals to minimize transmission and maximize health is imperative. Protective measures are especially important in hospitals where risk of transmission is high, and potentially lethal to patients and workers alike.

With this understanding, an integrated clinical care team at Marienhospital in Germany, rapidly developed and implemented new policies and procedures to maximize the health and safety of their patients and healthcare workers (HCWs) during the early stages of the pandemic.

Rapid polymerase chain reaction (PCR) testing was initiated in all patients and HCWs at strategic intervals in accordance with strict, custom protocols across all wards. Multiple real-time PCR (RT-PCR) test methods were used in parallel, mitigating supply dependences and enabling timely confirmation of indeterminate samples.

Especially, all inpatients were tested on admission, with high-risk patient tested one day prior to admission and precautionarily quarantined until test results were available, and low-risk patients tested on the day of admission with standard safety precautions (i.e., face mask, distancing). High-risk healthcare workers (i.e., those working on COVID-19 wards) were tested weekly, while low-risk HCWs and outpatients with risk of transmission (i.e., dental patients, gastroscopy) were tested every 4 weeks.

These proactive and protective measures have had a significant impact on the safety of patients and healthcare workers. Impressively, no HCWs in regular contact with infected COVID-19 patients were tested "positive" for COVID-19. Moreover, asymptomatic patients (and HCWs from other wards) have been identified through protective screening measures, enabling quarantine and tracing measures to reduce transmission. Hospital capacity during the initial phase of the pandemic was reduced to approximately 40%, with no elective procedures, and treatment of COVID-19 patients were under strict protective conditions. Since implementation of these protective measures and as the community healed, hospital capacity resumed to 95%. As the virus is still at large, care teams at Marienhospital continue to work together to mitigate risk and maximize the well-being of patients and staff.

For their strategic protective measures to protect the health of both patients and healthcare workers, this integrated clinical care team was recognized with a 2020 UNIVANTS of Healthcare Excellence award for Achievement. Congratulations to the leaders of this initiative Matthias Orth, *MD, PhD, Head of Institute for Laboratory Medicine,* Markus Bauer, MD, *Head of Department of Occupational health and Safety,* Sr. Karin Johanna, Haase, *Pharmacist, Head of the Hospital Pharmacy,* Stefan Reinecke, *MD, Head of Department of Internal Medicine.*

KEY TAKEAWAYS

- 1. Protective measures of tracking, tracing and quarantining individuals with COVID-19 is essential during the fight of the on-going COVID-19 pandemic
- 2. To have effective protective measures, proactive identification of symptomatic and asymptomatic individuals is crucial.
- 3. Implementation of laboratory-led strategic testing to maximize identification of infections is key success factor in this pandemic.

For more details on this best practice and/or other best practices that received recognition by the UNIVANTS of Healthcare Excellence Award program, please visit www.UnivantsHCE.com.





Enhanced discovery of unidentified comorbidities and diagnosis through the use of Diagnostic Logics



Picture (from left to right): Osamu Yonekawa, Akira Yamamoto, Keiko Oba and Kentaro Naoda

The use of technology to support and enhance delivery of care is becoming more common and crucial in health-care around the globe. Fully leveraging these augmented capabilities, interconnectivity and data within these technologies can have substantial impact on patient care, health outcomes and resource utilization. In order to realize the benefits of such technology, strong collaboration across departments and a drive to improve health-care is required.

At Seirei Hamamatsu Hospital in Japan, the clinical laboratory has a strong focus on applying technology to provide clinical support regarding test inquiries and research. Additionally, their laboratorians are known to frequently collaborate with their clinical partners to provide "Logistics Support" across teams. "Logistics Support" refers to activities that support diagnosis and treatment through the analysis of test results to find possible pathological conditions for more rapid communications to physicians.

To date, this integrated clinical care team has defined and implemented 27 diagnostic logics into clinical care. The logics involve use of flow charts to analyze combinations of test results as well as patient demographic data to provide potential diagnoses. The output stratifies patients into 3 risk levels, in order to provide physicians with standardized comments on possible diagnosis and recommendations on the follow up action.

This proactive diagnostic support initiative has resulted in the identification of previously unknown cancers, anemias and other comorbidities, thus enabling early treatment and intervention to mitigate downstream risk, reduce healthcare costs and improve outcomes for patients. Additionally, screening of pre-surgery test results

has resulted in \$80K of additional surgery and treatment revenue over a 3-year period. Success of this program has garnered widespread interest across Japan, resulting in 33 invited presentations over 2 years, including the Japan Society for Clinical Laboratory Automation (JSCLA), the largest clinical laboratory conferences in Japan.

This team from Seirei Hamamatsu hospital was recognized for their important outcomes and novel thinking through the 2020 UNIVANTS of Healthcare Excellence award program with recognition of Achievement. Congratulations Kentaro Naoda, *Laboratory Manager*, Hidenori Nakamura, *Director of Respiratory Medicine/Director of Medical Safety Center*, Keiko Oba, *Laboratory Leader*, Kenta Usui, *Deputy Director of Hospital Administration*, Akira Yamamoto, *Lab Technician*, Osamu Yonekawa, *Laboratory Physician*.

KEY TAKEAWAYS:

- 1. The clinical laboratory is uniquely positioned within hospitals to be a powerful clinical partner for enhanced strategic processes and clinical diagnosis.
- 2. Informatics is a powerful tool that enables insights and action to improve patient outcomes.
- 3. Through collaborative implementation of diagnostic logistics, previously unknown diseases can be identified and treated early.



Enhanced identification and care for patients with undetected HCV and/or HIV via Opt-Out ED screening with active education and linkage to care

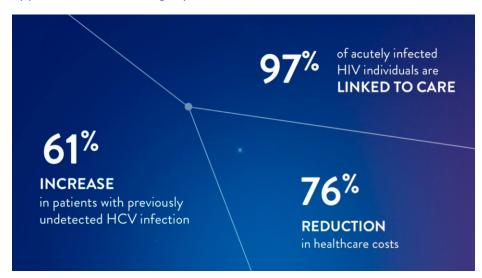
Infectious diseases continue to be significant and growing concerns for public health. Hepatitis C Virus (HCV) and Human Immunodeficiency Virus (HIV) are of particular concern as they are often underdiagnosed, and therefore left untreated. The World Health Organization estimates that approximately 81% of people living with HCV do not know they are infected, and 19% of HIV positive individuals are also unaware of their status. As such, there is a global focus on the elimination of these debilitating viruses.

A key to success in containment and prevention is the identification of individuals with unknown disease, and successful treatment. Lack of disease awareness and access to appropriate care can significantly impact timely treatment, and ultimately lead to disease spread, high morbidity and even mortality. Thus, identifying individuals with HCV and HIV, and linking them to appropriate care is vital. Linkage to care can be especially complicated in high risk and underserved populations, particularly for those who utilize emergency care services as their primary healthcare option.

With a goal to change this paradigm, an integrated clinical care team at the University of Alabama-Birmingham (UAB) Hospital sought to enhance identification and care for patients with undetected HCV and HIV by developing and implementing an opt-out screening program in the emergency department (ED), coupled with disease-specific care linkage services.

Results of this integrated approach has resulted in the identification of 2,349 HCV RNA+ individuals and 195 individuals with newly diagnosed HIV infections, with dedicated care coordinators facilitating enhanced patient engagement and sustained care, as appropriate. Additionally, 99 known HCV positive individuals previously

identified by HCV antibody testing were re-engaged to care. Implementation of the care coordination and improved access to HCV providers led to a 91% reduction in the average days between testing and initial medical appointments, enabling rapid treatment, and reduced overall healthcare costs.



For their impact on public health and important patient outcomes, this integrated clinical care team was awarded a 2020 UNIVANTS of Healthcare Excellence award with recognition of Distinction. Congratulations to the leaders of this initiative Joel Rodgers, HIV/HCV Testing and Linkage Program Manager, Ricardo Franco, MD, Infectious Disease, Sherichia Hardy, MPH, BSN, RN, CNL, Sonya Heath, MD, HIV/HCV Testing and Linkage Program Co-Director, Sherry Pol-

hill, MBA, MT(ASCP)CM, Directory, Laboratory, Wendy Tissier, Senior Director, Clinical Informatics.

KEY TAKEAWAYS:

- 1. Highly sensitive HCV and HIV Immunoassays enable early antigen and antibody detection for rapid turnaround and communication of results.
- 2. Implementation of opt-out screening for HCV/HIV in the ED can identify undiagnosed infections in under-served and high-risk individuals, link infected individuals to appropriate care, and help reduce downstream transmission events.
- 3. Care coordinators can facilitate enhanced linkage to care, improving health by ensuring that patients with identified disease receive care.



Using data, innovation and collaboration to support better patient outcomes during the COVID-19 pandemic

As the COVID-19 pandemic continues to turn life as we once knew it upside down, it is important to look back at some of the successes that have allowed us all to take measurable steps towards "getting back to normal". The COVID-19 pandemic has brought new challenges to clinical teams and laboratories alike, across health systems.

At the beginning of the COVID-19 pandemic, Public Health England (PHE) was primarily responsible for COVID-19 testing. Due to the hazardous nature of the virus and the vast number of individuals requiring testing, a substantial backlog in test processing was soon realized. To address this unprecedented challenge, an integrated care team that included laboratory medicine, information technology (IT), and North West London Pathology's [a National Health Service (NHS) pathology partnership serving 3 major London hospital trusts] Infection and Immunity team, collaborated to implement new solutions in the face of this pandemic.



Their approach was multi-faceted and included increasing the variability of testing, improving access to rapid tests, providing continuity and resilience in local testing. A key to successfully implementing this strategy required validation of testing across multiple different assays to ensure expected and reliable results. This particular challenge was uniquely addressed in collaboration with Imperial College (Dementia Research Institute).

A new workflow was implemented to test COVID-19 samples, which could validate test sample kits from multiple suppliers. Further, in-house testing for COVID-19 was launched within parts of Northwest London Pathology in order to reduce the number of samples send outs to PHE.

The diverse number of COVID-19 tests and multiple validated methodologies substantially improved testing capacity to 2,400 tests every 24 hours. This in turn enabled clinical teams within the hospitals to rapidly confirm which patients had the virus, thereby improving treatment, reducing transmission, and improving safety for staff and the community. The programs' success received national recognition and was featured on BBC News for their work and innovative testing in March 2020 and August 2020.

The collaborative nature and success in implementing timely COVID-19 testing strategies also gained global exposure through the UNIVANTS of Healthcare Excellence award program, with recognition of Achievement for the 2020 awards. Congratulations to Paul Nacmanson, Data/IT Analyst, Saghar Missaghian-Cully, Managing Director, North West London Pathology, Panos Pantelidis, Divisional Manager, Infection and Immunity, Paul Randell, Consultant Virologist, and Gabriel Roberts, Data Analyst.

KEY TAKEAWAYS

- 1. The COVID-19 pandemic has necessitated novel and quick thinking across clinical care teams to enable provision care.
- 2. Collaboration within systems and across systems is a key to tackling the challenges associated with the COVID-19 pandemic.
- 3. Clinical laboratories are key strategic leaders and collaborators for improving outcomes and care during pandemic and beyond.

Recognizing additional advocates of the UNIVANTS of Healthcare Excellence Program

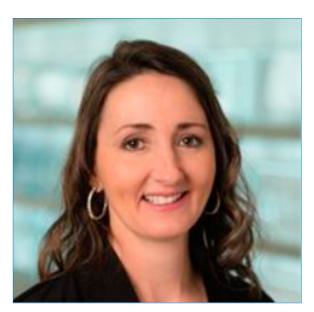
The UNIVANTS of Healthcare Excellence awards are a collaborative and global initiative made possible through the partnership of eight leading healthcare organizations/societies including the International Federation of Clinical Chemistry (IFCC), AACC, EHMA (European Health Management Association), Modern Healthcare, Health Information and Management Systems Society (HIMSS), National Association of Healthcare Quality (NAHQ) and the Institute of Health Economics (IHE) and Abbott Laboratories. The prestigious award program inspires teamwork across healthcare disciplines for measurable benefits and key performance indicators for patients, payors, clinicians, and entire health systems. As the mission resonates with health champions across the globe, strong advocates emerge every year to support awareness and reinforce opportunities for healthcare transformation. Last year, the IFCC eNews featured 10 early program advocates across various disciplines and geographical areas. This article however spotlights ten additional program advocates; all of whom, as before, are influential leaders in their respective fields with proven success in advancing healthcare. On behalf of the UNIVANTS of Healthcare Excellence program, we thank each of these individuals for their partnership, support, and advocacy. Together, we are inspiring patient-centric, measurably better healthcare. UNIVANTS cases each year and the program as a whole."



Alexandra Yates
Director of Scientific Affairs
The Association for Clinical Biochemistry and
Laboratory Medicine (ACB)

Alexandra is a Clinical Scientist in the Clinical Biochemistry department at the North Midlands and Cheshire Pathology Service, UK, where her interests include analytical interferences, renal medicine, and quality improvement. Wider interests also include equality and diversity within healthcare organisations where Alexandra is passionate about enacting meaningful change and equity for all. Alexandra was appointed as Director of Scientific Affairs for the Association for Clinical Biochemistry and Laboratory medicine in May 2019, after 5 years on the scientific committee, and a previous role, as a national member on the ACB council. As chair of the Scientific and Clinical Practice Committee, she leads the committee in fulfilling their vision of serving all ACB members across pan-pathology disciplines, enabling and promoting translational research and innovation, and providing scientific and clinical expertise to ACB's strategic partners in order to benefit the wider health care community.

"The UNIVANTs programme and awards are strongly aligned with the ACB's ongoing strategy of promoting innovation in the healthcare arena. In previous years, several ACB members have benefitted greatly from the programme having been recipients of awards. The ACB looks forward to having opportunity to celebrate the successes of all winners, share best practices, and inspire even more members to apply for recognition through the UNIVANTS of Healthcare Excellence programme."



Carrie Donovan, MSAS CPHQ
Safety & Quality Services Supervisor
at Monument Health
Spearfish, South Dakota, United States

Carrie is dedicated to the advancement of process improvement in healthcare. As a long-time board member at the National Association for Healthcare Quality (NAHQ), her passion to advance the profession of healthcare quality is well aligned for sustainable process improvements across communities. With direct expertise in risk management, performance improvement, infection control, patient safety, worker safety and emergency preparedness, Carrie helps to advance NAHQ's vision to realize the promise of healthcare improvement through innovative practices in quality and patient safety. Her interactions with the UNIVANTS of Healthcare Excellence awards date back to the inception, with valued contributions as a leader and advocate for healthcare excellence.

"It is rewarding to recognize transformational best practices who have made a measurable difference in healthcare. I am honored to advocate for such a meaningful program and see great promise in the value of integrat-

ed clinical care through teamwork and laboratory medicine. I am continually impressed with the UNI-VANTS cases each year and the program as a whole."



Ellie Dow, LRCP MRCS PhD FRCPath
Consultant in Biochemical Medicine
Diagnostics Laboratories, NHS Tayside
Ninewells Hospital and Medical School
Dundee, Scotland

Healthcare Excellence Awards for conceptualizing and implementing a novel and cost-effective way to increase early diagnosis of liver disease. Their "intelligent liver function test", or 'iLFT' quickly became standard of care across NHS Tayside, with work already initiated to roll out this best practice more widely across Scotland. Dr. Dow is a Consultant in Biochemical Medicine in Scotland and a leader in laboratory IT who champions integration of e-health into clinical care for healthcare excellence. Dr. Dow's advocacy and passion for improving health outcomes is evident with highly impactful global presentations on iLFT and well as recent publications in the Journal of Applied Laboratory Medicine and conversation within eNews, as well as a guest editor this February for a special issue on measurably better healthcare for the e-journal of the IFCC (eJIFCC).

"UNIVANTS enshrines the way we now work: laboratorians and clinicians working in co-production for the benefit of our patients. All our projects improving patient pathways have this evidenced way of working at their core. Sharing

best practice and enthusing others, that they too can work in this way, have been highlights of being involved with UNIVANTS. Global health systems have never been more challenged: UNIVANTS demonstrates what may be achieved by leadership in collaborative working for the benefit of patients everywhere."



David G. Grenache, PhD, D(ABCC)
Chief Scientific Officer and Medical Director
TriCore Reference Laboratories in Albuquerque
New Mexico

Dr. Grenache is world renown for leading transformational change in healthcare. Among many accolades, he received honors of distinction in the inaugural 2019 UNIVANTS of Healthcare Excellence awards for his laboratory's efforts to improve prenatal care in New Mexico. As the president of AACC he championed the association's strategic pillar to develop a quantitative evidence base to demonstrate the value of laboratory medicine for the organization and the field. He is a corresponding member on IFCC's Committee for the Value Proposition for Laboratory Medicine and was a member of the National Quality Forum's Improving Diagnostic Accuracy Committee. He previously held the position of AACC secretary from 2014-2016, chaired the organizing committee for the 2018 AACC Annual Scientific Meeting & Clinical Lab Expo and helped create the framework for AACC's Society for Young Clinical Laboratorians while also serving as its first chair.

"I have had the pleasure of interacting with the UNI-VANTS program on many levels. First, as a recipient of this prestigious award in 2019, and thereafter, as a

strategic partner to the program through AACC. I encourage all laboratory professionals to engage collaboratively with their clinical colleagues to mobilize insights from laboratory medicine that will deliver patient-centric care."



Professor Dražen Huić, MD, PhD

Department Head of Nuclear Medicine and
Radiation Protection
University Hospital Centre Zagreb,
School of Medicine Zagreb, Croatia

Prof.dr.sc. Dražen Huić, is an active and recognized leader in the field of nuclear medicine in Croatia as the Head of the Department of Nuclear Medicine and Radiation Protection at University Hospital Centre Zagreb (leading reference center in the country). His passion and leadership in this field is evident via his long-standing position as President of the Croatian Society of Nuclear Medicine, authorship across approximately 50 peer-reviewed publications, leadership at international congresses, engagement with multiple International Atomic Energy Safety Agency (IAEA) sponsored projects, and mentorship to young scientists.

"The UNIVANTS of Healthcare Excellence Award inspires healthcare teams to collaborate across disciplines, including laboratory medicine, in pursuit of not just Healthcare Excellence but better patient care. This sentiment is shared across the Croatian Society of Nuclear Medicine as collaboration with laboratory medicine is integral for developing novel treatment pathways, enhancing patient care and achieving improved outcomes for patients, payors, clinicians and health systems."



Professor Goran Krstačić
MD, PhD, FESC, FEHRA

Professor of Cardiology, Faculty for Dental
Medicine and Health, School of Medicine
J. J. Strossmayer University of Osijek
Co-founder, Croatian Heart House Foundation
Croatia



Craig Ivany, MBA, CHE
Chief Provincial Diagnostics Officer for the
Provincial Health Services Authority
British Columbia, Canada

Professor Goran Krstačić has been an innovative leader in cardiology for over 30 years with a legacy of outstanding leadership with the European Society of Cardiology, Working Group on e-Cardiology, member of the board of European Hear Rhythm Association and EP-EUROPACE and head of a specialized Institute for cardiovascular prevention and rehabilitation in Zagreb. He has authored over 150 publications in international journals with topic areas of focus including e-Cardiology, Digital health, m-Health and e-Health, preventive cardiology and cardiac rehabilitation. As co-founder of Croatian Heart House Foundation, he created a nationwide platform to assist in the treatment of patients with cardiovascular diseases, promote cardiovascular health prevention and the advancement of cardiology, while informing and educating citizens about their active participation for prevention and early detection.

"Integrated people-centered health services is about putting people and communities (not diseases) at the center of health systems, and empowering people to take charge of their own health, rather than being passive recipients of services. That mission aligns nicely with the UNIVANTS of Healthcare Excellence program in that transformational change requires unity across stakeholders, partnerships with clinicians and patients, as well as avant-garde thinking."

Craig Ivany is a leading executive and laboratory services strategist with over 35 years of experience influencing healthcare. His depth of practice includes a legacy of leadership across Canada, including serving as Executive Director of Canadian Blood Services' operations portfolio, CEO of the Eastern Ontario Regional Laboratory Association, CEO of Alberta Public Labs and is a current and past board member of several not-for-profit organizations in Canadian healthcare. In his current role as the Chief Provincial Diagnostics Officer for the Provincial Health Services Authority (PSHA) in British Columbia, Canada, Craig is leading the implementation of a new province-wide laboratory medicine service delivery model in collaboration with stakeholders across British Columbia. Craig is also a certified health executive, a long-time member of the Canadian College of Health Leaders and was appointed Adjunct Professor in the Department of Pathology and Laboratory Medicine of the Faculty of Medicine, University of British Columba in 2021.

Most recently, Craig was interviewed in Modern Health-care (https://www.modernhealthcare.com/patient-care/laboratorys-role-backbone-strong-health-system) for his leadership in laboratory medicine and advocacy for the UNIVANTS of Healthcare Excellence Program.

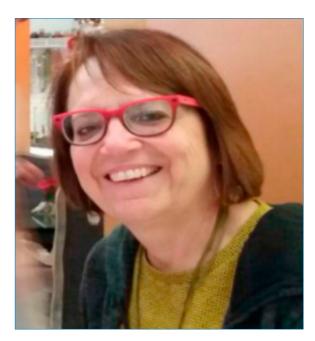
"UNIVANTS recognizes the significant impact that the laboratory can have on clinical programs that solve the biggest challenges we face in delivering better healthcare. It draws upon the significance of our work. It doesn't just focus on the innovations within the lab, but rather the broader impact they have on health outcomes."



Alexandre Lourenço
President, Portuguese Association of Hospital
Administrators (APAH)

Alexandre Lourenço is a hospital administrator at Coimbra Hospital and University Center, having performed various public duties within the Portuguese Ministry of Health. He coordinates the Postgraduate Program in Management of Health Institutions at ISEG - Lisbon School of Economics and Management. He is a consultant at the World Health Organization (WHO) for financing, health systems strengthening and healthcare delivery. He is also the President of the Portuguese Association of Hospital Administrators, the largest representation of professionals with administrative and management functions in the area of health within Portugal and is board member of the European Association of Hospital Managers and Treasurer of the European Health Management Association.

"The UNIVANTS award is the perfect initiative to supports health systems and organizations in generating attention and momentum around the value-based paradigm; a worldwide community of practices among those that are pursuing transformations and reconfigurations in health services delivery to enhance outcomes, efficiency, quality. The rigour of the UNIVANTS methodological approach as well as the quality of the case histories makes it highly effective in providing actionable food-for-thought. The award is not just a celebration of achievements, but also a great learning opportunity for health managers and clinical leaders."



Katherina Psarra, PhD
Biochemist
Department of Immunology – Histocompatibility
Evangelismos Hospital
Athens, Greece



Professor Tahir Pillay
MBCHB, PhD, FRCPath, FCPath
Professor of Chemical Pathology
and Head of Pathology
University of Pretoria/National Health
Laboratory Service and
Steve Biko Academic Hospital

Dr. Katherina Psarra has been active in the field of laboratory medicine for almost 40 years. She was instrumental in initiating and developing further the flow cytometry laboratory of Evangelismos Hospital, in Athens, Greece and in applying such methods in almost all clinical applications encountered in routine clinical settings, such as in immunology, hematology, oncology, gynecology, infections and neurology. She was a founding member of the Hellenic Society of Cytometry with leadership positions as Treasurer and President. She has also held extended leadership positions with Greek Society of Clinical Chemistry/Clinical Biochemistry, European Society for Clinical Cell Analysis (ESCCA) and the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). In her current leadership role as Editor in Chief of the IFCC eNews, she has overseen the publishing of nearly one hundred articles about UNIVANTS and healthcare excellence, strengthening the education and amplification of best practice sharing across the globe.

"I am a strong advocate for the UNIVANTS of Healthcare Excellence program, and very much agree with the program's mission and vision for driving transformational health outcomes through integrated clinical care teams and laboratory medicine."

Professor Tahir Pillay has a legacy of leadership within laboratory medicine including recent roles as Presidency of the South African Association for Clinical Biochemistry (SAACB) and Chair of the Communications and Publications Division (CPD) for the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). He is a Fellow of the Royal College of Pathologists and the College of Pathologists, South Africa, and has been the recipient of numerous honors, including the Juvenile Diabetes International Fellowship, the American Foundation of Clinical Research outstanding postdoctoral award, the Welcome Trust Senior Clinical Fellowship, and the Professors Prize from the Association for Clinical Biochemistry. Prof Pillay's research and extensive publications span the area of the molecular cell biology of insulin signaling and insulin resistance, molecular modelling of ligand-receptor complexes and development of new diagnostic probes for point-of-care testing using recombinant technology.

He is pioneering the application of nanobodies for diagnostic testing and his team received the first prize in the 2020 GAP Innovation awards run by the Technology Innovation Agency and Emory University Goizueta Business School for development of a low cost rapid antigen test for SARS-CoV2. He was recently interviewed in Modern Healthcare (link to article) for his thought leadership in laboratory medicine and advocacy for the UNIVANTS of Healthcare Excellence Program.

"Recognition can galvanize teams, elevating great work and meaningful outcomes to the rest of the world. The UNIVANTS of Healthcare Excellence awards rewards and elevates teams while also encouraging further innovation and professional development, potentially even creating more investment in their important work."



10 Tips for success for UNIVANTS of Healthcare Excellence Awards

Recognition through the UNIVANTS of Healthcare Excellence program is a global and prestigious honor. To date, 36 best practices from across the world have already been recognized for measurably better healthcare. The program was founded by Abbott and made possible through partnerships with other leading healthcare organizations, societies and federations including International Federation of Clinical Chemistry (IFCC), AACC, European Health Management Association (EHMA), Modern Healthcare, (Health Information and Management Systems Society (HIMSS), National Association of Healthcare Quality (NAHQ), and Institute of Health Economics (IHE).

If interested in applying for this elite honor, this article will help to maximize success. The recommendations below can be used as a supplement to other great tools and details. Visit www.univantshce.com for award criteria, helpful checklists, best practice examples and other guidance documents.

TIP 1. ENSURE THE CLINICAL CHALLENGE IS CLEARLY DESCRIBED

All judges for the program are diverse with unique and varied backgrounds. With that in mind, each organization and therefore each judge will have unique perspectives. Ensuring that the judges from all healthcare background and specialities can understand the clinical problem is essentially for comprehension of your care initiative, enabling interest and scoring to be possible.

TIP 2. CLEARLY DESCRIBE THE SOLUTION TO THE CLINICAL CHALLENGE

In addition to clearly outlining the clinical problem, a clear description of the solution (i.e. the changes that were made to clinical care) is essential. The easier it is for the judges to understand what changes were implemented into care, the more readily the outcomes or associated key performance indicators (KPIs) can be understood in context of the initiative itself. This is especially important since performance metrics have impact across stakeholders (patients, clinicians, health system/administrations and payors).

TIP 3. ENSURE THAT ALL METRICS ARE DIRECTLY RELATED TO THE CLINICAL PROBLEM AND SOLUTION

Connecting the outcomes or KPIs to the clinical care initiative, i.e. the outcomes are directly attributable to the solution mentioned above, is essential for ensuring that judges can understand impact and why each KPI

is relevant. Consequently, KPIs that are directly attributable to the clinical care initiative are more likely to be scored high. In contrast, KPIs not directly associated with the care initiative can be rejected, which in turn can disqualify an application.

TIP 4. PROVIDE CLEAR AND DETAILED RATIONALES FOR EACH KPI/METRIC TO ENSURE CLARITY AND TO PROVIDE CONTEXT

Each KPI should be accompanied by an explanation or rationale for why each metric is impactful to the stake-holder for which it is linked. The more specific the rationale is, the more likely that judges, who span expertise, can understand why even a modest improvement is important. Use of generic explanations without details will likely fail to highlight the importance of your metric and KPI. For example, if the same rationale can be applied to multiple and different KPIs, it is likely too generic.

TIP 5. PROOFREAD ALL CONTENT FOR CLARITY, LEGIBILITY, AND COMPLETENESS

Ensuring that all aspects of your application are clear, legible and complete is a simple and easy way to ensure that your clinical care initiative is more readily understood. The terminology used within the application should be easy to understand and globally relevant. As such, be sure to define all acronyms and avoid short-hand or local terms that might not be universally understood.

TIP 6. STRIVE TO HAVE MORE QUANTITATIVE KPIS THAN QUALITATIVE KPIS

Measurement or quantification of success across all four stakeholders (patient, clinician, health system/administration and payor) is a key component to ensuring award availability. New this year is a requirement to have no more than four qualitative metrics within each application. Strong quantitative (vs qualitative) measurement of value and success highlight the true measurable impact your clinical care initiative has, thus, a balance towards quantitative KPIs is essential.

TIP 7. USE THE PROGRAM REFERENCE GUIDES AND TOOLS

Multiple Reference Guides and tools are available on the program portal at www.univantshce.com and have been created to support the application process. In particular, the Application Guide, is often considered the most valuable tool for the application process as it provides best practice examples, explanations and tips for a strong application.

TIP 8. LEARN FROM OTHER BEST PRACTICES

The UNIVANTS website showcases teams who have been recognized by the UNIVANTS of Healthcare Excellence awards. Learning from existing best practices who have successfully been recognized by the UNIVANTS of Healthcare Excellence award program is a great way to gain insights on what 'good' looks like. Examples across each recognized care initiative include both the description of the initiative and standout KPIs and metrics.

TIP 9. ASK FOR HELP WHEN NEEDED

The UNIVANTS of Healthcare Excellence award is a team award. Involving and utilizing the expertise of each team member when creating the application is essential for optimizing ideas and highlighting the impact of the application. The unique perspective of each team member and their respective disciplines will not only ensure completeness but will help to better highlight the impact, thus improving your score. The UNIVANTS of Healthcare Excellence Program also has a dedicated email to support questions about the award process UNIVANTS of Healthcare Excellence @abbott.com.

TIP 10. SUBMIT AT LEAST 2 WEEKS BEFORE THE DEADLINE

In advance of judge review, an administrative team reviews all applications for minimum award requirements. Applications submitted in advance of the program deadline are given the opportunity to resolve gap(s) and provide clarity, as needed. Thus, submitting your application early provides an additional opportunity to increase chances of advancing to judge review and for a favorable outcome upon judge assessment.

All applicants who adhere to the recommendations above and utilize the tools available to them will have an excellent chance of meeting eligibility and receiving global program recognition. The aim of the UNIVANTS of Healthcare Excellence Award Program is to recognize integrated clinical care teams for the measurable difference they make in health outcomes, while also inspiring more best practices globally. The 2021 application cycle is now accepting applications, with the deadline to submit your best practice of November 15, 2021. To learn about the program and/or to apply, please visit: www.univantshce.com If you have questions, reach out to the UNIVANTSofHealthcareExcellence@abbott.com.

News from the IFCC Website

The IFCC announces its Annual Townhalls, starting this fall!



The IFCC Townhalls are a new initiative aimed to significantly enhance internal communications within the IFCC organization and between the IFCC Board and all IFCC member societies and Regional Federations.

The Townhalls aim to:

- Update the membership on current and upcoming IFCC programs and new initiatives globally or in specific regions
- Provide a platform for an open communication forum between the IFCC board members and the board members of IFCC regional federations and national societies, as well as all laboratory professional and scientists in each region
- Receive feedback from the membership on IFCC programs particularly the new initiatives planned to directly contribute to advancing excellence in laboratory medicine towards a better healthcare worldwide

They will be a three-hour Interactive Virtual LIVE event that will be held in different time zones around the world.

Read more

News from the IFCC Website

10th August 2021 IFCC Free Webinar

IFCC Webinars

Boston Children's Hospital

Live Series 2021





IFCC Live Webinar on **Tumor liquid biopsy**

Simultaneous Chinese translation available!



Chair/Moderator Society of Laboratory Medicine (CSLM)

Circulating tumor cell President elect of Chinese characterization of lung cancer brain metastases in the cerebrospinal fluid through single-cell transcriptome analysis

The application of mitochondrial DNA mutation as novel biomarker in cancer detection

Using tRNA-derived small RNAs as biomarkers in the screening of gastric cancer



Prof. Chuanxin Wang [China]
President of The Second Hospital of
Shandong University



Prof. Ming Guan [China] Director of Laboratory Medicine Huashan Hospital Fudan University



Prof. Jinliang Xing [China]
Director of Physiology and
Pathophysiology, Fourth Military Medical University



Junming Guo [China]
Director of Department of
Biochemistry and Molecular Biology, Ningbo University

Date: Aug 10, 2021 Time: 07:00 AM (Eastern Standard), 1:00 PM (Central European), 07:00 PM (Beijing)



IFCC 网络会议直播 肿瘤的液体活检

主持人 中华医学会检验分会 候任主委

通过单细胞转录组分析研究脑脊液 中肺癌脑转移的循环肿瘤细胞特征 线粒体DNA突变在肿瘤 检测中的应用



利用tRNA衍生的小RNA作 为胃癌筛查的生物标志物



王传新教授



[中国] 复旦大学附属华山医院检验科主任



【中国】 第四军医大学生理与病理生理学 教研室主任



郭俊明教授 **[中国]** 宁波大学医学院生物化学与分子生物

日期: 2021年8月10日 时间: 07:00 AM (东部标准时间), 1:00 PM (中欧标准时间), 07:00 PM (北京时间)



Click here for the on demand content in English Click here for the on demand content in Chinese

NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES



News from the Spanish Society of Laboratory Medicine (SEQC^{ML}): Second Inter-hospital Conference – June 15, 2021

'Approach to pregnant women in a multidisciplinary team: the importance of the clinical laboratory'

SEQCML

Approximately 12% of pregnant women in Spain have gestational diabetes mellitus, a prevalence that has increased in recent years due to various factors, including a higher rate of obesity in the population and the older age of pregnant women.

Gestational diabetes mellitus is associated with various complications such as increased risk of pre-eclampsia, polyhydramnios (excessive accumulation of amniotic fluid), macrosomia, increased perinatal mortality, foetal hypertrophic cardiomyopathy, neonatal respiratory problems, or metabolic complications in the neonate such as the presence of hypoglycaemia, hyperbilirubinemia, hypocalcaemia, or polycythaemia. In addition, if the pregnant woman has sustained hyperglycaemia during organogenesis, the risks of having a miscarriage and congenital anomalies increase. Treatment of patients with gestational diabetes mellitus can reduce the risk of developing these complications.

Gestational diabetes is just one of the pathologies or conditions that can affect pregnant women. In fact, Dr. Blanca Montero San Martín, member of the Residents and Young Scientists Group of the Spanish Society of Laboratory Medicine and of the Clinical Laboratory of the *Hospital Universitari Arnau de Vilanova*, Lleida, notes that as well as an increase in gestational diabetes mellitus due to the increase in maternal age,

a higher prevalence of Down syndrome has also been observed, with 1 case every 450 live births. Likewise, other aneuploidies with a high prevalence are trisomy of chromosome 13 (Patau syndrome) and trisomy of chromosome 18 (Edwards syndrome) with a prevalence of around 2.25 cases per 10,000 and 6.86 per 10,000, respectively.

For this reason, with the aim of raising awareness of the importance of pregnancy as a clinical condition of major importance given the numerous metabolic changes that take place and possible associated pathologies, the Second Inter-hospital Conference 'Approach to pregnant women in a multidisciplinary team: the importance of the Clinical Laboratory' was held, organized by the Residents and Young Scientists Group of the Spanish Society of Laboratory Medicine (SEQC^{ML}), with the collaboration of the Spanish Society of Gynaecology and Obstetrics (SEGO), the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC), and the Commission for Prenatal Diagnosis and Commission for Biological Magnitudes related to Medical Emergencies of the SEQC^{ML}.

Dr. Montero explained that these virtual sessions, which were held thanks to the collaboration of all the participants, maintained the initial program from April 2020 before SARS-CoV-2 invaded our laboratories and our lives. They emphasized the need for and benefits of multidisciplinary teams in the healthcare field, and for this reason they included speakers specialized in Clinical Analysis, Microbiology, and Gynaecology, all members of the main corresponding national scientific societies.

Similarly, Dr. Alex Larruzea, from the Clinical Analysis Service of the Mollet Health Foundation, stated that the objective of the conference was to acquire knowledge about the approach to pregnancy from a multidisciplinary approach. For this reason, topics such as gestational diabetes, thyroid disease, gestation from a microbiological point of view, aneuploidy screening, pre-eclampsia, and the importance of the laboratory at the precise moment of delivery were discussed. For example, the taking and handling of samples of the foetal shell and cord is of vital importance when it comes to giving reliable and real results of the condition of the foetus. For this, the laboratory must play an active role and collaborate with the clinical team by providing training and advice on the appropriate way to process this type of sample.

Likewise, since approximately 3% of newborns have some type of congenital anomaly and a quarter of these are chromosomopathies, these were also analysed within the framework of the Conference.

The sessions also featured a presentation of clinical cases, which generated debate to reinforce the knowledge covered in each session, emphasizes Dr. Larruzea, who also highlighted the opportunity that this gathering offered to residents and young adjuncts to participate by presenting a session in public, in this case online, and the importance of being able to discuss this in a multidisciplinary forum, with health professionals from both different medical specialties and different geographical areas.

ROLE OF THE CLINICAL LABORATORY PROFESSIONAL IN THE MULTIDISCIPLINARY TEAM

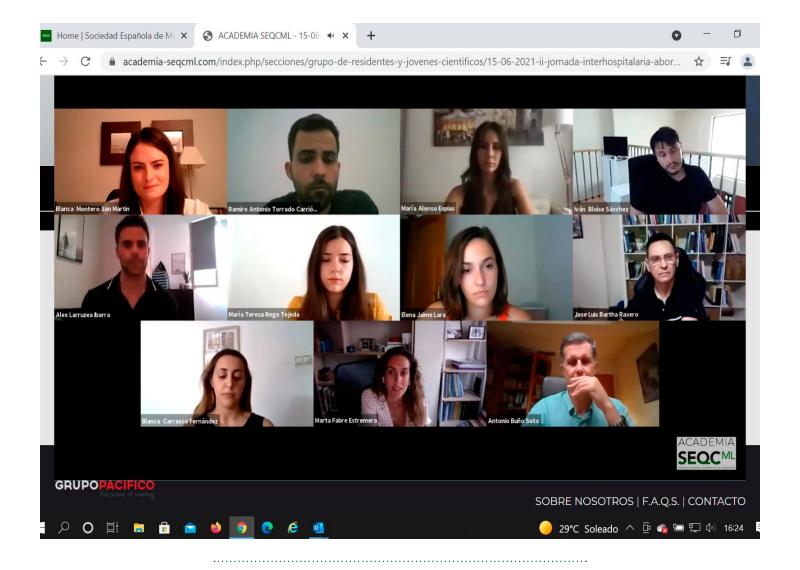
A multidisciplinary approach and the coordination between various professionals as part of the care of pregnant women is especially important. According to Dr. Montero, the benefits of the multidisciplinary approach in any pathology have already been widely demonstrated. Contact between different clinical professionals favours an exchange of points of view, giving rise to the creation of new work algorithms that translate into an improvement in patient diagnosis, which implies a decrease in time, and an improvement in the management of demand and in the treatment received.

In this context, according to this expert, a laboratory professional should be a member of the multidisciplinary team for the care of pregnant women, as they can provide knowledge about the tests carried out, which contribute to the diagnosis and monitoring of possible pathologies.

Similarly, Dr. Larruzea considers that in order to reach a correct diagnosis of each of the pathologies or special situations of pregnant women, the laboratory professional must advise the clinical team in every one of these situations, advising both when taking biological samples and in the different action protocols and with regards to the various possible test results.

It is clear that the laboratory professional is involved in a wide variety of aspects throughout the progression of a woman's pregnancy: they help in monitoring of the thyroid and gestational diabetes, collaborate in genetic tests to detect the most frequent aneuploidies, monitor all the microbiological aspects, and participate in the correct processing and reporting of the tests that can be performed at the time of delivery. In addition, the consulting and advisory function of the laboratory professional in a hospital's clinical team is very important when requesting the corresponding tests, interpreting the results, and establishing the protocols for action.

This applies in the case of gestational diabetes mellitus in which laboratory professionals must actively participate, from the control of preanalytical conditions in which the various samples are extracted, to management of the demand for tests and validation of the test results. Laboratory professionals must take part in the design of the different algorithms and in the investigation of new analytical methodologies. Recently, mass spectrometry-based methods have been developed in which differences in metabolic profiles can be observed in patients with gestational diabetes mellitus compared to healthy people; they can also distinguish pregnant women who will be normoglycemic after pregnancy from those who will suffer Type II postpartum diabetes mellitus, in the opinion of Dr. Montero.



Spanish Society of Laboratory Medicine (SEQC^{ML})

The Spanish Society of Laboratory Medicine (SEQC^{ML}) —founded in 1976— is an active member of the international and European Federations of Clinical Laboratory, IFCC and EFLM. It currently encompasses almost 3,000 professionals and its main objective is to bring together all interested scientists in the Clinical Laboratory field, promote the dissemination of scientific and technical publications, organize national and international meetings, courses and congresses, and cooperate with other scientific societies. Likewise, the Society wishes to contribute to studying and recommending standardized methods and establishing guidelines and recommendations for training in the field of Laboratory Medicine.

More information at:

www.seqc.es.



@SEQC_ML



Residentes del Laboratorio Clínico - SEQC



SEQC-ML



segresidentes



XXV COLABIOCLI CONGRESS

León, Guanajuato, Mexico March 30th to April 2nd, 2022

by Rosa Sierra-Amor, PhD

WG eNews, IFCC Nominations Committee Secretary International Scientific Committee, COLABIOCLI Congress Leon 2022



In less than a year, the Latin American Confederation of Clinical Biochemistry (COLABIOCLI) and the Mexican Association of Clinical Laboratory Sciences (CMCLabC) will be welcoming Laboratory medicine and Healthcare professionals to join The celebration of the XXV COLABIOCLI Congress, the silver congress, that will take place at the Poliforum Leon, in León, Guanajuato, Mexico from March 30th to April 2nd, 2022. We hope this to be a face-to-face meeting where colleagues from the region and abroad can get together for the good of the profession.

Being this an IFCC regional congress, IFCC EB members will have a formal meeting at the congress; in addition, there will be participation of several IFCC officers, COLABIOCLI EB and Affiliated societies participating at

the scientific program. From IFCC, the Emerging Technology Division, the Committee on Mobile Health and Bioengineering in Laboratory Medicine, and the Working Group on Guidance for the Implementation of Custom-made Genomic Panels will be presenting, and from the Education and Management Division, the participation of the Committee on Clinical Laboratory Management (C-CLM) is scheduled to deliver a Symposium on Sustaining high quality clinical laboratory services in a rapidly changing world.

Pre-congress courses are being organized by several professional societies which are collaborators of CO-LABIOCLI, among them, the Italian Society of Clinical Biochemistry (SIBIOCLI), the Asian Pacific Federation of Clinical Biochemistry (APFCB), and the American Association for Clinical Chemistry (AACC). In addition, topics on Bioethics, Molecular Diagnostics, Cost-analysis, Pre-analytical phase, Metrology in laboratory medicine, Covid 19 pandemic, Forensic medicine, and a Leadership pre-congress course organized by CO-LABIOCLI will be part of the first day of the scientific program, that will be followed by three days of Symposia, Workshops, and Conferences in five simultaneous sessions.

COLABIOCLI and Wiener-Lab are inviting researches to apply for the Latin American Award Miguel Rojkín-Wiener Lab-COLABIOCLI 2022 in clinical biochemistry https://colabiocli.com/convocatoria-premio-wiener-lab-dr-miguel-rojkin-colabiocli-2022/.

Industry in Vitro Diagnostics are inviting speakers to lecture at workshops, as well as participating at the lab exhibition taking place at the Poliforum Leon.

For more information, please contact Kgroup at info@kgroup.com.mx

For the first time, there will be a Satellite Symposium entitled: the PRESENT, PAST AND FUTURE IN THE DIAGNO-SIS OF ARBOVIROSIS organized by the University Center of Health Sciences of the University of Guadalajara, Jalisco. This activity will take place a day before the XXV COLABIOCLI congress in Guadalajara, the capital city of Jalisco State, a 220 km city far from Leon,

Guanajuato Mexico. https://www.visitmexico.com/en/guanajuato/leon.

We are looking forward to having a very cosmopolite and interesting meeting, full of science and technology in Laboratory Medicine, in a friendly and respectful environment.

For information and registration please go to: https://colabiocli2022.com/.



Conclusions and recommendations of the Conference Reframe Rare in Pakistan: 'Bringing Synergies and Breaking Silos'

Aga Khan University, Karachi, Pakistan – 4-7 March 2020

by Dr. Aysha Habib KhanProfessor & Consultant Chemical Pathologist
Department of Pathology & Laboratory Medicine

Summary

These conclusions and recommendations were agreed upon by the participants of the conference *Reframe Rare in Pakistan: Bringing synergies and breaking silos*, Aga Khan University, (Karachi, Pakistan, 4th–7th March 2020).

Participants

The conference organizing committee, collaborating departments and organization, scientific program with preconference workshops and meetings published in the abstract book can be downloaded from the website: https://www.aku.edu/events/Pages/event-detail.aspx?EventID=1227&Title=Reframe+Rare+in+Pakistan:+Breaking+Silos+and+Bringing+Synergies.

Preamble

Rare diseases affect many aspects of the lives of affected individuals including their social, educational as well as their employment opportunities. Increased awareness and understanding, including adjustments where needed, can help to reduce this impact. However, delayed diagnosis and even misdiagnosis owing to difficulty accessing appropriate information as well as non-availability of diagnostic facilities, difficulty

accessing care, unavailability of experts help and poorly coordinated care are still the norm for rare disease patients and their families in Pakistan.

The conference brought together experts working on rare inherited diseases across Pakistan with the aim not only to create partnerships and synergies in knowledge and skills for rare disease diagnosis and management in Pakistan but also to find ways to achieve impact and outcomes in line with the vision of the sustainable development goals (SDG) in which no one is left without access to diagnosis and treatment.

It is critical that investments (both in research as well as in dedicated infrastructure and development of national networks such as bio banks, registries and networks of expertise providing opportunities to train health professionals on rare diseases) go hand-in-hand to achieve the aspired targets.

Recommendations from the conference

It is hoped that this conference will act as a cornerstone for continued sharing of practical experience and knowledge based on different approaches to optimally use and upgrade the available systems of rare disease diagnosis and care.

Participation & involvement

<u>Recognized</u> the underscoring of the disease burden on Pakistani population due to absence of local diagnostics

Recognized that rare diseases' diagnosis and management is about people. All stake holders should be made aware of, consulted and involved in the interpretation and assessment of rare diseases not only in the preparation and presentation of the issues and solutions but also in the development of management systems. The participants recommended that State authorities like Drug regulatory authorities of Pakistan (DRAP) should be engaged to improve rare disease diagnosis as well as management

<u>Further recognized</u> that patients and support groups play a central role in the management of rare diseases and consider their involvement as an essential prerequisite for a concrete action on rare diseases. This implies that the authorities, experts, and the support groups need to work together. A strong need to for the voices of rare disease patients to be heard.

Recognized the existing flaws in the legislation of each province regarding rare disease diagnosis and care system, the responsibility of the state, and acknowledged the existence of legislation in some province but absence of a National action plan. It was recommended to work in coordination with the government through the professional societies like Pakistan Society of Chemical Pathology (PSCP) and Pakistan Pediatrics Association (PPA). Both have the



One of the speakers at the Conference

capacity to do advocacy with health policy makers to formalize a policy for rare disorders in children, a step towards establishing a wider neonatal screening program.

<u>Agreed</u> on the important role of professional societies in implementation of the program for rare diseases including PPA, PSCP and Pakistan Society of Gynecology & Obstetricians.

Local & international co-operation

<u>Recognized</u> that multilateral and interdisciplinary approach can lead to new opportunities for achieving sustainable development and international cooperation.

<u>Recommended</u> that coordination and cooperation between local organizations is further enhanced, and stressed the need for strengthening ties between gynecologists, obstetricians, pediatricians, pathologists and biomedical scientists. Strongly encouraged to aggressively seek further opportunities for collaboration.

<u>Recommended</u> that greater efforts are made to share experiences of the diversity of management systems

<u>Recommended</u> that scientific research and interdisciplinary work in theory and practice should serve as a basis for management systems strengthening, particularly with a view to reinforce dialogue between policy makers and scientific knowledge holders in order to enhance to transmit local issues and indigenous knowledge by education.

Capacity-building

<u>Recommended</u> that efforts are to be made towards increasing understanding of the significance of human knowledge as capital as well as the basis for sustainable development.

<u>Agreed</u> that capacity-exchange is an essential addition to capacity building, and for this recognized a specific need for a wide institutional collaboration.

<u>Acknowledged</u> that capacity-building and capacity exchange are continuing processes, based on trust and enduring relationships that require a long term commitment.

<u>Further acknowledged</u> that capacity building and capacity-exchange constitute a continuous dialogue between all stakeholders that should concentrate on the development of skills and on awareness-raising. Both these processes should be flexible enough to encompass the diversity of management systems, and develop the expertise of the stakeholders technically, as well as in other essential skills such as managerial skills.

Partnerships

<u>Acknowledged</u> that diagnosis and management of rare diseases cannot be made sustainable without partnerships at all levels.

<u>Recognized</u> the fundamental role of the state in establishing and implementing long term partnerships and disease management.

<u>Recognized</u> the need for sustainable support structures and financing, creating benefits and win -win situations for all involved, as well as the necessity of developing built-in mechanisms.

<u>Advocated</u> the need for mainstream conversation and coordination mechanisms, building on the principals of holistic, long-term, comprehensive, ownership-based, participatory and partnership development.

<u>Agreed</u> to look at the larger picture for building partnerships, ensuring integration at all levels and across all provinces taking into account complexities and inter-dependencies. There is a necessity to build on similarities and to share, learn and listen. Also agreed on harmonization and standardization of laboratory tests notably for newborn screening.



Participants and speakers at the Conference

<u>Agreed</u> on improving local availability of testing facilities. A need to focus on the genetic make-up and identify areas where local collaborations can be made through sharing of data so that low cost genetic panels can be offered for patients.

<u>Agreed</u> on establishing minimum laboratory standards for starting a newborn screening program in Pakistan for regulation and monitoring of rare disease.

Message from Pakistan Pediatric Association Sindh to Organizers of Conference of Rare Disease Day – 7th March 2020 (via Prof. DS Akram to Dr. Aysha Habib Khan)

- a. PPA recognizes the importance of inherited disorders both chromosomal and metabolic in nature.
- b. PPA is working in coordination with the government in giving assistance in many government health projects and programs.
- c. PPA is obliged and finds it important to join the efforts of the AKU team and other institutions working towards synergistic efforts towards newborn screening, improving diagnostics and management of inherited metabolic disorders (IMDs) and other rare disorders in children.
- d. PPA has the capacity for advocacy with health policy makers for developing a policy for rare disorders in children, creating a wider neonatal screening program.
- e. PPA and its members will systematically provide information to parents regarding dangers of consanguinity, importance of neonatal screening as well as the essential access to diagnosis and management of IMD/rare disorders in children

Conclusion:

We welcome further discussions within the rare diseases community about how we can strengthen our cooperation to ensure that people with rare diseases are able to access the health services they need.



Networking with Young Scientists



Surfing on the wave of POCT innovations and m-Health in Biarritz

The 8th International Symposium "Alain Feuillu" Biarritz, France – June 10-11, 2021

by Bernard Gouget
Chair IFCC-C-MHBLM
Christian Aussel
Michel Vaubourdolle
Organizing Committee, 8th Int. Symposium "Alain Feuillu"



(L to R) Front: Carole Poupon, President Syndicat national des biologistes des Hôpitaux (SNBH);
Anne Vassault, IFCC TF-Global Lab Quality; Michel Vaubourdolle, Président of the 8th symposium on Critical care and Blood gases and IFCC-C-POCT; L. Chabraoui, IFCC representative Morrocco; Jean Gerard Gobert, Honorary President Fédération nationale des syndicats de praticiens biologistes hospitaliers et hospitalo-universitaire (FNSPBHU)

Background: Christian Aussel, chair Organizing Committee 8th symposium on Critical care and Blood gases; Tomas Zima, Rector Charles University, Prague; Francois Blanchecotte, President Syndicat des Biologistes (SDB); Jean-Marc Giannoli, President LABAC; Vincent Sapin, President SFBC; Bernard Gouget, chair, IFCC C-MHBLM.

The 8th International Symposium "Alain Feuillu" on Critical care testing and Blood Gases was held on June 10-11, 2021, in Biarritz (FR) at the heart of the Basque country. The city of Biarritz is very famous since Napoleon III and his wife Imperatrice Eugénie. Many kings and queens from all over Europe, and later figures of the Russian intelligentsia, set up their summer residences at the end of the 19th century. The 20th century saw Coco Chanel, Francis Scott Fitzgerald, Ernest Hemingway, and other personalities of the international Gotha. In the 1950s, when tourism developed at high speed on the Basque coast, the first surfers tasted the waves of the Basque Coast and Biarritz became the cradle of surfing in Europe combining its aristocratic lineage with a bohemian spirit. In the exceptional context of the fight against the pandemic and in accordance with the instructions issued by the administrative authorities, Michel Vaubourdolle, President of the Congress, member IFCC C-POCT, Christian Aussel, Chair Organizing Committee and Claire Bardin, member Organizing Committee ensured strict compliance with the health rules and devices dedicated to welcoming the participants and exhibitors including Abbott, Radiometer, Roche, Siemens Healththineers, Werfen, Biosynex, Iumira Dx, Quidel, Sysmex, Biocare, Hemocue et Ovvi Diagnostic.

Disruptive innovations have resulted in a revolution of our diagnostic ability and will take laboratory medicine to the next level of patient care. The use of IoT and artificial intelligence are another promising disruptive innovation that can transform the future of laboratory medicine and POCT. In this exceptional environment, 320 passionate medical biologists interested in emerging technologies and new clinical applications in POCT were welcomed in the jewel of the Basque coast. It was a breath of fresh air after these months of confinement and curfew. The Coronavirus Pandemic has also forced the organizers to consider new ways of designing the congress as a hybrid event combining in person and virtual experiences. The organizers got additional benefits such as an increased attendance as well as enhanced opportunities for foreigners and medical biologists on duty in their laboratory to participate and interact on-line.

In an increasingly globalized, connected, and complex world, health systems are frequently challenged by crises of all kinds. Since the beginning of the pandemic, we are living a crucial period where the medical biologist and Lab medicine are playing a key role. Collective and collaborative discussions are important to make progress to find answers that lead to change in order to anticipate the clinical needs in critical care and in a variety of other health care settings to embrace potentially useful and implementable innovations. In this respect, the organizers invited all the Presidents of the French leading organizations in lab medicine and representatives of the national academy of Medicine and Pharmacy to participate at this POCT Summit (see photo). The global objectives of the symposium were to study and to exchange with the attendees knowledge on the potential role of POC technologies enhancing clinical decision making as well as to identify the meaningful new technologies in clinical practice, to translate them toward the goal of better health through rapid POC diagnosis and to have a common approach in discussions with health authorities.

Prof. Khosow Adeli (CA), IFCC President, delivered the opening e-lecture on: POCT in Pediatric. POCT devices have small specimen volume requirements making POCT particularly attractive for pediatric healthcare settings. With advances in POCT technology, most POCT devices have the capability to interface to the laboratory information system and electronic medical record. POCT device interfacing allows for improved compliance to regulatory and quality assurance standards. The plenary lecture was delivered by Prof Hervé Delacour, Military Hospital Begin-St Mandé (FR). He focused on "the Management of critical care testing surge during the pandemics crisis" highlighting several critical issues in the existing emergency response systems. Globally, the armed forces showed high reliability and efficiency in these unprecedented circumstances. Observing, analyzing and learning from the pandemic is important from a common defense and interoperability perspective. The lessons learned from decades of experiences in humanitarian missions overseas, peacekeeping operations and expeditions have been extremely precious for safeguarding the entire population. From now on, health becomes a security issue, and the armed forces are showing high reliability and efficiency in these unprecedented circumstances.

Several thematic areas concerning POCT were of exceptional interest during the two days.

The first session, chaired first by Vincent Sapin (FR) and later by Tomas Zima (CZ) and L. Chabraoui (MO), was dedicated to the Identification and new use of POCT use in emergency situations. M. Merzouk and R. Cohen presented the organization of decentralized biology for prehospital care and N. Oueidat and P. Hausfater the importance of POCT in ICU. POCT is an essential diagnostic technology for optimal care, POCT reduce unnecessary attendance in emergency departments and inconvenience to patients. In the Intensive Care Unit (ICU), every second counts, changes in patient status can happen quickly and without warning. POCT can help reduce waiting times for lab results with accurate results. V. Planche and L. Satre-Buisson illustrated several examples in Point-of-care coagulation management in intensive care medicine. M. Wehler from Augsburg described the clinical management of POCT in head trauma patient. Francois Blanchecotte discussed the clinical benefits of POCT INR for dependent elderly patients in long-term care facilities.

The afternoon session was dedicated to the disruptive technologies in Critical care and was coordinated in duplex with the chair of the IFCC-CMHBLM and Alexander Haliassos, IFCC Treasurer, from Athens. D. Gruson, IFCC ETD member spoke on analytical aspects of nanotechnologies in m-Health. It is clear that with the increasing value of patient information to hackers, we will continue to see healthcare organizations, especially hospitals, targeted through their connected systems. Every player across the digital health eco-system needs to be responsible for cybersecurity and addressing patient safety risks. A.L. Scaillierez from the drone office (London, UK) highlighted the unique benefits as well as the hurdles to be overcome by drone delivery in healthcare breaking the chains of transmission, saving time and efficiency,24/7. D. Bouvier, CHU Clermont-Ferrand, described a multistep validation procedure for deployment, connectivity, monitoring of POCT in a Large Network of Connected Hospitals, coordinated by the referent University hospital.

After coffee break, the session was connected in duplex with the two chairs D. Gruson in Belgium, and S. Stankovic in Serbia. The first presentation was dedicated to new technologies based on gene amplification and usefulness in POCT by J Isopet. J.M. Bereder gave his vision on how artificial intelligence, which is the main driver of emerging technologies like big data, robotics and IoT, will continue to act as a technological innovator for the foreseeable future of critical care.

At the end of the afternoon, B. Gouget coordinated the session for the oral presentation of the three best posters: M. Brailova, Biochemistry and molecular genetic department, CHU Clermont-Ferrand, presented the evaluation of the GEM Premier Chemstat; M. Brousse, CHU Montpellier, described the advantages of Point-of-care testing for human chorionic gonadotrophin (hCG) at the *Gynaecological Emergencies and* M.C. Beauvieux, CHU Bordeaux, reported on the SFBC National survey on POCT use during the pandemics. L. Cynober gave the "AISA" awards for the best posters.

After this rich program, a beautiful promenade at the sunset was a must. We took some time at the viewpoints to observe the coastline and to look for pretty moments such as the sand artist who is making beautiful sketches on wet sand before stopping at the restaurant located in an art deco building on the main beach to taste the basque cuisine in a friendly and interactive atmosphere. We couldn't have been happier and thankful in these critical times.

The second day started with the plenary lecture delivered by Paul Robach, E.N.S.A (National School of Ski and Mountaineering), on Hypoxia in extreme environments. at high altitude and the interactive effects on blood volumes. Then, H. Portugal (FR) and P. Oliver (Madrid, ES) coordinated the morning session. S. Millet and C. Boutherre presented the POCT quality management in health care centers. M. Kuentz described a cost benefit-analysis of decentralized bold gases in a rural context. F. Dempsey in duplex from Dublin Hospital promoted clinical excellence and accreditation with POCT connected instruments. The integrity of data from the time the sample is taken to the time the result is displayed in the electronic patient record is a vital element of the patient care pathway. A robust connectivity system which reduces risk at every stage of the pathway will be a key element

in managing patient safety in Point of care testing. Tele-expertise and therapeutic education for patients under antithrombotic therapy was explained by C Bal-Sollier and P. Plessis discussed risk management of capillary Hemoglobin in emergency departments

During the afternoon round table with the Presidents of the national laboratory medicine organizations, it was acted that the POCT health economic evidence has increased and provides promising evidence around the organization of care, support of clinicians. Quality management and accreditation are crucial in the widespread implementation of POCT. The regulatory, and ethical framework for tests must be also carefully addressed. An open dialogue and a multidisciplinary approach are needed to overcome the challenges that face the implementation of disruptive innovations in laboratory medicine.

Thank you, Michel Vaubourdolle and Christian Aussel for the high level of organization and the professional-ism which made it possible to gather so many different experts and develop all the activities with success and for all you did to make participation in this Symposium so easy, pleasant and rewarding that you handled so successfully. The level and diversity of scientific discussion were outstanding. You have just the right mix of subjects, people, and time. You must be very proud of your work: you honored the memory of Alain Feuillu! Wishing you future successes!

News from the IFCC Website

24th August 2021 IFCC Free Webinar



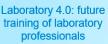
Siemens Boston Children's Hospital

Live Series 2021





IFCC Live Webinar on DIFFERENT PERSPECTIVES ON LABORATORY 4.0





Prof Dr Tomris Özben
[Turkey]
President-Elect
European Federation of Clinical
Chemistry and Laboratory Medicine

The advantages/disadvantages of Laboratory 4.0 in communication between laboratories and their clients



Dr Snežana Jovičić
[Serbia]
Head of Department
Clinical Center of Serbia



Consequences of Laboratory 4.0 for clinical practice in medical laboratories: present and future



Prof Dr Michael Neumaier
[Germany]
Chair for Clinical Chemistry and Laboratory
Medicine
Heidelberg University

Session Moderator: Prof Dr Tomris Özben

Date: 24 August 2021 Time: 11 AM Eastern Standard; 5 PM Central European; 11 PM Beijing Time



Click here for the on-demand content.

31st August, 2021 IFCC Free Webinar

IFCC Live Webinar on Metrology and clinical laboratory



Chair/Moderator IFCC EB COLABIOCLI

Basic concepts of metrology/ Applications in the clinical laboratory

Metrological traceability/ Reference Materials

Estimation of the uncertainty of measurement in the clinical laboratory



Dr. Ana Lena [Uruguay]



Dr. Ana Piana
[Uruguay]
Pharmaceutical Chemist and
Clinical Biochemist
CECC



Dr. Melina Pérez-Urquiza

[Mexico]

Chemical Metrology and

Biology Director

CENAM



Dr. Raul Girardi
[Argentina]
Chemist
National University of La Plata

Date: Aug 31, 2021
Time: 10 AM Eastern Standard Time; 4 PM European Time; 10 PM Beijing Time



Click here for the on demand content in English Click here for the on demand content in Spanish

8th September 2021 IFCC Free Webinar

IFCC Live Webinar on EVIDENCE-BASED LABORATORY MEDICINE



Chair/Moderator

Introduction to EBLM

Guideline Implementation

Point of Care Testing and EBLM



Prof Annalise E Zemlin [South Africa] Head of Division: Chemical Pathology at Stellenbosch University



Dr Seema Bhargava [India] Chairperson, Senior Consultant and Professor Sir Ganga Ram Hospital



Dr Andrew Don-Wauchope [Canada] Vice President - Clinical Services LifeLabs



Dr Katrina Rodríguez-Capote
[Canada]
Clinical Biochemist
Interior Health BC

Date: 8 September 2021
Time: 10:00 AM Eastern Standard, 16:00 PM Central European, 10:00 PM Beijing



Click here for the on demand content



Updates on EFLM publications

THE EUROPEAN BIOLOGICAL VARIATION STUDY (EUBIVAS): A SUMMARY REPORT

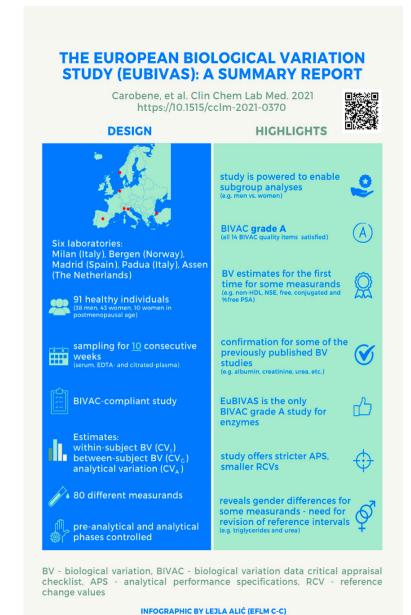
Carobene A, Aarsand AK, Bartlett WA, Coskun A, Diaz-Garzon J, Fernandez-Calle P, Guerra E, Jonker N, Locatelli M, Plebani M, Sandberg S and Ceriotti F

Clin Chem Lab Med 2021; Available from:

https://doi.org/10.1515/cclm-2021-0370.

Reported by Lejla Alić, member of the EFLM WG-Promotion & Publications

A recent study by the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) summarizes the European Biological Variation Study (EuBIVAS). The authors shortly describe the historical background and arguments for initiation of the study, followed by the overview of the design, including sample collection, study population, analytical methods, and data analysis. The study evaluated impressive 80 measurands in 91 healthy individuals and their biological variation (BV) estimates: within-subject BV (CVI), between-subject BV (CVG) and analytical variation (CVA). It is important to note that the EuBIVAS is compliant with all 14 Biological Variation Data Critical Appraisal Checklist (BIVAC) quality items and therefore is designated as BIVAC grade A study. Interestingly, the study reveals significant differences in some of the measurands between men and women, suggesting the need to revise traditional references intervals. Additionally, for some measurands prone to seasonal or other variations (e.g., inflammation markers, vitamin D), the authors discuss potential solutions for assessing their BV. This fundamental study offers high-quality BV data for a wide range of measurands and represents a basis for implementing further studies on issues that the EuBIVAS has uncovered.



Other recent EFLM publications:

SYSTEMATIC REVIEW AND META-ANALYSIS OF WITHIN-SUBJECT AND BETWEEN-SUBJECT BIOLOGICAL VARIATION ESTIMATES OF SERUM ZINC, COPPER AND SELENIUM

Coskun A, Aarsand AK, Braga F, Carobene A, Díaz-Garzón J, Fernandez-Calle P, Jonker N, Gonzalez Lao E, Marques-Garcia F and Sandberg S, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation and Task Group for the Biological Variation Database

Clin Chem Lab Med 2021 https://doi.org/10.1515/cclm-2021-0723.

WITHIN- AND BETWEEN-SUBJECT BIOLOGICAL VARIATION DATA FOR TUMOR MARKERS BASED ON THE EUROPEAN BIOLOGICAL VARIATION STUDY

Abdurrahman Coşkun A, Aarsand AK, Sandberg S, Guerra E, Locatelli M, Díaz-Garzón J, Fernandez-Calle P, Ceriotti F, Jonker N, Bartlett WA, Carobene A, on behalf of the European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Biological Variation

Clin Chem Lab Med 2021 https://doi.org/10.1515/cclm-2021-0283.

PRESENTATION AND FORMATTING OF LABORATORY RESULTS: A NARRATIVE REVIEW ON BEHALF OF THE EUROPEAN FEDERATION OF CLINICAL CHEMISTRY AND LABORATORY MEDICINE (EFLM) WORKING GROUP "POSTANALYTICAL PHASE" (WG-POST)

Cadamuro J, Hillarp A, Unger A, von Meyer A, Miquel Bauçà J, Plekhanova O, Linko-Parvinen A, Watine J, Leichtle A, Buchta C, Haschke-Becher E, Eisl C, Winzer J, Kristoffersen AH

Crit Rev Clin Lab Sci 2021 https://doi.org/10.1080/10408363.2020.1867051.

QUALITY BENCHMARKING OF SMARTPHONE LABORATORY MEDICINE APPLICATIONS: COMPARISON OF LABORATORY MEDICINE SPECIALISTS' AND NON-LABORATORY MEDICINE PROFESSIONALS' EVALUATION

Jovičić S, Siodmiak J, Duque Alcorta M, Kittel M, Oosterhuis W, Moberg Aakre K, Jørgensen P, Palicka V, Kutt M, Anttonen M, Velizarova MG and Marc J, European Federation of Clinical Chemistry and Laboratory Medicine Working Group on Patient-Focused Laboratory Medicine

Clin Chem Lab Med 2021 https://doi.org/10.1515/cclm-2020-0869.



IFCC WELCOMES A NEW MEMBER

GenScript Biotech Corporation



GenScript Biotech Corporation is a global biotech company. The Company's mission is to "Make the Human and Nature Healthier through Biotechnology". GenScript Biotech Corporation is a leading life sciences research and application service and product provider that applies its proprietary technology to various fields from basic life sciences research to translational biomedical development, industrial synthetic products, and cell therapeutic solutions.

With a mission to improve the health of mankind and nature through biotechnology, GenScript Biotech Corporation, Duke − NUS Medical School in Singapore, and the Diagnostics Development Hub (DxD) at Singapore's Agency for Science Technology and Research (A*STAR) have co-developed cPass™ SARS-CoV-2 Neutralization Antibody Test − a novel Surrogate Virus Neutralization Technology (sVNT) that detect total neutralizing antibodies in a sample. The cPass test is a safer, faster, easier and more consistent alternative to the traditional live virus- or cell-based tests, with comparable specificity and sensitivity.

The presence and level of neutralizing antibodies, which can decline over time, is an important indicator of the potential for re-infection. By providing the level of neutralizing antibodies in a vaccinated and previously infected individual, cPass enables better-informed decisions about whether a booster shot is needed. The cPass test can also be used to assess neutralizing antibodies for different SARS-CoV-2 variants.

cPass is commercialized in the U.S. as an ELISA-based semi-quantitative assay using plasma or serum samples. It can be performed in roughly 1 hour with simple ELISA readers. In addition, GenScript has tested the same product with finger-prick derived whole blood and found similar efficacy. With global strategic partners, GenScript is in the process of launching new product lines, including a chemiluminescent-based high-throughput assay, and a lateral flow-based 15-min home-use assay.

The only FDA-authorized serology test to detect the presence or absence of neutralizing antibodies, cPass is a more efficient alternative to traditional, highly complex cell-based assays. According to clinical data published in Nature Biotechnology, sVNT was able to detect neutralizing antibodies from patients with 99.93% specificity and 95%-100% sensitivity, with live-virus assay as the comparator. The cPass test does not require a biosafety level 3 facility and can test up to 92 samples per hour, significantly reducing the time required for neutralizing antibody detection.

The cPass™ kit is the only U.S. FDA Emergency Use Authorized serology test for neutralizing antibodies. The kit is also CE marked (Europe) and has received approval in Singapore, Brazil, Argentina, UAE, Malaysia, Thailand, Philippines, Taiwan etc as a medical device. Currently cPass is well received and serve as "gold standard" as a vaccine biomarker. As the coronavirus (COVID-19) pandemic continues to evolve globally, many of us have been inevitably impacted in our daily life. At this unprecedented moment, filled with challenges and uncertainty, Gen-Script is firmly committed to serving our clients, the research and healthcare community, and anyone in need of us, to the best of our abilities.

IFCC'S CALENDAR OF CONGRESSES, CONFERENCES & EVENTS

We advise readers to keep up-to-date about the evolving situation and possible rescheduled dates.

Contact organizing secretariats for updates on upcoming events.

Calendar of IFCC Congresses/Conferences and Regional Federations' Congresses

Sept 21, 2021	International Federation of Clinical Chemistry and Laboratory Medicine	IFCC Townhall 2021 Corporate Members	Online event
Oct 18 - 22, 2021	International Federation of Clinical Chemistry and Laboratory Medicine	IFCC WG-FC Autumn School of Cell Analysis in Immunology	Geneva, CH
Nov 11 - 13, 2021	Eugeration of Clinical Class	AFCC Congress 2021	Lusaka, ZM
Nov 26 - 28, 2021	XV ICPLM & Emerging Technologies in Pediatric Laboratory Medicine	International Congress of Pediatric Laboratory Medicine	Munich, DE
Nov 28 - Dec 2, 2021	EUROMEDLAB 2021 MUNICH	XXIV IFCC - EFLM EuroMedLab Munich 2021	Munich, DE

Dec 6 - 10, 2021	International Federation of Clinical Chemistry and Laboratory Medicine	IFCC-ICHCLR Workshop on overcoming challenges to global standardization of clinical laboratory testing: reference materials and regulations	Paris, FR
Mar 30 - Apr 2, 2022	COLABIOCLI	XXV COLABIOCLI Congress	Leon, MX
June 26 - 30, 2022	SEOUL 2020	XXIV IFCC WORLDLAB Seoul 2022 XVI APFCB Congress Seoul 2022	Seoul, KR
May 21 - 25, 2023	EUROMEDLAB ROMA 2023	XXV IFCC - EFLM WorldLab EuroMedLab - Rome 2023	Rome, IT
New date TBA	International Federation of Clinical Chemistry and Laboratory Medicine	IFCC Forum for Young Scientists	TBA

Other events with IFCC auspices

We advise readers to keep up-to-date about the evolving situation and possible rescheduled dates. Contact organizing secretariats for updates on upcoming events.

Mar 3 - Dec 3, 2021	Virtual Diploma in Clinical Biochemistry program	Mexico Online course
Jul 15 - Oct 15, 2021	Course on Analytical Quality Control from ABC to SIGMA	Mexico Online course
Aug 2, 2021 - Apr 3, 2022	Virtual Diplomat in Selected Topics of Diagnostic Hematology for the Laboratory (Advanced Level) Second Generation	Mexico Online course
Sep 1 - Nov 3, 2021	1st EFLM online Postgraduate course: Biostatistics in Laboratory Medicine	Online course
Sep 13 - 23, 2021	2nd EFLM online Postgraduate course on Leadership Skills	Online course
Sep 22 - 25, 2021	5th ACTC meeting "Liquid Biopsy in its best"	Kalamata, GR
Sep 23, 2021	International Conference on Laboratory Medicine: "The Ethics of Quality and Artificial Intelligence in Laboratory Medicine"	Padova, IT
Sep 28, 2021	The Global Creation and Monitoring of the Traceability of Test Results in the Medical Laboratory	The Netherlands, Online and on site event
Sep 30 - Oct 1, 2021	4th CELME 2021 - Emerging Challenges in Laboratory Medicine	Prague, CZ Hybrid event
Sep 30 - Oct 1, 2021	LMCE 2021	Online event
Oct 5 - Nov 4, 2021	Internal Audits in the Clinical Laboratory	Uruguay Online event
Oct 6 - 8, 2021	4èmes Journées Francophone de Biologie Médicale	Rennes, FR

Oct 7 - 10, 2021	46th ISOBM Congress	Bled, SI
Oct 20, 2021	Academia SEQC-ML: First Edition —External Quality Assurance Programs	Spain Online event
Oct 27 - 30, 2021	International Biochemistry Congress: 32nd National Biochemistry Congress of TBS	Gaziantep, TR
Oct 28 - 30, 2021	II National Meeting Conquilab and Technological	Mazatlan, MX
Nov 19 - 20, 2021	54 èmes Journées de Biologie Praticienne - JBP	Paris, FR
Nov 19, 2021	Annual Meeting of the Royal Belgian Society of Laboratory Medicine	Brussels, BE Hybrid event
Dec 1 -2, 2021	Journées de l'innovation en biologie JIB 2021	Paris, FR Hybrid event
Dec 3, 2021 - Jul 3, 2022	Virtual Diplomate in Clinical Biochemistry	Mexico Online course
Dec 6 - 7, 2021	X Molecular Cytopathology	Naples, IT Hybrid event
Feb 10 - 11, 2022	International Congress on Quality in Laboratory Medicine	Helsinki, Fl
May 23 - 26, 2022	10th Santorini Conference "Systems medicine and personalized health and therapy" — "The odyssey from hope to practice: Patient first — Keeps Ithaca always in your mind"	Santorini, GR
Oct 4 - 9, 2021	FEBS Advanced Course: 360-degree Lysosome; from structure to genomics, from function to disease-update	Izmir, TR
New date TBA	XXII Serbian Congress of Medical Biochemistry and Laboratory Medicine & 16th Symposium for Balkan Region	Belgrade, SRB

IFCC MEMBERSHIP

Full Members Albania (AL) Latvia (LV) Algeria (DZ) Lebanon (LB) Argentina (AR) Libya (LY) Australia and Lithuania (LT) New Zealand (AU/NZ) Luxembourg (LU) Austria (AT) Malawi (MW) Belgium (BE) Malaysia (MY) Bolivia (BO) Mexico (MX) Bosnia Herzegovina (BA) Montenegro (ME) Brazil (BR) Morocco (MA) Bulgaria (BG) Myanmar (MM) Canada (CA) Nepal (NP) Chile (CL) Netherlands (NL) China (Beijing) (CN) Nigeria (NG) China (Taipei) (TW) North Macedonia (MK) Colombia (CO) Norway (NO) Croatia (HR) Pakistan (PK) Cuba (CU) Palestine (PS) Cyprus (CY) Panama (PA) Czech Republic (CZ) Paraguay (PY) Denmark (DK) Peru (PE) Dominican Republic (DO) Philippines (PH) Ecuador (EC) Poland (PL) Egypt (EG) Portugal (PT) Estonia (EE) Romania (RO) Ethiopia (ET) Russia (RU) Finland (FI) Saudi Arabia (SA) France (FR) Serbia (SRB) Georgia (GE) Singapore (SG) Germany (DE) Slovak Republic (SK) Greece (GR) Slovenia (SI) Guatemala (GT) South Africa (ZA) Hong Kong (HK) Spain (ES) Hungary (HU) Sri Lanka (LK) Iceland (IS) Sudan (SD) India (IN) Sweden (SE) Indonesia (ID) Switzerland (CH) Iran (IR) Syrian Arab Republic (SY) Iraq (IQ) Thailand (TH) Tunisia (TN) Ireland (IE) Israel (IL) Turkey (TR) Ukraine (UA) Italy (IT) United Kingdom (UK) Japan (JP) Jordan (JO) **United States (US)** Kazakhstan (KZ) Uruguay (UY)

Regional Federations

Vietnam (VN)

Zambia (ZM)

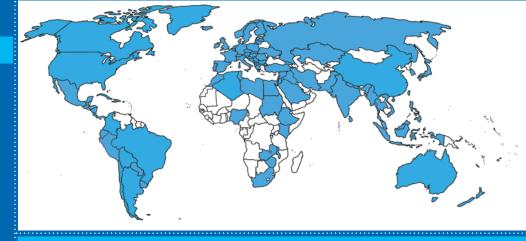
Zimbabwe (ZW)

Kenya (KE)

Korea (KR)

Kosovo (XK)

Arab Federation of Clinical Biology (AFCB)
African Federation of Clinical Chemistry (AFCC)
Asia-Pacific Federation for Clinical Biochemistry
and Laboratory Medicine (APFCB)
European Federation of Clinical Chemistry
and Laboratory Medicine (EFLM)
Latin America Confederation
of Clinical Biochemistry (COLABIOCLI)
North American Federation of Clinical Chemistry
and Laboratory Medicine (NAFCC)



Corporate Members

Abbott A. Menarini Diagnostics Mindray - Shenzhen Mindray Bio-Medical Agappe Diagnostics, Ltd. Nittobo Medical Co., LTD. Asahi Kasei Pharma Corp. **Nova Biomedical Corporation** BD Life Sciences – Preanalytical Systems **Oneworld Accuracy Collaboration** Beckman Coulter, Inc. Ortho-Clinical Diagnostics, Inc. The Binding Site Group, Ltd. PerkinElmer **Bio-Rad Laboratories** PHC Europe B.V. C.P.M. Diagnostic Research, SAS Radiometer Medical ApS DiaSys Diagnostic Systems GmbH Randox Laboratories, Ltd. ET Healthcare Inc. **Roche Diagnostics** Fujifilm Wako Pure Chemical Corporation Sebia S.A. Fujirebio Europe Sekisui Diagnostics Ltd. Gentian, AS Sentinel CH SpA **GenScript Biotech Corporation** Shanghai Kehua Bio-Engineering Co., Ltd. Helena Biosciencies Europe Shanghai Zhicheng Biol. Tech. Co., Ltd. Hemas Hospitals (PVT) Ltd. Shenzhen YHLO Biotech Co., Ltd HyTest, Ltd. Siemens Healthcare Diagnostics Immunodiagnostic Systems - IDS Snibe Co., Ltd. **Instrumentation Laboratory** Sysmex Europe, GmbH Labtronic **Technogenetics** LumiraDx Thermo Fisher Scientific

Affiliate Members

Tosoh Corporation

Labor Dr. Wisplinghoff

Wuhan Life Origin Biotech Joint Stock Co., Ltd.

Brazil: Sociedade Brasileira de Patologia Clínica / Medicina Laboratorial (SBPC/ML) China: Lab Medicine Committee, China Association of Medical Equipment (LMC)

Egypt: Egyptian Association of Healthcare Quality and Patient Safety

France: French National Network of Accredited Laboratories of Medical Biology (LABAC)

India: Association of Medical Biochemists of India (AMBI) Iran: Iranian Association of Clinical Laboratory Doctors (IACLD) Jordan: Society for Medical Technology & Laboratories (SMTL)

Maccura Biotechnology Co., Ltd.

Megalab, JSC

MedicalSystem Biotechnology Co., Ltd.

Kazakhstan: Public Association - Federation of Laboratory Medicine (FLM)

Mexico: Federación Nacional de Químicos Clínicos (CONAQUIC A.C.)

Nepal: Nepalese Association for Clinical Chemistry (NACC)

Philippines: Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL)

Romania: Order of the Biochemists, Biologists, Chemists in Romanian Health System (OBBCSSR)

Serbia: Serbian Society for Clinical Laboratory Medicine and Science (SCLM)

Spain: Andalusian Society for Clinical Analysis and Laboratory Medicine (SANAC)

Asociación Española de Farmacéuticos Analistas (AEFA) Sri Lanka: College of Chemical Pathologists of Sri Lanka (CCPSL)

Turkey: Society of Clinical Biochemistry Specialists (KBUD)

Ukraine: Association for Quality Assurance of Laboratory Medicine (AQALM)





Publisher

Communications and Publications
Division (CPD) of the IFCC

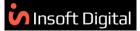
The Communications and Publications Division publishes ten editions of the e-News per year, including two double issues.

Editor

Katherina Psarra, MSc, PhD Department of Immunology - Histocompatibility Evangelismos Hospital, Athens, Greece

E-mail: enews@ifcc.org

Design & Production:



Circulation

The eNews is distributed to all IFCC members registered on-line to receive it and to all IFCC sponsors.

Deadlines for submissions to the eNews

N° 1/2 – January/February: by mid January

N° 3 - March: by mid February

N° 4 – April: by mid March

N° 5 - May: by mid April

N° 6 - June: by mid May

N° 7/8 – July/August: by mid June

N° 9 – September: by mid August
N° 10 – October: by mid September

N° 11 – November: by mid October

N° 12 – December: by mid November

If you want to submit an article or advertisement

to be published in the eNews, send it to: Katherina Psarra, Editor, IFCC eNews

E-mail: enews@ifcc.org

Copyright © 2021 IFCC. All rights reserved. Contents may not be reproduced without the prior permission of the Communications and Publications Division (CPD) of the IFCC.