



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



N° 11 – November 2021



In this issue

EDITORIAL

- ▶ Message from the eNews Editor 3

THE VOICE OF IFCC

- ▶ IFCC President's message – November 2021 4

CONTRIBUTE TO THE IFCC eNEWS

- ▶ Scientists who unlocked secrets of pain sensation win Nobel Prize 12
- ▶ Last call for applications
to the UNIVANTS of Healthcare Excellence Award Program 13

NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES

- ▶ News from the Canadian Society of Clinical Chemists (CSCC-SCCC) 17
- ▶ 4th JFBM in Rennes: Lab Medicine 4.0, smart tech and ethical issues 19
- ▶ Cutting edge laboratory management in Europe:
4th CELME Symposium 2021 23

IFCC'S CALENDAR OF CONGRESSES, CONFERENCES & EVENTS

- ▶ Calendar of IFCC Congresses/Conferences
and Regional Federations' Congresses 27
- ▶ Other events with IFCC auspices 29

EDITORIAL

Message from the eNews Editor

by Katherina Psarra
eNews Editor

Dear colleagues,

We are all so excited to finally have the opportunity to meet in person at the end of the month. We have missed this personal contact so very much. IFCC has been present in our lives throughout this time when we were physically apart. Emails featuring IFCC arrive in our inbox quite often. IFCC is organizing an interesting new webinar. IFCC is putting together the Town Halls. We have been in touch, but it will be so more wonderful when we meet in Munich.

Of course, some of the sessions will be available online, for all of you who cannot attend in person and members of the committees and workshops can participate on line if they cannot attend. Try to be present either way, try to be in the congress!

In this issue, our President Prof Adeli is presenting the 2022 General Conference in Brussels and the new IFCC Taskforces on Global Reference Interval Database and on Outcome Studies in Laboratory Medicine.

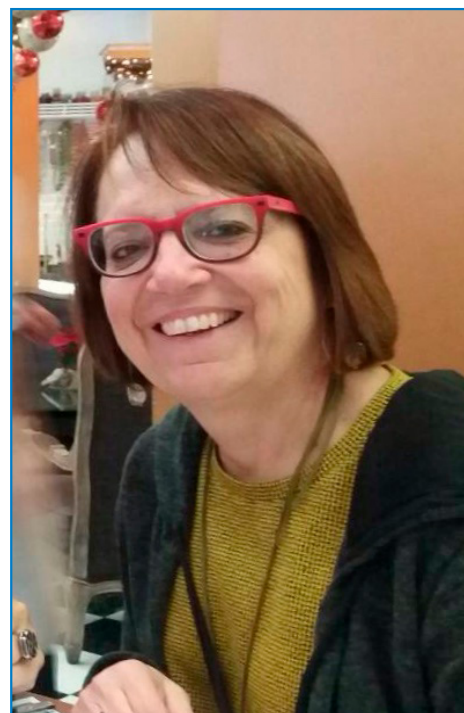
David Julius and Ardem Patapoutian, from the United States, share the 2021 prize in Medicine or Physiology for their work on sensing touch and temperature. Read about this sensational scientific discovery in this eNews issue and perhaps you will then want to find more information in the literature.

Have you submitted your best practice to the UNIVANTS of Healthcare Excellence Award Program? Don't miss the opportunity to share your research and cooperation results with the scientific community and to be rewarded for it.

A report of the 4th Journées Francophones de Biologie Médicales in Rennes, Brittany, France includes information about this historic city and its surroundings, together with the scientific information presented during that conference.

Till the next issue don't forget to look at the wonderful autumn colours!... and to go through all of our articles.

Katherina Psarra



Katherina Psarra
MSc, PhD

THE VOICE OF IFCC

IFCC President's message – November 2021

by Khosrow Adeli
IFCC President



Prof. Khosrow Adeli
PhD, FCACB, DABCC, FAACC

My sincere greetings to you all in the IFCC family. I am excited to announce that the **2022 IFCC General Conference** will be held in **Brussels, Belgium, from October 25-30, 2022**. Of note, this meeting is taking place at a special time because next year will be the 70th Anniversary of IFCC, and we will surely be celebrating this milestone. It will be a delight for us to be able to gather in person once again and foster collaboration between our divisions. The venue, the Radisson Collection Hotel located in the heart of the city of Brussels, will provide the perfect meeting space to convene the IFCC functional units and national representatives from around the world. Formal announcements and invitations will be sent out shortly.

In other news, I am delighted to share that we have established the membership for the **IFCC Taskforce on Global Reference Interval Database (TF-GRID)**. Chaired by Dr. Jakob Zierk, Germany, this taskforce will work towards creating a centralized global reference interval database, which will act as a key global resource on pediatric, adult, and geriatric reference intervals for both IFCC members and non-members. The website is currently under development and the

first phase, which highlights major reference interval studies from around the world, should be available soon. Thereafter, the taskforce will create a harmonized tool for global users to upload data and calculate reference intervals using various statistical methods and create an IFCC mobile app for easy access to the reference interval database. This group will also analyze global reference interval data to (1) create scatterplots of reference values in individuals from regions across the world, (2) assess potential similarities and differences in reference data between countries and/regions, and (3) assess opportunities for reference interval harmonization.

Membership for the **IFCC Taskforce on Outcome Studies in Laboratory Medicine (TF-OSLM)** has also been established, aside from the Chair position that is currently vacant and to be appointed. This taskforce will promote the value of laboratory medicine by gathering evidence to demonstrate the critical role of laboratory medicine in clinical decision-making and healthcare delivery as well as communicating these findings to key stakeholders and the public. Developing the evidence to support the value of laboratory medicine in patient care is a key component of our long-term strategy to promote the importance of diagnostic medicine in both patient care as well as public health. The TF-OSLM will aid in the development of a funded research program to assist scientists in institutions around the world with conducting both retrospective and prospective studies to assess outcomes related to the value of laboratory medicine in healthcare. Future plans also include the creation of a database for IFCC members that contains publications that demonstrate this value.

Article continued on next page

Finally, a **third IFCC Town Hall** was recently held on October 20, virtually bringing the IFCC community together in the Asia Pacific (AFPCB) region for the purpose of improving internal communication within IFCC. **The fourth IFCC Town Hall** for North America (NAFCC) and Central/South America (COLABIOCLI) regions was held on November 8. The IFCC Executive Board invited the Board Members and National Society Presidents of NAFCC (AACC and CSCC) and COLABIOCLI to join in. IFCC, NAFCC, and COLABIOCLI members in this region attended this event and participated in the discussion forum. Full [recordings](#) of the IFCC Town Halls are available on-demand.

I hope we can look forward to these future events and appreciate the great progress IFCC continues to make throughout the year, despite the pandemic! Should you have any feedback, questions, or concerns, please feel free to email me at president@ifcc.org.

Till next time 😊

Khosrow

News from the IFCC Website



Invitation to host the IFCC WorldLab 2024 - 26th International Congress of Clinical Chemistry and Laboratory Medicine (ICCCLM)

The IFCC WorldLab is one of the most significant international scientific congresses in the field of Clinical Chemistry and Laboratory

Medicine. The WorldLab also hosts the IFCC Council and serves as the focal point for the activities of IFCC and its working relationships with its Regional Federations and Full Member Societies.

It is normal practice for the WorldLab to be hosted by one or more of the Full Members and we invite you to consider whether your society may wish to host the 26th IFCC WorldLab in 2024, in collaboration with your Regional Federation. A copy of the Updated Guidelines for organising a WorldLab as well as the Application Form are available [here](#).

Guidelines outline the terms, conditions and procedures that will apply and the nature of the working relationship between IFCC, Regional Federation and the host society. Based on these new guidelines, the IFCC WorldLab Congresses will be held every TWO (2) years (2024, 2026, 2028, 2030). The IFCC conference in Europe (EuroMedLab) will be held jointly with EFLM in the intervening alternate years (2023, 2025, 2027, 2029).

Any Full Member Society outside Europe may apply to host the 26th WorldLab in collaboration with their Regional Federation. Completed application forms should be submitted electronically by e-mail to the IFCC Office (Silvia Cardinale at ifcc@ifcc.org) to arrive no later than November 25, 2021.

News from the IFCC Website

EUROMEDLAB Munich 2021 HYBRID



We have the pleasure to inform you that we already have 2100 attendees coming to Munich.

Since we are aware about COVID-19 restrictions in some countries, we would like to offer you an additional opportunity.

Besides the Live Euromedlab in Munich, we are glad to announce the Hybrid Euromedlab. If you are not able to attend the conference in person, you have the chance to attend some virtual symposia.

[Read more](#)

News from the IFCC Website

eJIFCC Vol 32 n°3 - October 2021



eJIFCC Vol 32 n° 3 is now available!

In this issue: POCT – making the point. Prof János Kappelmayer introduces the issue as follows: "This recent issue of the eJIFCC contains four additional manuscripts on topics that were presented at the Rome POCT Conference held between September 6-7, 2021.

The organization of this conference began in the midst of the pandemic when colleagues around the world were under tremendous pressure to fight Covid-19. The meeting had been postponed to a new date and finally, it was held successfully in the form of a hybrid conference with almost 200 registrations from 37 different countries (122 in person and 76 online).

In particular, the role of POCT was also highlighted during the Covid-19 pandemic in screening and monitoring programs. I think we should be grateful for the perseverance of the organizers, particularly Professor Sergio Bernardini, and all the participants, particularly those who undertook the travel burdens in these uneasy times and made this IFCC/EFLM conference a lively event".

Six more articles complete the issue.

[Read more](#)



MAGLUMI® X3

Save Your Space without Compromise

* Compatible with Small and Medium-sized Hospitals and Labs

All Balanced and Strong



Small but strong

The throughput is up to 200 tests/hour, and the throughput per unit area is 294 T/h/m². Compatible with all MAGLUMI® reagents with perfect compatibility (166 parameters).



Convenient and efficient

No-pause loading/unloading of reagents/samples/reaction cups without waiting or interrupting tests. Intuitive indicator lights make no need to check reagents and consumables frequently.



Low failure rate and accurate result

The single reaction cup can avoid light pollution and increase cuvette utilization, its integrated packaging can avoid the stuck of the cuvette, cuvette blockage and scratches.



Cost-efficient and intelligent

TEFLON-coated pipetting needle is equipped with independent washing unit to avoid carry-over (Small workload analyzer have higher consumable costs when using disposable Tips).



Excellent performance

The comprehensive advanced design of MAGLUMI® X3 ensures excellent performance, such as the latest intelligent washing technology and bidirectional temperature control measurement.

LabTalk Webinar on Diagnostic Center Management - Ep 2

Part 1: Lab Management Forum Part 2: Roundtable Discussion

Nov 18th, 20:00 (UTC+8: Beijing) 14:00 (CET: Germany) 9:00 (BRT: Chile)



Host



Prof. Khosrow Adeli 

- IFCC president, Senior Scientist in the Program in Molecular Structure and Function, Research Institute, The Hospital for Sick Children, University of Toronto

Speaker

Total Quality Management in Hematology and Chemistry Laboratories: Current Guidelines and the Future



Prof. Egon Amann



- Independent consultant in Life Sciences, Quality Systems and Clinical Chemistry
- Professor Emeritus of Marburg's Philipps University and University of Applied Sciences Hamm-Lippstadt, Germany
- Co-Chair of IFCC Task Force on Global Lab Quality (TF-GLQ)

Quality Management in Hematology Laboratory and State of Art labXpert



Assc. Prof Esin AVCI



- Assc. Prof Medical Biochemistry Department, Pamukkale University
- Laboratory Quality Management Director

Why Will Accreditation against ISO 15189 Improve Patient Outcomes



Prof. Tony Badrick



- CEO of the Royal College of Pathologists of Australasia Quality Assurance Programs based in Sydney
- Chair of the Education & Management Committee and the Scientific Committee, APFCB

Optimization and Development of Blood Cell Analysis Process



Prof. Carolina Prieto Castillo



- ALAPAC/ML Vicepresident- International Relationships, SMLC-Chile President
- Formato Clinico Chile Director
- H Dipreca Clinical Laboratory Medical Director Santiago- Chile

[Click to register >](#)

News from the IFCC Website

DIAGNÓSTICO IN VITRO October issue

Enjoy the contents of the new DIAGNÓSTICO IN VITRO October issue.

Dr. Girardi, Director de DiV dice: “Estimados colegas de la comunidad Iberoamericana.



Me complace una vez más publicar la edición Nro. 19 de la Revista Científica Diagnóstico in Vitro.

Con el objetivo de difundir y promover las actividades científicas, relacionada con nuestra profesión y modestamente, generar un lugar de reflexión es

que se ha trabajado en el número que les presento, no sin antes agradecer la enorme colaboración del Comité de Redacción y especialmente el Consejo Editorial de inestimable eficacia y celeridad que hace de la edición una tarea muy placentera.

Por supuesto un profundo agradecimiento a los autores que confiaron en esta revista para compartir sus actividades

En este número encontrarán la descripción de varios eventos científicos y una serie de trabajos de investigación tanto originales solamente publicados en esta revista como aquellos que consideramos de interés para difundir entre la comunidad cedidos gentilmente por los autores y las publicaciones de origen. Concluye la revista un reportaje Dr. Alan H.B. Wu donde nos cuenta su libro su libro “El asesino oculto: cuando las pruebas de laboratorio clínico salen mal”.

Espero disfruten la edición tanto como a mí me provocó armarla.

[Read more](#)

News from the IFCC Website

IFCC Information Guide on COVID-19 - 20 October 2021 Updates



Click on the link and access the IFCC online resource about COVID19 providing critical information on laboratory guidelines, biosafety, and other important resources to assist member societies worldwide and their clinical laboratories as they face the challenges posed by the COVID-19 outbreak.

The SECTIONS on: Molecular Testing - Antigen Testing - Serology Testing - The vaccines section has been updated with new publications.

The page is updated continuously with the most recent information on a monthly basis.

[Read more](#)

SAVE THE DATE

We invite you to
the re-scheduled
ICPLM Congress
to be held and
delivered
fully virtually
on 26th - 27th
November 2021
New registration
fees are available



XV ICPLM

Emerging Technologies in
Pediatric Laboratory Medicine

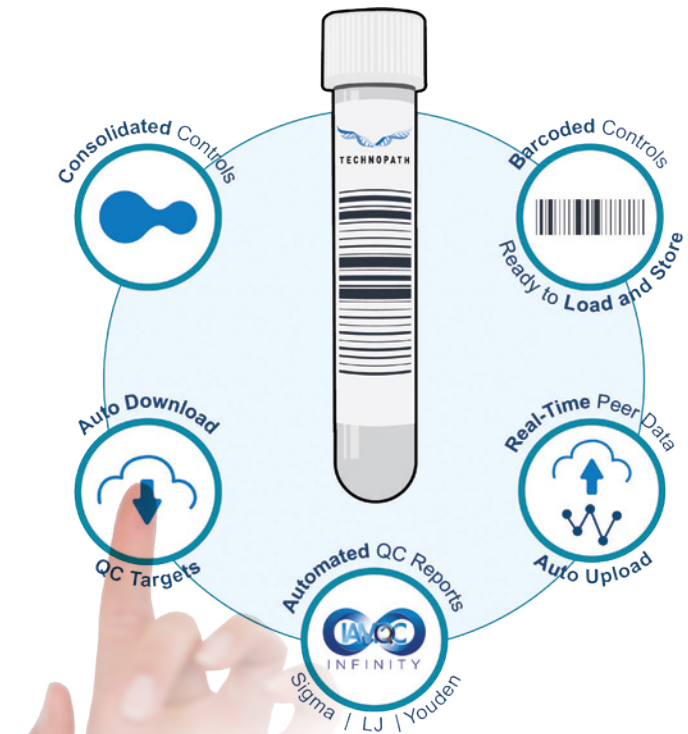


www.icplm2021.org



TECHNOPATH
CLINICAL DIAGNOSTICS

Meet us at **EuroMedLab**, Munich
Stand **117-118**, Nov 29 - Dec 2



Visit us to discover which of our **automated QC solutions** is the best fit for your laboratory.

Arrange a meeting with one of our Product Specialists at info@technopathcd.com



Arrange a Meeting

www.technopathcd.com



TECHNOPATH
CLINICAL DIAGNOSTICS

CONTRIBUTE TO THE IFCC eNEWS

Scientists who unlocked secrets of pain sensation win Nobel Prize



David Julius and Ardem Patapoutian, from the US, share the 2021 Nobel Prize in Physiology or Medicine for their work on sensing touch and temperature.

Physiologist David Julius, PhD, University of California San Francisco, and neuroscientist Ardem Patapoutian, PhD, Scripps Research in La Jolla, California, have jointly been awarded the 2021 Nobel Prize in Physiology or Medicine for their discoveries of receptors for temperature and touch. Their discoveries paved the way for new treatments for a wide range of disease conditions, including chronic pain.

“Our ability to sense heat, cold, and touch is essential for survival and underpins our interaction with the world around us,” the Nobel committee, in Stockholm, Sweden, said in a news release. “In our daily lives we take these sensations for granted, but how are nerve impulses initiated so that temperature and pressure can be perceived? This question has been solved by this year’s Nobel Prize laureates.”

Julius and his collaborators used capsaicin, a pungent compound found in chili peppers that produces a burning sensation, to identify TRPV1, an ion channel activated by painful heat. The discovery of TRPV1 was a major breakthrough leading the way to the unravelling of additional temperature-sensing receptors.

Article continued on next page

Both Julius and Patapoutian used menthol to identify another receptor called TRPM8 that is activated by cold. Additional ion channels related to TRPV1 and TRPM8 were identified and found to be activated by a range of different temperatures. The discoveries fueled other scientists to investigate the roles of these channels in thermal sensation. Julius' discovery of TRPV1 was the breakthrough that allowed us to understand how differences in temperature can induce electrical signals in the nervous system.

As the mechanisms for temperature sensation began to unravel, Patapoutian and his collaborators used cultured pressure-sensitive cells to identify an ion channel activated by mechanical stimuli in the skin and internal organs. It was given the name Piezo1, after the Greek word for pressure. Through its similarity to Piezo1, a second gene was discovered and named Piezo2. Sensory neurons were found to express high levels of Piezo2, and further studies firmly established that Piezo1 and Piezo2 are ion channels that are directly activated by the exertion of pressure on cell membranes. The groundbreaking discoveries of the TRPV1, TRPM8, and Piezo channels by this year's Nobel Prize laureates have allowed us to understand how heat, cold, and mechanical force can initiate the nerve impulses that allow us to perceive and adapt to the world around us.

Julius and Patapoutian will receive a gold medal and share the \$1.14 million prize money.



**Last call for applications
to the UNIVANTS of Healthcare Excellence Award Program**

Have you submitted your best practice?

The UNIVANTS of Healthcare Excellence awards recognize integrated clinical care teams that have led best practices in care delivery, with measurably better outcomes for patients, payors, clinicians and health systems/administration. On **November 15th, 2021**, the award cycle for 2021 officially closes.

WHAT DOES A GOOD APPLICATION LOOK LIKE?

Applications vary substantially across topics, disease states, continents and integrated clinical care teams with representative best practice examples of previous winners found on the program website here: univantshce.com (*Winners*). However, minimum award criteria is consistent across teams in order to be considered for this elite recognition. Those criteria include:

1. The clinical care initiative must be implemented into clinical practice.
2. The clinical care initiative must include at least three disciplines (including Laboratory Medicine/ Pathology).
3. There must be at least one measurable impact or Key Performance Indicator (KPI) associated with each of the four stakeholders: patients, clinicians, health systems/ administration, and payors.
4. Measurable impact can be assessed both quantitatively (preferred) or qualitatively, but there must be at least **two** quantitative metrics that supports the measurably better healthcare performance within the application.
5. There cannot be more than four qualitative metrics used for the impact analysis.

HOW DO I SUBMIT MY BEST PRACTICE?

With all the necessary data to support your key performance indicators (KPIs), an overview of your best practice and any necessary supporting documentation, submission of your best practices can be done electronically through the UNIVANTS application site, found here: univantshce.com (Login). Key documents to enable a strong application can also be found on the UNIVANTS website (www.UnivantsHCE.com) including, an updated applicant guide. If you have additional questions and/or would like to speak directly with someone from the award administration team, please send all direct inquiries to univantsofhealthcareexcellence@abbott.com.

WHAT'S NEXT?

For those who have submitted applications and those who eagerly await the announcement of this cycle's winners, mark your calendar! **July 2022** the next UNIVANTS of Healthcare Excellence Award Winning Teams will be announced.

With less than a week to submit your best practice, the countdown is on... Are you ready?

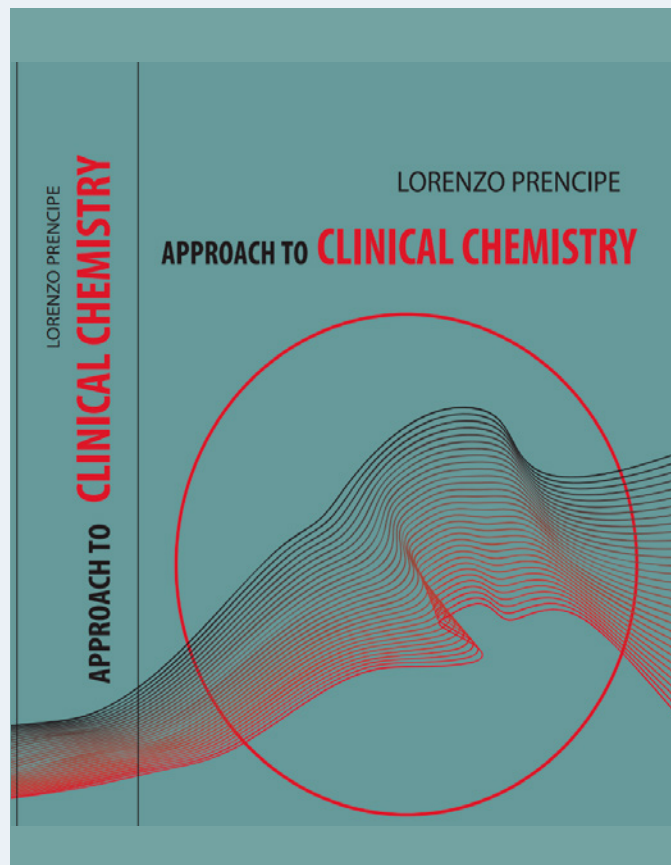
Quality laboratory testing starts with operator training.
This book can help with that. You can buy it on <https://amzn.to/2SRqtVM>

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.



Milano Niguarda Hospital

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

News from the IFCC Website

The IFCC Town Halls for Asia Pacific, and Latin and North American Regions are already available if you missed them!



The recordings of the latest two IFCC Town Halls, for **APFCB** and for **COLABIOCLI - NAFCC**, are now available. You can access them as on-demand content and listen to all the presentations on current and upcoming IFCC programs and new initiatives globally, as well as the subsequent discussions during the Q&A sessions.

News from the IFCC Website

20th October 2021 IFCC Webinar

IFCC Webinars
Sponsored by
Siemens
Boston Children's Hospital

**Live Series
2021**

www.ifcc.org

IFCC Live Webinar on Ethical dilemmas in laboratory medicine during pandemic



Some unique ethical challenges arising from clinical practice with Australia's remote-dwelling Aboriginal people



Dr. Richard Davey
[Australia]
Physician
Member of the IFCC Task-Force on Ethics

Ethical concerns and requirements regarding the use of COVID-19 diagnostic samples for research



Dr. Federico Remes Lenicov
[Argentina]
Research associate
Faculty of Medicine, University, Buenos Aires

Addressing Health Disparities Highlighted by the COVID-19 Pandemic



Dr. Joe Wiencek
[USA]
Assistant Professor of Pathology, Microbiology and Immunology, Vanderbilt University, USA

Chair/Moderator



Dr. Nilda Fink
[Argentina]
Chair of the IFCC Task-Force on Ethics

Date: October 20, 2021
Time: 10 AM Eastern Standard Time; 4 PM European Time; 10 PM Beijing Time



[Click here for the on demand content](#)

27th October 2021 IFCC webinar

IFCC Live Webinar on
Common laboratory measures of dysglycaemia;
Their strengths and weaknesses



Scan to Register

Chair/Moderator



Dr. Tina Yen [Australia]
AACB President,
Chemical Pathologist
St George Hospital, Kogarah, NSW

Laboratory measurement of
glucose



Mr. Greg Ward [Australia]
Department Head Biochemistry
Sullivan Nicolaides Pathology, Brisbane,
Queensland

Insulin analysis in
hyperglycemia



A/Prof. Paul Williams [Australia]
Principal Research Fellow
The University of Sydney (Central
Clinical School), NSW

HbA1c – still the gold standard?



A/Prof. Ken Sikaris [Australia]
Director of Chemical Pathology
Melbourne Pathology, Melbourne,
Victoria

Date: October 27, 2021

Time: 6:00 PM (Sydney - AEDT), 9:00 AM (Milan - CEST), 3:00 AM (US EDT)



[Click here for the on demand content](#)

28th October 2021 IFCC webinar

IFCC Live Webinar on
Alzheimer's disease therapeutics & biofluid tests:
Current practice and future prospects



Chair/Moderator



Dr. Robert Rissman [US]
Associate Professor
University of California San Diego

A primer on Alzheimer's
neuropathology and current
treatments



Dr. Haakon B. Nygaard [Canada]
Assistant Professor of Neurology; Director,
UBC Hospital Clinic for Alzheimer's Disease
and Related Disorders
University of British Columbia

Clinical implementation
of CSF biomarkers for
Alzheimer's disease



Dr. Mari DeMarco [Canada]
Clinical Chemist, Providence Health
Care; Clinical Associate Professor,
University of British Columbia

Blood-based biomarkers of
Alzheimer's disease



Dr. Melissa Budelier [US]
Medical Director of Clinical Chemistry
and Toxicology
TriCore Reference Laboratories

Date: October 28, 2021

Time: 9:30 AM Pacific Time (Vancouver), 6:30 PM European Time (Rome), 13:30 PM Argentina Time (Buenos Aires)



[Click here for the on demand content](#)

NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES



News from the Canadian Society of Clinical Chemists (CSCC-SCCC)

New CSCC-SCCC Council members elected in September



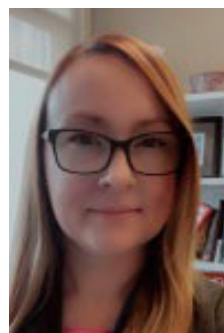
The Canadian Society of Clinical Chemists (CSCC-SCCC) is pleased to announce our new Council members who were elected at our annual meeting held in September.



Allison Venner
President



Paul Yip
President-Elect



Teralee Burton
Secretary



Saranya Arnoldo
Treasurer



Lori Beach
Head, Public Outreach
Division



Anna Fuezery
Head, Education &
Scientific Affairs
Division



Danijela Konforte
Head, Professional
Affairs Division



Nicolas Tétrault
Head, Publications
Division

Article continued on next page



Lawrence de Koning
Councillor



Christopher McCudden
Councillor



Uvaraj Uddayasankar
Councillor

We thank our members who served on the previous Council whose term ended in 2021 for their significant efforts and successful contributions to the Society. We look forward to another successful year with our new Council!

The updated website of the CSCC-SCCC can be found at www.cscs.ca.



www.ifcc.org



ADVERTISE in IFCC eNews!

Showcase your products and initiatives to more than 23.000 laboratory medicine specialists throughout Europe, North America, Asia-Pacific, Middle East, Africa and Latin America: laboratory directors, clinical chemists, and other clinical laboratory specialists and technologists, leading manufacturers, distributors and dealers in the field.

- Ten issues per year
- Free-of-charge to readers
- Interactive digital edition

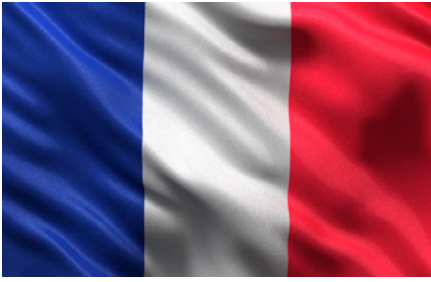


Published ten times a year:

N ^o 1/2	January/February
N ^o 3	March
N ^o 4	April
N ^o 5	May
N ^o 6	June
N ^o 7/8	July/August
N ^o 9	September
N ^o 10	October
N ^o 11	November
N ^o 12	December

For prices, formats and any further information on how your company can gain unique access to international markets through advertising with IFCC, please email us at enews@ifcc.org.

IFCC Corporate Members receive a 25% discount on current prices.



4th JFBM in Rennes: Lab Medicine 4.0, smart tech and ethical issues

by **Bernard Gouget**, Chair IFCC-C-MHBLM
Vincent Esteve, Chair SC 4eJFBM
Carole Poupon, Présidente 4e JFBM
Damien Gruson, Member IFCC-ETD

At just 1 hour and a half from Paris, Rennes the capital of Brittany is the beating heart of the whole region. Here Breton music is danced to, galettes eaten at lunchtime and besides that, so much culture and science radiate out with many universities; the ideal place for the 4th Journées Francophones de Biologie Médicales (JFBM). To stay in this region is to be immersed in the legendary Brocéliande forest which is the birthplace of the tales of King Arthur. Just the mention of this place awakens a wonderful world populated by the fairy Viviane, Merlin the great enchanter or the knight Lancelot. The land of the knight of the round table is also a natural treasure, studded with a rich historic heritage.

A big thank you to Dr. Carole Poupon, fairy-chairwoman of the congress, assisted by Marie-Hélène Tournos, lady enchantress in charge of the publication of the proceedings and the poster competition, to Vincent Estève, valiant knight and chairman of the scientific committee, and to the members of the organizing committee for choosing the Jacobin Convent which has all the assets of a 21st century convention center in a historic 14th century setting. A strong moment at the start of the congress was the presence, as guest of honor, of the French star Martin Fourcade (see photo) who equaled the all-time record for individual Biathlon World Championships titles who brought us all closer to the secrets of genetic predispositions for athletic performance.

Under the auspices of the IFCC/EFLM, this annual national congress of hospital laboratory medicine specialists benefited from the participation of several members of the SFBC (French Society of Clinical

Biology). Many current topics in laboratory medicine were discussed in person and online such as: new generation sequencing in microbiology, mass spectrometry and neonatal screening, news on hemochromatosis, pre-eclampsia markers, tumour markers and omics sciences, pediatric cytology, transfusion risks, etc.

Clarifications on new methods for simplifying the accreditation of medical labs were eagerly awaited. Indeed, accreditation no longer pertains to 100% of



Martin FOURCADE:

French biathlete, five-time Olympic champion, seven-time winner of the general classification of the World Cup and thirteen-time world champion whose international career spanned from 2007 to 2020

the tests performed by a medical lab, as provided for by the law of 30 May 2013, introduced following the 2010 ordinance making the accreditation of medical laboratories mandatory. A medical lab is currently considered to be accredited when all its scope lines, including the tests it performs, are accredited. Each scope line corresponds to “a collection of biological tests having common characteristics involving a common accreditation methodology”. The choice of tests representative of the scope lines must illustrate the main groups of analytical techniques used by the same medical lab. Only actually accredited tests are considered as such.

The first day provided complete updates on the health situation in France, with two round tables, the first with institutional representatives of the French Directorate-General of Health (DGS), French Public Health Agency (SPF), the French National Professional Council of Laboratory Medicine (CNP-BM), the French national Order of Pharmacists and the French Society of Microbiology (SFM), and the second with physicians, medical biologists, epidemiologists, intensive care specialists and the participation of Myrna Haddad-Germanos, President Lebanese Society of Clinical Biology (SDBL). France has been hit hard by COVID 19. At the end of the first week of October 2021, there have been 7,090,109 confirmed cases and 50.8 million people who received at least one vaccine dose (75.6% of the population). 73.5% of French people are fully vaccinated. There have been 117,306 deaths in France since the start of the pandemic. Since September, vaccination has been mandatory for healthcare professionals. Starting in October, we observed a continued improvement in the situation at the national level. In Metropolitan France, there is a trend toward stabilization of the incidence rate and new hospitalizations in certain territories with an $R_t < 1$. However, health authorities remain cautious. An increase in cases for the third consecutive week has been observed, which reflects a new increase in circulating virus. In the overseas territories, the incidence rate in Guyana is decreasing but remains high, with persistence of high pressure on hospitals. In Martinique, the incidence and hospitalization rates are still high. The delta variant has almost complete hegemony. Several variants exhibit common mutations deemed to be of

interest (variants of interest-VOI) by health authorities, because they appear to be associated either with an increase in transmissibility or a decrease in the effectiveness of certain vaccines”. The most-monitored mutations in France are E484K (borne by beta, gamma, iota, zeta etc.), E484Q (borne by kappa, B.1.1.7+E484Q etc.), L452R (borne by delta, kappa, etc.). The pass sanitaire [Health Pass] has also become mandatory as of 1 October for minors from age 12 and two months to age 17. Mask-wearing is required in restaurants, congresses, healthcare facilities, public transportation and commercial centers unless the incidence rate is less than 200/100,000 and has been decreasing for at least 7 days. An extra or booster dose is strongly recommended for immunocompromised individuals and those above age 65.

Raphael Beauffret and Olivier Clatz presented the digital health acceleration strategy launched on 18 October, which aims to make France one of the leading innovative health nations in Europe. Training, research, and digital MD assessment are one targeted avenue to promote the emergence of innovative solutions based on multidisciplinary scientific approaches and ambitious health economics models to conquer the rapidly growing digital health market at the global level. Digital medical devices are not gadgets or a simple, vaguely futuristic, trend. They are the future of our healthcare system and the drivers of a three-fold ambition: anticipate, prevent, treat. Healthcare students will be trained in digital technology. Continuing education on digital issues is also targeted to practicing professionals. The second avenue is dedicated to research. The goal is to launch scientific challenges and structure research communities to obtain scientific advances and introduce breakthrough technologies within five to ten years.

The third afternoon of the congress was dedicated to the IFCC C-MHBLM with the theme Lab Medicine 4.0: AI, Innovation and Bioethics. Laboratory medicine has benefited from a remarkable wave of innovations that have transformed this medical field from a peripheral player to a central player in the provision of healthcare. Scientific advances have made it possible to introduce and produce new large-scale tests, some in a decentralized framework. It is always difficult to predict the future, but we already know that

artificial intelligence (AI), digital medicine, robotics and genomics will have an enormous impact on improving healthcare efficiency and precision.

Lyse Santoro and Muriel Dahan shared CSIS (health industries strategic committee) proposals with us regarding the “*Innovation santé* [Health Innovation] 2030” strategy and Laure Millet shared work by the Institute Montaigne regarding e-health. The transformation of our healthcare system will not take place without massive and coherent development of digital health technologies. Digitization is not an end in and of itself. It is a means to better coordinate the actions and missions of healthcare professionals, to develop diagnostic, therapeutic and organizational innovations, to combat the healthcare divide, to reposition the citizen at the heart of the healthcare system and provide them with the means to actively participate in their own care and to plan the most appropriate treatments and personalize the management of chronic disease, in short, to provide better care. Telehealth tools must be accessible to everyone. The development of digital health has brought unprecedented progress to our healthcare system: contribution to scientific knowledge, improvement in the course of care, better fluidity of communications among healthcare professionals by paperless communication, development of telemedicine, increase in patient autonomy in the management of their own health and their interaction with the healthcare system, acceleration of diagnosis and treatment, emergence of more predictive medicine and medical and paramedical decisions made more reliable and secure.

Damien Gruson emphasized that Lab Medicine 4.0 is at the heart of a new health ecosystem where emerging technologies, smart tests, remote monitoring and data science act as drivers of change. Managing the transition must address multiple dimensions (performance, results, user experience, data, interoperability and multidisciplinary) for the benefit of citizens and patients. AI, machine learning and robotic technology will help healthcare professionals provide safer, better-quality care while reducing the workload. The true power of these technologies is probably found at their intersection. Antoine Vimont, SIDIV General Secretary (Union of the in-vitro diagnostics industry

in France) and HealthCare Development Director, Roche Diagnostics France, reminded us that, during the health crisis, the in-vitro diagnostics industries have demonstrated more than ever their ability to mobilize and innovate in the service of the national diagnostic strategy. Mobile applications are the cornerstone of our mobile-first world. Over the last decade, they have effectively bridged the gap between organizations and their end-users, and now offer advanced services and personalized experiences.

Dominique Stoppa-Lyonnet spoke to us about her work in oncogenetics, which remains an up-and-coming discipline. The inventory of genes predisposing for cancer is not finished, and researchers are constantly refining risk individualization. There are countless new indications for these genetic tests to predict cancer treatment effectiveness. The arrival of very-high throughput sequencing (NGS) has made it possible to broaden the indications for testing to less suggestive situations, but not without posing a certain number of questions, such as the classification of variants of unknown significance and individual estimation of tumour risk. Beyond identifying several recurrent changes in a tumour, NGS has also brought us closer to creating a molecular tumour portrait that can be drawn with increasing fineness: pathogenic variants of oncogenesis driver genes, loss of chromosomal regions, signatures of exposure to mutagens or DNA repair anomalies, mutational load, fusion transcripts, expression signature, all characteristics that are of diagnostic, prognostic or theranostic interest. With the arrival of PARP inhibitors currently prescribed in certain cases of constitutional or somatic alterations in the *BRCA1* or *BRCA2* genes, constitutional and tumour genetics are finally united. The performance of genetic testing in oncology must obey ethical imperatives: quality tests in informed and well-supported individuals. To these needs is added the need for equal access to testing throughout the territory. The fast acquisition of knowledge and technological progress (NGS allows going from analysis to sequential interpretation of tumour markers) is hard on the financial mechanisms for access to innovation in biology (RIHN). Organizational and financial agility needs to be found.

Finally, cancer medicine of tomorrow must be prepared for the arrival of artificial intelligence (AI). In addition to the ethical imperatives mentioned above, AI must meet the expected promises: quality of digitized data (medical records, radiological and histological images, information from connected objects, and analyses of constitutional and tumour genomes) and relevance of the inferences obtained.

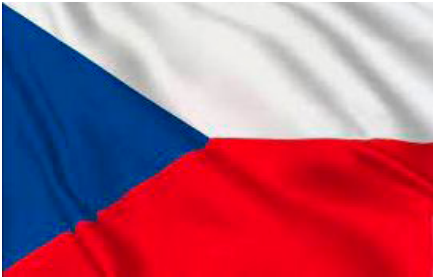
Laboratory medicine of the 21st century is such an innovative and precise medical specialty that it will radically change the care paradigm, for precise, anticipatory, smart, connected, robotic and digital medicine and an increased quality of care. The practice of laboratory medicine is at the heart of the interaction between 4P medicine, the medical industry 4.0 and dynamic health policies. With digital technology, the field of possibilities is nearly infinite for laboratory medicine. It is up to us to figure out how to attract generations Z and alpha.



Group photo left to right:

V. Esteve, Chair SC-JFBM; Muriel Dahan, CSIS; Lyse Santoro, CSIS; M.F. Gaudeau-Toussaint, ex-Présidente SNBH; B. Gouget, Chair IFCC-CMHBLM; M.H. Tournoys, Chair Poster-Committee, A. Vimont, SIDIV; L. Millet, Institut Montaigne; C. Poupon, Présidente JFBM, D. Stoppa-Lyonnet, Institut Curie-Paris (FR).

In the upper-left insert: D. Gruson, Cliniques Universitaires Saint-Luc (Uclouvain), Bruxelles (Be).



Cutting edge laboratory management in Europe: 4th CELME Symposium 2021

Charles University, Prague (CZ)

*by Bernard Gouget, Chair IFCC- CMHBLM
Sergio Bernardini, Chair IFCC-ETD*

It is always a pleasure to visit Prague after the invitation of Prof. Tomas Zima, Rector of the Charles University and to discuss during two days on “Cutting edge laboratory management in Europe and emerging challenges” held at the Carolinum Charles University, complex of buildings located in the Old town of the city, seat of the Charles University. Originally founded in 1348, during the rule of king of Bohemia and Holy Roman Emperor Charles IV, the Charles University (C.U.) was first modelled on those in Bologna and Paris. Václav Havel (5 October 1936 – 18 December 2011) playwright, and statesman who played a major role in

the Velvet Revolution in 1989, served as the last President of Czechoslovakia from 1989 until its dissolution in 1992 and then as the first President of the Czechoslovakia Republic from 1993 to 2003 allowed democratization, a return to academic freedoms at the turn of 1989 and opened a new chapter in the history of Charles University. With Tomas Zima, Rector at the head of the University since 2014, the influence of the University has continued to grow and includes 17 faculties. Charles Univ. is considered as one of the most prestigious universities with 47,400 students of which 10,500 foreign students and #210 among the **Best Global Universities**. C.U. is the 5th most popular with students arriving under the Erasmus program.

The Rector, Tomas Zima has developed international cooperation in participating at the 4EU+ European University Alliance which is bringing together six comprehensive, research-intensive, public universities from four regions of Europe. Charles, Heidelberg and Sorbonne Universities, and the Universities of Copenhagen, Milan and Warsaw have come together to establish a shared, seamless infrastructure, which is bringing together professors, researchers, students and staff from six institutions. The challenge is also to strengthen the European vision of deepened cooperation and mutual enrichment by developing a new quality of cooperation in teaching, education, research, innovation and management, leading to the creation of a truly integrated European University System.

Through this collaboration and working in partnerships, the 4EU+serve society to the highest level with core values: academic and research freedom, democratization of education, students at the center, collaboration in an interdisciplinary approach, research



Prof. Tomas Zima, Rector of the Charles university at his office, next to the conference room Vlastenecky sal “Patriotic Hall”

excellence, creativity and openness, integrity and internationalization. These objectives are very similar of the IFCC/EFLM missions to develop a barrier-free and continuously deepening cooperation based on a common understanding of the idea of the future of Lab medicine and ensures fair access and participation in education.

The program of the 4th edition of CELME (September 3-5, 2021) symposium has been compiled with greatest care by Tomas Zima, fantastic high-caliber organizer, in collaboration with Sverre Sandberg, ensuring that it contains inspiring topics reflecting the great diversity of the emerging technologies and other innovations in lab medicine as well as the efforts deployed by EFLM to promote harmonization of education and continuous training.

The two days were organized in four interactive networking sessions with exceptional speakers. After the welcome buffet, the first session was dedicated to emergent topics. Sunil Sethi on line from Singapore recalled that specialists in lab medicine are playing an essential role in the response to the SARS-CoV-2 and are working hard to strengthen the scientific response and to support research and implementation for COVID 19 diagnostic tests. They are providing essential technical assistance to the development of tests and guidance advice for the patients. The pandemic acted as a catalyst, increasing the speed at which promising diagnostics tests move through the pipeline into clinical applications. Biological tests have played a key role in the ability to understand and manage this disease. Good, accurate and reliable test can help reveal who has the disease or, by virtue of the antibodies in someone's system who has been infected. False negative RT-PCR results infected patients added to the challenge of necessitating rapid and sensitive techniques available for swift detection. The COVID-19 pandemic has highlighted biomedical technology's importance to public health security and pandemic preparedness.

Alexander Haliassos defined what Laboratory Medicine is needed for the health of mobile populations who are mostly affected by infectious diseases, mental health issues as also as by chronic diseases.

Laboratory medicine is playing a vital role in the provision of quality healthcare services to mobile societies population. It is involved in the screening, diagnosis, and monitoring of response to treatment and of Outcome Prognosis. Effective public health surveillance among mobile societies population needs advanced laboratory services. The use of Information Technology solutions and emerging Artificial Intelligence and Big Data approaches with POCT implementations will lead to the improvement of the health of mobile societies and the wellbeing of indigenous population, by preventing the spread of old but also emerging diseases and effectively confronting chronic situations.

The promise of precision medicine lies in data diversity. Michael Neumaier spoke on multidimensional Lab Medicine and on his collaboration with Stephan Schonberg, Professor in Imagery. They discussed the potential of "radiomics" as a crucial enabler for precision medicine and explained how integrating statistical, imaging and genomic data can help transform care delivery through much more precise treatment, e.g. of patients with heterogeneous tumors.

The second session chaired by S. Sandberg focused on the progress of implementing IVDR. Alan Fraser, as chair of the TF on medical devices at Biomedical Alliance in Europe is strongly encouraging the academic and scientific societies to be involved in the EU Health Policy-making. In this task force, high-level experts in the field are discussing the latest developments in the regulatory framework for medical devices. They exchange key insights and interpretations of the EU medical devices framework and identify areas where the BioMed Alliance can provide input and expertise to enhance the safety of medical devices in Europe. Alan Fraser insisted on the importance of evidence-based health policies, looking at the EU cooperation on health technology assessment ; the use of clinical real-world data to guide healthcare policies, and the need for better evaluation and regulation of artificial intelligence in medicine.

Laboratory medicine in the European Union (EU) is at the dawn of a regulatory revolution as it reaches the end of the transition from IVDD 98/79/EC to IVDR 2017/746. There is an urgent need for an EU 'fix' to address the transition to the IVD Regulation in a safe

and responsible way. Without amendments and contingency plans, implementation of the IVDR in May 2022 will lead the healthcare sector into uncharted waters due to very limited preparedness of the EU regulatory infrastructure. Prospective risk analyses were not performed by the European Commission (EC), but if nothing happens it can be anticipated that the consequences will negatively impact all stakeholders of the medical test pipeline, and it may seriously harm patients, may prevent caregivers from making appropriate clinical decisions due to non-availability of thousands of conventional medical tests. Finally, it also may discourage manufacturers and academia for developing specialty tests, thereby hampering innovation in medical diagnostic care. From the latest July CAMD survey on IVDR readiness, 22% of the existing medical tests (i.e., ~9,000 out of ~40,000 medical tests) are considered irreversibly lost in the transition from IVDD to IVDR. More uncertainties exist as ~75% of the SMEs and ~25% of the large IVD-manufacturers do not have an agreement with Notified Bodies yet, withholding them from the required conformity assessment process to get their CE-IVD tests per May 2022 on the EU-market.

Afterwards, Oliver Bisazza, MedTech Europe, caught our attention on the countdown of the IVDR date of application, priorities and expectations of Manufacturers. Christa Cobbaert, Chair of the EFLM Task Force on European Regulatory Affairs, informed the participants about the state of the play and the looming diagnostic collapse if nothing happens, both from the perspective of the IVD-manufacturers and from the lab professionals. Steps taken by the EFLM Task Force on European Regulatory Affairs, under the umbrella of the Biomedical Alliance in Europe, were highlighted, as well as the search for solutions through dialogue with the European Commission. Although it is recognized that the IVDR promotes positive goals such as increased clinical evidence, transparency through the EUDAMED database, and post-market surveillance throughout the lifecycle of tests, it was stressed that the diagnostic sector needs an urgent solution from the EC to ensure that the capabilities of the diagnostic sector are not further endangered and crippled by an immature and unsupportive EU regulatory system.

On 14 October, there is an amendment proposed by the EC with phased implementation of the IVDR (so longer timelines). The amendment is still a proposal and not an official law as EC and EU council have to vote on it. The European Commission has amended the IVDR by proposing a phased and protracted, risk class based IVDR roll out. This will give relief to both the IVD-industry and the medical labs.

The second day morning session, chaired by S Bernardini, was dedicated to the progress in harmonization of measurement procedures. Ian Young described on line some new initiatives, and Sverre Sandberg did how to monitor the harmonization of measurement procedures by external quality assessment and patient medians. Cathie Sturgeon gave us information to reduce avoidable lab errors in clinical diagnosis and how EQA can help. Personalized medicine depends on correct diagnosis and monitoring of patients, for which personalized reference intervals for laboratory tests may be beneficial. Abdurrahman Coşkun presented a simple model to generate personalized reference intervals based on historical, previously analyzed results, and data on analytical and within-subject biological variation.

The last session was dedicated to the new tools in education in Lab Medicine. EFLM President Ana-Maria Simundic, presented the Eisenhower's matrix to prioritize tasks to identify the actions to be carried out in order to achieve them. It is a simple tool that helps to visualize all the tasks in a matrix of urgent/important in four quadrants: Urgent & Important tasks/projects to be completed immediately; Not Urgent & Important tasks/projects to be scheduled on the calendar; Urgent & Unimportant tasks/projects to be delegated to someone else; Not Urgent & Unimportant tasks/projects to be deleted. Snezana Jovicic, chair EFLM WG-PFLM, presented the EFLM syllabus as the framework for the education of EuSpLM. Evgenia Homsak, chair EFLM C-P illustrated the equivalence of standards in education in Europe. Leila Alic, member EFLM C-C and TG-ESC organizing committee presented the Syllabus Course. The course is a major EFLM educational resource designed to support the post graduate education in clinical chemistry and Lab medicine. It will be officially launched in January 2022, more information is available on the EFLM website.

Thank you again to Tomas Zima for your hospitality and for your tremendous creative energy, strength and inspiration. Under your leadership, Charles University is continuously growing in excellence. Your valuable expertise in serving EFLM and IFCC is highly appreciated. You are doing a titanic work always to welcome the CELME participants in the best of the conditions. For you, no impossible tasks and impracticable plans are to welcome any IFCC/EFLM events, having always in memory 14th IFCC-FESCC EuroMedLab 2001. The CELME symposium is definitely a pioneering and unique event, regularly bringing together specialists in lab medicine, clinicians, scientists and IDV corporates (Abbott, Beckman-Coulter, Ceska Sporitelina, Roche, Siemens, Snibe, Sysmex in 2021) to talk about challenges and disruptive changes and how to materialize them to achieve better outcomes, while at the same time strengthening a common harmonized European training framework. Well done! It was energizing, uplifting and educational!








CELME 2021 Speakers:

Alan Fraser, Abdurrahman Coskun, Sverre Sandberg, Christa Cobbaert, Sergio Bernardini, Aneta Zimova, Bernard Gouget, Tomas Zima, Alexander Haliassos

IFCC'S CALENDAR OF CONGRESSES, CONFERENCES & EVENTS

Calendar of IFCC Congresses/Conferences and Regional Federations' Congresses

<p>Nov 11 - 12, 2021</p>		<p><i>AFCC Congress 2021</i></p>	<p>Lusaka, ZM Online event</p>
<p>Nov 26 - 28, 2021</p>		<p><i>International Congress of Pediatric Laboratory Medicine</i></p>	<p>Munich, DE</p>
<p>Nov 28 - Dec 2, 2021</p>		<p><i>XXIV IFCC - EFLM EuroMedLab Munich 2021</i></p>	<p>Munich, DE</p>
<p>Dec 6 - 10, 2021</p>		<p><i>IFCC-ICHCLR Workshop on overcoming challenges to global standardization of clinical laboratory testing: reference materials and regulations</i></p>	<p>Paris, FR Online event</p>
<p>Mar 30 - Apr 2, 2022</p>		<p><i>XXV COLABIOCLI Congress</i></p>	<p>Leon, MX</p>

Calendar continued on next page

June 25 -26, 2022		<i>IFCC Forum for Young Scientists</i>	TBA
June 26 - 30, 2022		<i>XXIV IFCC WorldLab Seoul 2022 XVI APFCB Congress Seoul 2022</i>	Seoul, KR
May 21 - 25, 2023		<i>XXV IFCC-EFLM WorldLab EuroMedLab - Rome 2023</i>	Rome, IT

Other events with IFCC auspices

Mar 3 - Dec 3, 2021	<i>Virtual Diploma in Clinical Biochemistry program</i>	Mexico Online course
Aug 2, 2021 - Apr 3, 2022	<i>Virtual Diplomat in Selected Topics of Diagnostic Hematology for the Laboratory (Advanced Level) Second Generation</i>	Mexico Online course
Nov 10 - Dec 1, 2021	<i>International Course on strategies and tools for the quality management in the laboratory</i>	Mexico Online course
Nov 12 - 14, 2021	<i>II Virtual Congress CNB National College of Bacteriology</i>	Colombia Online event
Nov 17, 2021	<i>Advances in neonatal screening for congenital hypothyroidism: Current situation and future prospects in the new detection strategies</i>	Spain Online event
Nov 18, 2021	Corporate Member Event: <i>LabTalk Webinar on Diagnostic Center Management-Ep2</i>	Mindray Webinar

Nov 19 - 20, 2021	54 èmes Journées de Biologie Praticienne - JBP	Paris, FR
Nov 19, 2021	<i>Annual Meeting of the Royal Belgian Society of Laboratory Medicine</i>	Brussels, BE Hybrid event
Nov 22 - 23, 2021	<i>XI Latin American Seminar in forensic genetics - XI Jornadas Latinoamericanas de genetica forense</i>	Mexico Online course
Nov 30 - Dec 3, 2021	<i>3rd International Meeting in Clinical Chemistry & Laboratory Medicine & SSCC 7th Annual Meeting</i>	Saudi Arabia Online event
Dec 1 -2, 2021	<i>Journées de l'innovation en biologie JIB 2021</i>	Paris, FR Hybrid event
Dec 3, 2021 - Jul 3, 2022	<i>Virtual Diplomate in Clinical Biochemistry</i>	Mexico Online course
Dec 6 - 7, 2021	<i>X Molecular Cytopathology</i>	Naples, IT Hybrid event
Dec 12 - 15, 2021	<i>47th Annual conference of Association of Clinical Biochemists of India (ACBICON 2021): "Towards a Better Tomorrow"</i>	India Online event
Feb 10 - 11, 2022	<i>International Congress on Quality in Laboratory Medicine</i>	Helsinki, FI
May 23 - 26, 2022	<i>10th Santorini Conference "Systems medicine and personalized health and therapy" – "The odyssey from hope to practice: Patient first – Keeps Ithaca always in your mind"</i>	Santorini, GR
Oct 4 - 9, 2022	<i>FEBS Advanced Course: 360-degree Lysosome; from structure to genomics, from function to disease-update</i>	Izmir, TR
Oct 14 - 17, 2022	<i>46th ISOBM Congress</i>	Bled, SI
New date TBA	<i>XXII Serbian Congress of Medical Biochemistry and Laboratory Medicine & 16th Symposium for Balkan Region</i>	Belgrade, SRB

IFCC MEMBERSHIP

Full Members



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

Regional Federations

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

Affiliate Members

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)
 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.