In this issue

Editorial
- Message from the eNews Editor

The voice of IFCC
- Message from the IFCC President
- 20th PCQACL Convention-Manila (PH): the Filipino spirit of QA and Integrative AI at its Finest!
- Introducing the IFCC’s Database of Outcome Studies in Laboratory Medicine

IFCC: the people
- IFCC Call for Nominations

IFCC: the Young Scientists
- Mentor and Mentee interview

Contribute to IFCC eNews
- Enhanced resource utilization, reduced waste, and expedited transplantation through real-time donor screening for infectious disease

News from Regional Federations and Member Societies
- LIII National Mexican Congress of Clinical Pathology “One Health”
- News from Artificial Intelligence improves precision in the Clinical Laboratory
- Medlab Africa Conference, 17 - 19 October 2023, Johannesburg, South Africa
- Cardiometabolic Health Symposium Explores Innovations in a Technological Era
- Society of Medical Biochemists of Serbia - Professor Ivan Berkeš Scientific Fund
IFCC’s Calendar of Congresses, Conferences & Events

- IFCC and Regional Federations events
- Corporate Member events with IFCC auspices
- Other events with IFCC auspices
Dear colleagues

December is already on the way, holidays are approaching and we are here with the December issue.

In this issue our President, Prof Khosrow Adeli is offering us a real report of what has been achieved during his presidency, which was really immense and at which difficult times! You can read all about it in his message but what I feel obliged to say and to thank him and his board immensely for it, is that IFCC has been present in our lives throughout the epidemic. IFCC has been there all the time. Webinars and new committees and task forces facing all the challenges presented were there for us. In this way IFCC has strengthened its position in our scientific life and made us look at it to draw inspiration for our professional life. This has been the most important accomplishment. Thank you very much Khosrow and the whole EB for that.

In this issue you will find VLP and Congresses reports from many places like South Africa and Mexico, Turkey and Philippines. This is also an important accomplishment. IFCC officers traveling around the world, offering their knowledge to the local societies and offering us via their reports glimpses of places and colleagues, we would never think we would join.

The Serbian society offers rewards to distinguished young scientists in honour of its founder and mentor and the Spanish Society investigates the pros and cons of AI application in the labs.

Enjoy this issue, dear colleagues, and let’s all of us wait for happy and restful holidays.
Serving as the president of the IFCC Organization for the past three-plus years has been an immensely gratifying experience. It has proven to be a journey filled with fascination, rewards, and, at times, considerable challenges – marking the busiest period of my life, surpassing all expectations. During this time, I had the privilege of meeting numerous individuals across the IFCC World, engaging with national societies and corporate members, and actively participating in scientific events worldwide.

In my role as the IFCC ambassador, I dedicated myself to sharing the organization's vision with thousands of colleagues across various regions and countries. Interacting with many of you has been a source of immense learning over the past three years. Throughout this period, my overarching goal has been to fortify the IFCC as an organization, enhancing its strength both internally and externally, and amplifying its core mission of “Advancing excellence in laboratory medicine for better healthcare worldwide.” Collaborating closely with the Executive Board, and with their unwavering support, we implemented numerous changes that we believe have significantly bolstered the organization. These changes I believe have rendered the IFCC more relevant and beneficial to its primary stakeholders – our esteemed national societies and corporate members.

The key changes over the past few years have included:

- **IFCC Office:** Strengthening the IFCC Office by hiring additional staff some with science degrees, doubling our full-time staff complement to six (6). This has been essential to support the growing number of new IFCC programs.
- **IFCC Finances:** Recruiting an international accounting firm, KPMG, to perform full accounting of IFCC finances including all income and expenses.
- **IFCC Contracts:** Renegotiating our long-standing contracts with the current PCO to significantly increase IFCC share of conference income as well as income for IFCC regional federations. This change has helped provide funding for many new programs initiated in the past couple of years.
- **IFCC Statutes:** Key changes to IFCC Statutes were proposed by the EB and recently approved by the IFCC Council (National Society Members) by a majority vote of >90%. The key changes include expansion of membership to other specialties in laboratory medicine in addition to clinical chemistry and changes to the election process for EB members, limiting board membership in the same position to no more than six years in total and preventing nomination to more than one position in the same year or election cycle.
• **IFCC Regional Federations:** Significantly increasing IFCC's financial contributions to Regional Federations including AFCC, APFCB, AFCB, and COLABIOCLI.

• **IFCC Scientific Exchange Program:** Strengthening the IFCC Scientific Exchange program by doubling its budget to increase the number of awards and establishing a formal application schedule biannually, in October and March of each year.

• **IFCC Young Scientist Scholarships:** Substantially increasing support for our young scientists by providing 50 IFCC Scholarships annually to young scientists from developing countries and scheduling a Young Scientists Forum every year at each major IFCC conference including the IFCC WorldLab and EuroMedLab Congresses.

• **IFCC Website:** A new, modern, and user-friendly IFCC Website developed in 2023 in collaboration with IFCC Office staff, CPD and our new IT partner, DIGIWEDO.

• **IFCC eNews:** A new layout and expanded IFCC eNews in collaboration with DIGIWEDO, IFCC Office staff, CPD and eNews Editor.

• **IFCC eJournal:** A new layout and format for the IFCC Electronic Journal, eJIFCC, in collaboration with Digiwedo, IFCC Office staff, CPD and eJIFCC Editor.

IFCC Response to COVID-19 Pandemic: My term commenced amidst the unfortunate onset of the COVID-19 pandemic, posing a significant challenge. However, in response to this global crisis, the IFCC Executive Board promptly established a dedicated taskforce on COVID-19 and introduced an online resource known as the IFCC Information Guide on COVID-19. The taskforce, in collaboration with the online resource, systematically compiled and disseminated the most recent evidence and updated information to the IFCC membership. Covering topics such as population screening and diagnosis, biosafety guidelines for clinical laboratories, and laboratory monitoring of hospitalized patients with COVID-19, the taskforce’s guidelines not only synthesized the current evidence but also offered practical recommendations to clinical laboratories worldwide. This collaborative effort supported the vital role of clinical laboratories in their battle against the unprecedented and unfortunate pandemic.

**New IFCC Programs Developed during the term of the current Executive Board (2021-2023):** Over the past few years, the IFCC EB has launched several innovative programs to further advance IFCC's mission and support our membership around the world, including:

1. **Launch of IFCC LIVE Webinar Series** in 2020: A very popular program with an average of over 4000 registrants from over 100 countries around the work at each webinar. It has become a key educational program of IFCC with speakers from IFCC divisions, taskforces as well as many IFCC national societies.

2. **Launch of the IFCC Global MEDLAB WEEK** in 2022 to celebrate the pivotal role of laboratory medicine and laboratory professionals in both public health and patient care. The program continues to grow in popularity with over 30 countries involved in this joint global celebration in 2023.

3. **Taskforce on Global Laboratory Quality** established in 2021 to support clinical laboratories through provision of free EQA programs and training in both IQC and EQA. The program is currently supporting 100 clinical laboratories in 10 countries in Africa, Asia, Eastern Europe, and Latin America.

4. **Taskforce on Global Newborn Screening** established in 2021 to provide scientific oversight of a new IFCC program to advocate and initiate newborn screening programs in developing countries around the world.

5. **Taskforce on Global eLearning and eAcademy** launched in 2021 and responsible for organizing and delivering LIVE global webinars (biweekly). This is an important way by which IFCC can give back to national societies around the world and their members especially young scientists and trainees.
6. **Taskforce on Global Reference Interval Database** launched in 2022 with the aim of creating a global reference interval database, which will act as a key resource for pediatric, adult, and geriatric reference intervals for the entire lab medicine community and clinical programs around the world.

7. **Taskforce on Outcome Studies in Laboratory Medicine** established in 2022 to 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.

8. **Taskforce on Environmental Impact of Laboratory Medicine** recently launched in 2023 will review the available evidence and develop evidence-based guidelines for both clinical laboratories and IVD industry. It will also identify measures/tools that can detect and quantify the impact of laboratory chemicals and waste on human and environmental health.

9. **Taskforce on Laboratory Medicine Practice Guidelines** recently launched in 2023 to coordinate development of various types of guidance documents, encompassing best practice recommendations, position papers, and comprehensive evidence-based and graded practice guidelines. Our primary aim is to provide guidance, establish standards, and promote best practices within the field of laboratory medicine. Undoubtedly, these resources will contribute significantly to enhancing the quality of laboratory practices worldwide, with a particular focus on benefiting developing countries.

The introduction of these new programs and taskforces has streamlined the development of vital initiatives designed to tackle various priority areas in which IFCC plays a pivotal role in supporting our members and the wider laboratory medicine community. The substantial contributions of these taskforces, alongside the continuous initiatives within the IFCC Divisions, will uphold the organization’s elevated level of engagement and efficiency, both within the organization and in its external endeavors.

I would like to take this opportunity to express my gratitude to all IFCC Office staff and Executive Board members who collaborated closely with me in developing and implementing these vital programs, contributing to IFCC’s high productivity and visibility in recent years. Additionally, I extend my warm congratulations to Professor Tomris Ozben, the incoming IFCC President, on her election to this pivotal position. I offer her my best wishes for a successful term, and, as the past-president starting in 2024, I commit to providing my utmost support to her and the new Executive Board in achieving continued success in advancing this valuable organization within the field of laboratory medicine.

Cheers and Happy Holidays to you all in the IFCC family 😊

Khosrow
26th International Congress of Clinical Chemistry and Laboratory Medicine

17th Congress of Arab Federation of Clinical Biology

10th Saudi Society for Clinical Chemistry Annual Meeting

8th UAEGDA International Genetic Disorders Conference

DEADLINES

15 January 2024
Deadline for poster abstract submission

15 March 2024
Deadline for reduced registration fees

The Preliminary Program is now available on the congress website!
I would like to express my heartfelt gratitude to the IFCC-Abbott VLP and its Chair, Prof. Sedef Yenice for giving me the privilege to speak at the TBS International Biochemistry Congress 2023 and 34th National Biochemistry Congress. This congress was organized by the Turkish Biochemical Society under the auspices of IFCC, EFLM, and FEBS. This prestigious event convened 684 participants at the Liberty Lykia Congress Center in Fethiye, a stunning resort boasting crystal-clear waters and majestic landscapes. Over four days, the congress featured a meticulously organized scientific program, engaging poster presentations, and a vibrant exhibition, creating a multifaceted experience at the intersection of laboratory medicine and scientific exploration.

The congress featured with an opening lecture given by Prof. Gökhan Hotamışlıgil from the Harvard T.H. Chan School of Public Health, USA, on “Subcellular Molecular Architecture as a Critical Determinant of Metabolic Programming”, in which he presented his revolutionary research findings on cell biology. The scientific program was enriched with various topics and presentations by distinguished speakers. EFLM President and IFCC President-Elect, Prof. Tomris Ozben delivered a keynote lecture on “Implementation for Sustainable Practices in Medical Laboratories: Switching Clinical Laboratories to Green Labs.”, delving into the intersection of science and environmental consciousness, paving the way for a more eco-friendly future in lab medicine. EFLM President-Elect, Prof. Mario Plebani emphasized the future of laboratory medicine through integrated diagnostics and the need for standardization and harmonization of immunoassays and the post-analytical phase. Prof. Giuseppe Lippi's insights into the preanalytical phase added depth to the scientific panorama, focusing on strategies for ensuring the quality and accuracy of subsequent analyses. Prof. Sedef Yenice curated a session dedicated to updating medical laboratory guidelines and international standards. Prof. Kristin Moberg Aakre from the University of Bergen, Norway, spoke about the “Current Update of the IFCC Committee on Clinical Application of Cardiac Biomarkers Educational Recommendations” and gave the young scientists insightful information on the topic “Establish Your Research: A Roadmap for Young Investigators” in the session “Young Investigator Roadmap”.

I had the privilege of contributing to two keynote presentations on October 30th and 31st. The first, titled “Current Advances in Clinical Application of Tumor Biomarkers: Utility, Challenge, and Perspective,” discussed the utilization of tumor markers and the changing landscape of tumor markers in the new era of precision medicine. The second presentation, “Career Development for Young Scientists in Clinical Biochemistry and Laboratory Medicine,” navigated the diverse avenues for career development in clinical biochemistry and laboratory medicine.
The level of engagement, interactions, and enthusiasm displayed by the participants, especially the young scientists, was incredible. Exchanging knowledge and insights with such a dedicated group fostered a sense of camaraderie and created lasting memories beyond academic discourse.

Beyond the science, the congress served as a cultural kaleidoscope, offering glimpses into the rich history and traditions of Turkey. The 100th anniversary celebration of the Turkish Republic added significance to the event, intertwining scientific exploration with a commemoration of cultural milestones. The sensory pleasures extended beyond the lecture halls, encompassing local cuisine and inviting beaches, complemented by the pleasing weather. These elements, seemingly unrelated to the scientific agenda, contributed to the overall experience.

I am deeply thankful to the Turkish Biochemical Society and the organizing committee for their pursuit of scientific excellence. My gratitude extends to fellow attendees who made my stay enjoyable and memorable. The support, assistance, and hospitality throughout my time at the conference were invaluable. My experience as a visiting lecturer in Turkey through the IFCC and Turkish Biochemical Society was an unforgettable journey of discovery, both culturally and scientifically.
The 20th Annual Convention of the Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL) was held in a hybrid mode, in-person and virtual, with a pre-convention workshop and a 3-days main convention on the theme “Transformation of laboratories in the digital age: Personal and institutional challenges”. This important event was organized under the Presidency of Dr Paulo Enrico Belen, MD, DPSP, MMHoA with the collaboration of the PCQACL board.

PCQACL was established on November 15th, 2000. Today, the 800 members are coming from hospital-based or free-standing laboratories. Several IVD companies have been accepted as corporate members. PCQACL is an IFCC affiliate member. Elizabeth Y. Arcellana-Nuqui †, was the IFCC representative and deeply involved in external cooperation that made her recent death an even greater loss for us all. The event was held at the Crowne Plaza Manila Galleria from October 11-13th, 2023 in Quezon city within the Metropolitan Manila region in the Philippines- (in Filipino: Kalakhang Maynila) commonly called Metro Manila, capital region and largest metropolitan area of the Philippines. This hotel complex is at the center of Ortigas city which is a bustling commercial and a central business district that includes multinational firms, government agencies and major financial institutions. The Medical City, one of the three hospitals in the nation accredited by the Joint Commission International Accreditation was within walking distance, a good opportunity to have a look at it!

This place was the ideal work play destination for more than 1000 specialists and professionals in lab medicine and with hundreds of attendees on-line. All of them were genuinely interested to expand intelligently their knowledge and their scientific network in a friendly atmosphere. The auditorium was equipped with the latest audiovisual techniques with five large screens. Different tools for interactive online discussions, as smartphone applications that make it possible to offer attendees multiple choice questions evaluated instantly, were available. The video team was highly active to film the highlights and project them on screens in the corridors, check-in areas and exhibition lounges. A stage with the names of IVD partner companies for souvenir photos was a remarkable success! The attention to everyone and the conviviality were at its best. Thanks to the PCQACL secretary team, coffee breaks and meals were served for each participant at their own place. Everyone could eat and chat about what they had just heard or schedule evening outings, while listening to the dynamic presentations from corporate members on innovations before visiting the expo.

A daily conference bulletin was made in real-time and appeared almost instantly on-line to reach the largest audience. The first issue was dedicated to the Pre-convention workshop on parasitology in the digital age. Dr. Paulo Enrico Belen, the President of PCQACL, welcomed the participants with his opening remarks and introduced Ms. Gioraidios Laicel Ison-Imbag, a science research specialist from RITM who talked about the diagnosis of human malaria through microscopy and reiterated the importance of establishing standards in advanced malaria microscopy in support of the National Malaria Elimination Program which aims to eliminate malaria in the Philippines by 2030. Prof. Frederick R. Masangkay. University of Santo Tomas, discussed about the different food and waterborne parasitic protozoans such as Cryptosporidium, Cyclospora and Giardia, as well as the current methods and research development for the detection and identification of these parasites.

His colleague from the same university, Prof. Giovanni D. Milanez spoke on free-living amoebae (FLAs) in the Philippines. These pathogens are often neglected despite their public health risks. A more general and broad discussion about parasites in the Philippines was shared by the former undersecretary of the Department of Health, Dr. Vicente Y. Belzario, Jr. He discussed the most common but often neglected tropical diseases affecting the Filipinos, especially the children. Among...
these are the soil-transmitted helminthiasis which causes malnutrition, poor school performance and poor health states in the children. Dr. Elia G. Paulino-Cabrera, senior consultant in Capitol Medical Center provided an in-depth discussion regarding the techniques in diagnosing parasites from the different specimens and tissues submitted in the laboratory.

My keynote lecture, an IFCC Abbott visiting lectureship, was dedicated to: “Going digital: electronic health (eHealth) and mobile health (mHealth)”. The transition to digitalization is fast-moving and the pandemic, while exacerbating existing inequalities, also contributed to increasing adoption of digital technologies. Digital health refers to the usage of digital technologies to enable universal healthcare access, improve healthcare quality/outcomes and enhance the health and physical and emotional well-being of populations. Digital health knows no borders at global level, as it works independently of national health infrastructure. Digital health is a broad umbrella term that includes eHealth and the use of emerging and advanced technologies in the field of, among others, big data, genomics, and artificial intelligence. m-Health is a subset of eHealth while digital health is defined as the use of digital technologies for health, a field of practice for employing routine and innovative forms of information and communications technology to address health needs. Both are becoming prominent components of healthcare.

The use of mobile and wireless technologies to support the achievement of health objectives has the potential to transform the face of health service delivery across the globe. A powerful combination of factors is driving this change. These include rapid advances in mobile technologies and applications, a rise in new opportunities for the integration of mobile health into existing eHealth services, and the continued growth in coverage of mobile cellular networks. WHO defines eHealth as the cost-effective and secure use of information and communications technologies in support of health and health-related fields, including health-care services, health surveillance, health literature, and health education, knowledge, and research. Evidence exists on the growing impact of eHealth and how it is making health systems more efficient and more responsive to people’s needs and expectations.

Many benefices are already demonstrated: mHealth and eHealth have made healthcare services more accessible to people around the world, especially in remote or underserved areas. Patients can now connect with healthcare professionals, access medical information, and receive treatment recommendations through their smartphones and electronic devices. These technologies empower patients to actively participate in their healthcare decisions, track their health metrics, and engage in self-care. Patients are more informed about their health, leading to better health outcomes. Data-driven care enables healthcare providers to make informed decisions based on real-time patient information and improve diagnosis accuracy and treatment effectiveness. With digitalization, healthcare systems benefit from increased efficiency in administrative tasks, reduced paperwork, streamlined processes, and optimized resource allocation. This efficiency leads to cost savings and improved healthcare delivery.

Telemedicine, predictive diagnostics, wearable sensors, and a host of new applications are transforming how people manage their health. These technologies emphasize preventive care by encouraging regular health monitoring, lifestyle adjustments, and early intervention. The focus of healthcare shifts from treating illness to sustaining wellness. This proactive approach can reduce the burden on healthcare systems and improve overall population health. Customizations of eHealth applications to the context of patient-centered care and management of highly complex patients with multimorbidity will be an ongoing challenge.

The advances of new technologies and discoveries of existing ones as well as innovative combinations of existing ones are among the many factors propelling patient empowerment, which is fundamentally changing how we prevent, diagnose and cure diseases. It is always challenging to predict the future and the pertinent technologies that will come to fruition in the future and will become widespread realities. Science fiction both predicts the future and influences the scientists.
The Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL) Executive Board (L-R) Dr. Sarah Jane L. Datay-Lim, Mr. Anthony Alcantara, Mr. Gerrick Joseph C. Dolor, Dr. Paulo Enrico P. Belen; Dr. Annie P. Valdez, Ms. Josefina S. Soriano, Dr. Emil Brian M. Garcia and Mr. Benzon C. Pisico

The fully booked conference room

1st prize winner: Entry from Veterans Memorial Medical Center entitled “Optimizing Excellence: A Streamlined LIS Implementation in the Department of Pathology at Veterans Memorial Medical Center presented by Mr. Cyrill Juster Barros, RMT.

2nd Prize Winner: Entry from Mary Mediatrix Medical Center entitled “Beating the Tiny Giant: A Call for Safe Environment” presented by Mr. Jhudiel Albert A. Sabalvarro, RMT, DTA, MLS (ASCP) CM.

Conference Bulletin

dr Gouget at the Ribbon - cutting ceremony

IFCC-Abbott Visiting Lecturer Programme (VLP) - 20th PCQACL Convention-Manila (PH)
IFCC-Abbott Visiting Lecturer Programme (VLP) - 20th PCQACL Convention-Manila (PH)

Awarding the certificate of appreciation to our honorable speakers at the preconference

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ELIGIBILITY REQUIREMENTS
- EDUCATION : DIPLOMA/ DEGREE
- IELTS GENERAL : 6 BANDS EACH
- EXPERIENCE : 3 YEARS RELATED
- ASCP(American Society of Clinical Pathology) LICENSE IS MANDATORY

CLICK HERE TO APPLY NOW
Introducing the IFCC’s Database of Outcome Studies in Laboratory Medicine

By Zhen ZHAO, PhD, Chair IFCC Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM), Associate Professor of Clinical Pathology and Laboratory Medicine, Weill Cornell Medicine Director, Central Lab and Clinical Chemistry Services, New York-Presbyterian/Weill Cornell Medical Center, New York, USA

The IFCC is excited to launch the “Database of Outcome Studies in Laboratory Medicine” (oslm.ifcc.org). Developed by the IFCC Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM), this database is a dedicated resource for highlighting the critical role of laboratory medicine in healthcare.

Key Highlights of the Database:

• Expansive Knowledge Resource: Featuring a diverse collection of outcome studies related to laboratory medicine, the database is a repository of publications illustrating the significant impact of lab tests in patient care, from diagnosis to management.
• Accessible Worldwide: Created for IFCC members and stakeholders globally, this free database is a valuable tool for supporting research, education, and policy development in healthcare.
• Promote Laboratory Medicine’s Value: Through aggregating outcome studies, we aim to enhance understanding and recognition of laboratory medicine’s essential role in healthcare.
• Foster Collaboration and Continuous Learning: This database is not just an information repository; it’s a platform for knowledge sharing, research enhancement, and healthcare advancement, reflecting the ongoing developments in laboratory medicine.

Be a Part of Our Growing Community!

Visit: oslm.ifcc.org

Your contributions and suggestions are vital. Contact Zhen Zhao (zhz9010@med.cornell.edu) or Smeralda Skenderaj (smeralda.skenderaj@ifcc.org) to get involved.

Discover How Laboratory Medicine Shapes Patient Care Through Our Database!
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- FT4  
- TRAb  
- Tg (Thyroglobulin)  
- TMA  
- Anti-Tg  
- Rev T3  
- Anti-TPO  
- T-Untalka

### Bone Metabolism
- Calcium  
- vitamin D  
- 25-OH Vitamin D  
- CTX  
- Osteocalcin  
- PTH (1-84)

### Hepatic Fibrosis
- HA  
- CIV  
- Cholyglycine  
- PIIIP N  
- Laminin GP73

### Immunoglobulins
- IgM  
- IgA  
- IgE  
- IgG

### Glyco Metabolism
- C-Peptide  
- Anti-IgA  
- Prominin  
- Insulin  
- ICA  
- Dicoumar  
- GAD 65  
- IAA (Anti Insulin)  
- Anti-ZnT8

### Tumor Markers
- AFP  
- PAP  
- SCCA  
- CEA  
- CA50  
- TPA-snipe  
- Total PSA  
- CYFRA 21-1  
- ProGRP  
- FPA  
- CA242  
- HE4  
- CA 125  
- CA 72-4  
- HEP  
- CA 15-3  
-NSE  
- PIVKA-II  
- CA 19-9  
- S-100  
- *AFP-L3  

### Anemia
- Vitamin B12  
- EPO  
- Anti-Intrinsic Factor  
- Ferritin  
- RBC Folate  
- Folate (FA)  

### Hypertension
- Direct Renin  
- Angiotensin I  
- Angiotensin II  
- ACTH

### Cardiac
- CK-MB  
- Tropin I  
- Myoglobin  
- D-Dimer  
- NT-proBNP  
- Myoglobin  
- Myoglobin  
- D-Dimer

### Fertility
- FSH  
- Oxytocin  
- Testosterone  
- Free Testosterone  
- DHEA-S  
- Progesterone  
- PRL  
- Estradiol  
- SHBG  
- Androgen  
- PIGF  
- sFlt-1  
- Inhibin A  
- *Inhibin B

### Infectious Disease
- Respiratory  
- 2019-nCoV IgG  
- SARS-CoV-2 S-RBD IgG  
- SARS-CoV-2 Neutralizing Antibody  
- Mycoplasma Pneumoniae IgG  
- Mycoplasma Pneumoniae IgM  
- *Oxyrhynchus Pneumoniae IgG  
- *Oxyrhynchus Pneumoniae IgM  
- *Respiratory Syncytial Virus IgM  
- *Coxsackievirus B  
- *Adenovirus  
- *Influenza A Virus IgM  
- *Influenza B Virus IgM  
- *Human Parainfluenza Virus IgM

### Autoimmune
- Connective Tissue  
- Rheumatoid  
- Endocrinology  
- Anti-A  
- *PCT  
- *RAA  
- *D-Dimer  

### Neutrophil Markers
- CRP  
- IL-6 (Interleukin 6)  
- *PCT  
- *RAA  
- *D-Dimer

### Metabolism
- Pepsinogen I  
- Gastrin-17  
- IGF-I  
- Pepsinogen II  
- GH (IGH)  
- IGF-3P-3

### Kidney Function
- Beta 2-MG  
- Albumin  
- *NGAL

### Drug Monitoring
- Digoxin  
- CSA (Cyclosporine A)  
- FK 506 (Tacrolimus)

### Coagulation Markers
- D-Dimer  
- TM  
- FPA  
- TAT  
- PIC  
- FDP

### Veterinary Testing
- *tSH  
- *TT4  
- *FT4

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IFCC: the people

IFCC Calls for Nominations

Participate into IFCC activities and give your contribution! Review the open positions and, if interested, contact your National or Corporate Representative.

Currently following call for nominations are open:

Communications and Publications Division (CPD)

- Committee on Internet and Digital Communications (C-IDC) - web editor position - Call for nominations letter

Please send CPD nominations to colli-lanzi@ifcc.org by 31st December

Scientific Division (SD-EC)

- Scientific Division Executive Committee - 2 positions: Secretary - Call for nominations letter and Member Call for nominations letter
- Committee on Standardization of Thyroid Function Tests (C-STFT) - 2 members - Call for nominations letter

Please send SD and C-STFT nominations to paola.bramati@ifcc.org by 10th January 2024

For any further information on nominations, please refer to your National or Corporate Representative - contacts are available here.

For all open call for nominations visit: https://ifcc.org/about/ifcc-calls-for-nominations/
Point-of-Care Testing: Current Status and Future Trends

May 25, 2024
Conrad Hotel, Dubai
United Arab Emirates

Visit the PoCT Meeting website for all the information
https://www.dubai2024.org/poct-meeting/
IFCC: the Young Scientists

Mentorship Interview
Presented by the IFCC Task Force for Young Scientists

By Sean Campbell, PhD, DABCC, FADLM, IFCC Task force for Young Scientists member, Director of Chemistry and Immunology Laboratories, Assistant Professor Department of Pathology, Albert Einstein College of Medicine, Montefiore Medical Center, NY - US

An interview with María Patricia Gentili (the Mentor) and Ana Sofía Duarte Acuña (the Mentee)

A little while ago I had the excellent pleasure of speaking with Ana Sofía Duarte Acuña of Guatemala and her mentor, María Patricia Gentili of Argentina, to speak about their mentor/mentee relationship. I had a great time speaking with them and they had some excellent thoughts about mentoring which I think you'll appreciate!

Sean: Hello Sofía! Could you tell us about yourself and your position?

Sofía: My name is Ana Sofía Duarte Acuña, I am a Biochemistry/Medical Lab Professional with an MSc. in Food and Nutrition from Guatemala, Central America. For many years I had the opportunity to be Technical Director of a private Med Lab and worked with various interdisciplinary health teams on health care projects. Working on these various projects resulted in my great interest in responding to the health care needs in my country, so I started training in Immunology and Autoimmunity testing. I currently direct an External Quality Assessment Program for the Asociación de Químicos Biólogos de Guatemala, my national organization, and I am in the process of taking what I learned in my Immunology and Autoimmunity training to help lab testing in my country.

Sean: That's fantastic! And Patricia, could you tell us about yourself?

Patricia: My name is María Patricia Gentili, I am a Biochemist specialized in Clinical Immunology. I am Head of Immunology at Fares Taie Laboratory, Scientific Secretary of the IX District Biochemical Center and Associate Professor of Clinical Immunology at the Fasta University of Mar Del Plata, Argentina.

Sean: Wonderful. Could you tell us how you met and how long you've been working together now?

Sofía: In June 2022, I began the application process for the exchange-internship scholarships of the IFCC Professional Scientific Exchange Program (PSEP), to carry out the program at the Fares Taie Laboratory in Mar del Plata, Argentina and have the opportunity to be trained in Immunology and Autoimmunity. Then in July, I received the good news that the scholarship was approved, so I made the trip from September to December 2022.

The Fares Taie Laboratory is a recognized high-specialty center with professionals with extensive experience and is well known for receiving other professionals for training. It is there that I had the opportunity to be assigned to my mentor. I had the joy of meeting my mentor, Dr. Patricia Gentili, who trained me for 3 months, with whom I continue to have communication and receive advice.
We have now been working together ever since we met in September 2022. Even though we’re now at a distance, we’ve been able to continue communicating and I’ve continued learning from her. It’s been great to have her advice for the development of projects in my country. This has allowed me to continue my academic, professional, and personal growth. She is a person with great experience and academic training. She’s very passionate about her desire to teach and leave a legacy for others. For me it has been a privilege to be one of the people learning from her.

Sean: That’s really lovely to hear. Can you describe your relationship with your mentor?

Sofía: Getting to know each other has been an enriching experience, both professionally in training and personally through friendship. Having the opportunity to have a mentor with extensive experience that gives one the opportunity to grow academically, develop, get advice, resolve doubts, and receive communication is something that is valued and appreciated. I can say that she is not only a mentor but a very special friend.

Sean: That’s really the best kind of mentorship relationship, in my experience. How about you, Patricia, do you feel mentorship works well for mentors?

Patricia: The exchange has been very beneficial for both parties, both for us providing our knowledge on important topics in immunology and learning the role of immunology in other countries.

Sean: That’s really great to hear. Have you mentored others before?

Patricia: I have been a mentor with biochemists who attended from other countries (Paraguay, Uruguay, Bolivia, etc.) and from Argentina to rotate through the area of immunology for several years and we continue to receive students and professionals.

Sean: That’s great, it sounds like an excellent experience. Could you also speak to how mentorship helps young scientists and laboratorians in their career?

Patricia: It gives them a unique experience since they learn different techniques, different ways of working algorithms, and different clinical decisions with each laboratory test. Although these areas follow international guidelines, there are always local modifications.

Sean: For sure, and that’s a big advantage for mentees. Sofía, can you present the advantages you’ve seen from working with a mentor?

Sofía: The advantages of working with a mentor is that it allows you to broaden your horizon, your network of relationships, and your ability to gain knowledge and continue advancing in your professional and personal development as a laboratory professional. A mentor opens doors to new opportunities and guides you in the development of new proposals. It is a unique experience that must be lived.

Sean: Agreed! Could you give your peers advice as far as seeking out mentors?

Sofía: Find out as much information as possible, ask other scholarship recipients for help, and don’t miss any opportunity to develop your skills. It may take a while to find a mentor, but there is great value in spending the time to find one to work with. Find a mentor who is willing to provide you with the knowledge and time required to train you. And you must have the commitment to respond to the delivery of time and knowledge that the mentor provides.
Sean: Totally agree with that. To that end, Patricia, can you give the mentors or aspiring mentors in our audience some points on how to be a good mentor and how to maintain a good mentoring relationship?

Patricia: The main thing is to help your mentee day by day and provide them with as much information as possible, with material for talks, videos, practical explanations, looking into a microscope, and with patience and dedication, providing all our experience so that they can replicate it in their countries.

Sean: That’s awesome. On the other side, how would you suggest young scientists seek out their mentors?

Patricia: I would suggest that you look for your mentors by thinking of professionals who are willing to provide you with all their knowledge in an authentic way.

Sean: Fantastic and agreed. To look at a concrete example of mentorship, Sofia, could you name a few projects and how your mentor helped you to accomplish your project?

Sofía: I have developed and directed two regional conferences of young scientists for Latin America (LATAM TF-YS) with the Confederación Latinoamericana de Bioquímica Clínica (COLABIOCLI). My mentor has helped me in the preparation of both conferences. Currently, the training, advice, and communication that I have with her is helping me in the process of implementing an area of immunology and autoimmunity in my country.

Sean: That’s really amazing! And it’s excellent you were able to find such a great partner like Patricia. Along the same lines, can you say what common challenges young scientists face that mentorship can help with?

Sofía: As young scientists, the challenges we face the most are opening a field in the world of work, meeting new people or accessing new studies. Having a mentor helps you keep growing and moving forward. It gives you the opportunity to make new contacts and develop new opportunities. It also depends on how much you get involved in that two-way communication.

Sean: It really does, thank you Sofía! And Patricia, for a final question, what kind of advice do you have for young laboratorians?

Patricia: The advice that I would give them is to start each activity with enthusiasm and passion, leaving aside the immediacy of achievements. You need to keep in mind that if one works with tenacity and dedication over the years, one will obtain its fruits.

Sean: Wonderful, thank you both so much for speaking with me, and for giving us all such a great glimpse into your relationship. I wish you both many more fruitful years as friends and colleagues!

(L-R) María Patricia Gentili (the Mentor) and Ana Sofía Duarte Acuña (the Mentee)
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Enhanced resource utilization, reduced waste, and expedited transplantation through real-time donor screening for infectious disease

The power of organ and tissue donation is immense. It can save, enhance and even transform the lives of those who receive such a powerful gift. On the other side of that equation are donors, their loved ones and the people who have dedicated their lives to ensuring safe and timely donation or live saving organs.

Organ Procurement Organizations (OPOs) are responsible for facilitating the organ donation process in the United States. An integral step in this process is donor viability assessments, which are required in order to screen donors for potential communicable diseases, including human immunodeficiency virus (HIV), hepatitis B virus (HBV) and hepatitis C virus (HCV). Screening is done using the U.S. Food and Drug Administration (FDA) licensed, approved or cleared donor screening tests according to the Organ Procurement and Transplantation Network (OPTN) policy and FDA regulations.

Like many OPOs, Mid America Transplant performed donor screening for infectious diseases in batches using manual testing methods with an average turn-around time of 18 hours 22 minutes. In the space of organ donation in particular, this timing is critical as tissue procurement must take place within 24 hours of donor death. Thus, and due to time constraints, screening results from infectious disease testing were typically not available until after tissue procurement had been completed. Consequently, this resulted in unnecessary utilization of resources, and procurement procedures on donors later determined to be ineligible.

Recognizing the opportunity to improve donor screening, reduce waste and enhance resource utilization, an integrated clinical care team at Mid America Transplant sought to overhaul their donor screening process through implementation of a fully automated donor serology testing platform. The FDA approved test system enables real-time screening for the qualitative detection of HBV surface antigen (HBsAg), HBV core antibody (anti-HBc), HCV (anti-HCV), HIV p24 antigen and antibody to HIV-1/HIV-2 (HIV Ag/Ab Combo), and antibody to Human T-Lymphotropic Virus Type I and II (anti-HTLV), on both pre- and post-mortem specimens.

The resulting outcomes have significantly changed workflow at Mid America Transplant. Efficiency of testing improved 94.7% with an average turnaround time of 58 minutes from laboratory receipt.
For their efforts and outcomes this team was recognized as a 2022 UNVIANTS of Healthcare Excellence Award winner of Distinction. Congratulations to Linda Martin, Vice President, Tissue Operations; Lindsey Speir, Vice President, Organ Operations, Kevin Lee, President and CEO; Amber Carriker, Director, Laboratory Services; and Erica Hinterser, Director, Tissue Procurement at Mid-America Transplant.

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**News from Regional Federations and Member Societies**

**LIII National Mexican Congress of Clinical Pathology “One Health”**

By Rosa I. Sierra-Amor and Jorge M. Sanchez-Gonzalez

From November 1st to 4th, 2023, the city of Aguascalientes Mexico was the venue for the LIII National Mexican Congress of Clinical Pathology “One Health” [https://live.eventtia.com/es/liiicongresopatologia](https://live.eventtia.com/es/liiicongresopatologia)

This important congress held more than 170 professors, which lectures included all together 23 plenary key lectures, and other 45 scientific activities such as conferences, symposia, and courses, 32 abstracts, one international symposium of laboratory professionals and one international symposium in conjunction with the Royal College of Clinical Pathology and the Academia. During the Opening ceremony (Photo 1) awards were given to recognize clinical pathology professionals contributing to the knowledge of the field of laboratory medicine in Mexico.

In addition, we had the opportunity to listen to the expertise of several connotated scientists from Mexico, Argentine, Bolivia, Brazil, Canada, Colombia, Germany, France, Kingdom of Saudi Arabia, Peru, United Kingdom, United States, and Uruguay.

The Opening ceremony took place at the La Estación Theme Park (The Railway Station), including The Old Train Station and Railway Museum, is a historic and recreational complex located in the city of Aguascalientes, in Mexico. La Estación Theme Park is composed of dancing fountains, the Old Railway Station Museum, fast food restaurants, the Locomotive Engine Monument, visitor attention office, Spring water Square, Furgón theater, Civic Plaza, Whistle Plaza and a Knowledge Cabús are part of this unbelievable complex. It consists of four showrooms. The first one functions as a gallery, in Showroom 2 the work of Manuel Manila Posada’s colleague is usually shown. A third show room works as an exposition of the followers of this art. The last room is a library and contains about five thousand books, that include an important collection of poetry and theatre works.

Article continued on the next page
In this occasion and for the first time the I NATIONAL SYMPOSIUM OF CLINICAL LABORATORY PROFESSIONALS “Prospective, positioning and future of the clinical laboratory and the laboratory medicine; from the vision of “One Health” was organized. That gathered in an interdisciplinary commitment, experts and managers of the main organizations and institutions, academic, vocational training, and unions, accompanied by representatives of other countries. Those who, after a debate and prior preparation, will develop in the Symposium assertive communication in the exchange of opinions, points of view and experiences, aimed at proposing and sharing, together with the congressmen in public debate, of the present and future needs, which have both health professionals related to clinical laboratory and laboratory medicine, as the interaction with other disciplines associated with human development in the context of “One Health”.

This event exposed and developed the core issues of this professional practice, its future, interdisciplinarity, public health, epidemiology, educational programs, continuous professional development, new technologies and methods, focused from different angles and points of view, to deploy a broad and updated vision of our professional work, and where clinical chemists and clinical pathologists involved in leading the laboratory medicine in Mexico got together for the first time.

This program included the following topics:
2. The New Skills And Abilities Of The Professional Of The Laboratory By J.F. Muñoz-Valle And L.E. Figueroa Lopez.
3. Social Determinants Of Health And The Clinical Laboratory By J.M. Sanchez-Gonzalez.
4. Future Perspective Of The Clinical Laboratory Professional At An International And Latinamerican Level By K. Adeli And A. Justiniano-Grosz, Respectively.
5. Professional Bioethics By F. Anaya Velazquez.
6. The New Role Of Professional Associations And Associations By C.D. Navarro.
7. Redesigning Continuing Education/Professional Development By X. Diaz And E. George.
8. Importance Of Pharmacovigilance And Toxicology In The Laboratory By L. Gomez-Olivan.
9. Personalized/Precision Medicine By G. Santoscoy-Ascencio.
10. Innovation In Management To Achieve Financial Support To Laboratories That Contribute To Reducing Social Exclusion And Achieving Universal Access To The Best Laboratory Studies By B. Gouget.

This activity conveyed the presence of clinical pathologists and scientists from several clinical chemistry organizations for the first time in the history of laboratory medicine in Mexico. The scientific program of this congress was granted with auspices of IFCC and WASPaLM. Other Latin American organizations such as the Latin American Association of clinical pathologists (ALAPAC) and the Brazilian Society of clinical pathologists (SBPC) participated too. IFCC full member society the CMCLabc, and three affiliated members societies CONAQUIC, CONQUILAB, FENAQC, all of them from Mexico together with COMECEF Board certification in Pharmaceutical sciences represented the Clinical Chemist and Pharmacists that in conjunction with the Collage of Clinical Pathology of the Center of the Republic and FEMPAC were the key organizers of the I National Symposium of Clinical Laboratory Professionals.

Among key speakers, we had the opportunity to listen to Jose Alejandro Madrigal, MD PhD FRCP FRCPath DSc HonDSci FMedSci who gave two key plenary lectures on Resilience In The Face Of Adversity: “A Life Dedicated To Medicine” and on Advanced Gene And Cell Therapy; Beyond the Last Frontier.

The full scientific program can be found at: https://drive.google.com/file/d/1IgUuGRGoSHhpc4swSwB3P PktzOjijWOO/view?pli=1

To finalize, the Speakers dinner on Friday evening was a great event, including the presentation and oath of the next president of FEMPAC, Guillermo Santoscoy Asencio, MD PhD and EB Members.
With gratitude to the organizations that gave auspice to this congress, to professors that participated as lecturers, to companies from the industry in vitro diagnosis, as well as to congress attendees from all around Mexico. We are proud to say that the LII National Mexican congress in Clinical Pathology was a successful event.
INTERNATIONAL CONGRESS OF PEDIATRIC LABORATORY MEDICINE

TOPICS:

Immunodeficiencies

Immuno-flow cytometry in pediatric laboratory medicine

Genomics vs Mass spectrometry in pediatric laboratory medicine

Newborn Screening for SCIDs

NGS in diagnosing undiagnosed diseases

CHAIR OF THE CONGRESS:
Tim Lang, UK
Artificial Intelligence improves precision in the Clinical Laboratory

- The integration of information extraction techniques, advanced data analysis, and process automation is changing laboratory practice: reducing errors and costs, simplifying workflows, and increasing productivity.
- A balance needs to be established between the technological advance that massive data analysis and Artificial Intelligence entails and the privacy risks for patients, as well as correctly understanding and interpreting their results.

Laboratory Medicine is one of the specialties that uses Artificial Intelligence (AI) as a support tool for clinical practice. Its use has led to improved precision in laboratory tests, greater productivity, and simplification of workflows. However, the incorporation of AI in healthcare practice must not compromise the privacy of patients, nor the correct understanding and interpretation of their results. The XVII National Congress of the Clinical Laboratory (LABCLIN 2023), organized by the Spanish Society of Laboratory Medicine (SEQCML), the Spanish Association of Medical Biopathology (AEBM-ML) and the Spanish Association of the Clinical Laboratory (AEFA), addressed these issues from October 18 to 20 in Zaragoza.

Specifically, in the symposium, “Big Data: Advanced Data Analysis and Artificial Intelligence in the Laboratory”, moderated by Dr. Germán Seara Aguilar, from the Hospital 12 de Octubre Research Institute (i+12), the use of data and AI in the healthcare field was examined in depth. According to Dr. Germán Seara Aguilar, “the application of Artificial Intelligence in the automation of processes has led to an improvement in precision, with a reduction in errors, and a simplification of workflows, with an increase in productivity and reduced costs.” Additionally, he said, automatic reporting improves communication with clinicians and patients and allows for the semi-automatic introduction of personalized recommendations.

The incorporation of massive data analysis, Machine Learning (ML) and Deep Learning algorithms in Artificial Intelligence models has greatly increased their power of application, decreasing their “explainability”, that is, the ability to understand and interpret correctly how you arrived at your results. The congress delved into the need to establish a balance between the technological advances represented by massive data analysis and AI and the risks of privacy for patients and “explainability.”

Training needs
Data Mining and Machine Learning allow us to improve data analysis, their description, classification and segmentation, the discovery of behavioral patterns, and the generation of predictive models. “At the same time, it requires professional training in the field of AI, systematic interdisciplinary work, the incorporation of mechanisms for verification and auditing of results, and an increased need for security measures, both in computer science and in privacy, to ensure ethical management of new technologies,” commented Dr. Germán Seara Aguilar.

Finally, he highlighted that the current digital revolution and the expansion of massive data analysis and Artificial Intelligence techniques are changing the way of practicing the profession and communicating with society. Despite this, Dr. Germán Seara Aguilar reminded that the future should not focus on replacing professionals, “but rather on supporting them in their work, improving the quality of services and value for patients. And it doesn’t seem like it’s optional. Either we join in or it will devastation us,” he concluded.

Spanish Society of Laboratory Medicine (SEQCML)
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I, Dr. Cecil J Weale, am currently in the third year of a highly impactful Postdoctoral Fellowship at the SAMRC/CPUT Cardiometabolic Health Research Unit (CMHRU), at the Cape Peninsula University of Technology (CPUT), in Cape Town, South Africa. The SAMRC/CPUT CMHRU, headed by Professor Tandi E. Matsha, the unit Founder and Director, provides a platform from which a team of researchers collaborate to provide an integrated research programme focusing on cardiometabolic traits (obesity, diabetes, hypertension, metabolic syndrome, and chronic kidney diseases): all with respect to inflammation, genetics, epigenetics, microbiome and oxidative mechanisms. The aim of the unit is to employ a holistic approach to investigate the context specific factors associated with diabetes and related cardiometabolic traits. Considering this, my research endeavours revolve around elucidating the intricate amalgamation of genetic mechanisms and the identification of risk factors associated with a spectrum of cardiometabolic diseases. In particular, the exploration of microRNAs, short non-coding RNA transcripts known for their pivotal role in regulating gene expression and endeavouring to harness the power of these transcripts as potential population-specific biomarkers for cardiometabolic diseases. More importantly, translating this knowledge into tangible benefits for the unique landscape of South Africa.

Considering my research domain, I had the honour of being invited to share some of our research unit’s findings at the Medlab Africa Conference, which was held in Johannesburg, from the 17th to the 19th of October 2023. The Medlab Africa Conference, co-located with the Africa Health Congress, is focused on core lab and specialist lab units, providing the platform for the showcasing of innovative research and technologies tailored to healthcare in Africa. As such, I am highly appreciative for being offered the opportunity to showcase some of our research at such an esteemed scientific gathering. I had the opportunity to deliver a presentation entitled “MicroRNAs and their potential role as novel population-specific biomarkers for dysglycaemia in a South African population”, at the Clinical Chemistry session of the Clinical Pathology meeting, which took place on the 18th of October 2023.

This session, chaired by the distinguished Professor Annalise Zemlin, boasted a wide array of talks by acclaimed researchers from across South Africa, spanning a plethora of important topics. These discussions facilitated a robust exchange of knowledge, delving into crucial insights related to the challenges posed by cardiometabolic diseases, such as diabetes and obesity, within the African context, as presented by Professor Nigel Crowther from Johannesburg. Additionally, the impact of environmental influences, particularly endocrine disruptors, on healthcare was covered by Dr. Verena Gounden from Durban. The significance of pinpointing reliable biomarkers for efficiently triaging myocardial infarctions in emergency room settings was also emphasized, by Dr. Ashlin Rampul from Durban. The importance of employing Westgard Sigma Rules for quality control in the diagnostic laboratory was also highlighted by Dr. Jody Rusch from Cape Town. Moreover, the potential advantages of integrating innovative technologies such as artificial intelligence into diagnostic laboratory settings was discussed, highlighting potential applications in African healthcare – this was delivered by Dr. Owen Wiese from Cape Town.

Participation in the Medlab Africa Conference provided the platform for a young researcher such as me to rub shoulders with pioneers in the field of Clinical Pathology. This also afforded me the opportunity to network with other researchers and foster collaborative efforts. Some of these partnerships are already unfolding, such as a MicroRNA Expression Analysis Workshop, to be offered at Sefako Makgatho Health Sciences University, by our team members from the SAMRC/CPUT CMHRU who specialize in this research niche.
In summary, I would like to extend my deepest gratitude to the Medlab Africa organizers, as well as the Clinical Pathology organizers, such as Professor Annalise Zemlin and Professor Rajiv Erasmus, for giving me the opportunity to contribute to such an acclaimed and important meeting, and I hope to participate in the next conference.

Dr Cecil J Weale delivering his talk

Speakers of the Clinical Pathology meeting (Clinical Chemistry Session) (L-R): Prof. Annalise Zemlin, Dr. Owen Wiese, Dr. Ashlin Rampul, Dr. Cecil J Weale, Dr. Jody Rusch, Prof. Nigel Crowther

IFCC Laboratory Medicine Practice Guidelines

The IFCC launches its Laboratory Medicine Practice Guidelines programme focusing on Best Practice Recommendations, Position Papers & Guidelines in Laboratory Medicine

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Laboratory Medicine Practice Guidelines program focusing on Best Practice Recommendations, Position Papers & Guidelines in Laboratory Medicine.

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The IFCC invites all IFCC Committees, Taskforces & Working Groups to propose topics related to their field of expertise, as per instructions outlined in the above linked document.

News from the website
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Cardiometabolic Health Symposium Explores Innovations in a Technological Era

By Saarah Davids (on behalf of the organising committee), SAMRC/CPUT Cardiometabolic Health Research Unit, Dept of Biomedical Science, Cape Peninsula University of Technology, Cape Town, South Africa

In a bid to delve into the intricate intersection of health and technology, the SAMRC/CPUT Cardiometabolic Health Research Unit organised a symposium on 9th November 2023. Nestled in the vibrant setting of the Cape Peninsula University of Technology (CPUT) Hotel School in Cape Town, South Africa, the event highlighted the theme, “Cardiometabolic Disease in the Technological Era.”

Distinguished guests and scholars convened to explore the symposium’s focal point. The keynote address was delivered by Professor Faadiel Essop, Director of the Centre for Cardiometabolic Research in Africa (CARMA) at the Biomedical Research Institute (BMRI), based at the Faculty of Medicine and Health Science, University of Stellenbosch. Professor Essop’s talk, entitled “Enhancing Cardiometabolic Research Care: Innovations for a Healthier Tomorrow,” set the tone for an intellectually stimulating day.

The symposium unfolded through four distinct sessions, each delving into critical facets of the field, namely: artificial intelligence, point of care and medical devices, e-health, and personalized medicine. Distinguished national experts and academics, among them Dr. Ashlin Rampul, a representative of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) young scientist task team; Prof Annalise Zemlin, Head of Division: Chemical Pathology at Stellenbosch University; Prof Kotsedi Monyeki from the Department of Physiology and Environmental Health at the University of Limpopo; and James Ross, Co-Founder and CEO of BixBio, a biotech company that is disrupting global healthcare by unlocking the power of African genomes for drug development, generously shared ground-breaking scientific advancements and practical experiences. Their collective insights not only expanded the horizons of knowledge but also fostered a deeper understanding of cardiometabolic health within the dynamic landscape of rapid technological evolution.

What set this symposium apart was the active participation of young emerging researchers in pivotal organizational roles. The organizing committee, consisting of Dr. Saarah Davids, Dr. Shanel Raghubeer, Dr. Cecil Weale, Dr. Dipuo Motshwari, and Dr. Don Matshazi played a central role in the event. All members of the organizing committee are affiliated with the South African Association for Clinical Biochemistry and Laboratory Medicine (SAACB), falling under the auspices of the African Federation of Clinical Chemistry (AFCC) and the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). Esteemed figures in the field, namely Prof. Tandi Matsha, Prof. Glenda Davison, and Prof. Rajiv Erasmus are guiding this dynamic team of emerging researchers. These seasoned scientists have provided mentorship, fostering an environment conducive to innovative research in the realm of non-communicable diseases.

This dynamic blend of established expertise and emerging talent underscored the commitment to advancing cardiometabolic research and heralded a promising trajectory for the future of healthcare in the technological age.
Cardiometabolic Health
Symposium Explores Innovations

Prof Faadiel Essop, Director of the Centre for Cardiometabolic Research in Africa at BMRI, Faculty of Medicine and Health Science, University of Stellenbosch, giving the keynote address at the SAMRC/CPUT Cardiometabolic Health Research Unit 2023 symposium.

Young scientist attending the SAMRC/CPUT Cardiometabolic Health Research Unit 2023 symposium at the CPUT Hotel School, Cape Town South Africa.

Three young emerging scientist who were part of the symposium organising committee, from left: Dr Dipuo Motshwari, Dr Shanel Raghubeer and Dr Saarah Davids.
Appreciating the work of its teacher and eminent expert, the Society of Medical Biochemists of Yugoslavia, (today the Society of Medical Biochemists of Serbia) after the death of Prof. Dr. Ivan Berkeš in 1997, formed in his honor, the Scientific Fund “Professor Ivan Berkeš” and the “Annual Scientific Conference” dedicated to the life and work of Professor Ivan Berkeš at the suggestion and organization of Prof. Dr. Nada Majkić-Singh was established.

Annual awards (diplomas and cash prizes) are awarded from the Fund to Pharmacy students for the twenty-sixth time this year.

The patrons of the “Professor Ivan Berkeš” Science Fund are:
- Society of Medical Biochemists of Serbia
- Institute of Medical Biochemistry of the Faculty of Pharmacy of the University of Belgrade
- Institute of Medical Biochemistry of the Military Medical Academy

Professor Dr. Ivan BERKEŠ, an important figure in the field of pharmacy and medicine, is the founder of medical biochemistry and clinical enzymology in the healthcare of Serbia and Yugoslavia.

Under his leadership, numerous generations of medical biochemists were educated at the Faculty of Pharmacy in Belgrade. In Serbia for a long time there was not a single laboratory, without a Professor Ivan Berkeš’ student working in it.

On November 16, 2010, the Thirteenth Annual Scientific Conference dedicated to the 100th anniversary of the birth of Professor Ivan Berkeš was held in Belgrade, in which experts from Belgrade (N. Majkić-Singh), Zagreb (S. Margetić) and Skopje (S. Efremoeva-Aaron) where Professor Ivan Berkeš lived and worked, held their lectures. Diplomas and monetary awards were also traditionally awarded from the Scientific Fund “Professor Ivan Berkeš” to the best students of the Faculty of Pharmacy in Belgrade, namely: Zori Ćetković and Jeleni Joksić.

In 2020, the Society of Medical Biochemists of Serbia marked the 110th anniversary of the birth of Professor Ivan Berkeš, on which occasion the Monograph: “Life and Work of Professor Ivan Berkeš and Fund Laureates: Where are They and What are They Doing Today?” was presented.

So far, the Fund has 56 laureates and their biographies are described in the Monograph.

The First Annual Scientific Conference “Professor Ivan Berkeš” was held on November 25, 1998 in Belgrade in the Inter-Continental Belgrade hotel with the Second Congress of Pharmacists of Yugoslavia.

The first laureates of the Fund were:
- Vesna Vuković (graduate pharmacist-medical biochemist)
- Nebojša Cekić (pharmacist graduate)

The Twenty Third Annual Scientific Conference “Professor Ivan Berkeš” were co-organized and hosted by the Faculty of Pharmacy, University of Belgrade on 15. December 2022 (see www.dmbj.org.rs).
Laureates of the Scientific Fund “Professor Ivan Berkeš” in 2022 were:
• Đorđe Stanivuk (Master of Pharmacy - Medical Biochemist) and
• Jovana Živanović (Master of Pharmacy)

They received Diplomas and monetary awards.

This year, diplomas and monetary awards were presented on November 4th at the opening of the IV TMB Congress “Cardiovascular risk factors - diagnostic challenges and importance”.

The laureates of the Scientific Fund “Professor Ivan Berkeš” in 2023 are:
• Minja Derikonjić (Master of Pharmacy – Medical Biochemist) and
• Nastasija Anđelković (Master of Pharmacy)

Minja Derikonjić was born on 23.03.1999, in Pancevo, where she finished elementary school as a student of the generation, after which she entered the “Uroš Predić” Gymnasium-natural sciences and mathematics. She graduated from high school in 2018 with a “Vuk Karadžić” diploma. In the same year, she entered the Faculty of Pharmacy of the University of Belgrade, majoring in pharmacy-medical biochemistry, from which she graduated in September 2023 with an average grade of 9.72. Graduate thesis entitled “Examining the predictive and diagnostic potential of insulin-like growth factor 1 in patients with colorectal cancer”, under the mentorship of Prof. Dr. Aleksandra Zeljković, was defended at the Department of Medical Biochemistry. She received award “Professor Ivan Berkeš” from the Scientific Fund as the best graduated student of the Faculty of Pharmacy majoring in pharmacy-medical biochemistry in the 2022/2023 year. During her studies, she got three times the Annual Award of the Faculty of Pharmacy for the best students. She is a scholarship recipient of the Fund for Young Talents of the Republic of Serbia-Dositeja for the year 2022/2023, and for four years she was also a scholarship holder of the Ministry of Education, Science and Technological Development of the Republic of Serbia. During her studies, she engaged in scientific research at the departments of medical biochemistry and toxicology. The student scientific research paper on the topic “Examination of biochemical indicators of cardiometabolic risk in patients with hypothyroidism”, carried out at the Department of Medical Biochemistry under the mentorship of Prof. Dr. Aleksandra Zeljković, was presented at the XV Mini-Congress of students of the Faculty of Pharmacy and the 61st Congress of Biomedical Sciences Students of Serbia on Kopaonik in 2022. The following year, she participated in the XVI Mini-Congress of the students of the Faculty of Pharmacy, where her student scientific research paper entitled “Exposure assessment of inhabitants of Pancevo to benzene”, carried out at the Department of Toxicology under the mentorship of Prof. Dr. Marijana Ćur–ić, was declared the best in the field of toxicology. She enrolled in doctoral academic studies in the 2023/2024 school year at the Department of Medical Biochemistry of the Faculty of Pharmacy in Belgrade. From October 2023, she is doing an internship at the Clinical Hospital Center “Dr. Dragiša Mišović-Dedinje”, at the Laboratory Diagnostics Service.

Nastasija Anđelković was born on 27th February 1999 in Kraljevo. She completed Medical high School-Kraljevo as the best student of generation. In 2018 she enrolled in the Faculty of Pharmacy in Belgrade (Master of Pharmacy) and graduated in July 2023. During her studies she was the member of the Student Scientific-Research Center (CNIRS) in Faculty of Pharmacy in Belgrade and Social media-team coordinator. She was engaged in scientific research work at the Department of Pharmaceutical Chemistry where she did three research papers under mentorship of Prof. Branka Ivković and at the Department of Pharmaceutical Technology under mentorship of Prof. Snežana Savić and Ass. Ines Nikolić. One of the papers named “How do we actually see the invisible: analysis of the impact of measuring conditions and sample preparation procedure on the size estimation of nanoparticles/nanodroplets through dynamic light scattering” was awarded as the best work in the field of pharmaceutical technology on the XV Mini-Congress of Students of the Faculty of Pharmacy and on the 61st Congress of Biomedical Sciences Students of Serbia in Kopaonik mountain in 2022. and the paper named “Characterization of propiophenone derivatives as potential antiseptics/disinfectants” was awarded the best work in the field of pharmaceutical chemistry on the 62th
Congress of Biomedical Sciences Students of Serbia in Kopaonik mountain in 2023. She is co-author of one research paper which is published in the Journal of the Serbian Chemical Society – JSCS, named: “Application of liquid chromatography in defining the interaction of newly synthesized chalcones and related compounds with human serum albumin”. She defended her graduate thesis entitled “Characterization of propiophenone derivatives as potential antiseptics/disinfectants” at the Department of Pharmaceutical Chemistry under mentorship of Prof. Branka Irvović. During her studies, she was awarded for her success by the Faculty of Pharmacy for several years. She received award for the best graduated student (Pharmacy programme) during 2022/2023 at the University of Belgrade – Faculty of Pharmacy from the Scientific Foundation “Professor Ivan Berkeš”. During her studies, she was a scholar of the Ministry of Education, Science and Technological Development, Republic of Serbia. She is a scholarship holder of the Fund for Young Talents of the Republic of Serbia – Dositeja, and holder of “Talent program in the public sector”. 

Professor Dr. Ivan Berkeš (1910–1997) The monograph (L-R) Nada Majkić-Singh with Minja Derikonjić Scientific Fund “Professor Ivan Berkeš” laureate in 2023, and Snežana Jovičić. 

(L-R) Nada Majkić-Singh with Nastasija Andelković, Scientific Fund “Professor Ivan Berkeš” laureate in 2023, and Snežana Jovičić. Article continued on the next page
Society of Medical Biochemists of Serbia

(L-R) Nada Majkić-Singh with Andelija Jocić, TMB Coordinator, and Snežana Jovičić

The 23rd Ivan Berkeš Annual conference
IFCC Free Webinar

**Improved implementation of medical tests - a new quality improvement project for the laboratory**

The recording is now available to view On Demand by clicking on the link below


The purpose of the Committee for the Value Proposition in Laboratory Medicine (C-VPLM) is to demonstrate ways to identify the value of medical tests, particularly using measures that have a financial or economic dimension. This includes applying the concept of a value proposition to tests based on the unmet clinical need being met through use of the test in a defined clinical pathway. Delivering the value proposition of a test includes two separate processes called adoption and implementation. The webinar will highlight the differences between these two processes, including the different types of evidence that are required in adoption and implementation. The focus of the Committee’s work is on the latter because the importance of implementation is poorly appreciated and when performed badly contributes to the poor value of testing including variation in utilisation and the incorrect use of test results. The webinar will highlight a process of implementation that will address these problems including the identification of stakeholders in the clinical pathway, the measurement of the benefits and disbenefits to the different stakeholders and the measurements that are necessary to monitor the implementation process. All of these aspects will be illustrated through reference to specific tests with the aim that improved test implementation – namely the way
tests are introduced by any laboratory or pathology provider – should be viewed as an exercise in quality improvement of the care pathway.

This webinar comprises of three following presentations of 20 min each followed by 20 min of panel discussion at the end.

Chair: Dr. Robert Christenson
Talk 1- “The value of effective test implementation” - Dr. Andrew St John
Talk 2- “Key concepts associated with test implementation” - Prof. Chris Price
Talk 3- “How to conduct a quality improvement project for test implementation?”- Dr. Maurice O’Kane

The IFCC webinar: Principles and practice of indirect methods for reference interval establishment” was held on November 21, 2023.

In this webinar, members of the IFCC TF-GRID will give presentations on the principles of indirect methods for reference interval establishment (Jakob Zierk), their application using huge real-world data sets (Mary Kathryn Bohn), and on guidelines to support their implementation into laboratory practice (Ken Sikaris).
This webinar comprises of three following presentations of 20 min each followed by 20 min of panel discussion at the end.

Chair: Dr. Jakob Zierk  
Talk 1- “Algorithms to calculate reference intervals from patient data in children and adults” - Dr. Jakob Zierk  
Talk 2- “Application of indirect algorithms to reference interval harmonization in Canada” - Dr. Mary Kathryn Bohn  
Talk 3- “Developing guidelines to support the quality of indirect reference intervals” - Prof. Ken Sikaris

The IFCC webinar: “Outcome studies to advance excellence in laboratory medicine” was held on December 6, 2023.

Laboratory professionals are now more than ever required to perform studies that provide evidence
of the impact of testing on patient outcomes since the growth of laboratory medicine is reliant on its “value add” in the health-care landscape. In order to demonstrate the value for testing, we need to understand whether the test is worth of investment and to identify the impact of testing on management, care pathways and outcomes. However, in reality, to link the clinical laboratory information to value is challenging. Most laboratory tests are used for multiple purposes and in combination with other laboratory or medical tests in a complex care pathway. Impact of laboratory testing on patient outcomes is partial and variable since measured outcomes may be many steps beyond the performance of the test and affected by many other variables. So when the outcome information is missing, quantifying the value of the lab tests is difficult.

The IFCC Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM) was established in 2022. In this webinar, three members from the IFCC TF-OSLM will share the taskforce’s mandates and experience in identify existing peer reviewed, high quality publications that demonstrate the value of laboratory medicine in healthcare and developing a funded research program for investigators in hospitals located around the world to conduct new retrospective and prospective research with outcomes that assess the value of laboratory medicine in healthcare overall.

This webinar comprises of three following presentations of 20 min each followed by 20 min of panel discussion at the end.

Chair: Dr. Verena Gounden
Talk 1- “Quantifying the Advantage of Laboratory Medicine: Evidence from Clinical Outcomes” - Prof. Zhen Zhao
Talk 2- “Timely cardiovascular marker results for getting clinical outcomes” - Dr. Claudio Suárez
Talk 3- “C-reactive protein and procalcitonin – Outcome studies for biomarker guided antibiotic therapy” - Dr. Erik Koldberg Amundsen
## IFCC's Calendar of Congresses, Conferences & Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Place</th>
</tr>
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<tr>
<td>Jan 25, - Jan 26 2024</td>
<td>AFCC CONGRESS 2024</td>
<td>Cairo, EG</td>
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<tr>
<td>May 25, 2024</td>
<td>XVII ICPLM - INTERNATIONAL CONGRESS OF PEDIATRIC LABORATORY MEDICINE</td>
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<td>May 26 - Jun 30, 2024</td>
<td>XXVI IFCC WORLDLAB - Dubai 2024</td>
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<td>AFCB Congress in conjunction with the XXVI IFCC WorldLab Dubai 2024 Congress</td>
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<td>Oct 3 - 6, 2024</td>
<td>XXVI COLABIOCLI 2024</td>
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<td>October 31 - Nov 3, 2024</td>
<td>APFCB 2024 Sydney</td>
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<td>May 18 - 22, 2025</td>
<td>XXVI IFCC-EFLM EUROMEDLAB 2025</td>
<td>Brussels, BE</td>
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<tr>
<td>Dec 15, 2023</td>
<td>International Symposium on Laboratory Medicine</td>
<td>Snibe, Kathmandu, NP</td>
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<tr>
<td>Dec 21, 2023</td>
<td>Vietnam Chemical Pathology Course XIV 2023 (webinar)</td>
<td>Roche, online event, VN</td>
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Other events with IFCC auspices

Click here
Season’s Greetings

We wish you a Healthy, Successful and Peaceful New Year!

We take the occasion to inform that the IFCC Office will be closed for Christmas Holidays from December 23rd to January 1st, both inclusive.

The IFCC Executive Board and Office Staff
Advertise in IFCC eNews!

Showcase your products and initiatives to more than 49,000 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.

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• Free-of-charge to readers
• Interactive digital edition

Published ten times a year:
No 1/2 January/February
No 3 March
No 4 April
No 5 May
No 6 June
No 7/8 July/August
No 9 September
No 10 October
No 11 November
No 12 December

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(L-R) Elisa Fossati, Paola Bramati, Silvia Colli Lanzi, Silvia Cardinale, Smeralda Skenderaj, Sofia Giardina
## IFCC Membership

### Full members

<table>
<thead>
<tr>
<th>Country</th>
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### Corporate members

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### Affiliate Members

- Botswana: Institute of Clinical Laboratory Professionals
- Brazil: Sociedade Brasileira de Patologia Clínica / Medicina
- China: Lab Medicine Committee, China Association of Medical Equipment (MC)
- 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 (AMB)
- Iran: Iranian Association of Clinical Laboratory Doctors (IACLD)
- Jordan: Society for Medical Technology & Laboratories (SMCL)
- Kazakhstan: Public Association - Federation of Laboratory Medicine (FLM)
- Mexico: Federación Nacional de Químicos Clínicos (CONAQUIC A.C.)
- Mexico: Colegio Nacional de Químicos Clínicos en Medicina de Laboratorio (CONQUILAB)
- Mexico: Federación Nacional de Colegios Profesionales de la Química Clínica, A.C. (FENACQC)
- Nepal: Nepalese Association for Clinical Chemistry (NACC)
- Philippines: Philippine Council for Quality Assurance in Clinical Laboratories (PCQLAC)
- 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)
- Spain: Asociación Española de Biopatología Médica - Medicina de Laboratorio (AEBM-ML)
- Spain: Asociación Española de Farmacéuticos Anaestesia (AEFA)
- Sri Lanka: College of Chemical Pathologists of Sri Lanka (CPCPSL)
- Türkiye: Society of Clinical Biochemistry Specialists (KBUD)
- Ukraine: Association for Quality Assurance of Laboratory Medicine (AQALM)
- United Arab Emirates: Genetic Diseases Association (UAEQDA)

### Regional Federations

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

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
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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

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