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N° 1/2 – January/February 2021
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IFCC’S CALENDAR OF CONGRESSES, CONFERENCES & EVENTS

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Dear colleagues,

I wish you a happy, joyful, fruitful, productive, and creative New Year! I admit this is wishing for a lot, but let’s try for the maximum (to get something...). Well, I am looking forward to the time when my editorial won’t begin with a phrase about COVID-19... (a repeat from November editorial). One step forward..., one or half step back?

In this issue our president Prof. Khosrow Adeli is presenting the plans of the IFCC for the New Year. He also introduces the members of the new IFCC task forces. We are looking forward to the results of their work.

In this issue we welcome and say farewell to new and old Chairs, and we are trying to learn from remembering the lives of valuable IFCC people.

This issue includes a lot of interesting activities, virtual of course, from all over the world show that IFCC community is really busy, creative, dynamic and tries to face this unprecedented challenge with all forces.

Dr. Bernard Gouget discusses the worldwide difficulties. It is important for all of us to realize that vaccines should be a public good, that only solidarity will bring the end of the pandemic. And he finishes: “Stronger than the virus, civilization still prevails, the opposite of a pathogenic virus.”

Dear colleagues, working in the labs is a powerful way to fight the virus!

Wishing you all the best,

Katherina Psarra

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**Message from the eNews Editor**

by Katherina Psarra
eNews Editor

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**News from the IFCC Website**

**Scam messages**

Recently we are coming across an increasing number of fake email messages. They seem trustworthy, but they are not. Scammers use email or text messages to trick you into giving them your personal information. If you receive an email that looks like it’s from IFCC and you suspect it is a scam, you should contact us using our usual email contacts, which are available on the “Contact Us” page. Do not use the information in the email or use links. Do not reply to the email. Also, if you receive any attachments and or links, remember that they can contain harmful malware.

Read more
Happy New Year to all of you, in the IFCC family! 😊

Moving into 2021, the IFCC is eager to continue its mission of “advancing excellence in laboratory medicine for better healthcare worldwide”. In 2020, we made significant progress towards impacting healthcare delivery and patient outcomes, initiating a number of new programs in the areas of newborn screening, global lab quality, putting together the infrastructure to become the largest provider of free distance learning in the field of laboratory medicine, and aiding clinical laboratories in the fight against the COVID-19 pandemic through development and publication of laboratory practice guidelines.

Despite unique challenges presented by the COVID-19 pandemic over the past year, the IFCC has had an immensely successful year, laying the foundation for the 2020-2023 strategic plan. We look forward to continuing this momentum into 2021!

In my previous president messages, I had detailed the terms of reference and strategic plans for the new taskforces on Global Newborn Screening, Global Laboratory Quality (iQC and EQA), and Global eLearning/eAcademy. I am happy to inform you that the membership for all these new taskforces is now complete and the taskforces have begun their work. They will be meeting on a monthly meeting via zoom and have already initiated detailed plans to implement the new strategic plans around these key areas of priority for IFCC. We will keep you updated over the coming months. Below please find the full membership rosters for TF-NBS, TF-GLQ, and TF-GEL.

As you are all well aware, the COVID-19 pandemic continues to have an enormous impact on our daily life as well as our laboratory practices. The pandemic has engaged the laboratory community in test development, validation, and implementation at unprecedented rates to support patient care and public health initiatives. In March 2020, a new Taskforce known as the IFCC Taskforce on COVID-19 was established by IFCC to summarize, critically review, and disseminate the most up-to-date, evidence-based information about the novel coronavirus as well as provide recommendations regarding test implementation. Beginning in April, the Taskforce published the IFCC Information Guide on COVID-19 to share key information and resources with laboratory professionals worldwide and has since regularly updated this guide on a biweekly basis as new information becomes available. This group also published an evaluation of the latest evidence on clinical testing (Bohn et al. CCLM 2020), as well as guidelines on biosafety (Lippi et al. CCLM 2020). In addition, the Taskforce administered and published the results of surveys to understand how laboratories were managing operational and biosafety challenges during the pandemic (Loh et al. CCLM 2020). Most recently, the Taskforce published interim guidelines based on available evidence for publication, providing practical recommendations to laboratories on molecular testing of...
SARS-CoV-2 infection, serological testing for antibodies against SARS-CoV-2, as well as biochemical and hematological monitoring of COVID-19 patients.

**Importantly, a kind reminder that IFCC has planned an exciting new IFCC Global Conference on COVID-19, which will take place virtually on February 15-17, 2021.** The theme of this conference will be the Critical Role of Clinical Laboratories in the COVID-19 Pandemic, with the goal of bringing together leading experts on a global virtual platform to present the latest advances in COVID-19 diagnostics and therapeutics. I am pleased to inform you that we have received strong sponsorship support for this conference and over 2400 registrations from over 95 countries from around the world (as of January 22nd) and have planned an exciting scientific conference with excellent speakers representing regions from around the world, making this a truly international event. **Do not miss this unique event and register if you have not already done so!**

### Joint Task Force of IFCC and International Society of Newborn Screening (ISNS)

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<tr>
<td>V. Leung-Pineda</td>
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<td>J. Bonham</td>
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<td>A.F. Al Othaim</td>
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<td>D. Webster</td>
<td>Member/ISNS</td>
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<td>E. Lebredonchel</td>
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### Task Force on Global Lab Quality (TF-GLQ)

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<td>R. Bais</td>
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<td>A. Park</td>
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<td>L. Langman</td>
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<td>N. Tabatadze</td>
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**Taskforce on Global eLearning/eAcademy (TF-GEL)**

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<td>P. Kumar Dabla</td>
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<td>E. Lianidou</td>
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<td>J. Lin</td>
<td>Corp. Rep./Abbott</td>
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<tr>
<td>Rojeet Shresta</td>
<td>Coordinator for Asia Pacific area</td>
<td>NP</td>
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<tr>
<td>Agustina Fares-Taie</td>
<td>Coordinator for Latin/North America area</td>
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<tr>
<td>Paul Hamilton</td>
<td>Coordinator for Europe and Africa area</td>
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WELCOME TO ANA-MARIA LENA (URUGUAY)

by Rosa Sierra-Amor, PhD
Former COLABIOCLI Regional Representative
Member IFCC WG eNews

Dr. Ana-Maria LENA is a Clinical Biochemistry and Pharmaceutical Chemistry professional, with a Doctorate in Chemistry from the Faculty of Chemistry of La República Oriental del Uruguay in Montevideo.

She was Technical Director of the Specialized Center for Hemostasis and Thrombosis Disorders, and Professor of Clinical Analysis at the Faculty of Chemistry from the same university where she is responsible for the Hematology Course of the Clinical Biochemistry Degree since 2004. Ana was also Professor at the Universidad Catholica – Faculty of Odontology, where she chaired the Biochemistry course.

From 1997 to 2001, she was the Head of the Hematology Service of the Military Hospital Laboratory. She is author of several research papers and publications in the area of Hemostasis and Thrombosis.

In COLABIOCLI, she was the General Secretary of the Executive Board of COLABIOCLI from 2018-2019.

Ana-Maria is also a member of the Latin American Cooperative Group of Hemostasis and Thrombosis, Vice President of the Research and Science in Hemostasis and Thrombosis - a non-profit Association. And, Member of the Administrative Committee of the Uruguayan Registry of Von Willebrand Disease.

Elected as Regional Representative, she will be an important link between COLABIOCLI and IFCC fostering interrelation in regional and international activities among both organizations. At the Executive Board of COLABIOCLI, she maintained contact with all affiliated societies, therefore, she has the knowledge to provide academic and supporting resources that the region needs.

She will act as the communicator between both organizations, COLABIOCLI and IFCC in relation to any technical, scientific and logistic matters; she is willing to participate in any academic activities in IFCC, and is keen to encourage young professionals to participate in IFCC activities hoping that many more young scientists from LATAM join the IFCC Task Force Young Scientist.

In addition, she will promote IFCC VLP across the region, and inform COLABIOCLI societies of the benefits and the series of activities that IFCC has for laboratory medicine professionals worldwide.

Welcome on board, Ana-Maria!
Prof. Dr. Leslie Lai ended his second term as Chair of the IFCC Education and Management Division (EMD) in December 2020.

Prof. Dr. Leslie Lai, MBBS (London), MSc (London), MD (London), FRCPATH (UK), FRCP (Edinburgh), FFSc (RCPA), FAMM, comes from Malaysia and obtained his medical degree in 1983 from the University of London (United Medical Schools of Guy’s and St Thomas’ Hospitals). During his tenure as Lecturer/Honorary Senior Registrar in Chemical Pathology at St Mary’s Hospital Medical School, Imperial College, University of London, from January 1986 till September 1990 he obtained his MSc in Clinical Biochemistry, MD and MRCPath.

From October 1990 until December 1996, Prof. Lei was Senior Lecturer in Clinical Biochemistry and Metabolic Medicine at the Medical School of the University of Newcastle upon Tyne and Consultant Chemical Pathologist/Head of Department at the Freeman Hospital in Newcastle upon Tyne, in the United Kingdom.

In December 1996, he relocated to Malaysia, to begin an appointment as Professor of Clinical Biochemistry and Metabolic Medicine as well as Deputy Dean for Academic Affairs at University Putra Malaysia from January 1997 till August 2001. From August 2001 till March 2004, he was Dean of the Postgraduate Medical School at the International Medical University in Kuala Lumpur, Malaysia.

While at the International Medical University Dr. Leslie Lai began his long association with the IFCC, first as a member of the Education and Management Division Executive Committee from 2004 till 2007, then as Vice Chair of the EMD from 2008 till 2013 and Chair of the EMD from 2015 till 2020, with a gap year in 2014. He was also the Chair of the IFCC-Abbott Visiting Lecturer Programme from 2007 till June 2013.

Dr. Leslie Lai has also had a long association with the Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB), having been Chair of the APFCB Education Committee from 1998 till 2004, Vice President from 2004 till 2010 and President from 2010 till 2016. He currently serves as the Immediate Past President of the APFCB. For his long and distinguished service to the APFCB he was awarded the APFCB Distinguished Service Award in 2019.

Dr. Leslie Lai’s current position is Consultant Chemical Pathologist and Laboratory Director at Gleneagles Hospital in Kuala Lumpur, Malaysia, where he also practices as a Consultant in Metabolic Medicine/Endocrinology.

He was Associate Editor of Clinical Biochemistry from 2008 till 2018 and has been Associate Editor of the Malaysian Journal of Pathology since 2008. He also serves on the Editorial Board of CCLM, Pathology, Clinical Biochemist Reviews, Practical Laboratory Medicine, Indian Journal of Clinical Biochemistry and the APFCB eNews.

He has published widely, particularly in the field of endocrine-related tumours and endocrinology. His clinical interests are in diabetes and endocrinology.

Thank you, Prof. Lai, for all your hard work and commitment into leading this important IFCC Division, sharing your expertise and knowledge!
Prof. Nader Rifai is the new Chair of the IFCC Education and Management Division (EMD).

Prof. Nader Rifai is a Professor of Pathology at Harvard Medical School, The Louis Joseph Gay-Lussac Chair in Laboratory Medicine, and Director of Clinical Chemistry at Boston Children’s Hospital. His research focused on biomarkers of cardiovascular disease. However, in the last decade his main interest shifted to dissemination of scientific information and E-learning.

Dr. Rifai is active in national and international societies; he served on the Board of Directors of the AACC, NACB and ABCC, was the Chair of Lipids and Lipoproteins Division, acted twice as the Vice-Chair of the AACC annual meeting. Dr. Rifai served on the IFCC Scientific Division, the Lp(a) Standardization Committee and the Education and Management Division and chaired the IFCC Visiting Lectureship programme.

In addition, he is the Editor-in-Chief of Clinical Chemistry, the Founder and Co-Chair of Clinical Chemistry Trainee Council, the Senior Editor of both the Tietz Textbook & Fundamentals of Clinical Chemistry and Molecular Diagnostics and the Co-Editor-in-Chief of NEJM Knowledge+/AACC Learning Lab for Laboratory Medicine, an adaptive learning program.

Best wishes for many successful results to the new Chair of the Education and Management Division!

Päivi Laitinen is the new Chair of the IFCC Committee on Congresses and Conferences.

Päivi Laitinen is Chief Chemist in HUS Diagnostic Center, HUSLAB, Laboratory of Helsinki University Hospital, Helsinki, Finland. Her duties include procurement processes, and she is responsible for the training of specializing clinical biochemists.

Päivi Laitinen has a long career as clinical biochemist in several university and central hospital laboratories in different roles. Along with her duties at daily work, she has been actively involved in the activities of the scientific societies of clinical chemistry and laboratory medicine at the international, European and national level.

Päivi Laitinen has long experience of IFCC activities. She served as Secretary of the Executive Board in 2006-2011. Before that, she was member of the IFCC Awards Committee (2003-2005). Other international activities include memberships European Communities Confederation of Clinical Chemistry (EC4) Board.
Päivi Laitinen has been a member of Scientific or Scientific Advisory Committees of several international congresses of clinical chemistry. At the national level she has been involved in organizing national meetings of the Finnish Society of Clinical Chemistry.

Päivi Laitinen scientific interests focus presently mainly on the use and implementation of cardiac markers, and this research is carried out under EFLM Task Group Cardiac Markers, which she chairs. Her other scientific work deal with prenatal screening and method development. During her free time she exercises in gym and knits sweaters for her grandchildren.

Päivi Laitinen has received the following honours: Finnish Society of Clinical Chemistry: Clinical Chemist of the Year 2005, Labquality Award 2007, LAL Multidisciplinary Professionals in Science: Scientist of the Year 2009, and IFCC Medal for Outstanding Services 2017.

Best wishes for your new position, Dr. Laitinen!

FAREWELL TO JAMES WESENBERG

Dr. James Wesenberg served as a full member of the IFCC Executive Board Committee on Congresses and Conference (C-CC) from 2008 to 2013, then as Chair-Elect in 2014 and then as Chair from 2015 to 2020. James will continue to serve the C-CC as the Consultant for 2021 and as a member of the Congress Organizing Committee (COC) for the ICCCLM (World-Lab) 2023 Rome.

James earned undergraduate and Master’s degrees in Chemistry and Biology at Trent University in his hometown of Peterborough, Ontario, Canada. He was then trained as a Clinical Biochemist in Canada at the University of Windsor and then at Wayne State University Medical School and Detroit General Hospital in the USA (1974 – 1978).

He was a Sessional Lecturer at the University of Windsor (1979) and an Assistant Professor at Wayne State University Medical School (1979 – 1980).

In 1980, he joined the Red Deer Regional Hospital in Alberta, Canada and served as Clinical Biochemist until 2011. He also served as the Medical/Scientific Director for Pathology and Laboratory Medicine in Central Alberta (2008 – 2009) and then in this capacity with Alberta Health Services (AHS) for all of Alberta except Calgary and Edmonton (2010). Dr. Wesenberg then served with AHS as the Medical/Scientific Director for Pathology and Laboratory Medicine for all of Alberta (2011 – 2016). He concluded his years of active service with Alberta Health Services as the Clinical Knowledge Lead for Pathology and Laboratory Medicine (2016 – 2020). Dr. Wesenberg was recently recognized by AHS for his 40 years of service to the people of Alberta.

James is a Diplomate of the American Board of Clinical Chemistry (1983) and now an Emeritus Fellow of the National Academy of Clinical Biochemistry (1984) and an Emeritus Founding Fellow of the Canadian Academy of Clinical Biochemistry (1986).
Dr. Wesenberg has completed over 65 research studies and publications and approximately 60 published abstracts across a broad range of clinical biochemistry topics. Dr. Wesenberg has been active in the analytical assessment and clinical application of cardiac markers for acute coronary syndrome from the early days of CK-MB/Myoglobin in 1996 through to the high-sensitive cardiac troponin assays of today and for heart failure from the early days of BNP in 2005.

With his current appointment as a member of the COC for WorldLab 2023 Rome, Dr. Wesenberg will have provided service to the profession of Clinical Biochemistry in every year for over 40 years. His contributions began with Alberta Society of Clinical Chemistry, moved national with the Canadian Society of Clinical Chemists (CSCC) and international with the American Association of Clinical Chemistry (AACC) and then global with the IFCC. With the CSCC, Dr. Wesenberg participated on various committees, served as a Division Head, and served on the Executive as Treasurer (1987 – 1990) and then as President-Elect and President (1997 – 2001). James participated on various AACC committees and served as the first international Chair of the AACC Annual Scientific Meeting and Clinical Lab Expo that was joint with the CSCC (2007 – 2009).

Dr. Wesenberg sends thanks to the people within the IFCC, Regional Federations, National Societies and MZ Congressi that he has had the opportunity to work with and to serve during his terms as Chair of the C-CC. He very much appreciates the personal friendships and collaboration that will no doubt survive beyond his terms of office.

Thank you, Dr. Wesenberg, for serving as Chair of the C-CC!
Open positions within IFCC

The following calls for nominations are currently open within the:

**EMERGING TECHNOLOGIES DIVISION**

- **Committee on Emerging Technologies in Pediatric Laboratory Medicine (C-ETPLM):** one member position
  - Time in office 2021-2023.
- **Committee on Omics Translation (C-OT):** one member position
  - Time in office 2021-2023.
ETD nominations should be sent to Silvia Colli Lanzi at the IFCC office (Colli-Lanzi@ifcc.org).

**SCIENTIFIC DIVISION**

- **Committee on Standardization of Thyroid Function Tests (C-STFT):** one member position
  - Time in office 2021-2023.
- **Committee on Traceability in Laboratory Medicine (C-TLM):** one member position
  - Time in office 2021-2023.
- **Committee on Molecular Diagnostics (C-MD):** one member position
  - Time in office 2021-2023.
SD nominations should be sent to Paola Bramati at the IFCC office (paola.bramati@ifcc.org).

**TASK FORCE CORPORATE MEMBERS (TF-CM)**

- **Three member positions:** two Members and one Member who will serve as Secretary.
  - Time in office 2021-2023.
  - Deadline to receive nominations and supporting documents: March 1st, 2021.
TF-CM nominations should be sent to Paola Bramati at the IFCC office (paola.bramati@ifcc.org).

If you are interested, please refer to your National Representative or Corporate Representative for information on procedures for nominations. Find your representative HERE.
CRITICAL ROLE OF CLINICAL LABORATORIES IN THE COVID-19 PANDEMIC

IFCC GLOBAL CONFERENCE ON COVID-19 (FINAL PROGRAMME)

FEBRUARY 15–17, 2021

TIME SCHEDULE: PROGRAMME WILL START AT 08.00 AM, US EASTERN TIME (CORRESPONDING TO: 14.00 ROME; 21.00 BEIJING)

All sessions will be recorded and fully available for registered people.
Dr. Ana Leticia Cáceres de Maselli from Guatemala, the Past President, between 2009 and 2011, of the Latin American Confederation of Clinical Biochemistry (COLABIOCLI) has passed away on January 14, 2021.

Ana Leticia served as Member of the IFCC Education and Management Division Executive Committee (2017-2019), a Member of the Nominations Committee (2016-2017), the Advisor of the Public Relations Committee of the Communications and Publications Division, and National Representative of the Association of Chemists and Biologists of Guatemala (AQBG, Asociación de Químicos Biólogos de Guatemala).

She graduated as Chemist-Biologist from the Faculty of Chemistry Sciences and Pharmacy at the University of San Carlos in Guatemala.

She was elected, first, Vice-president and, subsequently, President of the AQBG in the 1990s. Ana Leticia was very much involved in the spheres of quality control and quality assurance, implementing the National External Quality Assessment Program for the clinical laboratories in Guatemala.

She was the founder of the Biomedical Reference Laboratory, and the External Quality Assessment Program at the National Society. She formed the Quality Assurance Commission in 1995, and coordinated the Immunology External Quality Assessment Program as well. Ana Leticia was a member of the College of Pharmacists and Chemists of Guatemala.

She participated in AACC activities as member of the first Latin American Working Group (2010-2011), activity that has improved the knowledge of quality control for the clinical laboratories in Latin America.

She was a pioneer in the standardization of methods for the diagnosis of cysticercosis, a project that began as a research thesis, and she continued making progress in the diagnosis of this parasitic infection, an important contribution to our health until these days.

The region and the scientific community of the world will miss a very active and devoted professional in clinical chemistry, and a very caring person. Ana Leticia has left a legacy of humanism and professionalism.

Rest in peace, Ana Leticia!
In memory of Dr. Fouad Harb

by Ghassan Shannan
Public Health & Medical Lab Consultant
Damascus
Syria

Colleagues, friends and members of the Arab Federation of Clinical Biology and the Syrian Clinical Laboratory Association have received the news of Dr. Fouad Harb death with heavy hearts and great sadness!

Dr. Fouad Harb died on Sunday, 13 December 2020, at his home in Damascus, after suffering from complications of lung cancer.

Dr. Harb will always be remembered for his kind lovable personality, wide & extensive knowledge of laboratory medicine, loyalty, hardwork, eagerness, and ambition.

Dr. Harb started his career in Laboratory Medicine in 1974 and since then he has been continually an active member of the Syrian Clinical Laboratory Association, where he served as a secretary and treasurer.

In 1992, during the national conference of the Tunisian Society, Dr. Harb proposed a draft by-law to revive the Arab Federation which was frozen for several years. His proposal was accepted. His continuous efforts have paid off as the number of Arab Federation members jumped from four members in 1992 to 12 members in 2020. Then Dr. Harb and other colleagues convinced the International Federation of Clinical Chemistry & Laboratory Medicine to recognize the Arab Federation as a Regional organisation of IFCC.

Dr. Harb held the position of President and Secretary of the Arab Federation for two terms, during which he worked extremely hard to develop and implement a continuous education programme for AFCB members.

He was keen to actively participate in the national & regional conferences of AFCB. He initiated a Quality Assurance Programme in several Arab countries.
Valued Clinical leaders share perspectives on the importance of Laboratory Medicine

Clinical laboratories are essential partners for measurably better healthcare. Value realization, however, is not always universal or applied in everyday practice. Thus, widespread opportunities exist for enhanced cross-disciplinary integration and problem-solving in healthcare.

This article shares key perspectives, insights and experiences from three clinical experts with globally recognized best practices for teamwork, innovation and healthcare excellence. All three leaders are active champions of laboratory medicine with excellent strategic relationships both within and outside the core laboratory. Through those partnerships, they have each led integrated clinical care teams with extraordinary outcomes, including winning recognition from the UNIVANTS of Healthcare Excellence Awards Program.

- **Prof. Manu Vatish**
  - Professor of Obstetrics at the Nuffield Department of Women’s and Reproductive Health at the University of Oxford and an honorary consultant obstetrician at the John Radcliffe Hospital, Oxford University Hospitals NHS Trust, Oxford. His team was also recognized in 2019 with elite top honors of the UNIVANTS of Healthcare Excellence awards for *Improving safety of mothers and their babies using angiogenic biomarkers for pre-eclampsia*.

- **Dr. Martin Than**
  - Emergency Medicine Specialist at Canterbury District Health Board in New Zealand. His team was recognized in 2020 with an UNIVANTS of Healthcare Award for *Reducing patient risk and enhancing care through the development and implementation of a new chest pain pathway expedited by and for the COVID-19 era*.

- **Prof. John Dillon**
  - Professor of Hepatology and Gastroenterology in the School of Medicine, Ninewells Hospital, University of Dundee. He is also an honorary consultant with NHS Tayside. His team was recognized in 2019 with an UNIVANTS of Healthcare Award for *Intelligent Liver Function Testing (iLFT): A cost-effective way to increase early diagnosis of liver disease*.
How does laboratory medicine contribute to your profession?

Prof. Vatish:
Laboratory medicine is an essential part of my clinical practice, from routine biochemistry and haematology to more advanced tests such as angiogenic marker ratios. As an academic clinician, I also interact heavily with laboratory medicine in a research capacity. I have found that the laboratorians apply significant rigour to the assessment of data and interpretation of results.

Finally, the laboratory has a “helicopter view” of diagnostics in a range of different diseases and conditions and this is a unique resource within the hospital environment.

Prof. Dillon:
I agree with that “helicopter view” and certainly, biomarkers are a part of that. Laboratory medicine however is now also helping us sort out problems of triage as well as how to better use the information and data from the laboratory. This includes new biomarkers, as well as putting existing biomarkers in context, tests are not always about individual results, but rather are patterns across results. We’ve done this with intelligent liver function testing (iLFT), which enriches the value of the results. As a hepatologist, a major part of my workload comes from the measurement of liver function tests (LFTs). Symptoms of liver disease are often general and non-specific. Thus, LFTs trigger entry into my specialty. There’s a downside, however, as LFTs are increasingly being used as a general test of wellness. So, it can be a double-edged sword, presenting the opportunity to find liver disease early, but needing to triage a large volume of test results.

Dr. Than:
Laboratory contributions are absolutely vital pieces of information that we cannot do without. The fact that clinicians may sometimes take it for granted doesn’t make it any less necessary. In fact, it’s better that none of us take anything for granted. It is better you understand the issues around how services are provided because when you’re looking at new possibilities to redesign your system or patient flow, you’ve got to take other systems into account. Every health system has so many components and nobody knows how every component works. It is only when teams sit back and look at different things, when we realize that some of the simplest components that you take for granted are pivotal to actually getting stuff done.

What are the clinical success factors that enable success?

Prof. Vatish:
Good working relationships, communication and accessibility are key drivers for successful interaction and implementation of tests. Understanding the fiscal framework in which both the laboratory and the clinical department operate is also critical, since the funding streams for the implementation of tests need to be synchronised. This is also important for making business cases since the clinical department and the laboratory medicine department are usually under different budgets and the capacity for implementation to be prematurely halted is higher in these situations.

Prof. Dillon:
Conversations are crucial. Laboratorians have a very different set of parameters and drivers to those in clinical practice. If you’ve got a problem, which I’ve alluded to earlier, you need to have conversations with the lab to help solve them. Thereafter, it is easier to understand and even change each other’s workstreams, even workstreams that are coming from primary care or other specialties. It is sitting down together the way to understand the problems, commonalities and solutions. From the laboratory point of view, for example, with our liver disease example, they were spending more and more of their time repeatedly measuring LFTs, knowing that some of them were vitally important, even though some of them...
were also probably a waste of time. They wanted to try and manage that pattern, and the iLFT that we developed has dealt with the problem of triaging out the ones that are important. Now, we have confidence around identification and triage. We are now looking into how to reduce demand for the unnecessary repetitive testing.

**Dr. Than:**

Bilateral communication, as well as understanding the viewpoints of others are key in order to solve problem together. In New Zealand, there are perhaps less hierarchical relationships between disciplines and different health professionals than in some developed nations in which I have worked. So, perhaps it is easier for a technician here to have a conversation with someone who’s normally considered much more senior. Importantly, we should aim to reduce those barriers. Until then, it becomes even more beholden for clinical leaders in the hospital to try and bridge these gaps.

**What example(s) might you want to share whereby lab medicine made a substantial difference to your patients and/or care?**

**Prof. Vatish:**

We care for women with pre-eclampsia and were invited to undertake a trial assessing the effectiveness of the angiogenic biomarkers sFlt1 and PI GF in directing care. During the clinical trial we were able to work with the laboratory to obtain rapid test results with outcomes, including on our electronic systems for easy access without telephoning. The trial was also randomised by our laboratory staff, revealing results to the clinical team or not, depending upon the randomization. After successful completion of the trial and co-publication of the results, we moved forward with a full clinical implementation of the test and again an excellent interaction with the laboratory team facilitated a successful business case. The strength of the collaboration was recognised by a number of awards, including elite top honors with the UNIVANTS of Healthcare Excellence award program in 2019.

**Prof. Dillon:**

Our best example is the iLFT project. The program is now changing clinical practice across the UK and globally and was based on ideas that came from the conversation among colleagues including laboratory medicine. iLFT solved our dichotomous problem of wanting to detect liver disease earlier to prevent catastrophic consequences if detected too late, but not being overwhelmed by the volume of work. As we were problem-solving together, we began to realize that a lot of what was being done in clinical hepatology was automatic medicine; if you’ve got an abnormality, then you’re going to do this series of tests. Depending upon those results, you’re going to do another series of tests. Simple choices led to logic trees (or decision trees), which could be automated. It was an amazing experience as chatting with the laboratory staff enlightened us on the capabilities of the instruments that they already had available within the lab, but simply weren’t being used in this regard. With relatively easy manipulation of algorithms, we were able to effectively manage all our patients with high quality medicine, while doing it in a way that had cost savings to the health system.

**Dr. Than:**

I’ll give an example with Troponin. Everyone is trying to reduce turnaround time for this vital test. I think generally we hit around 90 minutes for most of our patients and we obviously wanted to do better. While discussing how to do that, we realized that in the initial phase, the blood was going by a pneumatic tube system to the lab for specimen reception. When it was dropped into a cage, there was no easy viewing of prioritization among the canisters. The forms from emergency are blue with the intent to take priority, but no one could see the blue forms within the blue plastic cannisters with ease, especially when there were
hundreds to sort through. So, they proposed a different colored cannister for troponin requests. Doing so, took 30 minutes off our turnaround times immediately. So, I think it’s a good example of collaboration through better understanding of what is actually happening from another’s perspective. We were saying that we needed a faster assay, and they were able to improve flow differently, making a real difference in care.

What advice do you have for laboratories who seek a more strategic role in collaborative patient care?

Prof. Vatish:

Direct interaction with clinicians is key. This needs to be a healthy collaborative relationship and involves seeking out clinicians who are willing to enter into this kind of partnership; one that will allow a strategic collaborative role in patient care. Clinicians are frequently unaware of new tests and technologies and are likely to be very enthusiastic if these tests have a clear place in their clinical practice. Garnering this enthusiasm will drive collaboration, allow research and facilitate a pursuit of successful business cases for implementation.

Dr. Than:

The common theme is building relationships, and ideally, doing so before problems need solving. Our teams for example partake in cross-department events to help cultivate greater team interactions. We have found that it is easier to problem solve with others once relationships are already formed.

Not to criticize core laboratories at all, but sometimes clinicians can feel that there is an appropriate, but unintentionally counterproductive emphasis on precision, when there are so many other aspects in a patient’s care pathway that should be emphasized. An example is when troponin results are near the 99th percentile, we later found out the laboratory was rerunning those test results to make sure it was exactly right. Meanwhile, we did not want them to rerun it. We just wanted the result quickly. The rerun added huge delays, and I had no idea that this was happening at first. So, that’s a really good example of someone trying to do the right thing, but it’s not necessarily in the context of what the other person needs, and vice versa. It is important to work together.

Prof. Dillon:

I completely agree that conversations between clinicians and laboratorians are crucial. A great deal of problem-solving can occur simply by appreciating workstreams, as well as the needs and capabilities across teams. I also think that laboratories have a big role in the strategic view across the whole of the system, as the latter is something that many clinicians who are looking after the patient in front of them may not always have. Broader perspectives can be valuable by helping to improve the quality of care across entire communities. Working together is how problems get solved.

For those interested in learning more about the UNIVANTS of Healthcare Excellence Awards and/or any of the globally recognized best practices associated with the healthcare excellence program, including those from Dr. Than, Prof. Dillon and Prof. Vatish, please visit www.UnivantsHCE.com.
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Severe bleeding is a life-threatening condition which requires immediate identification and attention, in order to determine the cause and to activate the necessary treatment. Left untreated, severe bleeding can progress to hemorrhagic shock and death. Challenges often exist in the identification of hemorrhagic shock, particularly if the source of the bleeding is unknown.

Recognizing opportunities for enhanced care at the Hospital Israelita Albert Einstein for improved identification and treatment of patients with severe bleeding, an integrated clinical care team composed of laboratory, ICU physicians and nursing staff collaborated to change the paradigm in which severe bleeding and hemorrhagic shock are identified and treated.

Through strategic implementation of the two ‘codes’ or alerts, Code Yellow and Code H, the team at Hospital Israelita Albert Einstein systematically enhanced procedures for identification of patients at risk for hemorrhagic shock. Efforts included logistical and procedural changes, implementation of dedicated
resources including Rapid Response and Code H teams, implementation of systematic multidisciplinary alerts and accelerated turn-around for critical tests required for timely decision-making.

Code yellow activation has enabled early detection of patients who require additional monitoring and care that is administered through the rapid response team. This new code helps mitigate patient decompensation and the need for a dedicated rapid response (code H) team in 88.5% of all code yellow patients. This is in part due to the dramatic reduction in the time required for a transfusion, from 1.5 hours to 15 minutes.

Consequently, mortality related to bleeding management failure has dramatically decreased, from 29.3% in January of 2013-December 2015 to 4.3% in May 2016 to July 2020, post-implementation.

These impressive patient-centric improvements have not only improved patient safety but have a positive impact on healthcare costs. While cost savings related to bleeding management can be complex, Vanessa Teich, Superintendent of Health Economics at Hospital Israelita Albert Einstein highlights that “Patients who receive urgent care have faster recovery, spend less time in the ICU during their recovery, and are less likely to have long-term complications. This collectively saves substantial costs to the patient, administration and entire health ecosystem”.

As a result of the inspiring outcomes and improvements to patient safety, the innovative minds behind the care project “Reducing Catastrophic Adverse Events in Patients with Hemorrhagic Shock through Early Recognition of Risk and System-Wide Automatic Alerts” have been awarded the prestigious 2020 UNIVANTS of Healthcare Excellence Award Designation of Distinction and Best in Latin America. Congratulations to João Carlos de Campos Guerra, MD, MBA, PhD, Coagulation Specialist, Head of Haematology, Priscilla Derogis, PhD Laboratorian, Michele Jaures, Registered Nurse, Roseny dos Reis Rodrigues, MD, MBA, PhD, ICU Physician, Carlos Eduardo dos Santos Ferreira, MD, MBA, PhD, Medical Manager – Clinical Pathology.

THREE TAKEAWAYS:

1. Strategic implementation of Code Yellow and Code H enable rapid identification of decompensating patients
2. Urgent response teams and multidisciplinary alerts for activation of urgent testing, exams and transfusions, enables expedited treatment and improved patient outcomes
3. Collaboration across disciplines enable comprehensive, 24/7 care for urgent patients at times when they most need escalation of care
The COVID-19 pandemic presents a global challenge that has stretched the limits of healthcare systems. Efforts to combat the pandemic require substantial protective and preventative measures, varying from protective equipment, policies, testing, and mass screening, to quarantines and more.

Early in the pandemic, the Dubai Health Authority (DHA) experienced significant challenges related to large scale testing and screening. This in turn affected DHA’s ability to effectively trace and isolate infected individuals and to ultimately help slow viral transmission.

Specific challenges included logistics of acquiring an adequate supply of COVID-19 tests, increased testing capacity with 24 hour reporting, as well as active data integration with governance between private and public laboratories across Public Health systems to enable tracing and isolation of COVID-19 patients.

Accordingly, the DHA sought to generate new partnerships with private laboratories to enable
increased COVID-19 testing capacity with prompt result turn-around and to enable regulation of the SARS-CoV-2 testing standards. Additionally, standardization programs and interlaboratory comparison programs were initiated to enable track and tracing.

This novel collaboration between public and private laboratories has enabled substantial improvements to patient and public safety. Specifically, COVID-19 test results are returned within 48 hours of collection, enabling actionable next steps for infected patients, while mitigating risk for transmission to others. Consequently, the mortality rate related to COVID-19 in United Arab Emirates has declined by 83 percent when compared to the acute phase.

Given that Dubai is the most populated emirate in the UAE per square meter, it stands to reason that Dubai Health Authority plays a substantial role in the overall UAE statistics.

Importantly, 23 of 38 Hospitals/Healthcare centers in Dubai have been declared COVID-19 free by the regulation sector of DHA and patients are now comfortable seeking care at these facilities. Not only does this ensure continuity of care for patients, but also enables important revenue streams and sustainability for healthcare centers.

This innovative approach for uniting private and public laboratories for the greater good in UAE would not be possible without the leadership and patient-centricity of core team members within and beyond the DHA. For their remarkable outcomes this care team has been awarded the prestigious 2020 UNIVANTS of Healthcare Excellence Award Designation of Distinction and Best in Africa and the Middle East.

Congratulations to Dr. Rana Nabulsi, FACHE, Head of Quality, DHA, Dr. Hussain Al Samt, Director, DHA, Dr. Laila Al Dabal Head of Infectious Diseases, DHA, Dr. Hanan Al Suwaidi, Assistant Professor, Mohammed Bin Rashid University, Mohammed Daoud, CEO, Unilabs Middle East.

THREE TAKEAWAYS:

1. Joint coordination of supply chain and logistics for timely acquisition of COVID-19 tests can substantially improve test availability and capacity across the UAE.

2. Standardization, active governance and data integration between private and public laboratories enables data sharing for enhanced tracking and tracing of active infections. This in turn translates to better prevention including quarantine and isolation measures.

A new standard for upholding blood sample integrity during pneumatic tube transport

Accurate validation and monitoring of pneumatic tube systems (PTS) can increase patient safety, save time, and reduce costs.

Bridging the gap between clinical laboratories and PTS manufacturers

VitalQC uses weight-matched blood vials to measure and evaluate PTS transport conditions that may influence sample quality or induce hemolysis. Specifically designed to ease the burden of clinical validation and monitoring, VitalQC translates PTS performance characteristics into actionable insights indicating rejection probabilities that lead to hemolysis. The customized performance reports tie in clinical and system performance and are used to support laboratory accreditation.

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Laboratories use VitalQC to validate and monitor existing systems and new PTS installations

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Hemolysis – the most common pre-analytical error

Hemolysis is well documented as the globally most common pre-analytical error in laboratory medicine. The incidence of hemolyzed blood samples varies and is normally most common in emergency departments often having a hemolysis rate of 5-12%.

Hemolyzed blood samples in vacuum tubes are usually detected in central laboratories, often resulting in a delay of 60-120 minutes in acute situations for correct test results, as the blood samples must be recollected. This can lead to increased waiting times and costs and a patient’s condition not being treated in time, which might have severely negative consequences for patient safety in individual cases.

Although it is proven that hemolysis is common in blood gas samples and that several analyzes performed are significantly affected by hemolysis, there is no built-in hemolysis control in any blood gas instruments on the market. Healthcare staff will therefore regularly risk basing clinical decisions on incorrect test results or repeating analyzes or sending supplementary samples to the laboratory, which increases lead times and costs and reduces the value of the blood gas analysis.

Unique POC-concept for hemolysis detection

Hemcheck has developed a CE-marked solution for fast detection of hemolysis in whole blood samples in vacuum tubes (v-Test) and blood gas syringes (s-Test).

Learn more about the concept

The user-friendly system is small, robust and portable and can be used anywhere, but is especially valuable for units having a high rate of hemolyzed blood samples and where the clinical impact and cost of each hemolyzed sample is high.

The v-Test enables hemolysis detection and direct sample retake in connection with blood collection and aims to improve the flows of samples and patients, reduce waiting times and patient length of stay, decrease staff workload, increase patient safety and save costs. The s-Test enables hemolysis detection either in connection with bloodsampling or blood gas analysis, and aims to contribute to more informed, reliable and timely clinical decisions and thereby improved patient safety.

Cost/benefit analysis shows substantial time and cost savings

Clinical studies show that the tests can effectively identify hemolyzed blood samples and, in case of vacuum tubes, greatly reduce the number of hemolyzed blood samples that reach the laboratory. The total cost for a rejected blood sample has been estimated in scientific articles to be above EUR 100 per sample and implies that Hemcheck’s products are cost-effective even at lower levels of hemolysis. The positive effects of the concept in terms of reduced patient length of stay and cost savings, can be evaluated using the customized cost/benefit model.

Perform your own cost/benefit analysis

High user satisfaction and several new and ongoing customers

A clinical study on electrolyte status at Capio S:t Göran Hospital, one of the largest emergency units in Sweden, showed a reduction of the hemolysis rate by 54% and a 100% user satisfaction. The concept is today used in clinical practice at the ED at Capio S:t Göran Hospital and also implemented at e.g. Tartu University Hospital in Estonia for usage at the oncology and hematology clinic, SYNLAB Sweden in primary care and FIND for various international healthcare projects. Hemcheck is looking for new interesting collaborations and offers healthcare providers the possibility to test the concept free of charge.

For further details, please send your inquiry to: peter.andersson@hemcheck.com

Facts about Hemcheck

- Hemcheck produces and commercializes a unique concept for point of care detection of hemolysis in venous and arterial blood samples, contributing to more efficient and patient-safe care.
- The products are CE-marked and developed in Sweden together with healthcare staff.
- The technology has patent protection in Europe and the USA.
- The company is listed on Nasdaq First North Growth Market since 2017.

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Meet us at the IFCC Virtual Event
Critical role of Clinical laboratories in the COVID-19 Pandemic
February 15th-17th 2021

EDUCATIONAL WORKSHOP
Feb 16th 15:45 EST / 20:45 GMT / 21:45 CET
Title: Quality Control of Qualitative Testing of SARS-CoV-2 in Clinical Laboratories
Presenters:
Wayne Dimech
Executive Manager, Scientific and Business Relations, NRL, Australia
Joe Vincini
Quality Control Services Manager, NRL, Australia

SPONSOR MEETING 1
Feb 16th 08:00 EST / 13:00 GMT / 14:00 CET
Title: Challenges for Quality Control in Qualitative Testing
Presenter:
Paulo Pereira
Senior Researcher and Head of R&D at the Portuguese Institute of Blood and Transplantation, Lisbon, Portugal

SPONSOR MEETING 2
Feb 16th 09:00 EST / 14:00 GMT / 15:00 CET
Title: Increasing Confidence in Release of Patient Results: A Complete Solution for Internal QC

Multichem® ID
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Multichem ID (Infectious Disease) Independent quality controls are specifically optimised for assays commonly used for infectious disease screening and diagnosis.

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The year ahead in the vaccine purgatory

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

While Europe struggles against the second wave of the epidemic and Americans are on their third, the forecasters are working overtime. For most of 2020, the coronavirus jumped from human to human, we were all in a race to curb the novel virus spread and flatten the curve with varying degrees of success. This year ahead, we are in another race to vaccine the world and in less than a year since the WHO declared the state of pandemic, we have more than one vaccine. But we need billions of doses to achieve herd immunity and stop the virus spread definitively. The generalization of vaccines is bringing a wave of optimism to major international public and private institutions with the hope of a better future. The slowdown in consumption due to the end of government aid

and a health situation that has deteriorated sharply around the globe will penalize service activities at the start of 2021. There are many countries that must continue to be affected by lockdown measures until at least the summer. More than ever, it is crucial to support emerging countries. Reducing inequality has become a more urgent subject in emerging countries, where solidarity measures against the coronavirus that can be applied almost immediately are essential to control the health crisis. The possibility of providing a vaccine at the lowest cost is a particular challenge and restarting the global economy relies heavily on the implementation of vaccine policies. The success of vaccination programs depends on the ability of each government to provide a sufficient number of doses, their ability to administer them under the right conditions as quickly as possible and the willingness of the population to be vaccinated. In other words, all countries do not start from the same line.

The new coronavirus variants: UK, South Africa, Brazil, etc. have been in the news since scientists sounded the alarm about B.1.1.7, a SARS CoV-2 variant that

first caught the attention of researchers in England in December and which is more transmissible than the viruses circulating previously. The variants have emerged one after another at a sustained pace for several weeks, creating great unrest in the scientific community and public health authorities around the world. Now, researchers are also concentrating on a potential new threat: variants that could escape the human immune response.

Some more contagious mutations have even become predominant in some countries, challenging the certainties about acquired immunity and the efficacy of current vaccines. In the face of this danger, researchers appear to be fully mobilized internationally. The WHO also convened its Emergency Committee on January 14 to discuss the impact of the new variants and the travel restrictions many countries are imposing to contain them. The committee has called for a global effort to further sequence and share SARS-CoV-2 genomes in order to monitor mutations. It has also asked countries to support global research efforts to better understand critical unknowns concerning mutations
and variants specific to SARS-CoV-2. Today, there are 51 countries in which the more transmissible UK variant B.1.1.7 has been detected. Scientists are also concerned regarding 501Y.V2, a variant detected in South Africa. Some mutations that it carries, including those called E484K and K417N, modify its surface spike protein and have been shown in the laboratory to reduce the ability of monoclonal antibodies to fight the virus. The variant identified in Manaus is also already in circulation. It is not yet clear how these new variants will affect the course of the pandemic. However, it is always necessary to remember that changes in human behavior are the still principal driver of this epidemic resurgence. Interactions among the new mutations could make it more difficult to identify their effects. The UK, South Africa and Manaus variants share a mutation called N501Y, or Nelly. But the mutation, which affects the spike protein, also occurs in some variants that do not spread more rapidly, which suggests that N501Y is not operating alone, explains Kristian Andersen of the Scripps Research Institute. Up until now, the virus does not appear to have become resistant to the COVID-19 vaccines.

The bad news is that the rapid evolution of these variants suggests that the virus could evolve into a vaccine-resistant phenotype according to vaccine specialist Philip Krause, who presides over a WHO working group on vaccines. This possibility adds to the urgency of setting up effective monitoring to quickly detect such mutations and quickly vaccinate as many people as possible, even if this means running the risk of only targeting certain variants. If vaccine-resistant SARS-CoV-2 strains arise, vaccines may need to be updated. Several of them could be easily modified to reflect these changes. However, it is important that the public does not think that this is imminent. No doubt new vaccines will be needed. To this end, it is necessary that the biotech and pharmaceutical industries think about producing vaccines designed to generate immunity to mutated versions of the spike protein in order to shut down one of the viral transmission routes. Social distancing measures and accelerating vaccination campaigns to deal with the threat of the variant are more relevant than ever. As in numerous areas in biology, to obtain a comprehensive understanding of virus operations, multidisciplinary approaches are required and there is a need for major investment in this field to enable rapid response to the dangers of this disease. This may be a major factor in saving lives worldwide.

We are far from finished with COVID-19 and yet it must be kept in mind that other pandemics may occur. The transmission of viruses from animals to humans could accelerate since more than two-thirds of emerging diseases and nearly all known pandemics are caused by pathogenic agents of animal origin that scientists call “zoonoses”. The emergence of SARS-CoV-2 has demonstrated the limits of the current approach to the health crisis and highlighted global alert system reaction times that are too long. Control measures (limiting international movements, physical distancing, routine testing, lockdown, etc.) were delayed too long given the extent of the spread in China and then to the rest of the world.

Many lessons can be drawn from the epidemic, such as the importance of having emergency plans, with the establishment of monitoring and alert systems coupled with pandemic prevention plans. The crisis has shown the need to have more flexible administrations and bureaucracies. Health systems must be more robust and agile. Political speech must be transparent and sincere to establish trust and help technological innovations to be better understood. The stakes are high, according to recent scientific studies, preventing emergences would cost 100 times less than trying to control them. Several Asian countries: China, Japan, Taiwan and South Korea have proven their efficiency once again while Europe and America have revealed weaknesses. Pandemic preparation plans are only as effective as they are operational, by consistently maintaining resources and equipment stores and conducting full-scale simulations.

This epidemic is also a demonstration of the interaction between the environment and health. It is essential to establish a dialog of trust among science, politics and society to be ready to act quickly. Another striking fact is that the health emergency has transformed the vaccine into a common good which partly escapes the laws of the market. Without killing the competition that stimulates research, the general mobilization has paid off. The example of COVID has
precedents. For example, during the second world war, large drug companies successfully pooled their advances in penicillin for the US Army, after which business as usual resumed. Major problems like antimicrobial resistance, which is on the WHO list of the 10 greatest health threats and which carries the risk of tens of millions of deaths by 2050, would lend themselves well to such collaborations. Sooner or later a new pandemic will strike; it should be anticipated now. The challenge is to create good strategies and incentive schemes for more and faster innovation.

One of the questions to ask is how far we can go with sanitary and safety requirements in the name of health. Where do we want to go after the pandemic? It is not a question of inventing new values but of remaining faithful to the values that we have been given to provide real meaning to life, freedom, justice and love, which we are responsible for sharing. Stronger than the virus, civilization still prevails, the opposite of a pathogenic virus. Nietzsche wrote that it is by transmitting it that we protect ourselves from nihilism and barbarism, by protecting others!

NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES

News from the Japan Society of Clinical Chemistry (JSCC): 2020 JSCC Article Award

The award is conferred to Dr. Miki Kawano, PhD

by Dr. Hideo Sakamoto
International Exchange Committee of JSCC

The Japan Society of Clinical Chemistry (JSCC) Article Award is given to a person who has made outstanding academic research in clinical chemistry. In 2020, Miki Kawano, PhD, is the winner of the Article Award. The award presentation was held at the 60th Annual Meeting of JSCC in Tokyo, Japan from October 30 to November 1, 2020 by livestreaming.

At the award presentation, award winner Dr. Kawano was congratulated by Dr. Masato Maekawa, president of JSCC for her outstanding work in clinical chemistry.

In this issue, we would like to introduce winner of 2020 JSCC Article Award to promote her outstanding work.

Miki Kawano, PhD (Assistant Professor in the Department of Medical Technology and Sciences, International University of Health and Welfare, School of Medical Technology and Sciences at Narita) is the
winner of the 2020 JSCC Article Award, entitled: “A novel assay for triglycerides using glycerol dehydrogenase and a water-soluble formazan dye, WST-8”. The GPO-POD chromogenic method is one of the most common methods of triglycerides (TGs) assay. However, it is well known that peroxidase is affected by reducing agents, and recently, it has been reported that some materials affect its activity. Moreover, there is a high possibility of non-specific reaction as the method uses many enzymes.

Against this background, she developed a simple assay method for TGs without using peroxidase. Her method had enough quality to diagnose the risk of coronary disease. Moreover, using WST-8 reagent enabled it to measure low concentration of TGs including remnant-like lipoprotein particle-triglyceride and very low-density lipoprotein triglyceride.

She made a special study of development of simple assay methods without using special equipment or techniques. The progress of technology has brought about many high-performance analyzing devices like the mass spectrometer and almost all components can be detected by them.

However, these devices are often quite expensive and need special techniques. She thought that assay methods using them are not common in most clinical institutions, therefore she focused on simple methods. Now she struggles to make assay methods of ethanolamine phosphate and phosphatidylethanol, a diagnostic marker of depression and alcohol intake, respectively. Since their concentrations are low (a few micromolar), inventing high-sensitive systems are the main targets of her study. She wants that someday her methods are used all over the world in order to contribute to the health of many people.

The Malawi Association of Medical Laboratory Scientists (MAMLS) held its second scientific conference on the 9th December of 2020, at the Golden Peacock Hotel in Lilongwe. The meeting was attended by laboratory professionals from across the country, from Central Hospital Laboratories, District Hospital Laboratories, Private laboratories, Christian Hospital Association of Malawi (CHAM) institutions, research institutions and Non-governmental organisations. The meeting was hosted both physically and virtually – 95 professionals participating physically and over 40 participants attending virtually (Malawi government COVID-19 regulations allow meetings of fewer than 100 physical participants).

The theme of the Conference was: “Strengthening health services in Malawi through enhancement of the Medical Laboratory Profession”. This theme focussed on the significance of laboratory diagnosis in patient management, thereby strengthening and improving health services in Malawi.

The purpose of the conference was to make laboratory professionals understand their role in healthcare provision and to strengthen the association by electing office bearers and endorsing the MAMLS constitution.

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The Conference was officially opened by Mr. Godfrey Kadewere, the Director of Health Technical Support Services (HTSS) at the Ministry of Health. He stressed the commitment of the government to strengthen clinical laboratory networks in the country.

We were honoured to welcome three prominent guest key speakers: Prof. Giuseppi Lippi and Prof. Thomas Zima from the University of Verona, Italy and Charles University of Prague, Czech Republic, respectively presented virtually and Mr. Richard Ndovi, Acting Registrar of Medical Council of Malawi (MCM) presented in person.

Prof. Giuseppi Lippi presented a lecture on the role of the clinical laboratory in the diagnosis and management of COVID-19. Malawi has not been hit too badly to date by COVID-19, perhaps because it has a young population and a warm climate. MAMLS was keen to ensure that its members were well briefed on what to do should the infection return this winter.

Prof. Thomas Zima from Charles University of Prague, Czech Republic delivered an overview of Tumour markers and their clinical applications and limitations. The presentation included the ways in which traditional clinical chemistry tumour makers (AFP, PSA, CA125 etc.) may be used in the diagnosis and management of cancer. Malawi has a high incidence of Hepatitis B and C and one specific example was the diagnosis of hepatocellular cancer in this highrisk population.

Mr. Richard Ndovi made a presentation on professional conduct during the COVID-19 pandemic and also explained the role of the Medical Council and the challenges it faced.

In addition to the keynote speakers, we also had presentations from Bioway, SNIBE and MM African Technology.

During the afternoon session, we endorsed our constitution and conducted elections. The following were elected as MAMLS office bearers:

A. NATIONAL EXECUTIVE COMMITTEE
   1. The President: Confidence Banda
   2. The Vice President: Jonathan Majamanda
   3. The Secretary General: Titus Chiwindo
   4. The Vice Secretary General: Joel Zephaniah Katua
   5. The National Treasurer: Elias Chipofya
   6. The National Vice Treasurer: Hilary Kapoteza

B. THE COUNCIL
   1. The Chairperson- Editorial, Publicity and Membership Committee: Anthali Munthali
   2. The Chairperson- Education, Training and Research Committee: Happy Manda
   3. The Chairperson- Finance and Planning Committee: MacDonald Saka
   4. The Chairperson- Disciplinary Committee: Brighton Mwenifumbo

The conference was closed by Mr. Joseph Bitilinyu-Bangoh, Assistant Deputy Director of HTSS-Diagnostics. He congratulated the newly elected office bearers and encouraged members to support them for the success of the association.

The conference organizers gratefully acknowledge the generous support provided by the following: IFCC, Thofu investment, MM Africa Technology, Southern Skies and Boli Medica.
Conference attendees pause for a group photo: The Guest of Honour, Mr. Kadewere (seated central)

Participants listening to a presentation from Prof. Thomas Zima
**AFCC REGIONAL CONFERENCE - LUSAKA 2021**

Event Dates:  
- 24-25 September Main Conference  
- Preconference Workshops: 23 September  
  Mulungushi International Conference Centre

**7th AFCC REGIONAL CONFERENCE**  
**HOSTED BY BIOMEDICAL SOCIETY OF ZAMBIA (BMSZ)**

**Collaboration with the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). Theme: Responding to Global Health Emergencies: The Role of Medical Laboratory Sciences in African Health Care.**

**Sub-Themes:**
- Cancer Genomics
- COVID
- Human Papilloma Virus (HPV)
- Antigen/Antibody serology for rapid disease detection
- HIV/AIDS, TB, MALARIA and other Infectious Diseases
- Point of Care Technologies
- Non-Communicable Diseases
- Haemoglobinopathies

**Not limited to the above sub-themes**

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**Conference Fee**

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Please send electronic copies of abstracts with not more than 250 words before 30 April, 2021 in the following format: Background, Objective, Materials and Methods, Results, Discussion & Conclusion to the following addresses:

**Dr. Sody Munsaka Chair Scientific Committee**  
**Ms Lucky Kalyapu Chair Education, Training & Research**

**Tel:** +260977925304  
**Email:** BMSZabstractreview@gmail.com

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**Biomedical Society of Zambia**  
**Standard Chartered Bank**  
**Account #: 0100112932400, SWIFT Code: SCBLZMLX, Main Branch, Cairo Road, Lusaka.**

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**Mulungushi International Conference Centre**  
**MICC Plenary Centre**  
**South Luangwa**

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**Victoria Falls**
In 2022, the XXV Latin American Congress is organized to take place from March 30 to April 2 at the Leon Convention Center in the City of Leon, Mexico.

The organizer is the Mexican Association of Clinical Laboratory Sciences, that together with the COLABIOCLI Executive Committee are leading the congress organization. Alvaro Justiniano-Grosz president COLABIOCLI, and Jezabel Vite-Casanova, president Congress Organizing Committee (COC) have invited COLABIOCLI Member societies to participate. IFCC Member society’s laboratory medicine professionals are also welcome to attend this important event of the Latin American Region.

Members of the Advisory Scientific Committee already confirmed are: Graciela PENNACCHIOTTI (ARGENTINA), Carolina CASTRO FIGUEROA (BOLIVIA), Marcos KNEIP FLEURY (BRAZIL), Hedilka JIMENEZ RIOS (COLOMBIA), Xinia PORRAS SANCHEZ (COSTA RICA), Victor Eugenio SILVA VARGAS (CHILE), Rebeca Margarita MAZÓN LOZADA (ECUADOR), Alba Marina VALDEZ DE GARCIA (GUATEMALA), Julio LARA RIEGOS (MEXICO), Jose E. MORENO POLANCO (PANAMA), Graciela RUSSAMANDO (PARAGUAY), Miguelina ROSARIO GOMEZ (DOMINICAN REPUBLIC), Cristina SERVETO (URUGUAY), Iratxe LÓPEZ PELAYO (SPAIN/AEFA) and from COLABIOCLI Executive Committee, Jovanna BORACE (PANAMA).

IFCC Symposia will be delivered by several well known international scientists, that together with Latin American laboratory professionals will make the **XXV COLABIOCLI Congress** a total success.

For more information: sol@kgroup.com.mx.
The Latin American Confederation of Clinical Biochemistry defines the entity as “A professional institution of a private and international scientific, academic and trade union nature, non-profit, which will group entities formed by university professionals who are dedicated to Clinical Biochemistry or similar professions, created or to be created, in Latin America, or in other countries with a Latin language, without political, racial or religious purposes, and their affiliates will have the rights and obligations established in their statutes “this Paragraph precisely defines the activities to be carried out by the Latin American entity.”

Latin America has been the epicenter of the coronavirus pandemic for a few months now, which has been advancing without restraint across the continent. Until December 2020, a total of 13,189,470 cases of COVID-19 have been registered in Latin America and the Caribbean. Political management in a fragile health system led many Latin American governments to decree confinement and closed borders, with the aim of protecting inconsistent health systems, instead, unequal or rotating restrictions, difficulties in controlling movements of the Population and stress on health systems have catapulted the numbers of infections and deaths in these countries.

The immediate challenges will not be limited to the post-pandemic, which is already an immense challenge, given that we are facing a very deep economic recession and serious difficulties to respond when the situation stabilizes. The pandemic brings an enormous social weight, an increase in inequality and greater poverty, however, our entity is not outside this situation and virtuality allowed us to interconnect more, exchange experiences, develop projects, programs of updating, continuous training activities.

The pandemic allowed our entity to advance in some spaces of the clinical laboratory and its role in diagnosis in some countries, in many other postponed plans, it prevented the development of actions aimed at improving not only sanitary conditions, but also an agenda aimed at generating the leadership of institutions in very important issues such as regulatory frameworks that allow incorporating laboratory medicine in certain countries into external quality assessment programs, laboratory accreditation, insertion of young professionals, and others. Despite this, our entity, in this difficult situation, was able to find adequate mechanisms to develop activities that serve as an instrument to help the countries during an extremely complicated year for the region.

The Executive Committee of COLABIOCLI wants to thank everyone for the contribution and work done during this year, since without their support nothing would not have been achieved in such difficult times.

A detailed report of the activities carried out by the Latin American Confederation of Clinical Biochemistry is presented in the following link:

The Covid-19 pandemic caused disruptions to the scheduled activities of the MACB due to restrictions imposed under the movement control order. The 30th Annual Conference of the Malaysian Association of Clinical Biochemists which was planned to be held in August was instead successfully organized for the first time as a virtual event. The MACB Virtual Conference 2020 took place between the 26th and the 28th November 2020.

This Conference carried the theme “Innovative Solutions: The Way Forward in Laboratory Medicine”. This theme was chosen as medical laboratories today are faced with many challenges such as rising cost, limited manpower and high public expectation; made worse with the onset of the pandemic. Innovation is a strategic change that creates value. It can provide medical laboratories with the opportunity to overcome current and future challenges.

An interesting lecture on the topic of “The Future of Laboratory Medicine: The Impact of Exponential Technologies & Platform Economy” illustrated how exponential technologies such as artificial intelligence (AI), cloud computing, augmented reality (AR), and virtual reality coupled with cheaper and faster internet availability have
transformed organisations to create value, manage their operations and their talent. The lecture described how the future of healthcare is related to key trends namely power of data, flexible organization and the focus on prevention and wellness. It also discussed the risks and possibilities of how trends set by leading platform-based business models can permeate and transform the medical laboratory sector.

Focussed topics related to the Covid-19 pandemic were delivered in two lectures entitled “The Value of Sars-Cov-2 Serology Testing and Implications for Vaccine Evaluation” and the lecture on “Applying Health Systems Principles and Economic Analysis towards a Pandemic-Resilient Lab Service” which discussed how lab services fit into health systems framework and how Covid-19 pandemic can accelerate the implementation of next-generation lab services.

The program also addressed other topics of interest such as “Epidemiology and Diagnosis of Nasopharyngeal”, “Clinical Use of High-sensitivity Troponin at the Point-of-Care with ESC 1-hour Algorithm”, “The Role of the Laboratory in Meeting the Asian Pacific Society of Nephrology Clinical Practice Guideline on Diabetic Kidney Disease”, “Addressing the Emerging “Epidemic” of Fatty Liver Disease”, “PTH: Keeping Up with the Generations”, “Clinical Application of MU”, “The QC Standards, Past and Present: Novel Controversies and Old Struggles”, “Sigma Metric – Quality Framework of Point of Care Glucose Testing”. “Auto-verification of Lab Results”, “Strategies in Overcoming the Frequent Errors in STAT Laboratory”, “ISO 15189 Accreditation – Remote Assessment”, “Licensing of Medical Laboratory Science Personnel and the Impact on the Medical Laboratory Service”. Lectures were delivered by experts from Malaysia, United States, Australia and Hong Kong. The APFCB Travelling Lecture was delivered by Helen Martin from Australia on the topic “Adding Value with Patient Report Commenting”. Lectures were followed by a live questions and answers session.

The Conference received generous support from the corporate sector and was made available to participants at no charge. A total of 1173 participants from 23 countries registered for the event.
News from the Hungarian Society of Laboratory Medicine (MLDT)

Change of the guard in the MLDT

by Agnes Peterfalvi MD, PhD
IFCC National Representative

Hungarian Society of Laboratory Medicine (MLDT) Secretary

Department of Laboratory Medicine,
University of Pécs, Pécs, Hungary

In the Hungarian Society of Laboratory Medicine, the term of the previous executive board expired at the end of last year. We are grateful for their efforts and the professional results they have achieved.

We welcome:

- The new President - Prof. Dr. Attila Miseta (Department of Laboratory Medicine, University of Pécs, Pécs, Hungary)
- The new Secretary/National Representative - Dr. Agnes Peterfalvi (Department of Laboratory Medicine, University of Pécs, Pécs, Hungary)
- The new Treasurer - Dr. Béla Nagy (Department of Laboratory Medicine, Faculty of Medicine, University of Debrecen)

Members of the executive board are:

- Dr. Zsuzsa Bagoly (University of Debrecen, Debrecen, Hungary)
- Dr. Gabriella Bekő (South-Pest Hospital Centre-National Institute for Infectology and Haematology)
- Dr. Imre Földesi (University of Szeged, Szeged, Hungary)
- Dr. Erzsébet Nagy (Buda Hospital of the Hospitaller Order of Saint John of God)
- Prof. Dr. Barna Vásárhelyi (Semmelweis University, Budapest, Hungary)

Article continued on next page
We wish the new Executive Board a successful term between 2021-2023, full of health, energy, enthusiasm, and productive cooperation!

The updated website of the Society can be found at www.mldt.hu.

News from the IFCC Website

IFCC Live Webinar

IFCC C-CB Appraisal of 2020 ESC Guidelines for the Management of Acute Coronary Syndromes in Patients Presenting Without Persistent ST-Segment Elevation: Getting Cardiac Troponin Right

Paul O. Collinson (UK)
Department of Chemical Pathology St George’s Hospital London

Allan S. Jaffe (US)
Cardiovascular Medicine, Mayo Clin College of Medicine, Rochester, MN

Fred S. Apple (US)
Hennepin County Medical Center, University of Minnesota Minneapolis MN

Implementing the guidelines – evidence base and practical issues
Rapid rule in and rule out – When can we be rapid and when should we wait
Getting it right - high-sensitivity cardiac troponin assays and other biomarkers: 99th percentiles and analytical considerations

Chair: Fred Apple (US)

The on-demand content for the IFCC Free Webinar on Cardiac Biomarkers is now available!

Click here to access it.
SARS-CoV-2 serology testing in the setting of vaccination

Siemens Healthineers position

To enable an effective vaccination strategy, Siemens Healthineers advocates for the use of automated SARS-CoV-2 serology testing to help confirm efficacy. Ensuring the effectiveness of vaccines will play a key role in promoting public health, including assessing sufficient and durable protection.

Siemens Healthineers supports measuring SARS-CoV-2 IgG antibodies in relation to vaccine use for: (1) establishing a threshold for protection or immunity; (2) evaluating initial immune responses following vaccination and (3) measuring changes to antibody levels over time. An automated and scalable serology assay used for patient care in the context of vaccination should include key technical features for effective use: measurement of S1-RBD (spike-receptor binding domain) neutralizing IgG antibodies, very high specificity (≥99.5%), and quantitative results.

Quantitative antibody testing approximately 3, 6, and 9 months after vaccination would ensure a sustained antibody response. Initial data on the duration of antibody-mediated protection is needed, and in the long-term testing may be focused on populations with known risks. The timing of appropriate serology testing would be optimized and refined as needed.

Potential Utility of Quantitative SARS-CoV-2 Antibody Testing Following Vaccination

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3–4 weeks after vaccination*  
- Confirms initial neutralizing antibody response  
- Helps ensure antibody response clears threshold for immunity

3, 6, 9 months after vaccination  
- Confirms persistence and duration of immunity  
- Provides means to sero-bridge abridged trials to additional populations

Annually after vaccination  
- Assesses persistence and duration of immunity  
- Informs requirements for future vaccinations

*For a 2-dose regimen, the proposed timing is after each dose.

In clinical chemistry and laboratory medicine, all steps before the analytical phase, that is, the preanalytical phase, can yield laboratory variability that may jeopardize patient safety. Few years ago, the Latin America Confederation of Clinical Biochemistry (COLABIOCLI) commissioned the Latin American Working Group for Preanalytical Phase (WG-PRE-LATAM) to study preanalytical variability and establish guidelines for preanalytical procedures to be applied by health care professionals in clinical laboratories.

COLABIOCLI WG-PRE-LATAM evaluated the impact of the Chilean and Ecuadorian breakfasts on laboratory testing and showed that avoiding fasting time represents more risk than benefits for the patients, except for the evaluation of lipid profile. Moreover, in collaboration with researchers from Lithuania the effect of the use of chewing gum was evaluated (sugar-free) before blood collection for laboratory tests; impact was evidenced for thyroid stimulating hormone, complete blood count and other laboratory testing. Furthermore, in cooperation with pharmacists the pragmatic approach to sample acceptance and rejection was evidenced, whereas the rejection of hemolyzed samples can jeopardize patient safety in specific circumstances.

A proud collaboration with the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) provided the Joint EFLM-COLABIOCLI Recommendation for Venous Blood Sampling. It offers guidance on the requirements for ensuring that blood collection is a safe and patient-centered procedure and provides practical guidance on how to successfully overcome potential barriers and obstacles to its widespread implementation. We encourage professionals throughout Europe and Latin America to adopt and implement this recommendation to improve the quality of blood collection practices and increase patient and workers safety.

Aiming the continued education of laboratory professionals, a critical review was published, that provides information to understand the mechanisms of the interactions and reactions that occur between blood and clot activators and anticoagulant additives inside evacuated tubes used for laboratory testing. Blood collection tubes have improved continually over the years, from the glass tubes containing clot activators or anticoagulant additives that were prepared by laboratory personnel to the current standardized evacuated systems that permit more precise blood/additive ratios; except for laboratories located from 800 m and up above sea level, i.e., Austria, Chile, France, Italy, Mexico, Switzerland.

The blood-to-additive ratio recommended by the manufacturer should be strictly observed. The blood volume that is collected depends on the residual pressure in the evacuated tube. The manufacturers specify this volume at sea level but increases in elevation decrease the blood volume drawn and cause the blood volume to be over-diluted by any liquid additive. In October 2019, the estimated world population was approximately 7.7 billion people, and about 1 billion people (12–13% of the world’s population) lived at altitudes ≥1000m above sea level. Furthermore, about 500 million people (6%) lived above 1600m above sea level. Thus, blood collection systems that can correct pressure differences in altitude are needed. Presently, the COLABIOCLI WG-PRE-LATAM are planning the evaluation of the impact of venous blood sampling in countries with this issue like Chile and Mexico. We hope to perform these evaluations soon.

The most important question when dealing with the laboratory sources of error is not “how big is one single source of variability?” but, “how big could be the error if all sources of variability impact together over a single laboratory outcome?”, conclude Gabriel Lima-Oliveira PhD, Chair of the COLABIOCLI-WG-PRE-LATAM.
COLABIOCLI WG-PRE-LATAM
Gabriel Lima-Oliveira – Chair
Beatriz Varela – Secretary
Maria Elena Arredondo – Member
Eduardo Aranda – Member
Patricia Ochoa – Member
Michele Brennan – Corresponding member
Stella Maris Carchio – Corresponding member
Silvia Flores – Expert/Consultant
Gian Cesare Guidi – Expert/Consultant

Articles published


Meeting of WG-PRE-LATAM with COLABIOCLI President
Pictured left to right: Gabriel Lima-Oliveira, Álvaro Justiniano Grosz (president COLABIOCLI), Beatriz Varela, Eduardo Aranda, Patricia Ochoa and Maria Elena Arredondo
After thirty years of organizing annual symposia, Croatian Society of Medical Biochemistry and Laboratory Medicine (CSMBLM) Northwestern Croatia branch, due to the pandemic, organized the first virtual symposium.

On October 17, 2020, more than 160 participants from Croatia and from neighboring countries joined the Symposium online. The main topic of the Symposium was: Hemodialysis - clinical and diagnostic challenges.

Throughout six presentations, lecturers discussed the pathophysiological basis of the laboratory parameter changes in dialysis patients, monitoring their nutritional status and hematological parameters, mineral metabolism monitoring in secondary hyperparathyroidism and the value of biomarkers of cardiovascular changes. Additionally, problems occurring in the pre- and post-analytical phase in the analysis of hemodialysis patients’ samples were also discussed. During lectures, participants were able to ask questions and participate in a chat conversation.

It is important to note that collaboration of laboratory medicine professionals and clinical doctors provided lectures for this Symposium. This cooperation is important in clinical practice every day. As doctor Zabic, concluded, ‘The start of treatment ... demands a thorough clinical monitoring of the patient’s condition, the assessment of the dialysis process adequacy and prompt reaction by clinicians, which is greatly based on fast, available and reliable laboratory test values’ (Biochem Med 2020;30(3)).

Lectures abstracts were published in the October issue of the Biochemia Medica journal.
The largest profile event in Russia was organized by “Federation of Laboratory Medicine”. In connection with COVID-19 pandemic the Congress was transformed into 6 thematic online forums:

- 28 July, Cytology Forum
- 27 August, Laboratory Diagnostic in Critical and Urgent Conditions
- 23-24 September, Preanalytical Forum
- 14-15 October, Organization of efficient work of laboratory
- 18-19 November, Fundamental and clinical investigations of biomarkers
- 17-18 December, Infection diseases and complications

The Congress was attended by over 18500 people from 222 Russian cities and 27 countries. Telebridge took place, connecting continents and countries. Almost 300 speakers from 17 countries - Argentina, Belarus, Canada, Croatia, France, Germany, Israel, Italy, Japan, the Netherlands, Portugal, Russia, Spain, Turkey, the UAE, the UK, and the USA - spoke on the 86 sections within 9 days.

Many presentations were devoted to the new coronavirus infection. IFCC President Khosrow Adeli presented the IFCC international guidelines for COVID-19 testing. The Biomarkers Forum was opened by academician Evgeniy Nasonov, who provided a comparison of the pathogenetic mechanisms of immune inflammation in rheumatic diseases and COVID-19. On the Congress final day academician Areg Totolyan delivered a lecture on the immunopathogenesis of COVID-19, including theoretical aspects of the validity of the hypothesis on the protective role of BCG vaccination, data on population immunity in Russian regions. Nikolay Mayanskyi shared the results of studies of the antibody response to SARS-CoV-2 in overexposed adults, immunocompromised children.

FLM President Michael Godkov and IFCC President Prof. Khosrow Adeli during their talk
FLM President Michael Godkov and Mark Sluiter prepared sections devoted to healthcare management in COVID-19 pandemic. Natalia Sapozhnikova (Moscow) and Igor Ushakov (Irkutsk) presented their experience of organizing large-scale COVID-19 testing. Conny Helder and Luc Kenter shared peculiarities of work of medical institutions in the Netherlands during COVID-19. Mark Sluiter reported on the implementation in the Republic of Tatarstan of the Dutch experience on remote monitoring of anticoagulation therapy, which allowed self-isolated patients to continue monitoring INR. Ozren Tošić spoke about the British experience, discussed the rationality of creating and using new hospitals.

The poster section was held in electronic format with 104 posters in 18 sections. The number of views of the posters exceeded 6300, about 600 listeners watched presentations of finalists of the Poster Section. To support young people, Alexei Tikhonov prepared the Young Scientists Club. Colleagues from 5 countries shared their career experience and opportunities in professional societies.

President Michael Godkov and Young scientist Alexey Tikhonov. They moderated the session “Young scientists’ session – Pathways in laboratory medicine: International experience and professional societies”

35 IVD manufacturers and suppliers participated in the virtual exhibition. About 10000 visitors downloaded almost 8000 advertising materials. Visitors left “business card”, could ask a question and get an answer in the interactive chat.

There was an extensive Cultural program. The ceremony of annual professional award named after Vadim Menshikov was held. Exciting award ceremony of the winners of the photo competition “Laboratory City and its inhabitants-2020” impressed audience. In honour of the famous scientists of the Mayansky brothers a page “Our heritage” with photos and memories as virtual museum was opened.

The wealth of experience gained in conducting the online Forums will be used in preparing the next 7th RCLM, which will be held between September 15-17, 2021, in Moscow.
The first patient, 48 years old, coming back from China, was diagnosed in France with a severe acute respiratory syndrome SARS-CoV2 disease on Jan 24th, 2020 at the University Hospital Pellegrin (Bordeaux, France). Simultaneously, two Chinese tourists (father, 80 years old; and daughter, 48 years old) traveling to France from China mid-January 2020 were hospitalized at Bichat-Claude Bernard University Hospital (Paris, France). These patients were diagnosed with COVID-19 by semi-quantitative RT-PCR on nasopharyngeal swabs. The patterns of clinical disease and viral load were assessed from different samples (nasopharyngeal and blood, urine, and stool samples). All samples were shipped to laboratories in the National Reference Center for Respiratory Viruses (The Institute Pasteur, Paris, and Hospices Civils de Lyon, Lyon, France), where RNA extraction, real-time RT-PCR, virus isolation and titration procedures were done. The 80-year-old patient presented a rapid evolution towards multiple organ failure and a persistent high viral load in lower and upper respiratory tract with systemic virus dissemination and virus detection in plasma and died on day 14 of the disease (Feb 14th, 2020). The other patients recovered and were discharged on Feb 19th, 2020. A crucial event in the spread of the disease across metropolitan France was the annual assembly of the Christian Open-door Church from February 17th to 24th in Mulhouse, attended by close to 2,500 people, at least half of them are believed contracted the virus. Meanwhile, China reported on Dec 31st, 2019 a cluster of cases of pneumonia in people at Wuhan, a Hubei Province; and on May 4th, a retroactive testing of samples in one French hospital showed that a patient was probably already infected with the virus on December 27th, almost a month before the first officially confirmed case in France. On March 16th, President Macron announced mandatory home lockdown for 15 days starting at noon on March 17th 2020; which was extended twice ending on May 11th, after a progressive lifting of lockdown and face masks were available to all citizens.
With increasing numbers of cases spreading just before the beginning of the spring of 2020, V. Sapin, SFBC President, following the recommendation of K. Peoc’h and D. Collin-Chavagnac, co-chairs-SFBC-Scientific Division, set up a committee on “COVID 19 biomarkers and Lab Medicine (C-COVID 19-LM)” to study the biological markers for the screening, triage and prognosis of the disease. This initiative served to analyze different clinical and biological types of the evolution of patients infected with SARS Cov2 with comprehensive viral sampling strategy, contributing to a better understanding of the disease and to advancing the implementation of more efficient infection control strategies. All this happened shortly after the creation of the IFCC-TF on Covid19. The terms of reference of this SFBC functional unit on Biochemical markers of COVID 19 were published in the Annales de Biologie Clinique by Beauvieux MC, et al. (Ann Biol Clin (Paris). 2020 Jun 1;78(3):269-277)

The call for nomination of the SFBC COVID 19 aroused great enthusiasm. Therefore, fifty six colleagues were appointed full members. The C-COVID19-LM is chaired by two medical biologists from the biochemistry department at the Bordeaux University Hospital (M-C Beauvieux, A-M Bérard). Also, eight working groups were established to analyze better specific problems related to health care institutions: University, General and Military Hospitals and private sector. Specifications on the health and social care facilities including residential facilities for dependent elderly people and with disabilities were provided. External experts contributed to the project representing a national network of one hundred medical biologists from the metropolitan area in France and its overseas territories, Belgium, Canada and French-speaking Mediterranean countries members of the Arabic Federation in IFCC.

A multicentric survey was organized among different categories of the healthcare institutions to identify the biological prescription panels in the clinical and medical-social care services, in emergencies, resuscitation and post-resuscitation care units, as well as in infectious diseases, nephrology, pneumology, geriatrics, pediatrics and internal medicine departments and medical dispensaries. For the first time, C-COVID19-LM members have really embraced virtual communication using widely video conferences that result in improving the exchange, a faster progress of the project strengthening the collaboration between different national societies. The survey was conducted in a binary mode, a response “1” corresponded to a systematic prescription; “0” absence of prescription, and “0.5” reflecting prescriptions according to the circumstances, all were treated by sensitive statistical analysis. The C-COVID 19-LM collected responses from 69 healthcare institutions and 329 clinical care services. A factorial and univariate comparative analysis was performed, preliminary results were presented at the VisioJFBM conference (4èmes Journées Francophones de Biologie Médicale (JFBM) last November.

The committee revised the application of the guidelines and published by IFCC in May and October 2020, concerning the parameters in biochemistry and partly in hematology and hemostasis. If recommendations are preserved, prescriptions are heterogeneous according to clinical specialties. There are quantitative differences in prescriptions according to the category of healthcare institutions. There is also a geographical slope region to region that can be explained based on products availability. The University Hospital working group is currently analyzing their specific biomarkers results with medical data collected at University Hospitals. The SFBC-WGs are very dynamic. For example, the WG from overseas and French-speaking countries representing 20 countries in a publication (Ann Biol Clin (Paris). 2020 Oct 1;78(5):499-518”), entitled “Management of a global health crisis: first COVID 19 disease feedback from Overseas and French-speaking countries medical biologists” by Barguil Y, et al., reported several problems on laboratory equipment, supplying specialized tests and border closings. The co-existence of zoonoses whose symptoms were equivalent to COVID-19 induced additional laboratory prescriptions for a differential diagnosis. The insularity, quarantine on boats, air transportations etc. underlined interest for the future of a combined approach of humans, animals and environmental health.


Article continued on next page
article reflects the key role in the screening strategy and epidemiological approaches of the private sector that demonstrated a strong capacity to adapt laboratories to the regulatory changes, the high volumes, the ability to carry out new methods while maintaining a non-COVID patient care service respecting the accreditation requirements. They established highly collaborative territorial networks with health professionals: nurses, fire brigades, caregivers from the communities and stakeholders.

The control of outbreak diseases requires rapid and accurate diagnostic tests. So far, testing for COVID-19 has relied on methods suited only for well-equipped centralized laboratories. Diagnostic tests must be as reliable as possible and give fast results, but should also be affordable and easy to use, including in some cases the point of care or even at home devices.

The WG-POCT, composed of 16 biologists, elaborated a survey for the secure and appropriate use of POCT during the pandemic crisis presenting a poster at the VisioJBMB Congress last November. They also assessed the current state of progress on the development of POCT for the diagnosis of viral diseases that cause pandemics. POC technologies are essential to enable front-line health workers to make the diagnosis quickly and accurately, as well as to reduce the risk of further virus spread. In addition, they need to provide comparable information to ensure healthcare authorities of having reliable tools to detect current or past infection. During the first wave, POCT devices were intensively used in the medical TGV trains during the transfer of critically ill patients among regions. Resources should urgently be made available for supporting the implementation of appropriate point-of-care testing platforms in emergency departments and admission units in hospitals in preparation for the next phase of the pandemic. Lastly, four additional WGs with clinical focus have been established in collaboration with several medical societies in neurology, cardiology, transplantation and hemodialysis and nutrition.

The global epidemic of coronavirus we are currently experiencing, needs an overview on the biological markers that allow monitoring COVID-19 disease properly. One year after its implementation, the SFBC C-COVID 19-LM showed a key role for the biological markers in the management of this sanitary crisis. The SFBC group illustrated the pivotal role and the fast adaptation of medical Laboratories to COVID 19 Pandemic to overcome problems, to be more reactive and to deliver suggestions for future pandemics reinforcing collaborations and evidence-based medicine, with organizational and innovative responses for a sustainable recovery. Good scientific governance is more important than ever!
We advise readers to keep up-to-date about the evolving situation and possible rescheduled dates. Contact organizing secretariats for updates on upcoming events.

## Calendar of IFCC Congresses/Conferences and Regional Federations' Congresses

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Feb 15 - 17, 2021</td>
<td>Critical Role of Clinical Laboratories in COVID-19 PANDEMIC (Virtual conference)</td>
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<tr>
<td>May 27 - 29, 2021</td>
<td>AFCB Congress 2021 (Beirut, LB)</td>
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<tr>
<td>Sep 23 - 25, 2021</td>
<td>AFCC Congress 2021 (Lusaka, ZM)</td>
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<tr>
<td>Nov 28 - Dec 2, 2021</td>
<td>XXIV IFCC - EFLM EuroMedLab Munich 2021</td>
<td>Munich, DE</td>
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<tr>
<td>Dec 6 - 7, 2021</td>
<td>IFCC-ICHCLR Workshop on overcoming challenges to global standardization of clinical laboratory testing: reference materials and regulations</td>
<td>Paris, FR</td>
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*Calendar continued on next page*
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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>Mar 28 - Apr 2, 2022</td>
<td><strong>XXV COLABIOCLI Congress</strong></td>
<td>Leon, MX</td>
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<tr>
<td>June 26 - 30, 2022</td>
<td><strong>XXIV IFCC WorldLab Seoul 2022</strong></td>
<td>Seoul, KR</td>
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<td>Oct 15 - 18, 2022</td>
<td><strong>XVI APFCB Congress 2022</strong></td>
<td>Sydney, AU</td>
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<td>May 21 - 25, 2023</td>
<td><strong>XXV IFCC - EFLM WorldLab EuroMedLab - Rome 2023</strong></td>
<td>Rome, IT</td>
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<tr>
<td><strong>New date TBA</strong></td>
<td><strong>International Congress of Pediatric Laboratory Medicine</strong></td>
<td>TBA</td>
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<tr>
<td><strong>New date TBA</strong></td>
<td><strong>IFCC Forum for Young Scientists</strong></td>
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*Calendar continued on next page*
### Other events with IFCC auspices

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

<table>
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<th>Date Range</th>
<th>Event Description</th>
<th>Location</th>
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<tbody>
<tr>
<td>Jan 15 - Apr 10, 2021</td>
<td>Lab Accreditation in Pathology Department</td>
<td>Pakistan</td>
<td>Online event</td>
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<td>Mar 2 - 5, 2021</td>
<td>XVIII Meeting of the SEQCML Scientific Committee</td>
<td>Madrid, ES</td>
<td>Online event</td>
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<tr>
<td>Mar 3 - Dec 3, 2021</td>
<td>Virtual Diploma in Clinical Biochemistry program</td>
<td>Mexico</td>
<td>Online event</td>
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<tr>
<td>May 24 - 27, 2021</td>
<td>10th Santorini Conference “Systems medicine and personalized health and therapy” – “The odyssey from hope to practice: Patient first – Keeps Ithaca always in your mind”</td>
<td>Santorini, GR</td>
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<tr>
<td>May 27 - 29, 2021</td>
<td>II National Meeting Conquilab and Technological</td>
<td>Mazatlan, MX</td>
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<tr>
<td>Jun 10 - 11, 2021</td>
<td>8th International Symposium on Critical Care Testing and Blood Gases</td>
<td>Biarritz, FR</td>
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<td>Sep 6- 7, 2021</td>
<td>POCT: Making the point</td>
<td>Rome, IT</td>
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<td>Oct 6 - 8, 2021</td>
<td>4èmes Journées Francophone de Biologie Médicale</td>
<td>Rennes, FR</td>
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<td>Oct 7 - 10, 2021</td>
<td>46th ISOBM Congress</td>
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<td>Feb 10 - 11, 2022</td>
<td>International Congress on Quality in Laboratory Medicine</td>
<td>Helsinki, FI</td>
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<td><strong>New date TBA</strong></td>
<td>6th Serbian Biomarker Symposium (SERBIS): Lipid Metabolism in Health and Disease</td>
<td>Belgrade, SRB</td>
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**IFCC MEMBERSHIP**

**Full Members**

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**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 (COLABIOCLI)
- North American Federation of Clinical Chemistry and Laboratory Medicine (NAFCC)

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- Agappe Diagnostics, Ltd.
- Asahi Kasei Pharma Corp.
- BD Life Sciences – Preanalytical Systems
- Beckman Coulter, Inc.
- Beijing Dream Diagnostics Medicine (DDM)
- Diatron
- ET Healthcare Inc.
- Fujifilm Wako Pure Chemical Corporation
- Fijurebio Europe
- Gentian, AS
- Helena Biosciences Europe
- Hemas Hospitals (PVT) Ltd.
- HyTest, Ltd.
- Immunodiagnostic Systems - IDS
- Labtron
- LumiraDx
- Maccura Biotechnology Co., Ltd.
- MedicalSystem Biotechnology Co., Ltd.
- Megalab, JSC
- Nova Biomedical Corporation
- One world Accuracy Collaboration
- Ortho-Clinical Diagnostics, Inc.
- Perkin Elmer
- Radiometer Medical ApS
- Randox Laboratories, Ltd.
- Roche Diagnostics
- Sebia S.A.
- Sekisui Diagnostics Ltd.
- Sentinel CH SpA
- Shanghai Kehua Bio-Engineering Co., Ltd.
- Shenzhen Mindray Bio-Medical Electronics Co., Ltd.
- Siemens Healthcare Diagnostics
- Snibe Co., Ltd.
- Sysmex Europe, GmbH
- Technogenetics
- Thermo Fisher Scientific
- Tosoh Corporation
- Labor Dr. Wisplinghoff
- Wuhan Life Origin Biotech Joint Stock Co., Ltd.

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- Brazil: Sociedade Brasileira de Patologia Clinica / 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 Biotechnologists, 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)
- Turkey: Society of Clinical Biochemistry Specialists (KBUD)
- Ukraine: Association for Quality Assurance of Laboratory Medicine (AQALM)
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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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E-mail: enews@ifcc.org

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