



Communications and Publications Division (CPD) of the IFCC

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International Federation of Clinical Chemistry and Laboratory Medicine



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EDITORIAL

Message from the eNews Editor

by *Katherina Psarra*
eNews Editor

Dear colleagues,

How nice and hopeful it is that our president, Prof. Khosrow Adeli, presents the in-person IFCC congresses planned for 2021 and 2022 in this issue! Let's hope that we will all meet, and that new life will be added to our face-to-face meetings. Now, when we really understand the force and the importance of social contact, of casual discussions in addition to the official program meetings, of the joy of participating in dinners and opening ceremonies, of getting to know the locals and their customs, everything will be more thoughtful and intense.

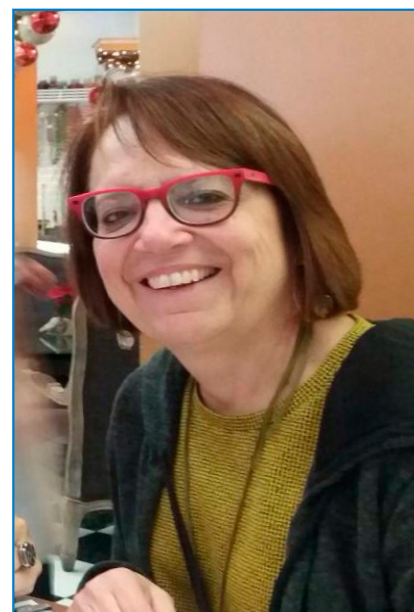
In this issue a new mentor-mentee report is presented. We have the opportunity to learn about the benefits of such relationships in the careers and lives of both mentor and mentee. Let it serve as an example for senior and young colleagues to be involved in similar relationships for their benefit as well as of the health systems.

A lot about the combat against HCV in Mexico can be learned from an interesting and important report of the "10 count-ups to Healthcare Excellence at Biomedica de Referencia". Once again, teamwork awarded by Univants.

"The post-COVID world will be unlike anything we know and it's time to prepare for the new normal and for achieving success.", Dr Bernard Gouget states in this issue in his article about vaccines and artificial intelligence. A lot of information about the extreme difficulties Overseas France faced trying to tackle the pandemic is given in the study presented in this issue as well.

As you go through this issue, dear colleagues. I am sure that you will find a lot of interesting information. Spring and good weather are here to stay and, as vaccines cover more and more of the population, our next issue will be even more hopeful!

Katherina Psarra



Katherina Psarra



الجمعية تحت إشراف



الهيئة السعودية للتخصصات الصحية
Saudi Commission for Health Specialties

Saudi Society for Clinical Chemistry

INTERNATIONAL LABORATORY
WEEK/QUALITY SEMINAR



Wednesday, 7th APRIL 2021



Virtual seminar



THE VOICE OF IFCC

IFCC President's message – April 2021



Prof. Khosrow Adeli
PhD, FCACB, DABCC, FAACC

by Khosrow Adeli
IFCC President

My cordial greetings and compliments of the spring season to you all in the IFCC family. After the declaration of the first anniversary of the COVID-19 pandemic, I hope we are all beginning to see the light at the end of the tunnel. Vaccination rates are rapidly increasing around the world—promising news that offers hope for return to normalcy, including face-to-face meetings over the coming summer and fall.

First, I would like to commemorate the late Professor Howard Morris, the IFCC Past President. As the second anniversary of his untimely passing approaches, I hope we can all take a moment to remember his numerous contributions to the field of laboratory medicine and our organization. He was a distinguished scientist, world traveler, and an active service member of the IFCC for over 20 years. To honour Professor Morris and in his memory, we will continue his goal of promoting the value of laboratory medicine in the effort to improve patient outcomes and safety in healthcare.

To this end, I am also happy to inform you that IFCC and MZ collaborated to survey all participants and corporate sponsors of the *IFCC Global Conference on COVID-19*, which covered the Critical Role of Clinical Laboratories in the COVID-19 Pandemic, this past February. There were over 500 responses to the survey highlighting the success of this global scientific event, with 93.7% rating the scientific program from very good/strong to excellent/very strong. Other features such as the industry workshops, industry panel, young scientist session, eExhibits, and ePosters were also rated very highly, and the majority of respondents described the overall conference as excellent. We look forward to using this feedback to continue to improve and deliver scientific conferences of high quality and demand for a worldwide audience, either virtually, in person, or as a hybrid model.

With that in mind, I would like to remind you all of some important upcoming conferences, including the *POCT: Making the Point Conference*, which as of right now is being planned as an in-person or hybrid meeting in Rome on September 6–7, 2021. Taking place in Munich, the *XV International Congress of Pediatric Laboratory Medicine (ICPLM)* is planned for November 26–29, 2021, followed by the *XXIV IFCC-EFLM EuroMedLab* from November 28 to December 2, 2021. Last month we also announced the *Joint WorldLab-APFCB Congress*, which will be held on June 26–30, 2022 in Seoul. All of these meetings are incredibly valuable in achieving our goal of advancing excellence in laboratory medicine for better healthcare worldwide, and I look forward to seeing you all there.

Aside from future conferences, the new IFCC Taskforces continue to work on the 2020–2023 strategic plan, meeting on a monthly basis to push plans into action. The IFCC Taskforce on Global eLearning/eAcademy has been busy organizing global webinars as part of the *IFCC Webinars Live Series 2021*. This next webinar on the *Application of Laboratory Techniques in the Diagnosis of Infectious Diseases* will be held on April 6, 2021. Additionally,

Article continued on next page

the IFCC Taskforce on COVID-19 is currently writing a new *Guideline on COVID-19 Rapid Antigen Testing* and discussing a potential new *Guideline on Monitoring Immunity following vaccination*.

I hope we can all look forward to a brighter future ahead and these excellent upcoming meetings and resources that the IFCC has committed to provide.

Feel free to email me at: president@ifcc.org, with your feedback, questions, or concerns.

Till next time 😊

Khosrow

News from the IFCC Website



Important Announcement

Dear Colleagues,

We are pleased to inform you that the 24th WorldLab Congress in Seoul will be held jointly with the 16th APFCB (Asia-Pacific Federation of Clinical Biochemistry) Congress in June 2022. The IFCC and APFCB have agreed that a joint conference would be more attractive and beneficial for both conference delegates and corporate sponsors and will ensure wider participation from laboratory professionals and industry partners across Asia-Pacific and around the world. The host Society, the Korean Society for Clinical Chemistry (KSCC), has also very graciously agreed to host the joint WorldLab-APFCB Congress in Seoul, which has also been approved by the IFCC and APFCB Executive Boards.

[Read more](#)

IFCC: THE PEOPLE

IFCC call for nominations



The IFCC invites nominations for the following position:

EMERGING TECHNOLOGIES DIVISION

Committee on Omics Translation (C-OT): one Corporate Member position

- Time in office 2021-2023.
- Deadline to receive nominations and supporting documents: 15th April 2021.

ETD nominations should be sent to Silvia Colli Lanzi at the IFCC office (Colli-Lanzi@ifcc.org).

Refer to your National Representative or Corporate Representative for information on procedures for nominations. More info about contacts available [HERE](#).

Register for the next IFCC webinar!

Dear Colleagues,

The next IFCC webinar on “Application of laboratory techniques in the diagnosis of Infectious Diseases” will be held on April 6, 2021. Infectious diseases are one of the most intimidating threats, responsible for an immense burden of disabilities and deaths. Identification of pathogens through rapid, specific, sensitive, and cost-effective diagnostic tools is key for the successful therapeutic interventions. This webinar will focus on recent laboratory techniques including metagenomic next-generation sequencing (mNGS) and digital PCR in the diagnosis of infectious diseases. The webinar will contain three presentations of 20 min per speaker plus 20 min panel discussion.

➔ **Talk 1:**

- Digital Nucleic Acids Amplification Testing of Infectious Diseases Based on Droplet Array Production Via Cross-Interface Oscillation**
- Speaker: Prof. Wenbin Du**

➔ **Talk 2:**

- Metagenomic next-generation sequencing in clinical microbiology: utility and challenge**
- Speaker: Prof. Hui Wang**

➔ **Talk 3:**

- How to improve the impact of up-to-date microbiological tests on patient management: a clinician’s perspective**
- Speaker: Prof. Jing Zhang**

Chairperson: Prof. Cheng-Bin Wang (President of Chinese Society of Laboratory Medicine – CSLM)

Register here: <https://www.workcast.com/register?cpak=8172916142437123>.

Time Zones: Live presentations starting at 7:30 PM Beijing Time; 7:30 AM Eastern Standard Time United States; 1:30 PM European Time.

Important: Please ensure that you carefully determine the time that the presentation will start in your global time zone. To calculate this, you can use the time zone converter tool at: www.timeanddate.com/worldclock/converter.html.

Recorded webinar: available on demand

Certificate of Participation: available for all registrants

Please ensure you register to attend the live event and have access to the recording and the certificate.

Note: Simultaneous translation available in Chinese.

Sincerely yours,

Rojeet Shrestha

Co-ordinator, IFCC eLearning/eAcademy

IFCC Live Webinar on
**Application of laboratory techniques in the
diagnosis of Infectious Diseases**

Simultaneous Chinese
translation available!

Date: April 6, 2021

Register at: <https://www.workcast.com/register?cpak=8172916142437123>

Chair/Moderator
President of Chinese Society
of Laboratory Medicine
(CSLM)



Prof. Cheng-Bin Wang
[China]
The General Hospital of the People's
Liberation Army

Digital PCR Amplification Testing
of Infectious Diseases Based on
Droplet Array Production Via
Cross-Interface Oscillation



Prof. Wenbin Du
[China]
Institute of Microbiology Chinese
Academy of Sciences

Metagenomic next-
generation sequencing in
clinical microbiology:
utility and challenge



Prof. Hui Wang
[China]
Peking University People's
Hospital

How to improve the impact of
up-to-date microbiological
tests on patient management:
a clinician's perspective



Prof. Jing Zhang
[China]
Zhongshan Hospital of
Fudan University

Date: April 6, 2021

Time: 07:30 AM (Eastern Standard), 1:30 PM (Central European), 07:30 PM (Beijing)

Important: Please ensure that you carefully determine the time that the presentation will start in your global time zone. To calculate this, you can use the time zone converter tool at: www.timeanddate.com/worldclock/converter.html.



IFCC Live Webinar

实验室技术在感染性疾病诊断中的应用

同步提供中文讲座!

Register at: <https://www.workcast.com/register?cpak=8172916142437123>

主席/主持人
中华医学会检验医学
分会主任委员



王成彬教授
[中国]
中国人民解放军总医院第一医学中心

基于交叉界面振荡液滴
阵列的感染性疾病数字
核酸扩增检测



杜文斌教授
[中国]
中国科学院微生物研究所

临床微生物学中的宏基
因组测序: 应用与挑战



王辉教授
[中国]
北京大学人民医院

如何提高最新的微生物
检测对患者管理的影响:
临床医生的观点



张静教授
[中国]
复旦大学中山医院

日期: 2021年4月6日

时间: 07:30 AM (东部标准), 1:30 PM (欧洲), 07:30 PM (北京)





MAGLUMI® Special Test Menu

SARS-CoV-2 Neutralizing Antibody **NEW**
 SARS-CoV-2 S-RBD IgG **NEW**
 2019-nCoV IgM
 2019-nCoV IgG
 SARS-CoV-2 Ag **NEW**

25-OH Vitamin D **FDA**
 Intact PTH

H.pylori IgG
 H.pylori IgA
 H.pylori IgM

hs-cTnl
 NT-proBNP
 Aldosterone
 Direct Renin
 Lp-PLA2

TRAb
 Anti-TPO
 Rev T3

CA 50
 CYFRA 21-1
 CA 242
 CA 72-4
 NSE
 TPA
 HE4
 HER-2
 PIVKA-II **NEW**
 Gastrin-17

GAD 65
 Anti-IA2
 ICA
 IAA (Anti Insulin)

PCT(Procalcitonin)
 IL-6(Interleukin 6)
 *SAA(Serum Amyloid A)

free Testosterone
 17-OH Progesterone
 AMH

Vitamin B12
 Folate (FA)

HA
 PIIP N-P
 C IV
 Laminin
 Cholyglycine

Cortisol
 IGF-I
 IGFBP-3

IFCC: THE YOUNG SCIENTISTS

Mentorship interview

Presented by the IFCC Task Force for Young Scientists

AN INTERVIEW WITH PROFESSOR ALAN WU (THE MENTOR)
AND DR. DEBORAH FRENCH (THE MENTEE)

THE MENTOR

Dr. Alan Wu is currently Professor of Laboratory Medicine; Chief, Clinical Chemistry Laboratory, San Francisco General Hospital; Chief, Clinical Pharmacogenomics Laboratory, UC San Francisco.

Working as a mentor

Dr. Wu has had the pleasure of serving at great medical institutions including the University of Texas Medical School and Hermann Hospital, the University of Connecticut and Hartford Hospital, and Zuckerberg San Francisco General Hospital/University of California, San Francisco. During the span of his combined 40 years with these institutions, he has received support from his department in furthering postdoctoral training programs.

When asked about the most valuable aspect of the mentor-mentee relationship, Dr. Wu shared:

“Laboratory medicine is a field that changes rapidly. Economic pressures threaten to turn our lab services into a commodity. Many physicians and the general public do not understand the effort it requires to generate a quality product. Educating and mentoring the next generation of clinical laboratory scientists is the only way our field can stay current and survive.”

While Dr. Wu has spent most of his time with postdoctoral fellows in clinical chemistry, he added:

“I have mentored countless numbers of clinical laboratory scientists, graduate students in chemistry, pathology, and pharmaceutical sciences.”

Article continued on next page

MENTOR

Dr Alan Wu, PhD

- Professor, Department of Pathology and Laboratory Medicine
- Chief, Clinical Pharmacogenomics Laboratory
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
- Chief, Clinical Chemistry Laboratory
SAN FRANCISCO GENERAL HOSPITAL

MENTEE

Dr Deborah French, PhD, DABCC

- Assistant Director, Chemistry
- Director, Mass Spectrometry
- Associate Clinical Professor, School of Medicine
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

INTERVIEW CONDUCTED BY

Dr Joe El-Khoury, DABCC, FAACC

- Core Member IFCC-TFYS
- Assistant Professor, Laboratory Medicine
- Director, Clinical Chemistry and Laboratory Medicine
- Co-Director, Clinical Chemistry Fellowship Program
YALE NEW HAVEN HEALTH

Dr. Wu has also trained several hundred residents during his career.

Mentoring is a balance between being a good mentor and maintaining a good mentoring relationship. Dr. Wu likens mentorship to raising a child and references the Harry Chapin song “Cat’s in the Cradle” (but without the sad undertones). He explained, “At first, the mentor knows what’s best and teaches the mentee what is important to succeed. Then as the mentee goes off into the real world, it is an equal partnership.” In the best scenario, it is the mentee that eventually teaches the mentor about what is important in moving forward in their field.

When discussing the career benefits of mentorship programs, Dr. Wu asserted:

“The two most important lessons for mentors to give is the art of communication and listening. We cannot succeed if we are not able to speak and write effectively and efficiently to our students, staff, administrators, research study sponsors, in vitro diagnostics colleagues, and most importantly, the physicians we serve.”

He pointed out that mentees must be able to “...describe complex medical and scientific topics into understandable language and text.”


Advice for young scientists and laboratorians

When considering the challenges for young scientists and laboratorians as they embark into mentorship programs, Dr. Wu advised:

“Find someone who has the time and genuine interest in your career. Beware of potential mentors that are overly ambitious. They may be seeking you because they sense you can advance their career, not yours. This is common in the basic sciences where competition for grants is career survival. We have the advantage of having true colleagues. Nobody is trying to get an edge up.”

When relaying the common challenges that young scientists face, Dr. Wu shared that when he was a fellow, the focus was expertise in clinical chemistry. Today, the expectations are much more involved. He stated, “You need to be go-to person for hematology, urinalysis, molecular diagnostics, and what the COVID-19 pandemic has shown us, infectious diseases.” The technologies have also increased. When once it

"Do not be afraid of going outside your comfort zone. . . . reach out to others . . . Embrace the responsibility that has been given to you that you can really make a difference in this world."

 Dr Wu

was sufficient to know spectrophotometry, immunoassays, and ion selective electrodes, today it is necessary to know nucleic acid analysis, micro-arrays, chromatography, mass spectrometry, and flow cytometry, for example.

Dr. Wu's best advice for young laboratorians? "Diversify". He encouraged:

"Do not be afraid of going outside your comfort zone. You will find that the approach towards any issue is the same. Only the specifics change. Collaborate. We are not the expert in any field. We need to reach out to others in order to succeed. Compassion. Embrace the responsibility that has been given to you that you can really make a difference in this world. Nowhere was that more evident than during the past pandemic."

THE MENTEE

Background

Dr. Deborah French has been out of fellowship for about 10 years, but she is excited to still be working at the University of California San Francisco (UCSF)! Here, she is an Associate Clinical Professor of Laboratory Medicine and one of two Chemistry Directors that oversee four chemistry testing sites for UCSF Clinical Laboratories. Dr. French is also the Director of Mass Spectrometry at UCSF.

The mentee's perspective

For the mentee, there are many benefits to a mentorship. Dr. French appreciated the ability to get advice and opinions from someone who is so well established in the field. Dr. French first crossed paths with Dr. Alan Wu when she was interviewed for the ComACC Clinical Chemistry Fellowship program at UCSF/Zuckerberg San Francisco General Hospital in December of 2007. She was accepted into the fellowship the following July of 2008. Noting their continued professional relationship:

"I've known Alan for almost 13 years! Time flies! I was in the Fellowship program until December 2010 and then I started in the position at UCSF Clinical Laboratories in January 2011. Alan is in the Department of Laboratory Medicine at UCSF too and we work about 15 minutes' drive apart."

A good mentor instills confidence in his mentee. Reporting an early experience, Dr. French shared:

"The first project I had when starting my position at UCSF Clinical Laboratories was to decide which mass spectrometer to purchase. The lab did not have any mass spectrometers and so we were essentially setting up mass spec testing from the ground up. I worked with a member of UCSF Clinical Laboratories and we gathered so much information about mass specs from the different vendors, we narrowed it down to two instruments that we were interested in and then asked the vendors to do further testing on them. We had a list of advantages and challenges for each instrument, but they were obviously different. When it was getting near the time that I had to decide I started panicking about 'what ifs.' I talked with Alan about it, and he said, 'whatever instrument you pick, you'll make it work.' And he was right! It was exactly what I needed to hear in that moment to give me the confidence to make a decision and move forward."

"It is important to weigh the advantages of participating versus the time commitment and talking it over with someone else can clarify the thinking process."

 Dr. French

Advice to fellow students about mentorship

"When mentorship opportunities arise", Dr. French noted:

"It is important to weigh the advantages of participating versus the time commitment. Talking it over with someone else can clarify the thinking process. When you are at the beginning of your career, it is easy to say yes to everything because it seems like the right thing to do and let us be honest, you are scared that you may not get any further opportunities if you say no! But you also must be careful that you do not overcommit yourself, especially with opportunities that don't excite you as we all know that projects like that are harder to complete."

When searching for an appropriate mentor, Dr. French advised:

"In the case of Alan and me, the mentorship grew organically which was great! I think it is important to identify

people in your life that you tend to gravitate to, in terms of asking questions and getting honest answers. It must be someone that you feel comfortable being honest with too. A mentor does not have to be someone that you work with directly but could be someone that you meet at a conference. Identifying a mentor can occur by simply being a faculty member and trainee like Alan and me, or it could be a more official process, such as participation in one of the mentoring programs that are available, for example, SYCL Mentoring Connections through AACC. Our academic department also has a mentoring program, so it is also an option if your institution offers such a program."

My relationship with my mentor

Discussing her relationship with her mentor, Dr. French remarked:

"Alan is someone that I can approach with any questions that I have whether regarding the testing that we do in the laboratory, or advice on pursuing opportunities that become available in terms of my career, or really any other questions that come up for me. I can always rely on Alan to tell me the truth, and to be direct about what he thinks. He is sure to inject humor into our communications, which resonates well with me. One thing that really impresses me about Alan is that it's like you become part of his family – even though I have finished my fellowship for over 10 years, Alan still thinks of me for opportunities such as participating in studies, reviewing manuscripts, and presenting at conferences."

During her mentorship with Dr. Wu, Dr. French worked on several projects. Some were planned, and some came up during her fellowship. Opportunity begets opportunity. An example shared by Dr. French:

"One of these projects was to develop and validate a 25-hydroxyvitamin D method on the LC-MS/MS. Ten years on, and I am still reviewing vitamin D papers! During my fellowship, Alan and I ended up publishing 10 peer-reviewed manuscripts together from the work we did in that time which was obviously beneficial to my career! Since then, we have published 3 more peer-reviewed manuscripts, and we wrote a book chapter together."

News from the IFCC Website



DiV - February 2021

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

El número comienza con la editorial del Dr. Raúl Girardi, director del DiV y Chair del Grupo de Trabajo de Iberoamerica de Nomenclatura y Traducción (WG-IANT) – Argentina.

El WG IANT se complace en anunciar una gran noticia sobre el DiV: además de los dos formatos habituales: flip y pdf, ¡cada artículo se podrá descargar individualmente! Un paso más hacia una mejor experiencia del lector: los lectores podrán leer todo el número de DiV o seleccionar los artículos que más les interesen y almacenarlos como archivos individuales.

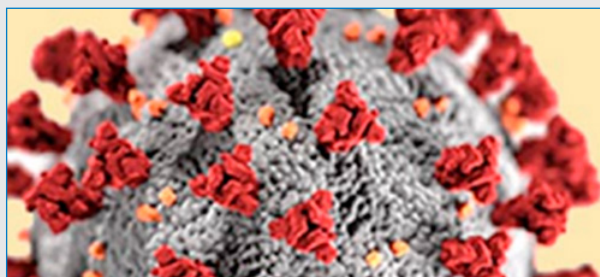
IFCC WG-IANT confirma su compromiso de promover la excelencia en la medicina de laboratorio para una mejor atención médica en todo el mundo en América Latina.

The WG-IANT is happy to announce a great news about the DiV: further to the two usual formats - flip and pdf, each article will be individually downloadable! A further step towards an improved reader's experience: readers will be able to read the whole DiV issue or select the articles they are more interested it and store them as single files.

IFCC WG-IANT confirms its commitment to advance excellence in laboratory medicine for better healthcare worldwide in Latin America.

[Read more](#)

News from the IFCC Website



The IFCC is pleased to publish an online resource providing key information on laboratory guidelines, biosafety, and other important resources to assist member societies around the world and their clinical laboratories as they face the challenges posed by the COVID-19 outbreak.

The page is constantly updated with the most recent information on a biweekly basis.

IFCC Information Guide on COVID-19 – biweekly updates – the NEW SECTION on VACCINATION has been updated

Coronavirus disease 2019, abbreviated to COVID-19, is an emerging global pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). As the number of individuals infected with COVID-19 continues to rise globally and healthcare systems become increasingly stressed, it is clear that the clinical laboratory will play an essential role in this crisis, contributing to patient screening, diagnosis, monitoring/treatment, as well as epidemiologic recovery/surveillance. This guide aims to organize relevant available information on laboratory screening, testing protocols, diagnosis, and other general information on COVID-19 for laboratory professionals, including links to helpful resources and interim guidelines. It will be continually updated as new guidelines and literature become available

[Read more](#)

CONTRIBUTE TO THE IFCC eNEWS



The Top 10 “Count-Ups” to Healthcare Excellence at Biomédica de Referencia (Mexico)

A major area of focus for the World Health Organization (WHO) is elimination of hepatitis C virus (HCV) as a public health threat by 2030. Globally, an estimated 71 million people have chronic HCV. However, only an estimated 19% of these cases are diagnosed (13.1 million), and even fewer are receiving the treatment they so desperately need (5 million). Accordingly, initiatives that focus on identification of unknown HCV infections have substantial value for public health and long-term outcomes following treatment and preventative care. Tackling such an important public health issue can be a herculean effort and often requires strategic partnerships across teams and organizations. Biomédica de Referencia has been a leader in this effort for over 13 years, partnering with the Mexican Foundation for Liver Health (FundHepa) to improve the identification and treatment of people with HCV. This was achieved through activation of comprehensive media campaigns to raise disease awareness, collaborations amongst partners to ensure access to complementary HCV population screening, all while also ensuring treatment strategies that link all positive patients to relevant education and care. Learn more about their collective effort in the below top 10 “count-up”, an homage to the measurable impact they are making to HCV elimination in Mexico:

1st CARE TEAM IN MEXICO TO RECEIVE A UNIVANTS OF HEALTHCARE EXCELLENCE AWARD

The UNIVANTS of Healthcare Excellence awards are a prestigious global honor for integrated clinical care teams who are achieving measurable success for patients, payors, clinicians and entire health systems. For their valued efforts toward HCV elimination, an integrated clinical care team received Recognition of Achievement for Healthcare Excellence in 2020. Despite hundreds of initiated applications across the globe each year, Biomédica de Referencia is the first site in Mexico to receive this esteemed honor.

221 PATIENTS WITH PREVIOUSLY UNDETECTED HCV WERE CONFIRMED POSITIVE FOR HCV INFECTION

Of the individuals who opted in for HCV screening, 367 were found to have detectable anti-HCV antibodies (0.5%) and 221 of those had active HCV infections (0.3%). Once active infections are identified, patients can be linked to care, thus reducing transmission and downstream complications.

3-FOLD REDUCTION IN DISEASE COST BURDEN DUE TO EARLY DETECTION AND INTERVENTION

The average cost for patients with late stage HCV is greater than 3 times the cost of treating HCV in the early stages¹. Thus, any effort to identify and treat HCV early can substantially reduce overall disease burden.

Article continued on next page

4th LEADING CAUSE OF DEATH IN MEXICO NOW DECLINING

Mexico is disproportionately affected by liver disease, among causes of which is HCV. Liver disease is the 4th leading cause of death in Mexico versus 14th leading cause of death globally^{2,3}. As such, opportunities to identify and treat the underlying causes of liver disease are exponentially important in this population.

5 INNOVATIVE WOMEN LEADING COUNTRY-WIDE INITIATIVE

Clara Corona de Lau, *BS, CEO, and Clinical Director Biomédica de Referencia*, Dana Lau Corona, *MD, PhD Medical Researcher, Department of Gastroenterology*, Alicia Arana Grimaldo, *BBA, Chief of Clinical Operations, Biomédica de Referencia*, Maria Concepcion Gutierrez Ruiz, *PhD, President of the Scientific Committee FundHepa*, Evelin Najera Lopez, *BBA, Team Leader, Innovation and Clinical Data Biomédica de Referencia* are the innovative leaders behind this important public health initiative. Congratulations to these strong women for their leadership and outstanding efforts focused on improving public health through identification of unknown HCV infections.



Clara Corona de Lau



Dana Lau Corona



Alicia Arana Grimaldo



Maria Concepcion Gutierrez Ruiz



Evelin Najera Lopez

6 ADDITIONAL CLINICAL LABORATORIES AND 29 ADDITIONAL COMPANIES ACROSS MEXICO NOW ENGAGED

To maximize participation and enable hassle free testing, HCV screening is available directly through the laboratory, as well as at facilitated collection centres made available at individuals' places of work. Thanks to early success at Biomédica de Referencia, their initiative has since expanded to include broader teams of laboratories and companies interested in HCV awareness and identification.

70 000 INDIVIDUALS IN MEXICO HAVE BECOME MORE AWARE OF THE COMPLICATIONS AND RISKS OF HCV

Among the significant barriers to improve outcomes is increasing disease awareness. Through comprehensive media strategies (print and online) Biomédica de Referencia and FundHepa were able to increase disease awareness thus far to more than 70,000 people. These exciting metrics grow year over year.

8-FOLD INCREASE IN THE NUMBER OF PATIENTS SCREENED SINCE PROGRAM INITIATION

As a direct result of increased disease awareness, the program has seen an 8-fold increase in the number of patients screened in the 13th year relative to the first year of the campaign (1,179 in 2007 to 9,372 in 2019).

Article continued on next page

9 YEARS MAXIMUM TO HCV ELIMINATION 2030

A major area of focus for the World Health Organization (WHO) is the elimination of HCV as a public health threat by 2030. Through initiatives such as this, the WHO goal is in sight, with only 9 years or less to achieve HCV elimination.

10+ YEARS OF HEPATITIS LEADERSHIP

With over 10 years of leadership in public health initiatives dedicated to HCV elimination, Biomédica de Referencia is considered a healthcare excellence leader and is truly an altruistic team dedicated to improving the health of all Mexicans.

Key takeaways

1. Strategic use of HCV antibody immunoassays, in combination with reflex testing by PCR for viral load, enables population-based screening for the identification of unknown HCV infections, which includes individuals who otherwise would not have been screened
2. Media campaigns can increase disease awareness and play a major role in encouraging citizens to get tested
3. Cross disciplinary involvement and strategic partners can substantially enhance education initiatives, follow-up, and treatment

For more details on this best practice please visit [UNIVANTS - Biomédica de Referencia](#).

References

1. Krajden M, et al. Health care costs associated with hepatitis C: a longitudinal cohort study. *Can J Gastroenterol*. 2010 Dec;24(12):717-726. doi: 10.1155/2010/569692.
2. Méndez-Sánchez, N, et al. Current trends of liver cirrhosis in Mexico: Similitudes and differences with other world regions. *World J Clin Cases*. 2018 Dec 6;6(15):922-930. doi: 10.12998/wjcc.v6.i15.922.
3. Ge PS, Runyon BA. Treatment of Patients with Cirrhosis. *N Engl J Med*. 2016 Aug 25;375(8):767-777. doi: 10.1056/NEJMra1504367.





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Vaccination: the way out!



Dr. Bernard Gouget

by Bernard Gouget

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

The COVID-19 pandemic has gripped the world, and one of the biggest challenges for researchers, health professionals, scientists and response teams has been the lack of data about the virus. Countries took drastic measures to mitigate the spread of Covid-19 on their home front with varying degrees of success. The pandemic has pushed the health systems beyond the edge and turned everything upside down, increasing pressures for laboratory medicine transformation. To stay ahead of the demand for healthcare services, organizations worldwide are turning to advanced techniques like big data and AI and technology to overcome our vulnerabilities and make our society function better in these critical times.

Using AI to track the spread of viruses and other infectious diseases improves the speed and efficiency of pandemic response allowing to make informed decisions in real time.

We have been forced to figure how to deliver care, how to streamline healthcare processes, how to use the full capacity of digitalization and virtual care. We have also had a taste of what is possible with e-communication and telemedicine. In the last year alone, almost all of us have lost hugs and the joy of gathering at our favorite places, at the congresses and more. Nevertheless, we were able to interact with colleagues and friends from all around the world in attending videoconferences that otherwise we would have no chance to participate in without extensive time and travel costs. The pandemic happened at a moment of convergence for biomedical and digital technology and social dynamics, which revealed enormous positive potential for IFCC community.

The pandemic brought pain and suffering with an explosion of certain diseases. For some people, COVID-19 can cause symptoms that last weeks or months after the infection has gone (long COVID). Common long COVID symptoms include: extreme tiredness,

shortness of breath, heart palpitations, problems with memory and concentration (brain fog), dizziness, sleeping difficulty, ... Chronicity and comorbidity influence the risk of COVID-19 infection, affect the processes of routine care as well as the course of the disease. Elderly people and those with pre-existing chronic conditions including cardiovascular disease, cancer, hypertension, respiratory conditions, and diabetes appear to be at a higher risk of developing complications and are at high risk of death. COVID-19 led to significant declines in healthcare utilization for preventive care, chronic care, and emergency care. Many patients did not care for themselves or used the healthcare system in 2020 as they typically would. Many underlying diagnoses have yet to be discovered. Not intervening early to prevent or treat developing chronic diseases will ultimately result in increased hospitalizations, morbidity, and mortality.

The coronavirus pandemic poses challenges to governments, public health authorities and medical personnel but also to the public, and each of us also face challenges in the form of immediate ethical questions. Are we ready to renounce our freedom to contain the pandemic? Are we sufficiently compliant with social

Article continued on next page

distancing and preventative measures imposed by health authorities and governments while we are far from having attained collective immunity and while highly contagious variants complicate a tense health and epidemiological situation?

In terms of public mental health, currently the main psychological impact is a high level of stress or anxiety. With the implementation of new measures and the emergence of new impacts – in particular the quarantine and its effects on normal activities, habits or means of subsistence for many people – levels of loneliness, depression, harmful alcohol and drug use, and self-harming or suicidal behaviors will also necessarily increase. The pandemic strikes hard at our conception of the balance between our essential freedoms and the need to limit them. Weariness is starting to win over populations and caregivers. A certain indifference in the face of the death count has set in. Health organizations must prepare for the fallout of additional residual healthcare crises.

Researchers and drug-makers are rushing to develop treatments that could hold the key to recovery. The pandemic sped things up. As the COVID 19 was raging there were more cases to be tested against. It was easier to get results from vaccine trials and we got vaccines very fast. Perhaps, the development that will have the most profound implications for future generations is the incredible advances in synthetic messenger RNA (mRNA) biotechnology.

Although there may have been an initial hesitation, the final acceptance of vaccines is high, and the efficacy of vaccination has been demonstrated. Vaccination is the pillar of the way out of the crisis. Populations at risk must be vaccinated as a priority. Delivering billions of vaccines to stop the spread of COVID-19 worldwide will be one of the greatest logistical challenges ever undertaken. Several vaccines are now available for public use, in limited quantities. On March 2, the WHO published the list of a first series of vaccine allocations to countries of the Covax system, but around ten countries have appropriated more than two-thirds of the vaccines. Unfortunately, we are witnessing doses being taken by bypassing Covax. It is clear, however, that the fight against the virus relies on generalized vaccination and the increased

contagion risks of the virus mutations make this even more urgent. Is this situation an effect of vaccine nationalism, or is it the inevitable consequence of market management of health goods, or a combination of national selfishness and private interests? Several developing countries end up paying far too much for the vaccine. Low- and Middle-income countries have very unequal access to vaccines while it is necessary to vaccinate more than two thirds of population for adequate immunity.

The biggest vaccination campaign in history is underway. On March 17, about 392 million doses have been administered across 128 countries, according to data collected by Bloomberg. There are still serious barriers in ramping up production and distribution. The latest rate was roughly 9.50 million doses a day. Israel leads all countries with 104.5 doses per 100 people. While the best vaccines are thought to be 95% effective, it may still be possible to spread the disease after getting inoculated. Vaccine equity is particularly important in cities, especially where people live in crowded conditions and the risks of transmission are high. The American company Pfizer-BioNTech has bowled a “strike”. The strike, as D. Seux, an economics columnist for Journal “les Echos”zxs’, recently reminded us is the best score in bowling, knocking down all ten pins at once. The vaccination champion in the United States, it has made up for its delivery delays in Europe... It can be said that Pfizer is emerging as the big winner, for the time being, in this race for vaccines and this global fight. This is due to its own success, as well as in contrast with the difficulties of its competitor AstraZeneca – which we hope will make a quick exit from its European purgatory. EMA and WHO vaccine safety panel said on March 18th that it considers that the benefits of the AstraZeneca Covid-19 vaccine outweigh any possible risks of side effects and recommends that vaccinations continue. It reiterated that there was “no indication” the vaccine causes blood clots, after several leading EU states paused their rollouts.

In the short term, Pfizer, with its partner BioNTech, who invented the vaccine with novel messenger RNA technology, dominates the market, while Moderna is close behind. The two global factories in Kalamazoo, Michigan (US) and Puurs (BE), are in full production with the goal of producing 2.4 billion doses this year,

and many more in 2022. They share roles, each manufacturing about half of the active ingredient and then calling on subcontractors everywhere. They just finalized an alliance with 13 companies to increase production capacities with high-end subcontractors including Novartis, Merck and Sanofi. The world has just passed the bar of 400 million injections of doses of all brands combined.

Mid-March, the latest vaccination rate was roughly 9.50 million doses a day. Israel leads all countries with 104.5 doses per 100 people. In the U.S. an average of 2.44 million doses per day were administered. The rate is steadily increasing, and new vaccines by additional manufacturers are coming to market. The introduction of Johnson & Johnson's one-shot option in March is speeding up vaccinations and making it easier to vaccinate hard-to-reach populations. It does not require freezing and is effective for all age groups.

COVID-19 has inflicted devastating losses. It has also delivered certain blessings. In the spring, we will still face some very difficult weeks. Questions loom large over whether governments have enough protection in place to defend themselves against the threat. The pandemic is not playing out in the same way from place

to place. But we will hope that within the next few months, everyone will be able to move toward a more peaceful period. The industrial situation is changing, and the challenge is to attain a significant level of global immunity. The development of the next generations of vaccines is important to counteract upcoming variants of the virus. Until we have better data, we are just going to have a lot of uncertainty. Given the extent of the volumes involved to cover all the needs, we will need all of them to inoculate a global population of some 7.8 billion people. It is humanity's best chance of ending a scourge that has claimed more than 2.7 million lives!

The COVID-19 pandemic is a reminder that besides our duty to care, we are committed to continuous improvement. Working together, too, has expanded in ways that were hard to imagine without the new digital tools that allow for rapid sharing and collaboration. The pandemic has catalyzed changes that were already underway. The future of healthcare and laboratory medicine is shaping up in front of our very eyes with advances in digital technologies. Nothing will ever be the same. The post-COVID world will be unlike anything we know and it's time to prepare for the new normal and for achieving success.



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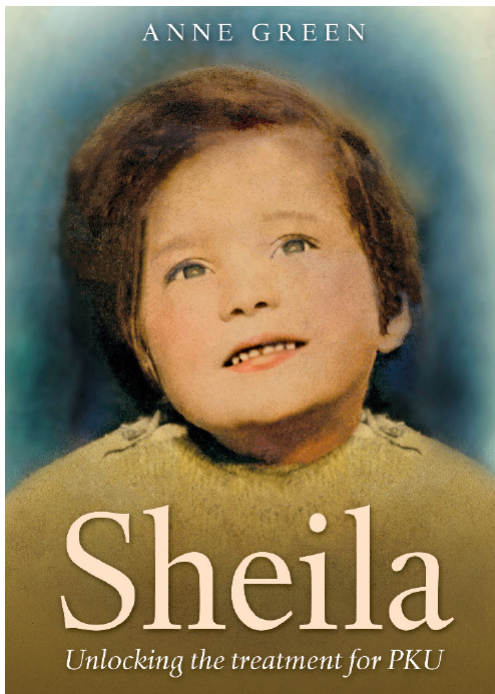
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Sheila – unlocking the treatment for PKU



By Anne Green

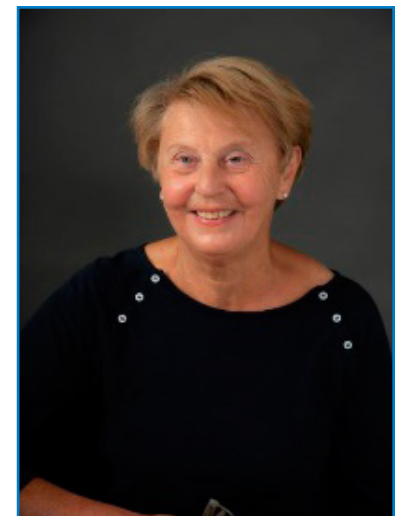
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In 1951, at two years of age, Sheila Jones was diagnosed with Phenylketonuria (PKU). With no treatment available at the time, Sheila's mother Mary persevered until she obtained help from three pioneering doctors at Birmingham Children's Hospital. They worked tirelessly to prepare a special formula for Sheila making her the first person in the world to receive dietary treatment for PKU. In this book Anne tells the remarkable story of Sheila and her important legacy - **the introduction of newborn screening and worldwide treatment for PKU.**

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'Birmingham can be proud of the part it has played in the history of global health'; Professor Sir Muir Gray, University of Oxford, UK.



Anne Green

Published by **Brewin Books**
ISBN 978-1-85858-714-1

The book is available to order **worldwide** via Brewin Books (www.brewinbooks.com) and available via Amazon.

All proceeds from the book will be for the Birmingham Children's Hospital Charity.

To listen to Anne chatting about the book there is a podcast on YouTube:

https://www.youtube.com/watch?v=KtxoTn-BIro&list=UU6qDV2_S9gYNWMZwVNEZWGA&index=7&t=0s
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NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES



Malawi Association of Medical Laboratory Scientists (MAMLS): accreditation of the first four laboratories in Malawi



by Elias Chipfoya

IFCC National Representative

Malawi Association of Medical Laboratory Scientists

www.mamls.mw

Efforts to strengthen laboratory systems in Malawi have received increased attention over the years. Between 1998 and 2021, 12 landmark events and actions had particular significance for laboratory medicine in the country.

These events were:

1. 1998-2002: Establishment of the Essential Medical Laboratory Services Project which culminated in the work programme.
2. February, 1998: Establishment and registration of the Malawi Association of Medical Laboratory Scientists (MAMLS).
3. 2004-2008: The first 5 year National Laboratory Strategic Plan was developed to support the Essential Health Package (EHP) within the Programme of Work in Sector Wide Approach (SWAp).
4. 2007: The first National Laboratory Policy was developed. The policy encompasses all the administrative and operational key issues of the Diagnostics services in the Ministry of Health and was reviewed and updated in 2015.
5. 2009-2014: The second 5-year Medical Laboratory Services strategic plan provided a roadmap for government, stakeholders and partners to prioritize support for laboratory systems.
6. 2012: The Malawi Government endorsed and implemented the Stepwise Laboratory Improvement Process Towards Accreditation (SLIPTA) and the Strengthening Laboratory Management Towards Accreditation (SLMTA) schemes.
7. 2015: MAMLS became a full Member of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC). Shortly after joining IFCC, MAMLS requested support from IFCC to help develop the quality of laboratory medicine in Malawi.
8. January 2016: Developing Quality Competence in Laboratory Medicine (DQCML) funded a scoping visit by an IFCC representative to assess how best IFCC may assist MAMLS.

Article continued on next page

9. 2016-2021: The third Medical Laboratory Services strategic plan largely continues the activities of the preceding plan.
10. February 2018: IFCC DQCML funded and supported a workshop, held in Blantyre and in Lilongwe. The major workshop conclusions were firstly that MAMLS should develop programmes to enable labs to “move up the Quality ladder” by applying SLIPTA and SLMTA schemes and secondly that laboratories should aim to achieve accreditation according to ISO 15189.
11. 2020: The first and second MAMLS Scientific meetings were held.
12. February 2021: The first four laboratories in Malawi were accredited to ISO 15189 by Southern African Development Community Accreditation Services (SADCAS). This is a very significant achievement for the four laboratories, Health Technical Support Services- Diagnostics (MoH), the laboratory implementing partners and every medical laboratory professional.

All these events and actions have built consensus and focused critical attention on approaches to strengthen laboratory medicine in Malawi. The SLIPTA/SLMTA scheme is affordable and scalable.

The MAMLS leadership would like to express their thanks to IFCC visitors (in particular Dr. Graham Beastall, Dr. Annette Thomas, Prof. Dr. Egon Amann, Dr. Tony Badrick and Prof. Rajiv Erasmus) for their efforts in helping MAMLS to implement laboratory quality standards and achieve successful accreditation.



Prof. Dr. Egon Amann, Dr. Annette Thomas and Dr. Graham Beastall with Partners in Hope lab staff (One of the first accredited labs)



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

XVIII Conference of the Scientific Committee of the SEQC^{ML}

The Scientific Committee of the Spanish Society of Laboratory Medicine (SEQC^{ML}), as it does every year, held its traditional meeting, the XVIII Conference of the Scientific Committee, which addressed and updated various important aspects in the clinical laboratory field. This year's meeting took place in virtual format.

“The Scientific Committee Conferences are one of the most important activities in which the Society's commissions participate and one of its main objectives,” says Dr. Eva Guillén Campuzano, president of the Scientific Committee of the SEQC^{ML}.

As this expert notes, “the format of the courses and the combination of the topics covered in each one of them lead to their popularity, among both experienced professionals and residents, allowing them to update their scientific knowledge of the topics covered”. These courses –adds Dr. Guillén- combine new topics or those of greater current interest with more academic topics, condensing the most important aspects related to the topic at hand. “The distribution and duration of the talks allows the speakers to adequately transmit the content, leaving a space for the attendees' participation, which is always very attractive and interesting,” she points out.

Ovarian cancer is the ninth most frequent type of tumor in women, but the fourth in terms of mortality, which makes it a health problem. The fact that survival is associated with the stage at time of diagnosis, and that around 60% of ovarian cancers are diagnosed in advanced stages, makes all efforts to improve diagnosis justified.

Specifically, in cases that are diagnosed in stages III or IV, the 5-year survival varies between 11 and 37%, while in those that are diagnosed in stage I or II, it increases up to 93%. “In other words, we are facing

SEQC^{ML}

a tumor in which early diagnosis is essential, both in terms of survival as well as in terms of morbidity for the patient and costs for the health system. In this sense, the laboratory has a lot to contribute”, points out Dr. Antonio Barco, member of the Commission on Biological Markers of Cancer of the Spanish Society of Laboratory Medicine (SEQC^{ML}).

For this reason, within the framework of the Scientific Committee of the SEQC^{ML} Conference, the role of the laboratory in ovarian cancer was addressed: prevention, diagnosis, prognosis, treatment, and follow-up.

“Today, the laboratory has taken a very important step forward and we not only develop algorithms that contextualize the clinical use of tumor markers, but we also combine them with imaging techniques and patient clinical data to the point of improving significantly the sensitivity, specificity, and predictive values, and of being able to make earlier diagnoses. This also allows for optimizing the use of health system resources, in secondary diagnostic tests, or referral of patients to the high- or low-complexity operating room as appropriate”, emphasized Dr. Barco, moderator of the panel.

In addition, he points out that the laboratory is currently preparing increasingly accurate interpretative reports and is actively participating in hospital clinical committees, and notes that “it must also participate in the elaboration of patient care protocols for the various kinds of tumors.”

ADVANCES IN DIAGNOSIS

The SEQC^{ML} Commission on Biological Markers of Cancer is currently following several lines of research, initiated by Dr. Rafael Molina, in the field of diagnosis. Specifically, a multicenter study has been completed in 10 Spanish hospitals for the validation of a lung cancer diagnostic algorithm that will be published soon, and similar work is being done for the validation of a diagnostic model for ovarian cancer, with which very good results are being obtained, in many cases detecting stage I tumors, including borderline tumors (tumors with low potential for malignancy). “In addition, we are able to avoid many false positives that occur when using other algorithms that use imaging techniques, which means we can avoid unnecessary laparotomies, reducing morbidity for patients and improving the efficiency of health resources,” says Dr. Barco.

Likewise, several members of the SEQC^{ML} Commission on Biological Markers of Cancer have developed a tool to make these algorithms available to the various laboratories, so as to facilitate the homogenization of the results, the validation of the models in multicenter studies, and their continuous improvement.

PROPER MANAGEMENT OF TUMOR MARKERS

As he explains, proper management of the levels of the various tumor markers, taking into account the coefficients of variation, etc., makes it possible to detect tumor recurrences 1-15 months earlier than imaging tests (with a median of 3-4 months). In addition, assessing the levels of these markers at different times during treatment makes it easier to detect patients with a worse therapeutic response, which makes it possible to carry out earlier therapeutic modifications, saving time and resources and reducing morbidity.

In all this process, the clinical laboratory professional plays a fundamental role. “The laboratory is currently in a position to take a step forward to increase

the added value it can provide in the management of cancer pathology,” says Dr. Barco. To this end, the SEQC^{ML} Commission on Biological Markers for Cancer is collaborating with other medical societies such as the SEOM (Spanish Society of Medical Oncology) to participate in the development of clinical guidelines for various tumors.

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

The Spanish Society of Laboratory Medicine (SEQC^{ML}) –founded in 1976–is an active member of IFCC and EFLM. SEQC^{ML} currently includes almost 3,000 professionals, and its main objectives are to bring together all scientists interested in the field of Laboratory Medicine, promote the dissemination of scientific and technical publications, organize meetings, courses and congresses of national and international character, cooperate with other Scientific Societies, and defend and promote the specialties of the field of Laboratory Medicine as well as those of its members. Likewise, the Society wishes to contribute to studying and recommending methods and guides, and to establishing guidelines and recommendations for training in the field of Laboratory Medicine.

More information at: www.seqc.es.



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News from the Japan Society of Clinical Chemistry (JSCC)

2020 JSCC Technology Award

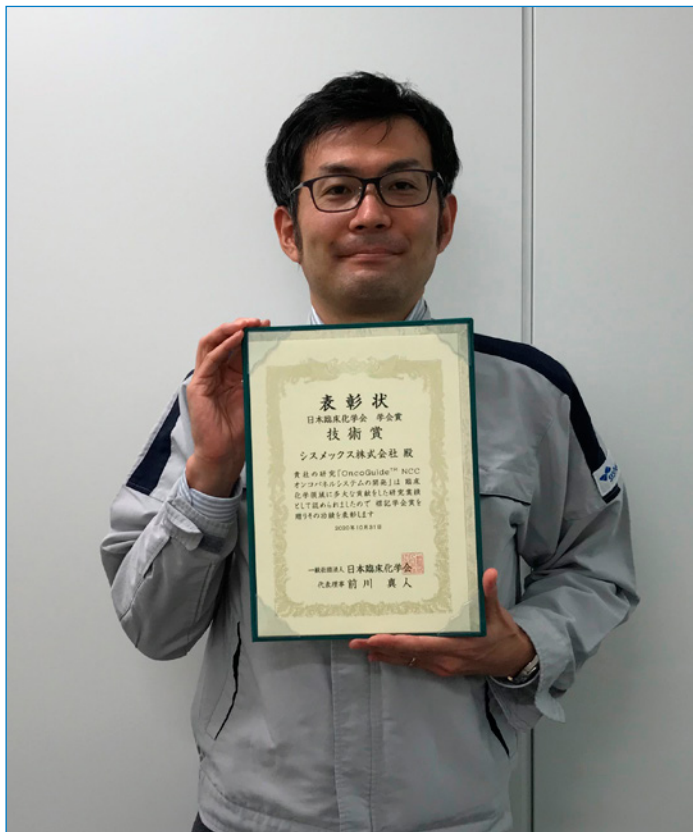
by Dr. Hideo Sakamoto
International Exchange Committee of JSCC

The Japan Society of Clinical Chemistry (JSCC) Technology Award is given to a person who has made outstanding academic research in clinical chemistry. In 2020, Masaki Kobayashi, M.S. and Yuri Matsuki, M.S. are winners of the Technology Award. The award presentation was held at the 60th Annual Meeting of JSCC held in Tokyo, Japan from October 30th to November 1st, 2020. At the award presentation, award winners Mr. Kobayashi and Ms. Yuri Matsuki congratulated by Dr. Masato Maekawa, president of JSCC for their outstanding work in clinical chemistry.

In this issue, we would like to introduce winners of the Technology Award to promote their outstanding work.

Masaki Kobayashi, MS (LS Business, Sysmex corporation) is the winner of the 2020 JSCC Academic Award, entitled with “Development of OncoGuide™ NCC OncoPanel System”.

The OncoGuide™ NCC OncoPanel System was jointly developed by Sysmex and the National Cancer Center in Japan, and became Japan’s first national insurance system for cancer genome profiling in June 2019. This system analyzes solid tumors without specifying the type of cancer, obtains a profile for 114 cancer-related genes, and detects genetic aberration (Mutations, Amplification, Rearrangement). Since non-tumor cells (whole blood) from the same patient are used as controls for tumor tissue (matched pair test), this system is able to exclude patient-specific genetic polymorphisms, detect somatic gene mutations, and calculate tumor mutation burden (TMB) with high accuracy. Matched pair testing is also able to distinguish



Masaki Kobayashi

between germline gene mutations and somatic mutations, thus expanding the drug options.

This system showed the following clinical performance in the second phase of the TOP-GEAR project at the National Cancer Center. At least 1 genetic aberration was detected in 156 of the 187 cases (83%) for which gene profiling data were obtained. In addition, 109 cases (58%) were found to have actionable gene aberrations that have diagnostic and therapeutic significance and 25 cases (13%) have since received molecular-targeted therapy according to their gene aberrations. In addition, germline

Article continued on next page

mutations causing hereditary cancers were identified in 3% patients.

They will continue to promote research and development in order to contribute to medical care in the field of genetic testing and in various other fields.

Yuri Matsuki (Nittobo Medical Co., LTD.) is the winner of the 2020 JSCC Technology Award, entitled with “Development of reagent “N-assay LA IgG4 Nittobo” for an open system automatic analyzer.



Yuri Matsuki

Autoimmune pancreatitis (AIP) is known as one of IgG4-related diseases (IgG4-RD). In 2001, Hamano et al. (Shinshu University, Nagano, JAPAN) reported for the first time in the world that the AIP shows high level of IgG4 in patient’s serum. When the usefulness of IgG4 began to be recognized, IgG4 could only be measured with reagent from a dedicated

automatic analyzer (nephelometry method), which was owned by some major commercial laboratories. Since an open system automatic analyzer was widely used in Japan, general medical institutions did not have a nephelometry analyzer. Therefore, it took several days to a week from the request of the medical institution to obtain the result of IgG4. It was quite difficult for clinicians to use IgG4 value in real time due to the situation.

In order to solve the problems above, Nittobo Medical Co. Ltd., in collaboration with the Shinshu University, has developed a new reagent for IgG4 quantification that enables an open system automatic analyzer to measure it. In July 2018, “N-assay LA IgG4 Nittobo” has been released.

N-assay LA IgG4 Nittobo has three major characteristics. First, this reagent can be applied to various types of automated analyzers that are widely used in clinical laboratories. Since blood IgG4 levels are essential for the diagnosis of IgG4-RD and are also required for steroid treatment and recurrence monitoring, it is very useful not only for clinicians but also for patients to obtain the results as soon as possible. N-assay LA IgG4 Nittobo can significantly improve the turnaround time (TAT).

Second, N-assay LA IgG4 Nittobo is designed to avoid a hook effect even at a high antigen concentration of IgG4. It has been reported that the blood IgG4 in IgG4-RD patients often rises to approximately 2,000 to 4,000 mg/dL, which is 16 to 30 times that of the normal population. In fact, it has been confirmed that the hook effect does not occur even at 8,000 mg/dL of IgG4, which is more than 10 times the concentration of the upper limit of the measurement range (500 mg/dL).

Third, N-assay LA IgG4 Nittobo employed a highly specific monoclonal antibody for IgG4. Since the monoclonal antibody has a single reactivity, there is an advantage that production lot differences are less likely to occur as compared with the conventional reagent using a polyclonal antibody.

N-assay LA IgG4 Nittobo will greatly contribute to clinical practice such as diagnosis, evaluation of treatment, and follow-up for patients with IgG4-RD.

The logo for the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM), consisting of the letters 'EFLM' in a stylized, blue, sans-serif font.

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The logo for MZ Virtual, featuring a stylized 'MZ' in a blue and white color scheme with a network-like pattern, and the word 'VIRTUAL' in a bold, blue, sans-serif font below it.

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EUROPEAN FEDERATION OF CLINICAL CHEMISTRY
AND LABORATORY MEDICINE

Under the
auspices of



**AN ON-LINE COURSE DEVELOPED
BY THE EFLM WORKING GROUP ON
CONGRESSES AND POSTGRADUATE
EDUCATION**

2nd EFLM online
Postgraduate course

LEADERSHIP SKILLS

13-23 September 2021

The ability to lead effectively a group of people relies on a number of key skills which varies in styles but with a common feature: the flexibility and ability to adapt to circumstances. Leadership skills are highly important to motivate, enthuse and build trust and respect in the work place. Nine experts from different professional fields (including the Presidents of EFLM and IFCC) will be delighted to illustrate the key aspects to be a good leader. In this virtual course, participants will have the opportunity to learn about identification and definition of the of leadership skills such as: rethinking education to shape the future, basic communication skills, how to understand and manage conflicts, change management and insight into different leadership styles. This course will also introduce to the TEST values which provide organizational harmony: Trust, Empathy, Sustainability and Transparency. The original, scientific theory of emotional intelligence will close the course. The course is structured on nine live sessions of one hour each scheduled on 9 days at h. 17.00 CET

**FURTHER INFORMATION
WILL SOON BE AVAILABLE.
STAY TUNED! www.eflm.eu**

Outcome of the Course

To improve leadership skills by discussing the characteristics of charismatic leaders and the qualities required to be effective leader. During the course, strategic leadership in organizations, challenges and problem-solved skills, key points to motivate, mobilize team members to get positive results will be presented.

Target Audience

Specialisants/trainees, Residency students, PhD students, Specialist of LM, Lab. Directors

Course Organizing Committee

Eser Sozmen, Zsuzsa Bagoly, Daria Pašalić, Silvia Cattaneo

Course Scientific Committee

Ana-Maria Šimundić, Eser Sozmen

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secretariat**



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Tackling the pandemic crisis in Overseas France

by Yann Barguil (1), M.C. Beauvieux (2), A.M. Bérard (2)
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4. Chair, IFCC C-MHBLM (France)



Yann BARGUIL
Chair, SFBC WG-FrOT

By spring 2020, the COVID 19 led to an unprecedented strain on health, social and economic dimensions. A rebound of the epidemic at the end of the year and until now has increased the uncertainty. Today, vaccines are a weapon, not yet a knockout punch. The remoteness of the French Overseas Territories (FrOTs) very far from Paris increases the feeling of isolation, even abandonment when they are hit hard by the second wave of the pandemic with the variants wreaking havoc! Overseas France is best known as easily accessible and French-speaking destinations for holidays in areas resembling paradise. But the coronavirus crisis risks are even grimmer there than on the mainland itself. Beyond the health and human tragedy, the world crisis has massively accelerated some pre-existing trends, in particular digitalization. It has also highlighted the importance of lab medicine. The SFBC-WG on French Overseas Territories (SFBC WG-FrOT) and French-Speaking Countries has been mandated by the SFBC C-COVID-19 Biomarkers and Lab Medicine (C-COVID BMLM) to study in-depth the organization and the role of the lab medicine in Overseas France to respond effectively and collectively to the pandemic.

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Overseas France includes territories in the Atlantic, Pacific, and Indian Oceans, French Guiana on the South American continent, and several peri-Antarctic islands as well as a claim in Antarctica. All are French-administered territories outside Europe: **Guadeloupe** (383 000 inhabitants), **French Guiana** (297 000 inhabitants), **La Réunion Island** (866 000 inhabitants), **Martinique** (364 000 inhabitants), **Mayotte** (270 000 inhabitants), **New Caledonia** (270 000 inhabitants), **French Polynesia** (282 000 inhabitants), **Saint-Barthélemy** (9 600 inhabitants), **Saint-Martin (36 000 inhabitants)**, **Saint-Pierre-et-Miquelon** (6 200 inhabitants), **The French Southern and Antarctic Lands** (200 inhabitants), **Wallis and Futuna Islands** (12 000 inhabitants). Overseas France covers a land area of 119,396 km² (46,099 sq mi) and accounts for 18.0% of the French Republic's land territory. For the nearly three million who makes up the population, the measures to restrict public movement in response to the pandemics crisis have particular importance especially concerning the economy and socially crucial sector of health and air travel. They are facing a dilemma that for many could end in a hammer blow. The FrOTs have many special features: their remoteness from mainland France, their insularity, tropical climates, and their wide biodiversity and available natural resources. These overseas characteristics require public policies adapting to the needs of each individual territory as well as prioritizing their sustainable development. Eight Overseas territories (**in bold above**) contributed to a large survey on the current outbreak of coronavirus disease. Local measures, which may include curfews or lockdowns are in force in those territories depending on the circulation of the virus.

Given a staggering spread of COVID-19, the FrOTs benefited from feedback from mainland France. Management during the COVID-19 pandemic paid attention to both organizational and leadership aspects in implementing the emergency plan and considering all hospital areas, including the medical laboratory. All staff placed themselves at the service of the pandemic that conditions all decisions. The hospital governance was really improved. Decision-making was consensual and fast; the necessary resources were allocated to adapt the medical lab in anticipation to what was going to happen, were the keys to success.

The FrOTs medical biologists made efforts to rapidly respond to the pandemic. They managed to establish in-country capacity for COVID-19 laboratory molecular testing within a few weeks of the detection of the first few sporadic cases. However, the demand, was so huge in some places that it quickly resulted in a shortage of RT-PCR tests. National guidance on laboratory testing for COVID 19 and procurement of reagents and laboratory supplies were rapidly available. Scientific and IVD company's webinars to discuss the scaling up of COVID testing in FrOTs were organized. Local resources were used. The FrOTs benefited from technical cooperation and assistance from national and international partners. RT-PCR internal controls, plates and strips were distributed in various quantities. Despite the ongoing supports, the existing laboratories capacity was challenged if there were travel restrictions during a long period.

Overseas France depends very heavily on air links with the mainland France or with the neighbouring continents. Due to the very active circulation of COVID-19 and particularly of new variants, new travel restrictions came into effect for the FrOTs, (as an example it happened recently in Martinique). International airborne and sea links with the island of Mayotte were also suspended after the detection of a case of the South African variant. Neighbouring Reunion Island has also confirmed its first case of the variant. The rapid closure of borders made it possible to prevent the virus' entry in Wallis and Futuna and Saint Pierre and Miquelon, making it possible to prevent the spread of the epidemic form of the virus (New Caledonia, Saint-Barthelemy). Cruise ship passengers are no longer allowed to disembark ashore during stopovers. Airlines consequently reorganized their operations adapting flight schedules to travel restrictions. Such isolation is responsible for difficulties in the supply of reagents requiring urgent ordering. The sustainable stock management was always difficult. All the above, resulted in shortages of reagents and sometimes in stopping routine analyses (i.e.: immunochromatography reagent for rapid urinary toxicological screening, procalcitonin). Internal quality control was minimized (i.e.: troponins, BNP). Flight disruptions didn't allow to send regularly specialized tests to the subcontracting

laboratories, impacting patients' care by causing diagnostic and therapeutic delays.

In France, there was a big debate on two old antimalarial drugs, hydroxychloroquine and chloroquine. Preliminary clinical evidence have suggested these drugs may have an effect on the treatment of COVID-19, following the Chinese publications on its potential efficiency in Chinese COVID 19 patients as well as those by Pr D.Raoult, IHU-Méditerranée Infection, Marseille (FR). The toxicology and therapeutic drug monitoring units of reference labs in Martinique and New Caledonia worked on the development of chloroquine dosages and/or hydroxychloroquine by High Performance Liquid Chromatography.

New Caledonia became a specific entity of the French Republic in 1999 enjoying a large degree of autonomy. For the tropics and subtropics, the differential diagnosis of infections presenting the same symptomatology must be made according to other epidemic contexts: especially dengue and other arboviruses, leptospirosis, sometimes malaria or angiostrongylosis without forgetting the presence of classic agents of acute respiratory infections (influenza viruses, VRS, adenoviruses, other coronaviruses, Haemophilus influenzae, etc.). Diagnostic testing became an essential feature of standard medical practice and it was difficult to cope without molecular biology equipment to make a differential diagnosis. So, the Utura hospital, island of Raiatea-French Polynesia had acquired the necessary equipment and reagents for 12,200 inhabitants.

New Caledonia did not experience a concomitant dengue epidemic in 2020. Only 45 cases of dengue were diagnosed in a population of 270,000 inhabitants. The temporal coincidence in several countries implies the two outbreaks may happen during the same period with possible co-infections with both viruses leading to overlap of symptoms, misdiagnosis and inappropriate case management. Efforts should be made to reduce the mosquito population before the onset of the rains. Procedures must be put in place to protect the island from import of Aedes mosquitoes, vectors of dengue fever from Tahiti or Vanuatu. The heavy rain from March to May 2020 facilitated the conditions for the development of leptospirosis, 63 cases were confirmed biologically. Since December 27

2020, it has been raining almost continuously: almost nine weeks of a remarkable rainy and stormy episode! But what was the reason for these torrential rains? The South Pacific convergence zone (SPCZ) is much further south than it should be this season, due to the current La Niña episode that had a consequence in the territory: unstable weather. So far, 99 leptospirosis cases have been confirmed with more than twenty hospitalizations at the intensive care units. The Indigenous Melanesians and all Polynesian populations, already have prevalent health issues, particularly diabetes, and respiratory and cardiovascular diseases. If the virus spread, the impact would be devastating. Yam festivals mark the start of the yam harvest which takes place across the country between February and July. The yam is a true symbol of social organization in Kanak culture and a source of life. But, in 2021, there is no mood for it. The possibility of hosting a festivity is always critical even if there were some organized in February.

In New Caledonia, 11,104 people received the first injection of the vaccination since January 20, 2021. 3,355 people received the second injection on March 12, 2021 out of 270,000 inhabitants. Vaccine deliveries from mainland France to New Caledonia continue with air transport of around 3000 vaccines per week. Only Pfizer-BioNTech COVID-19 Vaccine® is used. The goal is to speed up the vaccination campaign, therefore several centres are being opened. Regarding the management of variants, the microbiology department has ordered a PCR screening kit, targeting N501Y (South African variant) and the 69-70 (UK variant). On March 8th, New Caledonia (91 cases and 0 deaths) went into a strict two week lockdown after nine Covid cases were confirmed in the community.

Recently, FrOTs have strengthened measures to combat the further spread of the virus. In Wallis and Futuna, following the detection of 36 cases of Covid-19 on March 9, a lockdown entered into force for two weeks. In Mayotte, where 82 percent of the population lives under the poverty line, often in shanty towns without running water, this is a particular source of concern. Their health system is not doing well (18,642 cases and 129 deaths). The only hospital in Mamoudzou is overwhelmed: 39% of people tested are positive for SARS-CoV-2 (South African variant at

75%). Combined infections, Dengue, COVID-19, respiratory syncytial virus and, sometimes, malaria and / or leptospirosis complicated the clinical and laboratory management of patients. Especially, that with COVID-19, a non-specific polyclonal response, with the presence of IgM directed against the dengue virus was found. The Center for Disease Control and Prevention (CDC) has issued a Level 4 Travel Health Notice for French West Indies due to the increasing number of cases of COVID-19. The French West Indies include the islands of Guadeloupe (10458 cases, 168 deaths), Martinique (6886 cases, 47 deaths), French Saint Martin (1 602 cases, 12 deaths), Saint Barthelemy (712 cases, 1 death). In Wallis and Futuna Islands, there were 168 cases, 0 death. In St Pierre and Miquelon, 24 patients with COVID recovered. There is also rising concern about the disease's spread on Reunion in the Indian Ocean, and in French Guiana in South America.

Even, if the systems that have been put in place in the overseas territories, located thousands of kilometres from the mainland, with distance proving no protection for regions with fragile infrastructures, match the same criteria and organization as mainland France, anxiety is growing over the coronavirus threat. The remoteness of the territories, coupled

with the poverty and relatively high unemployment rates even if many people are working in the fields, risks turning any outbreak into a full-blown epidemic that could quickly overwhelm health professionals.

The effects of COVID-19 are wide ranging and learning how to navigate these complexities is crucial. The pandemic is placing immense pressure on medical laboratories and on health care and management systems of the French Overseas Territories. The SFBC WG has emphasised the crucial need to sustain efforts to prevent, detect and treat the COVID 19. The Combined impact of both COVID 19 and zoonosis epidemics could have potential consequences devastating the population at risk.

With this study, the SFBC-WG established medical labs networks reinforcing the collaboration with the overseas France to analyse the health situation and the progress made in dealing with the pandemic and not leaving anyone behind. Interdisciplinary research on emergencies and priority public health problems must be encouraged continuously and systematically in order to build a sustainable future. The SFBC WG-FROT is contributing as a driving force behind projects, testing out solutions, innovating and playing a full part in such critical times.

XIII Jornada Ibérica Virtual



JIV

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under the auspices of



29 de mayo a 4 de junio de 2021

IFCC'S CALENDAR OF CONGRESSES, CONFERENCES & EVENTS

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

Calendar of IFCC Congresses/Conferences and Regional Federations' Congresses

May 27 - 29, 2021	 <p>ARAB FEDERATION OF CLINICAL BIOLOGY AFCB</p>	<i>AFCB Congress 2021</i>	Beirut, LB
Sep 23 - 25, 2021	 <p>African Federation of Clinical Chemistry</p>	<i>AFCC Congress 2021</i>	Lusaka, ZM
Nov 26 - 29, 2021	 <p>XV ICPLM Emerging Technologies in Pediatric Laboratory Medicine</p>	<i>International Congress of Pediatric Laboratory Medicine</i>	Munich, DE
Nov 28 - Dec 2, 2021	 <p>EUROMEDLAB 2021 MUNICH</p>	<i>XXIV IFCC - EFLM EuroMedLab Munich 2021</i>	Munich, DE
Dec 6 - 7, 2021	 <p>IFCC International Federation of Clinical Chemistry and Laboratory Medicine</p>	<i>IFCC-ICHCLR Workshop on overcoming challenges to global standardization of clinical laboratory testing: reference materials and regulations</i>	Paris, FR

Calendar continued on next page

Mar 30 - Apr 2, 2022	 COLABIOCLI	<i>XXV COLABIOCLI Congress</i>	Leon, MX
June 26 - 30, 2022		<i>XXIV IFCC WorldLab Seoul 2022</i>	Seoul, KR
Oct 15 - 18, 2022		<i>XVI APFCB Congress 2022</i>	Sydney, AU
May 21 - 25, 2023		<i>XXV IFCC - EFLM WorldLab EuroMedLab - Rome 2023</i>	Rome, IT
<i>New date TBA</i>		<i>IFCC Forum for Young Scientists</i>	TBA



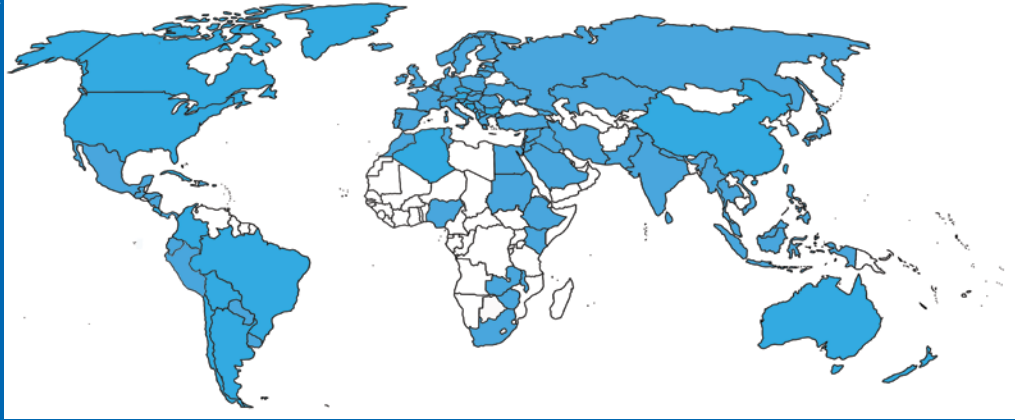
Other events with IFCC auspices

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

Jan 15 - Apr 10, 2021	<i>Lab Accreditation in Pathology Department</i>	Pakistan Online event
Mar 3 - Dec 3, 2021	<i>Virtual Diploma in Clinical Biochemistry program</i>	Mexico Online event
Apr 7, 2021	<i>SSSC International Laboratory Week/Quality Seminar</i>	Online event
May 27 - 29, 2021	<i>II National Meeting Conquilab and Technological</i>	Mazatlan, MX
May 29, 2021	<i>XIII Jornada Ibérica Virtual AEFA-OF</i>	Online event
Jun 10 - 11, 2021	<i>8th International Symposium on Critical Care Testing and Blood Gases</i>	Biarritz, FR
Jul 12, 2021	<i>MASTERCLASS (POCT) Quality in the Spotlight</i>	Online event
Sep 1 - Nov 3, 2021	<i>1st EFLM online Postgraduate course: Biostatistics in Laboratory Medicine</i>	Online course
Sep 6- 7, 2021	<i>POCT: Making the point</i>	Rome, IT
Sep 8 - 11, 2021	<i>XXVIII Balkan Clinical Laboratory Federation Meeting and XIII National Conference of Clinical Laboratory</i>	Sofia, BG
Sep 13 - 23, 2021	<i>Leadership Skills</i>	Online course
Oct 5 - 10, 2021	<i>FEBS Advanced Course: 360-degree Lysosome; from structure to genomics, from function to disease-update</i>	Izmir, TR
Oct 6 - 8, 2021	<i>4èmes Journées Francophone de Biologie Médicale</i>	Rennes, FR
Oct 7 - 10, 2021	<i>46th ISOBM Congress</i>	Bled, SI
Feb 10 - 11, 2022	<i>International Congress on Quality in Laboratory Medicine</i>	Helsinki, FI
May 23 - 26, 2022	<i>10th Santorini Conference "Systems medicine and personalized health and therapy" – "The odyssey from hope to practice: Patient first – Keeps Ithaca always in your mind"</i>	Santorini, GR
<i>New date TBA</i>	<i>6th Serbian Biomarker Symposium (SERBIS): Lipid Metabolism in Health and Disease</i>	Belgrade, SRB

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	Zimbabwe (ZW)

Regional Federations

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

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 China: Lab Medicine Committee, China Association of Medical Equipment (LMC)
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 India: Association of Medical Biochemists of India (AMBI)
 Iran: Iranian Association of Clinical Laboratory Doctors (IACLD)
 Jordan: Society for Medical Technology & Laboratories (SMTL)
 Kazakhstan: Public Association - Federation of Laboratory Medicine (FLM)
 Mexico: Federación Nacional de Químicos Clínicos (CONAQUIC A.C.)
 Nepal: Nepalese Association for Clinical Chemistry (NACC)
 Philippines: Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL)
 Romania: Order of the Biochemists, Biologists, Chemists in Romanian Health System (OBBCSSR)
 Serbia: Serbian Society for Clinical Laboratory Medicine and Science (SCLM)
 Spain: Andalusian Society for Clinical Analysis and Laboratory Medicine (SANAC)
 Asociación Española de Farmacéuticos Analistas (AEFA)
 Sri Lanka: College of Chemical Pathologists of Sri Lanka (CCPSL)
 Turkey: Society of Clinical Biochemistry Specialists (KBUD)
 Ukraine: Association for Quality Assurance of Laboratory Medicine (AQALM)

Publisher


**Communications and Publications
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N° 6 – June: *by mid May*

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N° 10 – October: *by mid September*

N° 11 – November: *by mid October*

N° 12 – December: *by mid November*

If you want to submit an article or advertisement to be published in the eNews, send it to:
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