



Communications and Publications Division (CPD) of the IFCC
Editor: Tahir Pillay, MB ChB, PhD, FRCPath (Lon), FCPATH (SA)
Department of Chemical Pathology, University of Pretoria, South Africa
E-mail: enews@ifcc.org

International Federation of Clinical Chemistry and Laboratory Medicine



November - December
2017



In this issue

<input type="checkbox"/> The retrospectoscope: a look back at WorldLab 2017 Durban	3
<input type="checkbox"/> Record number of travel scholarships contribute to success of WorldLab Durban 2017	5
<input type="checkbox"/> Young Scientists Symposium at WorldLab Durban	6
<input type="checkbox"/> IFCC Regional Representatives 2018-2020 elected	7
<input type="checkbox"/> Let us join together to achieve excellence in lab medicine!	9
<input type="checkbox"/> Opinion: our common home and the laboratory	10
<input type="checkbox"/> IFCC Working Group on CSF Proteins and EC-JRC Alzheimer video on Euronews	11
<input type="checkbox"/> IFCC standardisation of Carbohydrate Deficient Transferrin (CDT)	12
<input type="checkbox"/> IFCC welcomes a new Affiliate Member: LMC, China	14
<input type="checkbox"/> IFCC is seeking an eAcademy Coordinator	15
<input type="checkbox"/> IFCC app and IFCC Electronic Journal (eJIFCC)	15
<input type="checkbox"/> Season's Greetings from IFCC	16
<input type="checkbox"/> NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES	
▶ Spanish consensus on recommended values for the lipid profile	17
▶ Presentation of the SEQC ^{ML} POCT online database	19
▶ News from Paraguay: evaluation of patients with kidney diseases	20
▶ News from the Chilean Society of Clinical Chemistry	21
▶ 13th EFLM Symposium for Balkan Region	23
▶ News from Croatia: research integrity workshop	25
▶ VLP report from COLABIOCLI Congress	26
▶ Updates of the EFLM publication list	27
▶ EFLM recommendation for venous blood sampling: call for comments	29
<input type="checkbox"/> IFCC PROFESSIONAL SCIENTIFIC EXCHANGE PROGRAMME (PSEP)	
▶ My experience at Mayo Clinic	32

The retrospectoscope: a look back at WorldLab 2017 Durban 22-25 October 2017



by Tahir Pillay

IFCC eNews Editor

Congress Co-president, WorldLab 2017

IFCC Worldlab 2017 Durban was a conference of many firsts, including being the first time it was held in Africa. Durban was the chosen city because the original bid had been submitted with the city of Durban in 2010.

In South Africa, Cape Town is the popular choice for many conferences, but Durban offered a unique African flavor and was still an excellent city to host a conference. In any case, the new MedTech Europe directive¹ does not allow the touristic appeal of a city to dictate the choice of venue, therefore, in many respects the choice of Durban had anticipated this philosophy or concept. Durban is a very understated city and can be thought of as South Africa's best kept secret and delegates soon discovered why this is the case.

The conference attracted people from many countries and continents and provided an eclectic mix of topics. It was the first time that many delegates had either visited South Africa or, indeed, Africa.

Owing to the slightly shortened schedule (1 day), the programme was hectic but the numbers of attending delegates facilitated networking and interaction that would often not be possible with conferences that attract many thousands of delegates.



Prof. Salim Abdool Karim, opening plenary speaker (second from left) with Prof. Rajiv Erasmus (congress president); Fawzia Peer (Deputy mayor of Durban); Prof. Maurizio Ferrari (IFCC President) and Prof. Tahir Pillay (congress co-president and chair of the scientific committee)

A number of satellite conferences were also organized, attached to the main congress and there were many delegates who took advantage of these.

Moreover, the conference was a huge benefit to African delegates, who would often not be able to afford to travel to conferences held in Europe, the USA and elsewhere. In this way, many African delegates were also exposed to eminent speakers.

The opening plenary lecture was delivered by Prof. Salim Abdool Karim and the audience was enthralled by his overview of the fight against HIV and the recent advances he and his group have been involved in.

Article continued on next page

The closing ceremony saw the final plenary lecture by Dr. Bill Bishai from Johns Hopkins and the handing over of the flag to South Korea. It was the first time that an IFCC Conference featured the posters within an app. This may have had a downside that fewer people visited the posters but this was a result of filled schedule of talks during the lunch times and the lunch symposia taking place.

It is hoped that the majority of delegates left with fond memories of South Africa and an appreciation for the beauty, complexity and challenges in this great country in Africa.

Reference

1. Pillay T.S.: The new MedTech Europe directive: implications for educational activities in pathology and laboratory medicine. *J Clin Pathol.* 2017 Mar;70(3):185-18.



Entertainment by the Marimba Band at the opening ceremony hosted by the EtheKwini Municipality



Delegates at the opening ceremony cocktail function



Closing ceremony with the representatives of the Korean Association, Prof. Maurizio Ferrari, IFCC President and Prof. Howard Morris, IFCC President-Elect



Delegates at the opening ceremony cocktail function

Record number of travel scholarships contribute to success of WorldLab Durban 2017

by Howard Morris
IFCC President-Elect



Howard Morris

A record number of travel scholarships strongly contributed to the success of the triennial International Congress of Clinical Chemistry and Laboratory Medicine, WorldLab, held for the first time on the African continent. The opportunity for the South African Association of Clinical Biochemistry and Laboratory Medicine to host WorldLab 2017 was granted to stimulate the improvement of laboratory medicine practice throughout this rapidly developing and populous continent and to further assist the IFCC national societies in Africa. Critical to achieving these aims was the attendance of numerous young clinical laboratory practitioners.

Members of the Executive Board were very much aware of the impact of attending our own first WorldLab Congresses. It inspired building a rewarding career in laboratory medicine and had positive impacts on creating interest in our profession and building national societies. To this end the IFCC Executive Board allocated the historic level of funding for travel scholarships to support 70 young delegates. In addition,

the IFCC was highly appreciative of the philanthropic support from Professor Jocelyn Hicks, who supported a further 4 travel scholarships and our Corporate Member, Roche Diagnostics, for funding to support a further 11 scholarships.

We were very pleased to receive applications from some 90 young African scientists who met the criteria for support including aged younger than 40 years, priority for abstract presenters and each applicant had written a personal statement highlighting what they hoped to gain by attending this Congress. The scholarship provided 4 nights' accommodation, contribution to economy air travel to Durban and coverage of bank charges. The Conference Organizing Committee contributed by providing registration for WorldLab 2017.

The IFCC was now faced with the challenge of identifying extra funds to meet the demand from these excellent candidates. We turned to the generosity of our National Societies to allow these young scientists to achieve their dreams and were very pleased to receive an excellence response for this call for action. Support for all 90 eligible applicants was achieved

through the contributions received from the following national societies: Australasian Association of Clinical Biochemists (5 scholarships); Association of Clinical Biochemists – UK (1 scholarship), American Association for Clinical Chemistry (2 scholarship), Canadian Society of Clinical Chemistry (2 scholarship), Deutsche Gesellschaft für Klinische Chemie und Laboratoriumsmedizin – DE (2 scholarship), Malaysian Association of Clinical Biochemists (1 scholarship), Société Française de Biologie Clinique – FR (1 scholarship), Saudi Association for Clinical Chemistry (1 scholarship). The IFCC pledged to make up any shortfall.

The IFCC is extremely grateful for this extra support from our members and clearly, as indicated by the reports of the scholarship awardees and the photographs from the WorldLab Durban Congress, feel vindicated for this effort. The future of laboratory medicine in Africa is immeasurably stronger following the Congress and we are confident that many of these young clinical scientists will play key roles in our profession to improve the outcomes of their patients, a key element in building their young nations.

Young Scientists Symposium at WorldLab Durban

by *Guilaine Boursier*

IFCC Task Force for Young Scientists (TF-YS) member



The more than one hundred young scientists around the globe who received the IFCC Travel Scholarship to attend IFCC WorldLab Durban 2017

The well-organized IFCC WorldLab congress in Durban was a unique and historical occasion to feature young clinical laboratorians from African countries and other countries to share their experiences.

The YS symposium featured young scientists from the IFCC Task Force as well as established scientists; Ms. Serah Plaifa and Prof Rajiv Erasmus. The symposium was moderated by Dr. Graham Beastall and focused on ISO accreditation and quality assurance.

We live in a world of globalization and accreditation of clinical laboratories may be an experience we all share during our daily practice.

The information presented in the symposium was of great value to those who wanted to improve their knowledge about external quality assessment & internal quality control thanks to Dr. Miljan Savkovic, followed by Dr. Guilaine Boursier who shared with the audience the French experience of mandatory ISO accreditation.

We also learnt that the WHO is providing a national external quality assessment to South African laboratories and that the South African National Accreditation System (SANAS) is one of the three national accreditation bodies on the African continent.

Article continued on next page



Left to right: Prof. Vanessa Steenkamp – liason TF-YS; Dr. Graham Beastall – symposium chair and the speakers; Ms. Serah Plaifa, Dr. Guilaine Boursier and Dr. Miljan Savkovic, who participated in the YS session.

Almost one hundred young scientists attended the symposium and had an opportunity to interact with the workshop speakers and to network at the conclusion of the session, thanks to the dynamism of Prof. Vanessa Steenkamp.

Such a nice symposium would not have been possible without the support of the IFCC&LM and all our sponsors that provided scholarships and travel awards for YS.

We would like to sincerely thank the IFCC, Jocelyn Hicks, Roche Diagnostics and the scientific societies of South Africa, Australia, Canada, France, Germany, Malaysia, Saudi Arabia, UK and USA for having made this symposium possible.

We are pleased that this successful event has brought in new energy and insight into our TF-YS projects, and once again allowed us to make global connections.

IFCC Regional Representatives 2018-2020 elected

The IFCC Nominations Committee is happy to announce the IFCC Regional Representatives for 2018-2020. We warmly congratulate the newly elected IFCC Regional Federation Representatives to the IFCC Executive Board for the period 1 Jan 2018 -31 December 2020. We wish the new EB the best success to ensure the promotion of clinical chemistry and laboratory medicine world-wide, promoting the 'added value' of laboratory medicine to healthcare, enhancing international clinical collaboration and education and management support to developing countries, and communicating good laboratory medicine practices and patient safety. The result of the ballot required to confirm (or reject) the IFCC Regional Federations Representatives' nominations, for the term 2018-2020, was concluded on September 30th, 2017.

THE CONFIRMED REPRESENTATIVES FROM THE REGIONAL FEDERATIONS ARE THE FOLLOWING:

- Adekunle Bashiru OKESINA, African Federation of Clinical Chemistry (AFCC)
- Abderrazek HEDHILI, Arab Federation of Clinical Biology (AFCB)
- Sunil SETHI, Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB)
- Sverre SANDBERG, European Federation of Clinical Chemistry and Laboratory Medicine
- Rosa SIERRA-AMOR, Latin-American Confederation of Clinical Biochemistry
- Ann GRONOWSKI, North American Federation of Clinical Chemistry and Laboratory Medicine



Adekunle Bashiru OKESINA



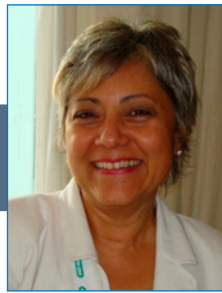
Abderrazek HEDHILI



Sunil SETHI



Sverre SANDBERG



Rosa SIERRA-AMOR



Ann GRONOWSKI

THE IFCC EXECUTIVE BOARD 2018-2020 WILL BE COMPOSED AS FOLLOWS:

- **PRESIDENT: Prof. Howard Morris** (Australia)
- **PAST PRESIDENT: Prof. Maurizio Ferrari** (Italy)
- **SECRETARY: Dr. David Kinniburgh** (Canada)
- **TREASURER: Prof. Tomris Ozben** (Turkey)
- **REGIONAL FEDERATIONS Representatives:**
 - ***African Federation of Clinical Chemistry (AFCC): Prof. Adekunle Bashiru Okesina*** (Nigeria)
 - ***Arab Federation of Clinical Biology (AFCB): Prof. Abderrazek Hedhili*** (Tunisia)
 - ***Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB):***
Dr. Sunil Sethi (Singapore)
 - ***European Federation of Clinical Chemistry and Laboratory Medicine (EFLM):***
Prof. Sverre Sandberg (Norway)
 - ***Latin-American Confederation of Clinical Biochemistry (COLABIOCLI):***
Dr. Rosa Sierra-Amor (Mexico)
 - ***North American Federation of Clinical Chemistry and Laboratory Medicine (NAFCC):***
Dr. Ann Gronowski (USA)
- **CORPORATE Representative: Dr. Rolf Hinzmann** (Roche Diagnostics)

The confirmation of the results has been officially presented at the Council on Sunday 22 October 2017 in Durban.

On behalf of the Nomination Committee, we would like to thank the candidates who campaigned and took an active part in the IFCC electoral process as well as for their steadfast commitment to serving IFCC.

We congratulate warmly the newly elected IFCC Regional Federations Representatives.

Best wishes to the new Executive Board for a productive term 2018-2020!

Let us join together to achieve excellence in lab medicine!

by Bernard Gouget

Counselor for Public Health FHF

IFCC Chair-Nominations Committee

President Human Healthcare Section Committee-COFRAC;

General Secretary of the International Francophone Federation

of Clinical Biology and Laboratory Medicine (FIFBCML),

SFBC-International Relations Committee



Bernard Gouget

The concentration of the laboratory medicine sector is increasing worldwide. This still very fragmented sector has been concentrated for several years around two major types of structures. On the one hand, there are integrated groups, such as Sonic, Unilabs, Biomnis etc., and on the other, independent private practice laboratory networks, built around technical platforms, via mergers or by forming subsidiaries from private practice companies.

This last form of grouping, a common legal structure with many regional sites, with the advantage of preserving the private practice character of the profession, is currently preferred by a number of laboratory medicine specialists. These structures constitute expert local networks with high tech platforms.

In addition to the effects of scale sought by forming groups, this movement is accompanied by a specific regional strategy of redefining the pathways of patient care, concentrating medical expertise, conducting training and organizing to conduct research with supporting publications.

Given these new networks of regional scope, the public sector is setting up, as in France, cooperative dynamic arrangements with regional focus while combining two objectives: on the one hand, the guarantee of equal access to healthcare, and on the other hand, control of healthcare costs, notably hospital costs, by the regional cooperation of healthcare facilities as part of a coordinated and graduated care pathway. Working with legal divisions and shifting policies, cooperation between healthcare facilities and laboratories has long been at the heart of the distribution of the regional supply of hospital services. Also under increasing pressure, coupled with multiple constraints and competition, the regional cooperation of public structures is shifting towards a group focus.

Any collaboration requires a reduction in the autonomy of legal entities or physical partners, involves information sharing and at least partial coordination

of strategies, actions and operations. Ties of interdependence and even solidarity are created. Thus cooperation must be understood above all as an individual and collective method of connection. Cooperation is a way of resolving complex situations faced by the hospital sector and a force to highlight the added value of laboratory medicine. In the latest law on the modernization of the French health system in 2016, functional cooperation is understood in the sense of complementarity between hospitals and laboratories.

Thus cooperation becomes a lever for decompartmentalization. Setting up regional hospital groups (GHT) aims to enable facilities to implement a regional strategy of shared and graduated patient care in order to ensure equal access to safe and quality care. To this end, a shared medical plan and a shared care plan are developed in each GHT. In each GHT, the member facilities jointly organize laboratory medicine activities.

Article continued on next page

The laboratory medicine plan is an integral part of the shared medical plan. In fact, this underlines the need for consistency and connection between the laboratory medicine organization and the clinical activity organization. The common organization of laboratory medicine activities is intended to be understood within the broader framework of GHT reform, taking into account, in particular, the establishment of a convergent information system within each GHT. Jointly organizing laboratory medicine activities also leads to the understanding of other aspects in relation to specific constraints and environment, in particular any existing partnerships and markets. A joint medical laboratory, set up between the facilities participating in the GHT, leads to a single accreditation process and a better visibility of laboratory medicine at the regional level.

Laboratory medicine is a particularly rich and varied specialty, which has become an essential key player in the care pathway. It is a discipline at the forefront of innovation in continuous development due

to constant technological evolutions and scientific advances. It is a multifaceted specialty that requires mastery of medical and technical aspects. Quality is guaranteed by the accreditation process in which all countries are involved, ensuring quality and compliance with the rules of good practice according to common standards for all medical laboratories, both private and hospital.

The landscape is changing and we are still at the beginning of group formation, but according to Comexium Consulting, history shows that nothing is written because, on the one hand, laboratory medicine players, bio-financiers- and financiers are emerging each year, and on the other, many cessions have shown that, despite belonging to a network or believing that laboratory medicine belongs to practitioners, when it comes time to take off, the patrimonial aspect can quickly make everyone agree the terms of a cession. Let us remain vigilant to promote innovative, excellent and locally-based laboratory medicine, serving the patient.

Opinion: our common home and the laboratory

by Joseph Lopez

Kuala Lumpur, Malaysia



Joseph Lopez

Our planet is warming at an unprecedented rate. The scientific evidence for this is overwhelming (see e.g. reference 1). While we scientists report this fact to others, we ourselves often do not do enough to mitigate the environmental impact of our activities. It is time we woke up to this shortcoming in order to play our part to protect the earth from the deleterious effects of our activities. After all, this is the only “common home” that we have (2).

The profession of clinical chemistry can do a lot more to institute the 3 key elements of being green i.e. to reduce, reuse and recycle more, both within the laboratory and even individually, among ourselves. One of the targets of the IFCC’s 2009 Strategic Plan was to produce a set of guidelines for good environmental practices for clinical laboratories (3). The same authors have published a follow-up document on this subject (4).

Since then little has happened and the topic has not appeared on the radar screens of clinical chemists. The recent WorldLab in Durban did not have a single session on the impact of the clinical laboratory on the environment. Neither did the APFCB Congress in 2016 nor the EuroMedLab in Athens 2017.

Article continued on next page

The IFCC as the global representative of our profession needs to take a leadership role in this matter to sensitise laboratories to their impact on the environment. Such an effort involves education and laboratory management. Rather than take a bottom-up approach and passively wait for proposals to come to IFCC, the new Executive Board can adopt a top-down approach and direct the EMD to proactively look into the matter. For a start, a Working Group could be formed. The IFCC could encourage case studies and promote good laboratory practices globally. There was a time not too long ago when laboratory quality and subsequently accreditation were the flavours of the day. It is time that the IFCC encouraged laboratories to look closely at their environmental impact and, where possible, work towards ISO 14000 certification for good environmental practices. If that is too big a goal, laboratories could for a start by incorporating Good Environmental Practices into their quality programmes.

The IFCC also needs to co-opt its corporate members in this endeavour. If the pressure is to come from users then laboratories can impose conditions on vendors, suppliers and contractors by buying instruments, equipment, reagents and services that are environmentally friendly. Instruments that consume less energy and water, chemicals that pollute the environment less are but a few of several ways. Laboratories could, for example, contractually demand that suppliers reduce and take back for reuse packaging, where this is feasible. We need to move away from single use plastics to products made from biodegradable or reusable materials (3, 4). The construction of

new laboratories or renovations of existing ones provide an excellent opportunity to introduce a green laboratory infrastructure (5).

There is much we can and should do to go green but it requires laboratories to first need to be conscious about their environmental impact. We do not lack the knowledge or technology to be more environmentally sustainable in our practices. We need to think green and have the will to make changes.

References

1. National Aeronautics and Space Administration (NASA). Global climate change – vital signs of the planet. <https://climate.nasa.gov/evidence/> (accessed 1 Nov 2017).
2. Laudato si', subtitled, "On Care For Our Common Home". Second encyclical of Pope Francis. Publ Vatican, 2015. Also available online. http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html (accessed 26 Nov 2017).
3. Lopez JB and Badrick T. Proposals for the mitigation of the environmental impact of clinical laboratories. Clin Chem Lab Med 2012; 50(9): 1559–1564.
4. Lopez JB, Jackson D, Gammie A, Badrick T. Reducing the Environmental Impact of Clinical Laboratories (commentary). Clin Biochem Rev 2017; 38: 3-11.
5. Lopez JB, Hoyaranda E and Priatman I. The First Green Diagnostic Centre and Laboratory Building in Indonesia. eJIFCC 2016; 27:84-87.

[The writer is a past member of the IFCC Executive Board and a past President of the APFCB]

IFCC Working Group on CSF Proteins and EC-JRC Alzheimer video on Euronews



Over 40 million people in the world are diagnosed with Alzheimer's. No cure exists today, however **researchers** are making **rapid progress** focussing on a small protein in the brain called Abeta 42. Clinical trials are ongoing with the **hope** that new **treatments** may be on the horizon! The IFCC Working Group on CSF proteins in conjunction with the EC-JRC (formerly IRMM) presented their work on Alzheimer's Abeta 42 with a video released on Euronews. The Alzheimer's Abeta

42 video has been broadcasted on the Euronews TV channel in 71 countries in 13 different languages.

Watch the video at: <http://www.euronews.com/2017/11/20/takeaway-alzheimer-early-detection>.

News from the IFCC Website



23rd IFCC-EFLM Barcelona Congress website is now open!

We are happy to announce that the EuroMedLab Congress website is now open with all the information to plan your attendance.

Visit www.euromedlab2019barcelona.org to retrieve all the information you need. Mark on your calendar the dates: 19-23 May, 2019 in beautiful Barcelona!

[Read more](#)

IFCC standardisation of Carbohydrate Deficient Transferrin (CDT)

International standardization of CDT measurement and interpretation improves its use as biomarker for chronic excessive alcohol consumption

*by Jos Wielders
Chair, IFCC WG-CDT*

CDT (carbohydrate deficient transferrin) is a biomarker for chronic excessive alcohol consumption. Its diagnostic accuracy exceeds that of traditional markers such as γ GT and MCV, while the skills and analysers needed for measuring CDT are available in most medium-sized modern medical laboratories.

Because the results obtained and the reference intervals differed significantly between available commercial methods the IFCC decided to start a Working Group for standardisation of CDT (WG-CDT) in 2005.

Very recently this standardization task of the WG-CDT was completed by the acceptance in 2016 of the candidate Reference Measurement Procedure by the IFCC-SD (chaired by Prof Ian Young) and the subsequent approval by the national IFCC societies. The present main goal of the WG-CDT, as agreed with Prof Philippe Gillery, is to expand the knowledge

about CDT and the worldwide use of the standardized CDT, called CDT_{IFCC}.

WHAT IS CDT AND WHAT DOES IT TELL US?

CDT is the abbreviation for carbohydrate-deficient transferrin which is used as a clinical and forensic alcohol biomarker. The iron transport protein transferrin contains two carbohydrate chains with sialic acid end groups. Chronic excessive alcohol consumption decreases the carbohydrate content of the molecule, increasing the amount of “carbohydrate-deficient” transferrin. Transferrin and CDT, have a half-life of about two weeks, meaning that the CDT level becomes elevated after excessive alcohol intake over a couple of weeks and will not return to baseline until after about 3-4 weeks of alcohol abstinence. CDT has a higher sensitivity and specificity than traditional markers like γ GT and MCV.

Article continued on next page

WHEN IS CDT MEASUREMENT RELEVANT?

Excessive alcohol consumption is amongst the top-five risk factors for disease, disability and death throughout the world. Single CDT measurements are used for objective detection of people engaged in chronic excessive alcohol use. CDT measurement is also becoming increasingly used in health checks of professions where the client may put others at risk, such as public transport services and aviation.

In some countries, CDT is the cornerstone in regranting of a driver's license in individuals being involved in a traffic accident when driving under the influence of alcohol. CDT is also used in other medical issues with special implications for heavy alcohol consumption, such as pregnancy (first two trimesters), liver transplantation and pre-surgery check-up.

HOW IS CDT MEASURED AND WHAT ARE THE PRESENT REFERENCE INTERVALS AND DECISION LEVELS?

At present, three different analytical principles are applied for routine CDT testing: high-performance liquid chromatography (HPLC), capillary electrophoresis (CE), and immunonephelometry. Because both the measured, being the actually measured substance, and the reference intervals differ between available methods the IFCC decided to start a Working Group for Standardization of CDT measurement (WG-CDT) in 2005.

HOW WAS THAT STANDARDIZATION ACHIEVED?

The IFCC WG-CDT started with defining the analyte (disialotransferrin) and the way it is measured by an HPLC candidate reference measurement procedure (cRMP). A number of experienced international CDT reference laboratories running the HPLC-cRMP were selected and demonstrated to provide comparable results over time. Multi-level serum calibrators and control materials were then developed and tested for long-term stability, to be used as candidate reference material (cRM).

The WG proved that all commercial CDT methods correlated linearly with the cRMP, indicating that standardization was possible. After a validation procedure of the cRMP and the cRM, both were approved by the national societies within the IFCC, making them a formal IFCC RMP and RM.

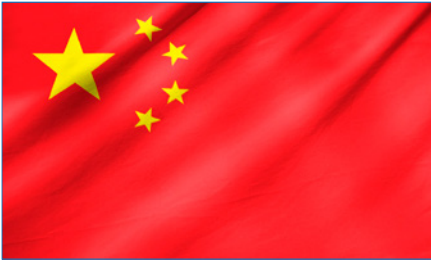
WHAT IS THE REFERENCE INTERVAL AND THE FORENSIC DECISION LEVEL FOR THE RMP?

CDT results obtained with methods that are calibrated against the HPLC-RMP are to be termed CDT_{IFCC} . The clinical reference interval defined using standard procedures has an upper limit of 1.7% CDT_{IFCC} no lower level is defined. For forensic application, the measurement uncertainty, as required by ISO 15189, should be taken into account, leading to a higher decision limit (also called cutoff) of 2.0%. This implies that a single CDT_{IFCC} result of 2.0% could be considered in forensic medicine as the highest expected numerical value without excessive alcohol consumption, considering all sources of imprecision.

WHAT CHANGES IN REPORTING RESULTS? WHEN IS THE CHANGEOVER TO THE NEW UNIT?

CDT results expressed in the new standardized CDT_{IFCC} unit will be different from those presently obtained with commercial methods. Especially for some capillary electrophoresis methods (manufacturer claimed upper level of reference interval is 1.3%) and for the immunonephelometry method (manufacturer claimed upper level of reference interval is 2.4%) the change in results will be significant. Manufacturers will adapt their inserts and / or software in the last quarter of 2017. From December 2017, it is advised that results will be provided both as traditional method-specific results (% CDT) and as IFCC-standardized results (% CDT_{IFCC}).

From 1 July 2018, only % CDT_{IFCC} results should be used as recommended by the IFCC.



IFCC welcomes a new Affiliate Member: LMC

Lab Medicine Committee China Association of Medical Equipment (LMC)

The IFCC is glad to welcome its 12th affiliate member:

Lab Medicine Committee, China Association of Medical Equipment (LMC).

The Lab Medicine Committee, China Association of Medical Equipment is a branch of the China Association of Medical Equipment. It is a national secondary-level association approved by the Chinese Ministry of Civil Affairs. It is a group specializing in professional academic research and practice in the construction and management of medical clinical examinations. This committee is a national social and educational institution that is fully non-profit, commonweal, academic organization. Formed entirely by volunteers by public, scientific research and educational institutions and social organizations, related to laboratory medicine and laboratory medicine equipment.

The purpose of work done in the Lab Medicine Committee, China Association of Medical Equipment is to promote the concept of “big test”, to build a platform for cooperation, learning, research and use, and to develop clinical diagnosis and treatment technology. This is accomplished through exploration and introduction of new ideas in laboratory medicine, creating a new culture to promote the development of laboratory medicine and support talented qualified personnel, ultimately to improve the overall state of China’s laboratory medicine services to serve the cause of human health efforts.

At the same time, it will actively play the role of self-discipline, rights protection, coordination, supervision and guidance in related industry, to improve the quality of laboratory medicine services and management to maintain the legitimate rights and interests of the industry to promote the development of general laboratory medicine.

News from the IFCC Website

eJIFCC Vol 28 n°3 (October 2017)



eJIFCC Vol 28, n°3 is now available.

In this issue you will find the following articles: "Postprandial dyslipidemia: pathophysiology and cardiovascular disease risk assessment"; "e-Learning: a model to support ongoing education"; "Compendium of Terminology and Nomenclature of Properties in Clinical Laboratory Sciences"; "Correlation of HbA1C levels with body mass index in newly diagnosed polycystic ovary syndrome"; "Factors affecting quality of laboratory services in public and private health facilities in Addis Ababa, Ethiopia"; and "Retrospective approach to evaluate interferences in immunoassay". The issue also features a "Case report: biliary pancreatitis with acute cholangitis in a patient under anticoagulant treatment with dabigatran".

[Read more](#)

IFCC is seeking an eAcademy Coordinator

The eAcademy Coordinator will work closely with the IFCC Committee on Internet and Distance Learning (C-IDL) and will be responsible for coordinating the development of new webinars for the eAcademy website. The coordinator will support communication with webinar speakers (identified by the Committee), recording of presentations, and webinar development using slides provided by the speaker and voice recordings. Familiarity and prior experience with eLearning software such as Office Mix is essential.

Other responsibilities of the eAcademy Coordinator include:

- To follow up potential presenters recommended by C-IDL for specific eAcademy topics.
- To provide advice, troubleshooting and training to presenters during the production of webinars.
- To provide relevant documentation, including that relating to permissions and monetary issues.
- To follow up progress on module preparation by presenters (it includes Key Words, CV, Photo, Self-assessment, Quizzes).
- To liaise with C-IDL members to identify learning objectives.
- To coordinate recording of select presentations at IFCC conferences and development of Webinars.

The eAcademy Coordinator will report to the Chairs of the Internet and Distance Learning Committee as well as the CPD chair. Compensation will be provided for each webinar developed based on an expected annual development of 20-30 webinars.

Eligible applicants are encouraged to apply by providing a full curriculum vitae and a statement of interest, sending them via email to colli-lanzi@ifcc.org.

Nomination by an IFCC national society is not required.



IFCC app and IFCC Electronic Journal (eJIFCC)

by Edgard Delvin

Vice Chair/Public Relations Coordinator, CPD

IFCC app Promotion



Reaching the IFCC website is easier than ever through the newly launched IFCC app!

The IFCC Internet and eLearning Committee and the Communication and Publication Division (CPD) would like to remind you that the IFCC website can be reached by a single step on a smartphone, iPad/tablet or laptop by typing or copying/pasting the following link: <http://www.ifcc.org/>.

Consult this information-laden site anywhere and anytime!

eJIFCC indexing reminder

eJIFCC



We remind all laboratory professionals that the electronic Journal of IFCC (eJIFCC) is officially indexed by MEDLINE/PUBMED.

All issues from 2009 onward are available on the PubMed website (<https://www.ncbi.nlm.nih.gov/pmc/journals/2920/>).

Older issues will be available online in the near future.

Season's Greetings
May the New Year bring
Health, Success and Peace

...
The IFCC Executive Board and Office Staff



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

NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES



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

Consensus on recommended values for the lipid profile



Under the auspices of the scientific societies for Arteriosclerosis, Primary Care, Cardiology, Family and Community Medicine, and Laboratory Medicine

The consensus may be summarized as follows:

- Currently, there is variability in lipid values considered to be advisable by clinical laboratories, which may generate confusion and pose a barrier to the correct treatment of dyslipidemias.
- The document's aim is to recommend to all clinical laboratories the adoption of homogeneous recommended values for the variables that make up the lipid profile.
- This consensus includes wide-reaching and documented information, such as epidemiological data for our country, existing barriers to achieving control of dyslipidemia and strategies to avoid them, and recommendations on which values of lipid constituents should be reported as altered.
- In Spain, it is estimated that 48% of men and 52% of women over 18 years of age have high total cholesterol levels, while 23% of men and 12% of women have hypertriglyceridemia.

Madrid, October 2017. Alterations in circulating lipid concentrations (total cholesterol and its high --HDL-- and low --LDL-- density and triglycerides fractions), commonly referred to as dyslipemias, correlate with the development of cardiovascular diseases of ischemic origin. Thus, numerous studies have shown that interventions that "normalize" circulating lipid concentrations protect against these diseases.

However, in Spain, there is no unanimous agreement on circulating lipid concentrations that can be considered

as "baseline" or "recommended" and, therefore, used to define dyslipidemia when they are altered.

In addition, the recommendations in international literature are based on population studies that are not universally applicable. For this reason, the reference or recommended values that accompany analytical laboratory reports may vary between different clinical laboratories.

This variability can create confusion among clinicians who receive laboratory results and may be a barrier to the correct treatment of lipid abnormalities (or dyslipidemias) and reduction of ischemic cardiovascular disease.

Recently, the European Society of Arteriosclerosis (EAS) and Cardiology (ESC) have developed a recommendation for the control of dyslipidemia, which includes several novel aspects. One of them is the non-need for fasting to obtain the lipid profile, which requires the varying of concentrations of triglycerides that are considered desirable.

Faced with this situation, a group of professionals has developed the consensus document 'Homogenization of lipid profile values', under the auspices of the five scientific societies of which they are part: Spanish Society of Arteriosclerosis, Spanish Society of Primary Care Physicians, Spanish Society of Cardiology, Spanish Society of Family and Community Medicine, and Spanish Society of Laboratory Medicine.

"The objective of creating this consensus is to recommend to all laboratories the adoption of homogeneous



Dr. Jordi Ordóñez Llanos, SEQC^{ML}

values, considered as recommended, for the variables that make up the lipid profile,” says Dr. Jordi Ordóñez Llanos, one of the authors of the work and member of the Spanish Society of Laboratory Medicine (SEQC^{ML}).

According to this expert, this consensus not only reflects the recommendations of the EAS-ESC, but also includes epidemiological information for our country, and the details of the pre-analytical, analytical and post-analytic sources of variation that may influence lipid concentrations or their evaluation; it also identifies the barriers that exist to achieving control of dyslipidemia, and recommends strategies to avoid them. “In addition,” he adds, “it establishes a recommendation for the lipid constituents that the lipid profile should include and, very importantly, what values of the same should be reported as altered in

the analytical report provided by clinical laboratories. In addition, it establishes values for blood tests obtained both with and without fasting “.

The consensus is directed particularly at clinical laboratory specialists and recommends, in particular, the adoption by the laboratories of limit values to consider the concentrations of circulating lipids as altered. “Although it is also useful for any medical professional who has responsibility in the diagnosis, treatment, and treatment monitoring of dyslipemias,” concludes Dr. Ordóñez.

HIGH PREVALENCE

Different studies estimate that in our country, 48% of men and 52% of women older than age 18 have total cholesterol levels above 200 mg/dL (5.2 mmol/L), while hypertriglyceridemia (triglycerides > 150 mg/dL, 1.67 mmol/L) occurs in 23% of men and 12% of women.

THE SEQC^{ML}

The Spanish Society of Laboratory Medicine (SEQCML) - founded in 1976 - currently comprises more than 2,000 professionals and has as its main objective to bring together all scientists interested in the Clinical Laboratory field, to promote the diffusion of scientific and technical publications, to organize meetings, courses and congresses of national and international character, and to cooperate with other Scientific Societies. Likewise, the Society wants to contribute to the study and recommendation of standardized methods, and to establish guidelines and recommendations for training in the field of Laboratory Medicine. For more information: <http://www.seqc.es>.

News from the IFCC Website



Diagnóstico in vitro - Octubre 2017

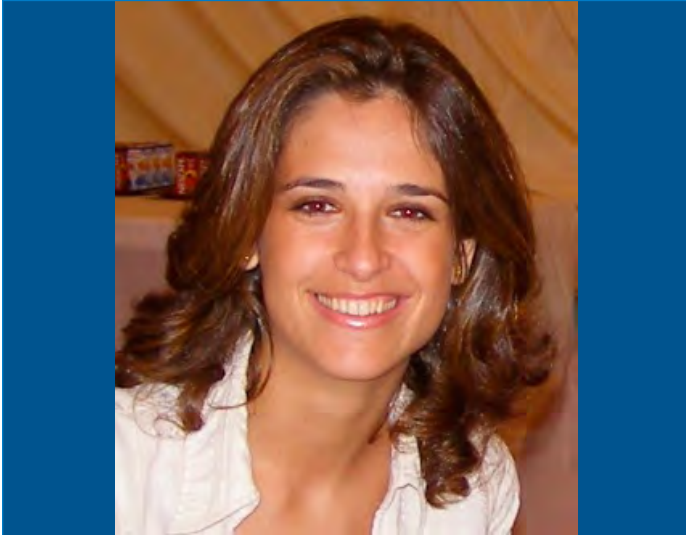
Enjoy the contents of the new DIAGNÓSTICO IN VITRO October issue!

El Consejo Editorial del DIV ha elaborado para todos un nuevo número de la Revista Diagnóstico in Vitro, con el objeto de mantenerlos informados de los eventos, noticias, artículos científicos y publicaciones que se producen en el ámbito del Laboratorio Clínico.

[Read more](#)

by Paloma Oliver Sáez

Chairman of the Point-of-Care Testing (POCT) Commission, SEQC^{ML}



Dr. Paloma Oliver Sáez

In 2005, interest arose within the Spanish Society of Laboratory Medicine (SEQC^{ML}) in creating a working group focused on Point-of-Care Testing (POCT). This group created a “Guide for the implementation of laboratory tests at the point of patient care”, published in 2006.

Subsequently, back in 2012, the SEQC^{ML} promoted the incorporation of new professionals, which ultimately led to the creation of the current Point-of-Care Testing Commission.

During its first few years, the Commission developed many activities, such as the creation of documents, surveys, and publications, the organization of courses and seminars, and also participated in research and development projects related to POCT. All of this was done in collaboration with other SEQC^{ML} Commissions as well as other scientific societies, such as the Spanish Diabetes Society, which granted to this Commission the interdisciplinary role so important in this type of tests.

One of the latest activities of the Commission has been the creation of a database on POCT equipment,

called POCT ONLINE. Within both the Commission itself and our different work environments, we have always shared the view of the great difficulty that existed in quickly and easily finding the POCT equipment and/or devices for measuring a specific test. The development and growth of this technology is exponential, which is why we began to see the crucial need to create a consultation tool that would resolve all of these observed limitations.

The SEQC^{ML} supported this idea from the beginning through its later development and incorporation into the website. The POCT Commission began conversations with different in vitro diagnostic companies, with the aim of inviting them to freely and voluntarily collaborate. Thus, the information offered in this database has always been provided by the suppliers. The POCT and the SEQC^{ML} claim no responsibility for the truth of the information or the quality of the equipment. As noted on the website, once the database has been consulted, it is the user’s responsibility to make the appropriate evaluations to choose the option that best meets their needs and quality requirements.

The POCT ONLINE database will be updated periodically in collaboration with the companies involved, and will continue to be developed further with the incorporation of additional information that could be useful for users.

Behind every announced result in the POCT environment there are many activities carried out by numerous professionals, such as the evaluation of methods, quality assurance, the training and qualification of personnel, connectivity, daily monitoring of the equipment that makes up the network, reports of results, etc.

Once the benefits of the use of POCT technology in the clinical environment is evaluated, a process begins with the correct choice of equipment. POCT ONLINE

was specifically created in order to provide, in a user-friendly format, extensive information that can help users find and evaluate the equipment that best meets their needs. As always, patient care is the main objective of our activities.

Information on the Point-of-Care Testing (POCT) Commission, as well as the database, can be found in the following link: http://www.seqc.es/es/comisiones/comision-de-pruebas-de-laboratorio-en-el-lugar-de-asistencia-poct/_id:22/.



News from Paraguay

Biochemistry laboratory approach and evaluation of patients with kidney diseases

by **M. Montserrat Blanes G.**

Paraguayan Biochemistry Association



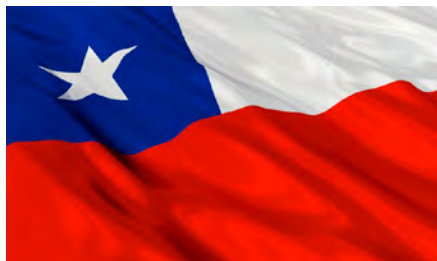
L-R: Prof. Dra. Maria E. Bianchi, Nephrologist, Professor of Physiology, Medicine School, Northeast National University, Corrientes, Argentina

Dr. Gustavo A. Velazco, Biochemistry, Coordinator Clinical Biochemistry, Julio C. Perrando Hospital Resistencia, Argentina

Prof. Dra. M. Montserrat Blanes G., Coordinator course intra-congress, Paraguayan Biochemistry Association, Asunción, Paraguay

Last October, in Asunción, Paraguay, more than 150 biochemists were trained, in a congress course entitled: *"Biochemistry laboratory approach and evaluation of patients with Kidney diseases"*, during the IX Congress of Chemistry Sciences and VIII Congress of Clinic Biochemistry of Paraguay. The course, coordinated by biochemist Montserrat Blanes Gonzalez, had the purpose that each and every one of the participants should take into account the importance of their work beyond kidney disease. In order to achieve this purpose, two speakers were invited: María E. Bianchi, nephrologist, Professor of Physiology at the Medicine School of the Northeast National University (Corrientes, Argentina) and Gustavo A. Velasco, Biochemist, responsible for the Clinical Biochemistry area of "Julio C. Per-rando" Hospital, one of the most important hospitals of the region (Northeast, Argentina). The audience was presented with a detailed frame of the physiological mechanism behind a simple creatinine clearance, for example, and the complexity of a standardization process when all laboratories need to harmonize their methods.

Clinical practice was addressed, establishing Diabetic Nephropathy and Chronic Kidney Disease as axes to show the kidney function was affected. There was an excellent reception. The strength of the course was the motivation shown by the participants, who managed to understand the concept and the different interpretations that the clearance formula has, depending on the substance filtered. The need for the joint work of nephrologists and biochemists was strengthened, especially for the development of standardization programs in clinical chemistry. The weakness was that the "omics" and "genomics" approaches were presented as a wish for future courses, since they are not accessible for the first line patient care in Latin America.



News from the Chilean Society of Clinical Chemistry

Report on 19th National Congress of the Chilean Society of Clinical Chemistry

by **Leticia Luna**

Chair of the Scientific Committee, SCHQC



The XIX Congress of Chilean Society of Clinical Chemistry was held on 4th-6th October, 2017 in Santiago, the capital and largest city of Chile.

This event takes place every two years gathering professionals from clinical laboratories of several regions of Chile, academics from local universities and representatives of the “in vitro” diagnostic industry with a select group of speakers.

The activities were organized in one pre-congress course, four plenary lectures, eight conferences, seven symposia and two workshops.

An update on immunohematology and blood center with a view towards self-sustainability and safety was the starting point of the meeting as a highly attended pre-congress course.

The meeting has received the significant support of the IFCC through its Visitor Lecturer Program that made it possible to include two relevant speakers: Dr. Veronica Luzzi PhD, DABCC, FACB from Providence Health and Services, Portland, Oregon, USA and Dr. Gian Cesare Guidi, PhD, Postgraduate in Laboratory Medicine from the University of Verona, Italy. Dr. Luzzi provided the lectures “Human chorionic gonadotropin and its multiple forms: challenges and achievements” and “Vitamin D assays in the clinical laboratory and what they really measure”. Dr. Guidi addresses the importance of the preanalytical phase through the lectures: “Preanalytics in haematology and immunochemistry”,

“Preanalytic aspects of Biobanking and ccfDNA” and “Preanalytics and personalized medicine”. Both speakers not only have offered such wonderful talks but also have strengthened links with Chilean professionals and students that will allow future collaborations, and by this way, improving the knowledge in this area.

This year the organizing committee has invited to Dr. Jeanette Vega, Director of FONASA, the government entity in charge of the funds administration and distribution destined to health, to deliver the keynote address. She provided an interesting view of information technology as a critical factor for health transformation.

A wide range of issues were also presented: “Hepatitis E, new perspectives” by Dr. Mauricio Venegas; “Clinical laboratory contribution to the diagnosis and follow-up of polycystic ovarian syndrome” by Dr. Nicolás Crisosto; “State of art in neonatal screening of phenylketonuria and other inborn errors of metabolism” by Dr. Verónica Cornejo; “New findings in medical mycology in Chile and estimation of national fungal burden” by Dr. Eduardo Álvarez; “Reliable and recognized HPLC/UHPLC and LC-MS/MS assays for the clinical laboratory” by Dr. Richard Lukacin; “Advances in automated analysis in the urinary sediment by fluorescence flow cytometry and support in the decision to perform uro-culture” by Dr. Domingo Osorio; “Quality management system, design and implementation: risk management process” by Dr. Pau Vila; and “Quality process systems

that support manufacture reagents and components” by Dr. Charles Towne.

In the symposiums the following topics were discussed: *“The current challenge in determinations of hormones and neurotransmitters”*, provided by Dr. V. Luzzi, Dr. Eduardo Aranda and Dr. Cristian Carvajal; *“Preanalytical phase”* by Dr. Gabriel Lima-Olivera, Dr. Olga Panes and Dr. GC Guidi; *“Stem cells use in regenerative therapy and immunomodulation”* by Dr. Flavio Carrion, Dr. Claudio Aguayo, Dr. Caroline Weinstein; *“Plasma levels of therapeutic drugs”* by Dr. Juan Cayun, Dr. Sandra Solari, and Dr. Luis Quiñones; *“Point of Care Testing”* by Dr. Javier Giraldo, Dr. Fernanda Mosso and Dr. Sabina Vargas; *“Quality and safety of the patient. Laboratory’s perspective”* by Dr. Olaya Peñaoza and Dr. Ximena Daza and *“Current challenges in mycological diagnosis”* by Dr. Hugo Madrid, Dr. Cecilia Tapia and Dr. Victor Silva.

The workshops were presented by international experts invited by sponsors: *“Flow cytometry harmonization in oncohaematology, the harmonaemia project”* by Dr. Andre Marinato; *“Significance of ionized magnesium levels (iMg^{2+}) in critical care patients”* by Dr. Federico Montealegre; and *“ β -hydroxybutyrate use in diagnosis and management of Diabetic Ketoacidosis”* by Dr. Alberto Blanco.

Attendees also had the opportunity to hear from the authors of 17 oral communications and 15 posters who shared their experiences in a very enthusiastic way, demonstrating that young professionals and students can be a significant contribution to the medical

laboratory. From this group of authors the Chilean Clinical Chemistry Society award recognized the work *“Implementation of an analytical methodology for the measurement of the activity of the enzyme tiopurine s-methyltransferase through High Resolution Liquid Chromatography”* authored by Alonso De la Rivera, Diaz M. and Daniel Navea from Dr. Luis Calvo Mackenna Hospital Clinical Laboratory, Andrés Bello University and Clinica Las Condes Medical Laboratory. And the *“Biosystems”* award recognized the work *“Evaluation of 8 equations for the estimation of LDL-cholesterol in Chilean population”* authored by Sergio Guerrero from ACLIN Clinical Laboratory.

During the closing ceremony, Dr. René Gómez, Chair of the XIX Meeting of the Chilean Society of Clinical Chemistry, thanked all the attendants for their enthusiastic participation and invited them to the next meeting on 2019.



Left to right: Dr. Jeanette Vega, Dr. René Gómez, Chair of Congress and Dr. Angélica Lagos, Chair of SCHQC



Left to right: Dr. Eduardo Aranda, National representative SCHQC; Professor Gian Cesare Guidi, IFCC- ABBOTT VLP and Professor Leticia Luna, Chair of the Scientific Committee



13th EFLM Symposium for Balkan Region

Laboratory medicine management: leadership skills for effective laboratory

by *Snežana Jovičić*

Society of Medical Biochemists of Serbia

Liaison Member of the IFCC eNewsletter Working Group

This year's EFLM Symposium for Balkan Region entitled "Laboratory Medicine Management: Leadership Skills for Effective Laboratory" successfully fulfilled high expectations set thirteen years ago.

The 13th EFLM Symposium for Balkan Region was held on 21 -22 September 2017 and organized under the auspices of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), Balkan Clinical Laboratory Federation (BCLF), Ministry of Education, Science and Technological Development of Serbia and Ministry of Health of Serbia.

During the two-day Symposium, eminent foreign and local experts introduced participants to the latest developments in the management in laboratory medicine, leadership skills of laboratory medicine professionals, laboratory medicine planning, organization and strategy, medical laboratory accreditation and competence, and laboratory medicine environmental health and safety.

Also, the optimization of the post-analytical phase, economy of consolidation and decentralization of medical laboratories, how to use laboratory information system and manage laboratory data, and also how to implement economic evaluation of laboratory testing were elaborated.

Experiences regarding accreditation process and total quality management were discussed, with the accent on the balance between the accreditation process and patient safety, possible errors and risks in sample collection and how to register frequent pre-analytical incidents, and efficiently manage unexpected events and accidents. Special attention was given to laboratory reports form, its categorization and actions, as well as to the use of statistics in laboratory practice.

The Symposium was opened by Prof. Sverre Sandberg, the EFLM President, with the reminder of the role and current developments in the EFLM. The welcoming word of the Symposium President Prof. Nada Majkić-Singh followed, when the participants were introduced with the Society of Medical Biochemists of Serbia's activities and the contents of the previous symposia.

The lecturers were Prof. Paul Collinson (UK), Prof. Ivan Brandslund (Denmark), Dr. Per Jorgensen (Denmark), Prof. Sverre Sandberg (Norway), Prof. Bernard Gouget (France), Dr. Vera Lukić (Serbia), Dr. Snežana Jovičić (Serbia), Prof. Nataša Bogavac-Stanojević (Serbia), Prof. Matthias Nauck (Germany), Prof. Mario Plebani (Italy), Prof. Tomáš Zima (Czech Republic), Prof. Svetlana Ignjatović (Serbia), Dr. Herbert Stekel (Austria), Dr. Zorica Šumarac (Serbia), Prof. Duško Mirković (Serbia), Dr. Ciprian-Valentin Mihali (Romania), and Prof. Dr Jelena Kotur-Stevuljević (Serbia).



Prof. Sverre Sandberg opening the Symposium

The special lecture was prepared by the students of medical biochemistry from the Faculty of Pharmacy, University of Belgrade, organized in the Team of Medical Biochemistry Students, part of the Belgrade Pharmacy Students' Association. Their representatives, Ana Đorđević and Tamara Stamenić, presented their view on laboratory medicine management and leadership for effective laboratory, in an original and refreshing manner.

The central event of the 13th EFLM Symposium for the Balkan Region was the presentation of the Honorary Diploma of the Society of Medical Biochemists of Serbia, as the highest recognition presented to foreign colleagues, and meant for promoting Clinical Chemistry and Laboratory Medicine in Europe and globally, and for significant contributions to the work and development of the Society of Medical Biochemists of Serbia. It was awarded, so far, to Prof. Victor Blaton, Prof. Stojan Danev, and Prof. Simone Zerah.

On this occasion, the Honorary Diploma was awarded to the distinguished Professor Mario Plebani for his huge activity and great contribution to the development and improvement of Clinical Chemistry and Laboratory Medicine at the national and international level, as well as for his contribution to the work and development of the Society of Medical Biochemists of Serbia.

The 13th EFLM Symposium for the Balkan region, with over 200 participants from many Balkan and European countries, fulfilled the high expectations defined during the previous ones. The presence of distinguished lecturers gave very high recognition and prestige to this meeting, which influences the development of clinical chemistry and laboratory medicine in the Balkan region and strives to focus on the new data in the field of laboratory medicine.

This is the opportunity to thank them, as well as all the participants, for another successful symposium.



The Honorary Diploma Laureat, Prof. Mario Plebani with Prof. Nada Majkić-Singh (left) and Dr. Zorica Šumarac (right)



Representatives of Team of Medical Biochemistry Students, Ana Đorđević and Tamara Stamenić



Left to right: Prof. Sverre Sandberg, Prof. Nada Majkić-Singh, Prof. Bernard Gouget, Dr. Snežana Jovičić, Dr. Vera Lukić, Prof. Nataša Bogavac-Stanojević, Dr. Per Jorgensen and Prof. Ivan Brandslund



News from Croatia

Research integrity workshop – Zagreb, Croatia

by Daria Pasalic

*Zagreb University School of Medicine
Croatia IFCC National Representative*

On 29 September 2017, the Croatian Society of Medical Biochemistry and Laboratory Medicine along with its official scientific journal *Biochemia Medica* organized Research Integrity Workshop.

This one-day event took place at the Faculty of Food Technology and Biotechnology Faculty of Biotechnology and Food Sciences at the University of Zagreb, Croatia and it dealt with research integrity challenges science journal editors encounter.

Speakers and experts in the field

- Treffor Higgins, member of the Task Force on Ethics at International Federation of Clinical Chemistry and Laboratory Medicine
- Mirjam Curno, elected Trustee and council member at Committee on Publication Ethics
- Vedran Katavić, Associate Professor at University of Zagreb, School of Medicine and former research integrity editor for Croatian Medical Journal

Article continued on next page

- ▶ Ana Utrobičić, Information Specialist at Cochrane Croatia
- ▶ Ana Borovečki, Assistant Professor at University of Zagreb and associate editor for Medicine Health Care and Philosophy Journal
- ▶ Tjeerd Fuijk, product support specialist, Turnitin

The aim of the workshop

To gather research integrity experts and science journal editors in order to consider and debate research integrity issues where there are no clear conclusions or definitive recommendations. This workshop was also an opportunity to share knowledge and increase awareness on research integrity.

The workshop was organized in four sections:

- handling submitted manuscript in Crossref Similarity Check and technical challenges

- detection of plagiarism during editorial process
- ethical approval and informed consent
- other topics concerning publishing in biomedical science

Each section started with a short lecture from an expert speaker, followed with a few cases prepared by Research Integrity Editors from Biochemia Medica, which cases illustrated the challenges they encounter in their work.

The Workshop welcomed 22 biomedicine journal editors from Croatia. The small group of participants and prepared cases allowed rather productive discussions.

As such, the Research Integrity Workshop successfully fulfilled its goal in exchanging ideas and practices to implement and use in further editorial work.

VLP report from COLABIOCLI Congress

*by Tomris Ozben
IFCC Treasurer
Chair, VLP program*

I would like to express my sincere gratitude to the Chair of the VLP program and Abbott company for supporting my attendance at the COLABIOCLI Congress.

The joint XXIII COLABIOCLI CONGRESS and XI URUGUAYAN CONGRESS OF CLINICAL BIOCHEMISTRY was held at the Convention Centre of Punta del Este Uruguay, 17-20 September 2017.

On Sunday, 17 September 2017, a full day pre-congress workshop was organized by the AACC.

During the main congress, five parallel sessions were organized from 18-20 September 2017. Simultaneous translation from English/Spanish was provided at the main auditorium. The participants of the congress were students of Clinical Chemistry and Pathologists, Medical Laboratory Technicians Licensed in Laboratory Sciences, Clinical Biochemists, Clinical Pathologists, Biochemists, Biologists, Chemists, and Physicians. The commercial exhibition and posters' exhibition were

held every congress day between 10:00 and 19:00. Poster defences were then received between 13:40 and 17:05.

On Monday, September 18, 2017, in the main auditorium, the IFCC sponsored symposium titled ***“the IFCC eAcademy: Progress and the future”*** chaired by Janet Smith was held between 08:00-10:50. Following the IFCC symposium, I delivered my lecture titled ***“Potential Risk Predictors for Cardiovascular Diseases”*** between 10:55 and 11:45. The Chair was Juana Ortellado. The main auditorium was full and I received a lot of questions regarding cardiovascular disease markers from the audience. The day was ended by the opening plenary conference, held between 19:00 and 19:50, and the opening ceremony between 20:00- 20:25.

On Tuesday, 19 September 2017, I took part in the round table held in the main auditorium, ***“Biomarkers and new therapies in cancer”*** chaired by Marta Marco between 17:05 and 18.30. The first speaker was Mev



Tomris Ozben

Dominguez and the title of her talk was ***“From genomics to genetic markers”***. I was the second speaker and spoke on ***“Liquid Biopsy: Circulating free tumour DNA (ctDNA) and circulating tumour cells (CTC) as novel***

diagnostic and prognostic markers”. The last speaker was Monica Vazquez-Levin and the title of her presentation was ***“From investigation to clinic: identifying new markers of tumour progression and aggression”***. After delivering our talks, we answered the questions of the audience.

Tuesday night, a dinner was organized for the speakers in a restaurant in front of the Hotel Conrad Punta del Este.

On Wednesday, 20 September 2017, I participated in the Workshop ***“Regulatory Aspects for Clinical Laboratories”*** which was held in the main auditorium from 08:00 till 09:55.

I was the first speaker and the title of my presentation was ***“In vitro Diagnostics and Evolving Regulatory Changes in Laboratory Medicine”***.

The second speaker was Sergio Bernardini. He spoke on ***“Automation and Digital Laboratory”***.

The last speaker of the workshop was Ingrid Lima and the title of her talk was ***“Regulatory aspects for reagents and equipment”***. After delivering our talks, we answered the questions.

The Congress was ended by the closing plenary conference delivered by Jean Claude Forest on ***“Hypertensive disorders of pregnancy”*** between 19:00 and 19:50 and the closing ceremony between 19:55-20.25.



Updates of the EFLM publication list

by Maria Stella Graziani

Chair of the EFLM Communication Committee

in the European Federation of Clinical Chemistry and Laboratory Medicine.

Carobene A on behalf of the EFLM Working Group on Biological Variation

J Lab Precis Med doi: 10.21037/jlpm.2017.08.13

This Letter to the Editor is a reply of a comment written by CG Fraser on a previous paper by the same group published in Clinical Chemistry, also included in

EFLM can count on four more papers by EFLM functional units: the scientific relevance of these papers demonstrates the continuous commitment of the Working Groups and Task Forces to the advancement of our profession.

The European Biological Variation Study (EuBIVAS): delivery of updated biological variation estimates, a project by the Working Group on Biological Variation

the EFLM publication list. Thanking prof Fraser for his kind words of appreciation, the Author describes in more details the EuBIVAS project emphasizing the design of the study that allows the collection of robust data on biological variation (both within and between subjects). These data could be used to define sounder analytical quality specifications that are the basis for the evaluation of new analytical systems and for setting criteria of acceptability of internal quality control results and proficiency testing.

Strategies to define performance specifications in laboratory medicine: 3 years on from the Milan Strategic Conference

Panteghini M, Ceriotti F, Jones G, Oosterhuis W, Plebani M and Sandberg S, on behalf of the Task Force on Performance Specifications in Laboratory Medicine of the European Federation of Clinical Chemistry and Laboratory Medicine

Clin Chem Lab Med 2017;55:1849-56

This paper describes the deliverables from the five EFLM Task & Finishing groups established after the 1st Strategic Conference that was aimed to address the definition of different models to set performance specifications (PS) for analytical quality. The deliverables are related to concepts about PS for EQAS, how to set PS for the extra-analytical phases, the need for more quality data on biological variation and the use of the “total error” concept. These concepts help the definition of what quality is needed and what measurement errors can be tolerated without jeopardizing patient safety and should therefore be defined for each analyte having clinical use. It is expected that this work will now be taken forward, possibly by consolidating some of these activities in a permanent structure within EFLM.

The EFLM strategy for harmonization of the preanalytical phase

Lippi G, Simundic AM. on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (WG-PRE).

Clin Chem Lab Med. 2017 DOI 10.1515/cclm-2017-0277

The EFLM Working Group on preanalytical phase (WG-PRE) was established four years ago with the aim

to promote harmonization in the preanalytical phase. This article describes the achievements of the group and illustrates future projects. Among the completed projects: harmonizing the definition of fasting status, patient and blood tubes identification, colour coding of blood collection tubes, sequence of tubes during blood drawing and development of suitable preanalytical quality indicators. The WG-PRE has also provided guidance on local validation of blood collection tubes, and has organized four European meetings to promote the importance of quality in the preanalytical phase. The future activities include development of an external quality assessment scheme on preanalytical variables, dissemination of a survey about the local management of unsuitable samples in clinical laboratories, as well as release of EFLM phlebotomy guidelines.

Pre- and post-test probabilities of venous thromboembolism and diagnostic accuracy of D-dimer, estimated by clinicians working in emergency departments

Kristoffersen AH, Ajzner E, Bauça JM, Carraro P, Faria AP, Hillarp A, Rogic D, Sozmen EY, Watine J, Meijer P, Sandberg S.

Thromb Res 2017;159:19-23

This letter to the Editor has been written on behalf of the joint Working Group on Postanalytical Phase (WG-POST) of EFLM and the European Organisation for External Quality Assurance Providers in Laboratory Medicine (EQALM). It follows a paper published in the same Journal in 2016 (also included in the EFLM publication list) describing the results of a questionnaire sent to clinicians working in Emergency Departments in Europe. The present study illustrates the results of questions about pre- and post-test probability before and after receiving D-dimer results that were not included in the previous report. The conclusions are that the clinicians estimated the diagnostic accuracy (LR) of the D-dimer test for venous thromboembolism in line with what is found in the literature, but they estimated a too high pre-test probability which also resulted in a too high post-test probability.

The list of the EFLM publications is available on www.eflm.eu under EFLM Publications, where the available papers can be downloaded.



The EFLM Working Group on Pre-analytical Phase

The EFLM Working Group on Preanalytical Phase, chaired by Prof. Ana-Maria Simundic, has recently released the final draft of the “*EFLM Recommendation for venous blood sampling*”.

[Click here](#) to download the paper.

EFLM National Society Members are invited to take part in the final stage of the development of the first official EFLM Recommendations.

Comments have to be submitted to the EFLM National Representatives who are in charge of collecting comments on behalf of the National Society Members and send them to EFLM within December 10, 2017. All comments will be taken into account during the final revision of the document.

After this public consultation and revision, final version of this Recommendation will be sent for final voting to all EFLM National Societies.

Abstract of the guidelines

This document provides the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for Preanalytical Phase (WG-PRE) recommendation for venous blood sampling and practical guidance on how to successfully overcome potential barriers and obstacles to its widespread implementation. It offers guidance on the requirements for ensuring that blood collection is a safe and patient-centred procedure. Target audience for this recommendation are healthcare staff members directly involved in blood collection. This recommendation applies to the use of a closed blood collection system and does not provide guidance for the blood collection with an open needle and syringe and catheter collections. Moreover, this document neither addresses patient consent, test ordering, sample handling and transport nor collection from children and unconscious patients.

The recommended procedure is based on the best available evidence. Consensus opinion about each step and requirement throughout the procedure was reached after detailed discussions and involving a mixture of stakeholders from over 16 EFLM member countries, including nurses, phlebotomists, specialists in laboratory medicine and representatives of venous blood collection products manufacturers.

Each step was graded using a system that scores the quality of the evidence and the strength of the recommendation. The process of grading was done at several

face-to-face meetings involving the same mixture of stakeholders stated previously.

The main parts of this recommendation are:

1. Pre-sampling procedures;
2. Sampling procedure;
3. Post-sampling procedures; and
4. Implementation.

We encourage professionals throughout Europe to endorse, adopt and implement this recommendation to improve the quality of blood collection practices and increase patient safety.

News from the IFCC Website

IFCC Call for Nominations

<p>Education and Management Division EC</p> <p>Applications by Dec 18, 2017</p>	<p>Scientific Division C-STFT</p> <p>Applications by Dec 20, 2017</p>	<p>Scientific Division C-TLM</p> <p>Applications by Dec 20, 2017</p>
<p>Scientific Division C-NPU in collaboration with IUPAC</p> <p>Applications by Dec 20, 2017</p>	<p>Education and Management Division C EBLM</p> <p>Applications by Jan 22, 2018</p>	<p>Education and Management Division C-DL</p> <p>Applications by Feb 5, 2018</p>

[Read more](#)

News from the IFCC Website

IFCC Slide Kit now available in Hungarian



Thanks to the contribution of the Hungarian Society of Laboratory Medicine (MLDT), the Hungarian version of the Laboratory Medicine Slide Kit is now available. Hungarian speaking IFCC members can access the slide kit for the general public to increase awareness of the role of Clinical Chemistry and Laboratory Medicine Clinical Laboratory in delivery of healthcare. Visit the "Resources & Downloads" section of the IFCC website to find PR resources (Brochures in 12 languages, and presentations), Educational Resources, Programmes for Developing Countries and Register of Experts.

[Read more](#)

ADVERTISE in IFCC eNews!

Showcase your products and initiatives to more than 15000 laboratory medicine specialists throughout Europe, Asia-Pacific, Middle East, Africa and Latin America: laboratory directors, clinical chemists, and other clinical laboratory specialists and technologists, leading manufacturers, distributors and dealers in the field.

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

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

Published ten times a year:

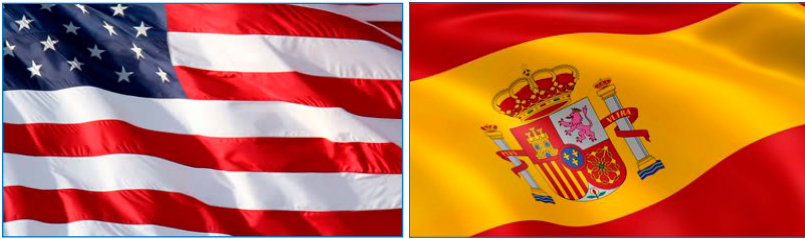
N° 1	February
N° 2	March
N° 3	April
N° 4	May
N° 5	June
N° 6/7	July
N° 8	September
N° 9	October
N° 10	November
N° 11/12	December

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

www.ifcc.org



IFCC PROFESSIONAL SCIENTIFIC EXCHANGE PROGRAMME (PSEP)



My experience at Mayo Clinic

*by Cristina Bailén Ruiz
Spain*

From July to October 2017 I was able to carry out a research Project on “Assessment of immune function gene expression in relation to *Braf V600E* mutation in Papillary Thyroid Cancer”, at Mayo Clinic, Jacksonville, thanks to the help of IFCC, SEQC and Jose Luis Castaño foundation.

I chose Mayo Clinic to carry out my external rotation because there are many interesting projects that could be useful for my career in laboratory medicine and considering that the Mayo Clinic is a great research centre, I thought it was a great opportunity to perform my external rotation.

My experience at Mayo Clinic in Jacksonville gave me the opportunity to integrate into a research team and to learn new technologies such as NanoString technology and the software interpretation and how to evaluate the quality of RNA samples with Bioanalyzer equipment. From the first day I had my own work space and my own organization to carry out the project step by step.

Our main objective was to confirm the hypothesis that BRAF V600E tumors are immunosuppressed in Papillary Thyroid Cancer samples. The working hypothesis was that expression of the BRAFV600E mutation was associated with decreased immune function and perhaps attenuated chemotherapeutic response.

My project consisted of assessing immune function gene expression RNA in thyroid tumor specimens for genetic analysis. NanoString digital quantitative analysis of immune function gene expression was carried out using the NanoString Cancer Immunology V2 codeset and additional immune function genes.



Cristina Bailén Ruiz (second from left),
Dr. Aubrey Thompson (third from left), and team at Mayo Clinic

I had the opportunity to assist in a videoconference about NanoString nSolver Analysis 3.0 and Illumina training NGS.

In addition, I visited the core laboratory as I was interested in knowing how they work in the laboratory and the work protocols that are followed.

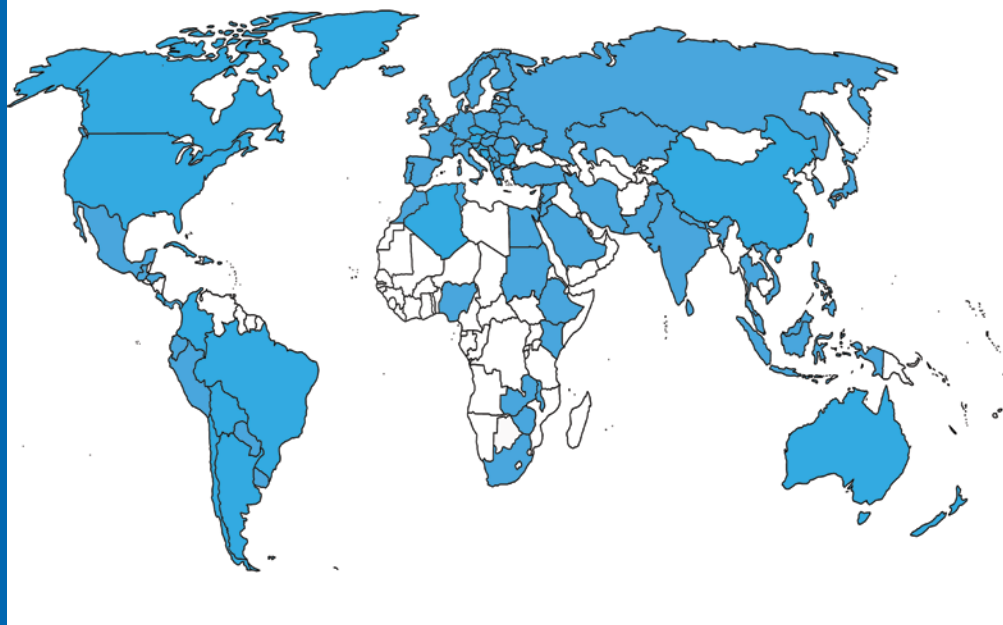
It has been a great experience. I have learned another way of working in the laboratory and above all I have gained excellent training in NanoString technology.

I would like to thank Dr. Aubrey Thompson for all I have learned and Jennifer Kachergus who was my day-to-day teacher for the procedures.

IFCC MEMBERSHIP

Full Members

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



Corporate Members

Abbott	Mitsubishi Chemical Europe, GmbH
ADx Neurosciences	Ningbo MedicalSystem Biotech. Co., Ltd.
Agappe Diagnostics, Ltd.	Nova Biomedical Corporation
Analisis R&D Diag.	Oneworld Accuracy Collaboration
Asahi Kasei Pharma Corp., AS	Ortho-Clinical Diagnostics, Inc.
Axis Shield Point of Care Division	Philips
BD Life Sciences – Preanalytical Systems	PPD Inc.
Beckman Coulter, Inc.	Radiometer Medical ApS
Beijing Dream Diagnostics Medicine (DDM) Technology Co. Ltd.	Randox Laboratories, Ltd.
The Binding Site Group, Ltd.	Roche Diagnostics, GmbH
Bio-Rad Laboratories	Sebia S.A.
C.P.M. Diagnostic Research, SAS	Sekisui Diagnostics (UK) Ltd.
DiaSys Diagnostic Systems GmbH	Sentinel CH SpA
Diatron	Shanghai Kehua Bio-Engineering Co., Ltd.
ELGA LabWater	Shanghai Zhicheng Biol. Tech. Co., Ltd.
Fujirebio Europe	Sichuan Maccura Biotechnology Co., Ltd.
Gentian, AS	Siemens Healthcare Diagnostics
Guangzhou Wondfo Biotech Co., Ltd.	Snibe Co., Ltd.
Helena Biosciences Europe	Sonic Healthcare Europe
HyTest, Ltd.	Sysmex Europe, GmbH
Instrumentation Laboratory	Thermo Fisher Scientific
A. Menarini Diagnostics	Unilabs
Mindray	Wako Pure Chemical Industries, Ltd.
	Labor Dr. Wisplinghoff

Affiliate Members

Brazil: Sociedade Brasileira de Patologia Clínica / Medicina Laboratorial (SBPC/ML)
China: Lab Medicine Committee, China Association of Medical Equipment (LMC)
India: Association of Medical Biochemists of India (AMBI)
Iran: Iranian Association of Clinical Laboratory Doctors (IACLD)
Jordan: Society for Medical Technology & Laboratories (SMTL)
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)
Russia: Regional Association for Clinical Laboratory Diagnosis, St. Petersburg
Spain: Asociación Española de Farmacéuticos Analistas (AEFA)
Turkey: Society of Clinical Biochemistry Specialists (KBUD)
Ukraine: Association for Quality Assurance of Laboratory Medicine (AQALM)

Regional Federations

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

Publisher

**Communications and Publications
Division (CPD) of the IFCC**

Starting in 2018, the Communications and Publications Division publishes ten editions of the e-News per year, including two double issues.

Editor

Tahir Pillay, MB ChB, PhD, FRCPath (Lon), FCPATH (SA)
Department of Chemical Pathology
University of Pretoria, South Africa
E-mail: enews@ifcc.org

Design & Production:



www.insoftdigital.com

Circulation

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

Submissions

If you want to submit an article or advertisement to be published in the eNews, send it to:
Tahir Pillay, Editor, IFCC eNews
E-mail: enews@ifcc.org