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The IFCC is deeply saddened to announce that Dr. Michael Metz passed away around midnight on 2 October 2018, at St Andrews Hospital, Australia.

Michael was a major influence in Paediatric Laboratory Medicine internationally through his work with the IFCC TF PLM and ICPLM.

A dual fellow of the American Academy of Pediatrics and of the Royal College of Pathologists of Australasia, he was also valuable contributor to AACB both at the SA/NT Branch, and at National levels.

Despite his illness, Michael continued to actively contribute to the AACB RCPAQAP Patient Comments and Sweat Testing Advisory Committees until recently. He was always willing to share his knowledge and will be greatly missed.

Dr. Michael Metz was a dual fellow of the American Academy of Pediatrics and the Royal College of Pathologists of Australasia.

A graduate of the University of Nebraska College of Medicine, Michael trained in paediatrics at the University of Minnesota and in chemical pathology in Adelaide at the Women’s & Children’s Hospital (WCH) and the Institute of Medical and Veterinary Science.

He practised chemical pathology in Adelaide at the WCH site of SA Pathology and at Clinpath Laboratories where he was director of clinical chemistry.

Michael was a foundation member of the AACB Paediatric Special Interest Group and Chair of the RCPA QAP sweat testing working party. He was also a member of the advisory board of the Atherosclerosis Australasia Familial Hypercholesterolaemia Registry and the sole consultant at the lipid clinic of the WCH.

He was a clinical senior lecturer at the University of Adelaide School of Paediatrics and Reproductive Health. Mostly he liked looking after the kids.

As Chair of the International Federation of Clinical Chemistry Task Force on Pediatric Laboratory Medicine, Michael contributed to improving the diagnosis and management of patients from birth to adolescence.

His dedication and warm friendly nature will be greatly missed.
IFCC EMD, the Committee on Clinical Laboratory Management (C-CLM) hosted an educational workshop on Leadership and Management in the 56th International Congress of the Federation of South African Societies of Pathology (FSASP), named PathCape 2018, which was held at the Spier Conference Centre in Stellenbosch, South Africa, between 16-18 August 2018.

It was a great pleasure for us, and we were profoundly honored to be invited and granted the opportunity by Prof. Rajiv Erasmus and by Prof. Tahir Pillay to organize this educational workshop at the PathCape 2018 and in the beautiful country of a great leader Nelson Mandela.

Sedef Yenice, Matthias Orth, and Aye Aye Khine Wamono, who are the members of C-CLM, were the speakers at the workshop held on 16 August 2018; and Sedef Yenice chaired this workshop. In addition, Sedef Yenice and Matthias Orth delivered talks in the symposium on “Accreditation, Quality, and Leadership”; and Aye Aye Khine Wamono chaired a session on the oral presentation by Linda Macheka regarding “Mercury ingestion and toxicity in adult females” on 17 August 2018.

Through more than 30 years of service in the laboratory medicine, in clinical laboratory management and with the lots of research studies, we have been privileged to work with and learn from superb leaders, from the young instructors who taught us how to manage the experiments in basic and clinical laboratory research to the very smart group of profession experts and institute chief executive officers we met during our work life.

These talented people have differed widely in their personality traits and life stories. Some have been charismatic, some very modest. Some came from a poor background, others grew up amid great wealth. Some of them came by their leadership abilities naturally, and many others worked hard at developing them.

But these men and women have shared three critically important skills: they have been driven by an inspiring vision of success. They have excelled at communication and exercised professional judgment.
In order to lead our organizations effectively through today’s economic turmoil, we all will benefit if we master those very same skills.


A compelling vision has that power. It inspires, clarifies and focuses the work of people and preferably entire organizations for a lengthy span of time. Before we embark on any leadership enterprise, stop and take a hard look at our vision of success. What is it? Do we even have one? Often, in the rush to get things done, to launch a new project or product, we ask people to get behind our efforts without ever really giving them a good reason. Our vision needs not be as grandiose as Mandela’s. It probably should not be, unless we have Mandela's phenomenal array of talents and experience.

It’s fine to start with something smaller, like instituting a new method or instrument technology to improve our laboratory service. But even an incredibly compelling vision won’t do much good if it remains only in our head. That brings us to the second key skill: communication.

We still need to communicate effectively and that means being our organization’s chief listening officer, also embracing each other’s contributions, strengths, and roles while providing constructive and positive feedback.

A third key element of successful leadership involves judgment. In the end, our judgment calls, which are rooted in our character, become our legacy. Without the right values, judgment can easily be trumped by perverse incentives that encourage poor ethical choices.

Sedef Yenice’s talks covered those related topics under the titles of “Organizational Culture and Managing Change”, and then on “Building an effective and supportive supervision for Quality Improvement.” Good strategy judgment often means a leader must find a new path when his/her organization is heading in the wrong direction.

How well we can do this depends on our ability to scan the horizon and ask the right questions. But unless we have the right people on board, we can’t execute our strategy. We need to get the right talent, and we need to make sure that it’s positioned appropriately throughout our organization and this is a constantly evolving process. The skill sets we need and the places in our organization where our team members best fit will change as our environment and competition shift and new opportunities arise.

Matthias Orth addressed those issues on his talks, first regarding “Organizational Planning and Laboratory Medicine”, and secondly “Leading and Managing the Laboratory Team.” Due to the mostly indirect patient contact in Laboratory Medicine, some novel planning
strategies developed for industries can also be applied to clinical laboratories. Further, clinical laboratories are part of the healthcare, and a new framework of legal and ethical regulations are in place to protect the patients and to allow adequate access to healthcare for those in need. However, this contrasts with the law of the marketplace. Laboratory managers need to know the advantages and the challenges when industry strategies are used, or laboratory performance is challenged from outside by people who are employing these strategies.

The definition of the skills required for leading and managing a laboratory team is also under scrutiny. The focus of those management skills should be the benefit of the stakeholders, which are the patients, the people working in the laboratory and the administration/health insurance. Again, a laboratory must be aware of the special situation of a clinical laboratory and should focus on the medical value of the laboratory. This value is more than delivering reliable analytical services but should also include medical interpretation and the allocation of laboratory resources according to the medical needs of the patients being served. Medical knowledge, practical experiences, and management skills are most needed for laboratory managers. These properties can and must be learned and practiced and will allow making the step from a laboratory manager to become a leader.

On the other hand, conflict in the workplace can destroy good teamwork. When we don’t manage it effectively, real and legitimate differences between people can quickly get out of control, which can result in an irretrievable breakdown in communication. To resolve a conflict between our team members requires an effective and skillful approach. Aye Aye Khine Wamono delivered her talk on this important topic of “Conflict resolution.”

We saved the best talk for last from Rajiv Erasmus as he focused on “The Centre for Creative Leadership through Key Leadership Skills of An Outstanding Leader Nelson Mandela: Application to the Laboratory” which was very inspiring for the audience.

The workshop was a great success. Thanks to all the speakers for their valuable contributions.

Our presentations can be accessed through a private link: www.pathcongress.org/presentations.
The importance of good leadership to the health of an organization is evidenced by the investment many organizations are willing to apply to leadership development. Leadership theory describes leadership as both an art and a science. Although accepted by many that leadership qualities are inborn personality traits, there is growing evidence that leadership can be learned through a training process.

The clinical laboratory environment is one of diversity, with the scope of services ranging from relatively simple phlebotomy centers to large reference laboratories applying cutting-edge techniques and esoteric analyses.

Leadership in the medical laboratory requires interaction with other front-line health care providers towards the management, maintenance, and development of medical laboratory services to meet needs. Because the major contribution of the laboratory to health care is information, leadership in the laboratory also involves oversight to ensure that this is provided in an appropriate and legible manner leveraging where possible opportunities to add value to services.

Most importantly medical laboratory leadership requires effective interactions with individuals within the laboratory, suppliers, and manufacturers, higher administration, and those relying on the services provided.

In recognition of the importance of effective leadership to the success of a medical laboratory, the Committee on Clinical Laboratory Management (C-CLM) has embarked on a project to help bridge any knowledge gaps challenging good and effective leadership in the medical laboratory environment specifically.

Figure 1: Responses by contributing country region
Size of the circle is proportional to the number of respondents
This will take the form of a Laboratory Leadership Training Programme, which will cover major topics related to developing effective leadership skills and techniques.

It is also a goal of C-CLM to have the programme accredited in order to provide certificates to successful participants in the programme. In addition to scoping topics covered in most leadership training activities, C-CLM also developed and circulated a survey among IFCC represented national societies in order to identify gaps in knowledge that can then be addressed in the programme.

The twenty-question survey addressed self-determined comfort level on topics covering three areas of leadership, including: Self-Management and Leadership Style; Leading Change; and Leading and Managing the Laboratory.

Participants from at least 56 different countries participated in the survey with national societies in Canada, Jordan, Turkey, Chile, India, and Slovenia making up almost half of all 266 participants (Figure 1).

About 43% of participants came from accredited labs with another 26% from labs pursuing accreditation.

The most acknowledged professional designations/activities included:
- 38.1% were Clinical Laboratory Specialist;
- 19.4% were Professor/Instructor;
- 15.6% indicated laboratory manager, and
- 14.2% identified as physician laboratory director and
- 13.8% as non-physician laboratory director.

About half of the participants (50.5%) identified clinical chemistry/biochemistry as their laboratory area of expertise, while 34.6% indicated general laboratory 19.4% selected hematology, 19.0% chose Quality Assurance/Quality Control, and a further 18.3% described the point of care testing as areas of professional expertise.

The survey did not assess competency but relied on individual self-assessment to determine perceived knowledge gaps in items related to leadership.

The results are summarized in Table 1.

More than 50% of responses to all topics indicated self-confidence of the participant’s in the specific topic. However, in 16% to 44% of cases, participants indicated either neutral or some degree
of disagreement with the statement, suggesting a self-identified knowledge gap.

Although results may have been different if the questions assessed knowledge of the topic areas were addressed more directly, such surveys give an indication of potential interest in learning more in an area and a recognition of the potential need for further education.

When asked to identify other topics where there was felt to be a significant knowledge gap, 96 respondents provided additional input. The top four included:

- Work relationships and effective communication with subordinates and superiors (17.7%);
- Team management and motivation (23.96%);
- Financial management and budgeting (10.4%); and conflict management (9.4%).

Other topics identified by four or more respondents (38.5%) included:

- Developing and monitoring quality indicators and a quality management system (an existing project of C-CLM);
- Self-management and emotional intelligence; Building a business case;
- Marketing and growing the laboratory;
- Safety and Risk Management;
- LEAN/Six Sigma and value-oriented service;
- Administering Health Services;
- Changing workplace culture;
- Resource management; and
- Mentoring.

Responses from the survey have helped confirm the relevance of previously identified topics for the programme and have identified other concepts to be covered in the programme, or by other initiatives being developed by C-CLM.

A minority of those finding themselves in leadership roles in medical laboratories have had formal or organized training in leadership techniques towards a more successful position.

The C-CLM with the assistance of partners hopes to fill recognized knowledge gaps through the developing laboratory leadership training programme.

Table 1 is a summary of survey responses indicating neutrality or disagreement with survey statements.

The survey consisted of a five optioned response to each question consisting of strongly disagree, disagree, neutral, agree, or strongly disagree.

Responses indicate the percentage of those neutral or disagreeing with the leadership characteristic statement as applicable to them.

<table>
<thead>
<tr>
<th>Survey questions</th>
<th>Responses (%)</th>
</tr>
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<tbody>
<tr>
<td>I can identify my own learning style and describe how to best apply it to work, and when working in teams</td>
<td>16.1</td>
</tr>
<tr>
<td>I am familiar with several different ways of resolving conflict and can describe the advantages of each in different types of conflict situation</td>
<td>35.2</td>
</tr>
<tr>
<td>I can confidently identify common barriers to effective time management</td>
<td>23.1</td>
</tr>
<tr>
<td>I can identify several strategies to address barriers to effectively manage my time at work</td>
<td>28.4</td>
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</tbody>
</table>

Table 1 Summary of survey responses indicating neutrality or disagreement with survey statements

Article continued on next page
### Leading change

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
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<tbody>
<tr>
<td>I can confidently describe the common biases that affect the ability to make sound decisions</td>
<td>38.5</td>
</tr>
<tr>
<td>I can confidently describe the parts of a formal project management plan</td>
<td>33.2</td>
</tr>
<tr>
<td>I can confidently identify common barriers to effective change management</td>
<td>25.8</td>
</tr>
<tr>
<td>I describe the principles for effective change management</td>
<td>44.3</td>
</tr>
<tr>
<td>I can confidently describe why strategic planning in Health Care is important</td>
<td>28.7</td>
</tr>
<tr>
<td>I can confidently describe the strategic planning process</td>
<td>40.2</td>
</tr>
<tr>
<td>I can confidently develop a programme evaluation plan</td>
<td>38.9</td>
</tr>
<tr>
<td>I can confidently describe the types and purposes of evaluation</td>
<td>37.3</td>
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### Leading and managing the laboratory

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<th>Description</th>
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<tr>
<td>I can confidently describe the differences between leading a laboratory versus managing a laboratory</td>
<td>28.3</td>
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<tr>
<td>I can confidently identify and describe my leadership style</td>
<td>21.0</td>
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<tr>
<td>I can confidently describe how to build an effective laboratory team in spite of the challenges presented by generational, cultural, and lifestyle differences</td>
<td>25.8</td>
</tr>
<tr>
<td>I can confidently describe how to effectively manage human resources including how to attract, hire, develop and keep talented workers in my laboratory</td>
<td>35.6</td>
</tr>
<tr>
<td>I can describe the differences between organizational vision, mission, goals, and objectives and describe how they apply to me (as a laboratory leader) and to my laboratory</td>
<td>31.8</td>
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<tr>
<td>I can list the principles of good communication, and describe how to communicate accurately toward achieving the desired outcomes for my laboratory</td>
<td>27.0</td>
</tr>
<tr>
<td>I can confidently describe the principles and tools of risk assessment and risk management for reducing patient harm</td>
<td>30.9</td>
</tr>
<tr>
<td>I can confidently describe the principles and practices of ethical leadership</td>
<td>33.5</td>
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**Acknowledgment:** Thanks to the full members Edward Randell and Sedef Yenice (Chair) from the C-CLM who wrote and worked together in the preparation of this short communication.
Professor Ian Wootton, the founding Secretary of the IFCC (1952-1958), has passed away at the age of 97 years. Ian worked closely with Professor Earl King who was the founding father of clinical biochemistry in Britain and the first President of our Federation. These early years following the Second World War were a golden age in the development of the discipline of clinical biochemistry with concurrent development of our professional societies. Under King’s leadership the formation of the Association of Clinical Biochemists (ACB) was undertaken in 1953, with Ian as the first Treasurer.

Ian graduated in Medicine from Cambridge University with special commendation and served briefly in post-war Egypt, in the Royal Army Medical Corps. He returned to work as a research assistant with Earl King, at Hammersmith Hospital and the Royal Postgraduate Medical School and Ian naturally took over as Chair of Chemical Pathology on King’s death.

The humorously labelled “W” Club, consisting of Gordon Whitby in Edinburgh, Tom Whitehead in Birmingham and Ian Wootton in London, formed the spine of the rapidly developing discipline of clinical biochemistry. Earl King had written various editions of the textbook *Microanalysis in Medical Biochemistry* from 1946 onwards, and Ian co-authored the third edition with him. He then singlehandedly produced the fourth and fifth versions after King’s death, before jointly producing the sixth with Heather Freeman. Translated into many languages, the book became an obligatory text in every clinical biochemistry department library throughout the world.

Ian Wootton made important early contributions in the development of “normal” ranges, collecting reference data and applying statistical analyses. His national and international interlaboratory comparisons revealed the need for reference laboratories and materials.

Soon, the first UK autoanalyzer was placed in the Department, at that time measuring only glucose. Ian’s advice for further suitable tests was sought and his suggestion of total protein was deemed so visionary that the Technicon company offered him a position in the USA, which he declined.

The rapidly expanding test repertoire, together with burgeoning automation, demanded computerisation and the Hammersmith group were leaders in developing and coding these early machines. In those days, getting the computer to play Christmas carols for the party was considered a major achievement.

Many of the statistics programs were written personally by Ian and he was often debugging program printouts at home in the evenings.
Consistently a champion of professional education, Ian played a pivotal role in first establishing and then examining for the Mastership of Clinical Biochemistry (MCB), with stakeholders the Association of Clinical Biochemists, the Royal College of Pathologists, the Royal College of Physicians and the Royal Institute of Chemistry. As a Fellow of all four bodies, he was uniquely qualified to catalyse this interaction. He served as President of the ACB 1975-6 and he was awarded the Wellcome Prize in 1977 for his contributions to the quality of laboratory practice. Ian was awarded honorary membership of the ACB in 1988. Additionally, Ian held the role of Chief Scientist for the Department of Health and Social Security from 1972-3 although he always claimed to prefer pathology to politics.

Ian was a beekeeper, a boat builder and on his retirement in 1982 became a book binder. His lifelong interest in navigation resulted in him becoming founding Registrar for the British Sundial Society and he played a major part in mapping (and often correcting) every sundial in the British Isles.

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**Clinical Chemistry Trainee Council: Guide to Scientific Writing (GSW)**

*by Nader Rifai*

*Founder of CCTC programme*

*Ann Gronowski*

*Co-Chair, CCTC programme*

This is the seventh in a series of articles about the *Clinical Chemistry* Trainee Council (CCTC), a free multi-lingual online educational program for laboratory medicine trainees and their mentors (www.traineecouncil.org). Over 12,500 registrants from 157 countries currently use this program, approximately 40% are from emerging and developing countries.

The CCTC website houses a variety of educational materials and activities including *Clinical Chemistry* Guide to Scientific Writing (GSW). This guide consists of a series of 14 articles that have been written by Dr. Thomas Annesley of the University of Michigan. Each article in this series tackles an aspect of the scientific paper and provides the reader with guidance on how best to present it. A list of the titles of these articles is presented in Table 1.

The GSW has been shown to be very popular among students, trainees, and faculty members and continues to be downloaded >100,000 times per year Figure 1. It is not unusual to see the GSW incorporated in the curriculum of trainees in laboratory medicine.
Dr. Annesley regularly presents workshops to young clinical laboratory scientists and physicians about scientific writing at national and international meetings such as the Nordic Congress of Clinical Chemistry, Euromed-Lab, and those of the IFCC. These workshops are highly sought after and have proven to be popular.

The GSW is currently available in six languages: English, Spanish, Portuguese, Chinese, Japanese, and Turkish. These articles can be accessed through the CCTC or the Journal website (www.clinchem.org).

We encourage all trainees in laboratory medicine and their mentors to take advantage of this free resource and register to gain access to these materials by going to www.traineecouncil.org.

It takes less than a minute! Enjoy reading the GSW.

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<th>Clinical Chemistry Guide to Scientific Writing</th>
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<td>Part 5. Show Your Cards: The Results Section and the Poker Game</td>
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Making the link: migrants, refugees and lab medicine

by Bernard Gouget
Chair-IFCC Committee on Mobile Health and Bioengineering in Laboratory Medicine (C-MHBLM)
SFBC-International Committee
General Secretary of the International Francophone Federation of Clinical Biology and Laboratory Medicine (FIFBCML)
Chair-Human Health Care Committee-COFRAC

More than ever before, people are on the move.

A migrant, according the Hellenic Centre for Disease Control and Prevention (HCDCP), is described as someone who makes a conscious, voluntary choice to leave his/her country of origin and who, voluntarily, can return home in safety.

Refugee is defined as the person who does not have this option and is formally owed protection, including access to health services, from the first country of registration of asylum, where the asylum claim has been accepted. Asylum seeker is the person whose claim for refuge is under consideration.

Immigration is reshaping societies and it is one of the great challenges of the globalized world. People fleeing conflict and poverty in Africa and the Middle East are still making the dangerous journey by land or by sea to Europe.

Two years after sparking an unprecedented humanitarian and political crisis, the largest influx of refugees and migrants into Europe since World War II, seems to be slowing down, according to the International Organization for Migration (IOM). 172,000 people, mostly escaping from conflict in the African and Mediterranean region, crossed the Mediterranean into Italy, Greece, Cyprus and Spain in 2017, compared to more than 363,000 in 2016. Decreasing also is the number of deaths in the Mediterranean significantly from 5,143 to 3,118.

If major policies have partially successfully stemmed the flow of migrants into Europe, this has been nothing short of controversial. A slow-down in the European migrant crisis is undoubtedly a relief, especially for host countries. But numbers do not show the whole picture. Migration is still deadly for too many, and for those who survive, it’s no better than the unbearable conditions they fled in.

Too much remains to be done to reach the ultimate goal which is to facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies, according to one of the targets of Sustainable Development Goal 10 by United Nations, which aims to reduce inequality.

Nicole Scholz from the European Parliamentary Research Service considers that migration itself does not count as a risk factor for health, migrants are often comparatively healthy. But the circumstances of migration are often associated with physical, mental and social health disorders. Throughout the process of migration, several aspects may have a negative influence on the migrants health: pre-departure traumas due to suffering from war, conflict, violence, torture, etc.; and during the journey due to the travel mode, and its duration. The most commonly reported problems are hypothermia, gynaecological and obstetric complications, gastrointestinal and respiratory...
illnesses, dermatological, cardiovascular events, metabolic problems and mental and psychosocial illness as well as accidental injuries, small wounds, burns, dehydration and musculoskeletal problems.

Once in host countries, the migrants are often met with substandard or inhumane conditions, uncertainty and instability. Women and young people are vulnerable to sexual violence. They are living on the margins of society because of an inadequate reception system and harmful border policies. This situation combined with language and administrative barriers, makes it extremely difficult for them to access social services and health care, as well as the basics, such as potable water, food and electricity.

The poor hygienic conditions increase the risk of communicable diseases such as water and food borne diseases (salmonellosis, hepatitis A, Cholera). Crowded settings can lead to a higher risk of infections transmitted by the bite of infected arthropods (mosquitoes, sandflies, lice, ticks, fleas, etc.), such as malaria, leishmaniasis, relapsing fever, rickettsial diseases and typhus.

The poor living conditions in crowded refugees centres are associated with respiratory infections: influenza, respiratory syncytial virus, adenovirus. WHO is supporting provision of influenza vaccine to risk groups, irrespective of legal status.

The risk for acquiring tuberculosis or being infected depends on factors such as the incidence in the refugees’ own respective countries. The risk of HIV importation is low but some migrants acquire HIV after their arrival. Sub-Saharan Africans have the highest sero-prevalence of chronic HBV.

The health of those who are suffering from chronic diseases such cardiovascular diseases, diabetes, or cancers can increase the vulnerability because the loss of medication and of psychological strain.

Mental aid is important, many of them have endured physical and emotional trauma and torture. Children, pregnant women and the elderly are particularly susceptible.

There is an urgent need to address the related public health consequences and this, therefore, requires an adequate response from the health players and from the governments.

Prof. Sergio Bernardini, President SIBioC (Italy) organized on 2-4 July 2018, with the IFCC, EFLM, AFCB and FIFBCML representatives the first conference on “Meeting the needs of Mediterranean countries” at the Tor Vergata University-Roma. This event attracted over 270 attendees and 85 Posters. During two days, it was possible to highlight the value of laboratory medicine for a greater effectiveness in the access to healthcare for the migrants.

This conference was “the” place of scientific exchange of knowledge, information and good practices where progress can be made related to priority aspects of migrant health, as well as emphasizing the positive impact of the medical laboratory in the management and their follow up. Initiatives from medical biologist colleagues, who collaboratively developed locally relevant projects addressing migrant and refugee health in Italy, Greece, Syria, Lebanon, Jordan, Algeria, Tunisia, Morocco, were welcomed and encouraged.

The right of everyone to enjoy the highest attainable standard of physical and mental health is established in the WHO Constitution of 1948.

Our understanding of fundamental freedoms and human rights, our concept of what it means to be human; all these things know no borders, whether these are borders of countries or continents. In this sense, we also bear responsibility for what happens in the rest of the world.

The scale of the migratory challenge requires collaborative actions between states, international organizations and cooperation between different disciplines and health sectors. The desire to immigrate is today so strong that the reality of migration represents the future of our new world. It is a global challenge that require a strong response from the international community.

That is precisely why a second edition of this type of conference is important to link between migrants, refugees, laboratory medicine and healthcare needs. It is essential to help to build healthier communities and to tackle health inequalities.
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News from the German Society for Clinical Chemistry and Laboratory Medicine (DGKL)

DGKL bestows ‘Ivar Trautschold Award’ for the Promotion of Young Scientists to Andreas Bietenbeck

by Michael Vogeser
DGKL Secretary
LMU, University Hospital
Institute of Laboratory Medicine
München, Germany

Andreas Bietenbeck has received the “Ivar Trautschold award for the promotion of young scientists” from the German Society for Clinical Chemistry and Laboratory Medicine (DGKL) for his work on quality control.

As Andreas Bietenbeck pointed out in his award speech, quality control in laboratory medicine should be patient-oriented. Instead of determining laboratory artifacts, it should reduce real risk for patients.

Furthermore, quality control methods should be able to distinguish precisely between normal and out-of-control situations. A specific method should attribute errors to root causes to facilitate their quick correction. Lastly, quality control methods need to be easily integrable into laboratory daily routine.

In Germany, internal quality control relies primarily on the evaluation of single measurements of quality control samples. These methods can be easily integrated into laboratory routine, as sample material is commercially readily available. However, lack of commutability can severely reduce their informative value.

Other methods such as “medians”, or “averages of normal” use patient measurements directly. They have no commutability problems but require a large number of measurements.

To take advantage of both approaches, results can be transformed into Z-scores or Z-values. Z-values can then be evaluated with Westgard-like rules or with a new method called “Aggregated Z-values” that works similar to a mean of Z-Values. In a computer simulation (https://github.com/acnb/rSimLab), Westgard-like rules and “Aggregated Z-Values” were able to detect biases better than single medians or single quality control measurements. Aggregated Z-values performed better than Westgard-like rules if a bias affected quality control measurements unevenly.
To evaluate external quality controls, Andreas Bietenbeck retrieved glucose data from the two German External Quality Assessment (EQA) organizations “Instand” and “Reference Institute for Bioanalytics”.

For both point-of-care testing and for measurements performed in central laboratories, the device had the highest influence on measurement performance. In over 10% of the analyzed cases, measurements with the same device but different test strip lots deviated substantially. Although device and test strip lots have such a great influence on measurement performance, they are only poorly recorded in the analyzed EQAs.

For historical reasons, both organizations still use simple tables that often only contain broad device groups to encode a device. However, the ability of EQAs to contribute to standardization, to harmonization, and to post-market surveillance is severely limited if faulty devices cannot be correctly identified.

Therefore international standards such as the “Global Unique Device Identification Database” by the FDA might be a better alternative to specifically encode device and lots.

Another challenge for EQAs is the lack of commutable ring trial materials. Without commutable samples, evaluation according to reference method values is not possible and the EQAs have to resort to so-called device specific consensus values as target values. The calculation of these consensus values removes biases.

Therefore, passing an EQA with consensus values might be easier than intended because the performance specifications are aggregate both bias and imprecision. In his talk, Andreas Bietenbeck stressed the need to develop commutable material for EQA.

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**News from the Confederación Unificada Bioquímica de la Republica Argentina (CUBRA)**

**CUBRA Executive Board elected for 2018-2020**

In August 2018, on occasion of the Assembly of the Ordinary Confederated Council, the Confederación Unificada Bioquímica de la Republica Argentina (CUBRA) renewed its Executive Board and following authorities have been designated for the period 2018-2020:

**EXECUTIVE COMMITTEE CUBRA**

**President:** Dr. María Alejandra Arias (San Luis)
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**Deputy Council Members:** Dr. Carlos A. Di Stéfano (Santa Fe), Dra. Nora B. Pierángeli (Neuquén), Dr. Antonio A. Casado (Prov. of Buenos Aires), Dr. Fernando D. L. Barale (Córdoba)

**Auditors:** Dr. Rosa E. Mansilla (Santa Cruz), Dr. Javier I. Baabdaty (San Juan), Dra. Juana B. Lorenzo (Misiones)

**Deputy Auditors:** Dr. Juan J. Somoza (La Pampa), Dra. Ma. De la Merced Pérez (V. Mercedes, San Luis), Dr. Carlos A. Palacio (Formosa)
The Symposium of Molecular Biochemistry was an inter-departmental academic event, organized by the Rocío Ivette López-Roa, PhD, Adelaida Sara Minia Zepeda-Morales, PhD and Jorge Hernández-Bello, PhD, with the approval, support and collaboration of the Heads of the departments of Exact Sciences and Engineering (Centro Universitario de Ciencias Exactas e Ingenierías, CUCEI), and Pharmacobiology and Molecular Biology and Genomics at the University Centre of Health Sciences (Centro Universitario de Ciencias de la Salud, CUCS) (Dr. Ma. Refugio Torres-Vitela and Dr. José Francisco Muñoz-Valle respectively.)

The theme was science and the clinical laboratory, which can be defined in various ways and which are structurally similar to each other, already catering to different kinds of biological properties of which are occupied by Biochemistry and Molecular Biology in conjunction with physics, mathematics and nano-sciences, and which constitute fields of science with higher growth and technological development in recent years and, in consequence, with great influence in areas such as: health services, medical devices derived from biotechnology, pharmacy among others.

Owing to the importance of institutional interaction between the UDG and international leadership in the field of laboratory medicine and to promote excellence to the profession, Rosa Sierra-Amor, PhD, Regional Representative of the IFCC EB was invited to participate.

Her lecture was devoted to promoting IFCC activities and reinforcing the future of laboratory medicine.

It was of great interest for the audience to learn about the IFCC curriculum developed as part of the IFCC e-Academy project by the committee of Distance Learning, and about the work IFCC has achieved in different areas, mostly in standardization and worldwide education in clinical chemistry and laboratory medicine.

On the other hand, it is important to mention, that the IFCC performs an important role in spreading science and knowledge, through its organization of congresses, conferences and meetings focused on the clinical laboratory specialists, to raise awareness and present the main original findings and best practices in this area of
knowledge, as well as to support with scholarships to its members and collaborators for stays, attendances at conferences and other forums of research.

Based on the need to update the curricula, especially in chemical pharmaceutical biologist career Bachelor degree and Molecular Biochemistry doctoral project, it was important to say that the UDG was interested in future collaboration with IFCC.

The aim of this symposium was to inform the CUCEI and CUCS community, and in particular students from degrees in chemical, pharmaceutical biologist, biomedical engineering, chemistry sciences and medicine, as well in the Molecular Biochemistry doctoral project about the future of laboratory medicine.

Since CUCEI is a major seedbed of graduates who may be candidates to be part of a doctoral program, broadcast through an academic event like this, it represented an excellent opportunity to awaken the interest of students.

It was worth mentioning because of interest in the areas of knowledge addressed at this symposium.

Teachers, medical students and nutrition students at CUCS also attended the event, as well as teachers and students from other universities. The success of this event was very rewarding for us as organizers.

Organizers and Speakers: Jose-Francisco Muñoz-Valle, Ma. del Refugio Torres-Vitela, Rosa Sierra-Amor, Rocio Ivete Lopez-Roa, Ma. Jezabel Vite-Casanova and A. Sara-Minia Zepeda-Morales
In addition, Ma. Jezabel Vite-Casanova, MS, current President of the Mexican Association of Clinical Laboratory Sciences (CMCLabC), spoke about the regulations and accreditation process in Mexico, based on national mandatory and voluntary standards.

The academic programme included several other presentations:

- **Extra synaptic gabadergic receptor and excitability in the neural circuits of spinal cord,**
  by Paulina Osuna-Carrasco, PhD;

- **Nutraceutical with anti-inflammatory effects in murine models with metabolic diseases,**
  by Rocio Lopez-Roa, PhD, Research Professor, Department of Pharmacobiology and Head of the Pharmaceutical Department, and

- **Molecular pathology and translational biochemistry,**
  by Jorge Hernandez-Bello, PhD, a Young Scientist recently accepted as corresponding member of the IFCC TF YS.

The closing remarks were given by Dr. José-Francisco Muñoz-Valle, Head of the Department of Molecular Biology and Genomics at SCUCS, national investigator (SN III) and IFCC National Representative for Mexico (CMCLabC).

Finally, it should be mentioned that the number of attendees to the event exceeded the expectations of organizers, which opens the possibility of planning another similar one, owing to the interest shown by participants in topics related to the clinical laboratory sciences and molecular biochemistry. There were 380 students of the University of Guadalajara, from all campus, and careers related to the microbiology, pharmacology and biochemistry sciences.

As a result of this successful symposium, we hope to have closer interaction with IFCC, as a university and as member of the CMCLabC, a full member society of the IFCC.
SAVE THE DATE - 30 November 2018

Introducing SAACB Endocrine Grand Rounds

A pre-conference workshop to the International Congress of Endocrinology 2018
Presented by the South African Association for Clinical Biochemistry and Laboratory Medicine (SAACB)

An interactive workshop on endocrinology exploring the interface between laboratory medicine and endocrinology and case presentations. The workshop will consist of seminars and 30 minutes case presentations in endocrinology. A call for abstract submissions will be made shortly.
Please send expressions of interest to saacb1@gmail.com to be included in the mailing.

Date: Friday, 30 November 2018
Venue: CMSA, Milner Road, Rondebosch, Cape Town, South Africa
Time: 09h00-16h00

Tentative list of Topics

Problems with hormone determinations
  Current state of affairs: State-of-the-art vs Affordable
    • Limitations of current methodologies: cost vs accuracy
    • Standardisation
    • Traceability – why is it important for the endocrinologist?
    • How are hormone assays standardized and quality assured: EQA

Limitations in endocrine testing: clinical case-based illustrations
  Clinical conundrums: when laboratory results are incongruous with the clinical picture
    • Antibody and Metabolite interferences: avoiding erroneous results
    • Specific assay limitations e.g. intact PTH; hCG; testosterone
    • Challenges with growth hormone assays
    • Medical decision limits and reference intervals (e.g. NMA cut-offs in urine)
    • Pre-analytical factors e.g. biological variation, timing (hypoglycaemic work-up)
    • Effect of analytical variation on interpretation (e.g. DI)
    • Perplexing thyroid function tests

Enquiries: saacb1@gmail.com  Visit www.saclinpath.co.za for more information.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Name</th>
<th>Location</th>
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<tbody>
<tr>
<td>May 19 - 23, 2019</td>
<td>XXIII IFCC - EFLM EuroMedLab</td>
<td>Barcelona, ES</td>
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<td></td>
<td>Barcelona 2019</td>
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<tr>
<td>Sep 10 - 13, 2019</td>
<td>COLABIOCLI Regional Congress 2019</td>
<td>Panama, PA</td>
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<tr>
<td>Nov 17 - 20, 2019</td>
<td>APFCB Regional Congress 2019</td>
<td>Jaipur, IN</td>
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<tr>
<td>May 16 - 20, 2021</td>
<td>XXIV IFCC - EFLM EuroMedLab -</td>
<td>Munich, DE</td>
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<td>Munich 2021</td>
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Calendar continued on next page
## Calendar of events with IFCC auspices

<table>
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<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>Oct 10 - 13, 2018</td>
<td>5th EFLM UEMS European Congress in Laboratory Medicine</td>
<td>Antalya, TR</td>
</tr>
<tr>
<td>Oct 11 - 13, 2018</td>
<td>16th National Congress of Clinical Chemistry</td>
<td>Alexandroupoli, GR</td>
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<tr>
<td>Oct 15 - 20, 2018</td>
<td>7th Biennial Scientific International Conference of the Association of Clinical Chemists of Nigeria (ACCN)</td>
<td>Lagos, NG</td>
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<tr>
<td>Oct 16 - 17, 2018</td>
<td>2èmes Journées Francophones de Biologie Médicale</td>
<td>Paris, FR</td>
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<tr>
<td>Oct 19, 2018</td>
<td>A Multidisciplinary Symposium on “Management of Vitamin D deficiency and Osteoporosis”</td>
<td>Karachi, PK</td>
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<tr>
<td>Oct 23 - 25, 2018</td>
<td>Patologia e Medicina di Laboratorio 4.0</td>
<td>Acicastello, IT</td>
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<tr>
<td>Oct 24 - 26, 2018</td>
<td>XII National Congress of Clinical Laboratory</td>
<td>Bilbao, ES</td>
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<tr>
<td>Oct 24 - 27, 2018</td>
<td>X Congreso Argentino de la Calidad en el Laboratorio Clinico - CALILAB</td>
<td>Buenos Aires, AR</td>
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<tr>
<td>Oct 29 - 30, 2018</td>
<td>5th Congress on eCardiology and eHealth</td>
<td>Moscow, RU</td>
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<tr>
<td>Oct 30, 2018</td>
<td>International Conference on Laboratory Medicine &quot;Laboratory Medicine: 25 Years On&quot;</td>
<td>Padova, IT</td>
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<tr>
<td>Nov 1 - 4, 2018</td>
<td>2nd International Cell Death Research Congress</td>
<td>Izmir, TR</td>
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<tr>
<td>Nov 9 - 12, 2018</td>
<td>18º Congreso Internacional del Colegio Nacional de Bacteriologia</td>
<td>Barranquilla, CO</td>
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*Calendar continued on next page*
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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Nov 13, 2018</td>
<td>Workshop on Alzheimer’s disease &quot;Making the point&quot;</td>
<td>Prague, CZ</td>
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<tr>
<td>Nov 14 - 16, 2018</td>
<td>Promoting Research in the area of Vitamin D</td>
<td>Karachi, PK</td>
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<tr>
<td>Nov 15 - 18, 2018</td>
<td>26th AMBICON Annual Conference</td>
<td>New Delhi, IN</td>
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<tr>
<td>Nov 21, 2018</td>
<td>Réunion LABAC</td>
<td>Paris, FR</td>
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<tr>
<td>Nov 28 - Dec 1, 2018</td>
<td>II International Conference of the Bolivian Society of Clinical Biochemistry</td>
<td>La Paz, BO</td>
</tr>
<tr>
<td>Nov 29, 2018</td>
<td>Place and role of the medical biology and lab medicine in the Health System Transformation Strategy</td>
<td>Paris, FR</td>
</tr>
<tr>
<td>Nov 29, 2018</td>
<td>International Scientific Meeting of the Centre of Metrological Traceability in Laboratory Medicine (CIRME): &quot;Standardization in Laboratory Medicine and Patient Safety&quot;</td>
<td>Milan, IT</td>
</tr>
<tr>
<td>Dec 5 - 6, 2018</td>
<td>4th Annual Meeting, Saudi Society for Clinical Chemistry</td>
<td>Riyadh, SA</td>
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<tr>
<td>Dec 7 - 8, 2018</td>
<td>JBP 2018 - Journées de Biologie Praticienne</td>
<td>Paris, FR</td>
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<tr>
<td>Dec 24 - 27, 2018</td>
<td>ICB 2018 - 2nd International Congress on Biomedicine</td>
<td>Teheran, IR</td>
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<tr>
<td>Feb 7 - 8, 2019</td>
<td>International Congress on Quality in Laboratory Medicine</td>
<td>Helsinki, FI</td>
</tr>
<tr>
<td>Mar 22 - 23, 2019</td>
<td>5th EFLM European Conference on Preanalytical Phase “Preanalytical Challenges - time for solutions”</td>
<td>Zagreb, HR</td>
</tr>
<tr>
<td>Apr 4 - 5, 2019</td>
<td>10th European Symposium on Clinical Laboratory and In Vitro Diagnostic Industry: ‘The Clinical Laboratory in the Pregnancy Monitoring'</td>
<td>Barcelona, ES</td>
</tr>
<tr>
<td>May 19, 2019</td>
<td>International Symposium: Standardization and Recommendations in the Laboratory of Haematology - Satellite Meeting IFCC-EFLM EUROMEDLAB 2019</td>
<td>Barcelona, ES</td>
</tr>
<tr>
<td>Sep 11 - 13, 2019</td>
<td>XXIV Congreso Latinoamericano de Bioquímica Clínica (COLABIOLICI) and XIV Congreso Nacional de Laboratoristas Clínicos de Panamá</td>
<td>Panama City, PA</td>
</tr>
<tr>
<td>Jun 9 - 12, 2020</td>
<td>XXXVII Nordic Congress in Medical Biochemistry</td>
<td>Trondheim, NO</td>
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- Zambia (ZM)
- Zimbabwe (ZW)

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

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- Nepal: Nepalese Association for Clinical Chemistry (NACC)
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- Spain: Asociación Española de Farmacéuticos Analistas (AEFA)
- Turkey: Society of Clinical Biochemistry Specialists (KBUD)
- Ukraine: Association for Quality Assurance of Laboratory Medicine (AQALM)
Publisher
Communications and Publications Division (CPD) of the IFCC

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

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N° 4 – April: by mid March
N° 5 – May: by mid April
N° 6 – June: by mid May
N° 7/8 – July/August: by mid June
N° 9 – September: by mid August
N° 10 – October: by mid September
N° 11 – November: by mid October
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