Successful 14th International Congress of Paediatric Laboratory Medicine in Durban, South Africa – Record number of scholarships and merit awards, diverse global representation, novel scientific program, and charity for children

by Sharon M. Geaghan on behalf of the IFCC Task Force on Paediatric Laboratory Medicine



Aerial view of the Durban, South Africa coastline (courtesy of Grant Pitcher)

The IFCC's Task Force on Paediatric Laboratory Medicine organized its 14th successful Congress in Durban, South Africa, proffering new levels of scholarship grants and research awards, while continuing to attract global delegate representation, offer scientific novelty in programming, and provide charity for local children. One of the Task Force Committee's primary goals was to insure the Congress would be accessible, particularly for African colleagues. The Congress received 120 registered participants, and approximately a quarter (of 74 delegates) were African. The delegates represented a diversity of scientific communities around the globe: Algeria, Australia, Bolivia, Canada, France, Germany, Greece, India, Italy, Japan, Lithuania, Netherlands, Nigeria, Norway, Oman, Pakistan, Poland, Qatar, Russian Federation, Saudi Arabia, Singapore, South Africa, Switzerland, Thailand, Turkey, United Arab Emirates, United Kingdom, and the United States.



Choir: The Key of Hope children's choir performed at the Opening Ceremony for the Paediatric Congress in Durban

Scholarship grants were key to insuring accessibility, and we are grateful to the Society for the Study of Inborn Errors of Metabolism (SSIEM) for their generous support of 22 educational grants. SSIEM, founded in 1963, aims to foster the study of inherited metabolic disorders. It has over 1400 members and is truly international, with representation from more than 75 countries. A registered charity in the UK, the SSIEM publishes The Journal of Inherited Metabolic Disorders (see ssiem.org). The Society also monitors training in pediatric metabolic medicine on behalf of the European Academy of Paediatrics. Dr. Timothy Lang was instrumental in securing the travel grants, € 500 each, which were allocated to support individuals with interest in inherited metabolic disease. After publicity and recruitment of candidates through calls for applications by the Task Force, the Organizing Committee was able to offer every applicant a grant this year.



IFCC Task Force for Pediatric Laboratory Medicine
L-R (front): Tim Lang, Vijay Grey, Tze Ping Loh,
Magdalena Turzyniecka, Sharon Geaghan, Klaus Kohse;
L-R (back): Martin Hersberg, Tahir Pillay

A larger number of monetary research prizes was a notable feature of this year's Congress, which included Best Poster prize for Corey Markus and team (Singapore, Australia) for "Derivation of data-driven, outcome-based critical values"; and second-place finalist Poster prize for Martin Hersberger and team

(Switzerland) for "Development of a LC-MS/MS Method for the Quantification of 16 Steroids in Plasma from Children".

Merit awards were also presented for five additional outstanding posters (in alphabetical order): Sibtain Ahmed (Pakistan) for "Establishment of Reference Intervals of Thyroid Stimulating Hormone in Neonates-An Experience from Pakistan", Randa Alratrout (Saudi Arabia) for "The Frequency of Inherited Metabolic & Endocrine Disorders in the Eastern and North-Western Jawf Provinces of Saudi Arabia: Four Years' Data from the Newborn Screening Department , Ministry of Health, Dammam", Marta Camilot (Italy) for "1st and 99th percentiles of aminoacids and acylcarnitines measured in dried blood spots collected at two and four weeks of life from prematures and/or low birth weight newborns for extended newborn screening"; Busadee Pratumvit (Thailand) for "Close Correlation between Arterial and Central Venous Lactate Concentrations of Children in Shock: A Cross-sectional Study"; and Natalia Simakova (Russian Federation) for "Reference intervals for reticulocyte parameters of infants during their first year after birth using Sysmex XN-1000 hematology analyzer".

Of 52 accepted abstracts, seven were offered oral presentation The Best Oral Presentation prize (for investigators over 40 years of age) was awarded to Chris Vorster (South Africa) for "Justification for and perceived barriers to the implementation of a newborn screening program for South Africa". The Best Oral Presentation prize (for young investigator, up to 40 years of age) was awarded to Sonja Bartlett (Canada) for "A basic metabolomics investigation of the effect of nanogold based treatment: Potential applications/consequences in inborn errors of metabolism." In total, monetary prizes were provided to nine winners at the Congress. Veteran judges noted an especially high quality of abstracts and posters for this Congress, combined with excellent oversight by Dr. Tze Ping Loh over the process and prizes.

Scientific programming focused on novel technologies and breaking news topics of paedatric interest, which included four distinguished plenary speakers in the following scientific realms: recent experience



SSIEM scholarship recipients gather for the Paediatric Congress

with the Ebola Virus in West Africa (Dr. Janusz Paweska), use of point of care to improve patient care (Dr. Sverre Sandberg), the microbiome in early life (Dr. Michael Surette) and the genetics of calcium metabolism disorders (Dr. Rajesh Thakker). Additionally, nine symposia featuring 32 speakers were offered in the general paediatric interest areas of newborn screening; endocrinology; panel discussion of critical values; reference intervals; next generation sequencing; nutrition and immunology; bone metabolism; select oral platform presentations; and general pediatric laboratory testing.

An initiative of this Congress's Organizing Committee was to identify an

opportunity for charitable sponsorship to a local community of children, in keeping with the paediatric mission of the Task Force. Accordingly, Drs. Tahir Pillay and Sharon Geaghan arranged the opening ceremony to be graced by the Key of Hope Choir, a group of young girls and boys whose voices and joyful energy welcomed attendees and made spirits soar. In return for this gift, the Task Force donated to this meritorious organization, which helps children that have been orphaned by or otherwise affected by HIV and AIDS in South Africa. Specifically, over 1200 children are visited in their home every week, over 200 children are sent to school every year, and more than 300 children's rights cases are advocated for annually by this organization. For others who may wish to make their visit to South Africa into a lasting relationship, and might be interested in supporting a Durban-based fountain of goodwill and hope, please visit its website: https://keyofhope.org/.

Financial support for the Congress, a satellite meeting presented in advance of the IFCC WorldLab on a triennial basis, was independently recruited by the TF-PLM Committee members. The efforts once again re-



SSIEM scholarship recipients network during the Paediatric Congress

sulted in excellent funding, and our gratitude extends to Platinum level sponsor, Alexion Pharmaceuticals; six Gold level sponsors (in alphabetical order): American Association of Clinical Chemistry (AACC), Roche Diagnostics, Canadian Society of Clinical Chemists (CSCC), Deutscheland Gesellschaft für Klinische Chemie und Laboratoriumsmedizin/German Society for Clinical Chemistry (DGKL), the Society for the Study of Inborn Errors of Metabolism (SSIEM), and the Swiss Society of Clinical Chemistry (SSCC); and Bronze level sponsor, Sarstedt. Additional sponsorships included the Royal College of Pathologists (RCP), South African Medical Research Council (SAMRC) and the Federation of South African Societies of Pathology (FSASP).

Committee members include Chair, Michael Metz (AU) and Vice-Chair Timothy Lang (UK); Immediate Past-Chair Vijay Grey (CA); Past Past Chair Klaus Kohse (DE); and (in alphabetical order): Sharon Geaghan (USA); Martin Hersberger (CH); Patti Jones (USA); Tze Ping Loh (SG); Magdalena Turzyniecka (ZA) and Tahir Pillay (ZA).

For the magnificent programme design (Dr. Magdalena Turzyniecka) and core leadership for the Durban Symposium, the trio of Drs. Michael Metz, Tahir Pillay and Magdalena Turzyniecka are heartily thanked.

The 14th Congress met the longstanding mission statement of the IFCC Task Force on Paediatric Laboratory Medicine: *improving the diagnosis and management of patients from birth to adolescence*. Looking ahead three years to 2020, the TF-PLM will continue its mission in Seoul, South Korea.

14TH INTERNATIONAL CONGRESS OF PAEDIATRIC LABORATORY MEDICINE: TESTIMONIALS RECEIVED FROM SEVERAL AWARDEES (excerpts)

To have a conference of this magnitude in my own country was already an inspiration to me...The lectures were topical, vast and interesting and the presenters made an extra effort to engage and discuss which was refreshing. The intimate setting allowed for networking & open discussion outside the plenaries. In a short space of time a lot of ground was covered and it was interesting to see how far other countries have progressed ...I am grateful for the SSIEM travel bursary which has allowed me the opportunity to broaden my horizon and look to the future especially for my country & its health amongst our most vulnerable population. (Ashandree Reddy-ZA)

The XIV International Congress of Paediatric Laboratory Medicine (ICPLM) was a great experience and I am truly grateful for the SSIEM travel scholarship that made it possible for me to attend the conference .I have gained insights to improve laboratory service especially in children in my hospital and my country. I returned from the conference with a great deal of inspiration, enthusiasm and ideas to apply with pediatric laboratory service and expand my knowledge to laboratory professional personnel in the country. Thank you very much to give this great opportunity. (Best regards, Busadee Pratumvinit, MD-THAILAND)

Thank you again for this incredible opportunity to attend an international conference in paediatric laboratory medicine, specifically focused on inborn errors of metabolism, for which I have a particular passion. ...I thoroughly enjoyed all of the sessions at the ICPLM conference, as well as the opportunity to catch up with distant colleagues and to meet and interrogate the great minds in this field. The smaller numbers attending the conference meant that these individuals were more accessible to those of us that are junior and who would normally not have an opportunity to come close to them, let alone to sit at lunch with them! The conference was superbly organized, with all sessions running smoothly and to time. I thank you again for a most valuable experience. (Kind regards, Justine Cole-ZA)

...The congress had a lively opening ceremony where the Key of Hope children's choir entertained us with enthusiastic renditions of popular local songs. The children's smiling faces set the tone for the academic programme leaving delegates also smiling and satisfied with the intellectual content of the congress ...There was a small group of attendees which allowed registrars and other trainees greater opportunity to network more meaningfully with all categories of laboratory staff including consultants and experts in their fields. I wish to thank the organizers for a highly enjoyable programme, for reducing the registration fee for African delegates and SSIEM for granting me a travel grant despite being an older delegate. (Jocelyn Naicker-ZA)

I was the fortunate recipient of a travel scholarship from SSIEM...I would also like to take the opportunity to thank the Organising Committee for recruiting these world class speakers for the Congress...I was welcomed to an emotional opening ceremony, with an uplifting performance from the children's choir, Key of Hope. Key of Hope provides long term mentoring, allowing children to thrive as citizen's and potential leaders, to combat the future challenges Africa faces. We were then provided with stark evidence of the

tragic reality of life in Africa and risks healthcare workers face (both local and foreign), with Prof. Janusz Paweska opening plenary lecture discussing the ecological and epidemiological aspects of the recent Ebola outbreak in west Africa from 2013 to 2015...the work done by Prof. Janusz Paweska team gives hope to rapid and effective control of future viral outbreaks....I would like to thank the SSIEM

for funding 22 travel scholarships, the largest number of scholarships awarded in the history of the ICPLM, of which I was fortunate enough to be granted one. I have retuned back Australia having made many wonderful new friends and fostering new collaborative partnerships into the future. (Corey Markus-AU)

How can you explain traceability in laboratory medicine to your clinician users?

by Graham Beastall

on behalf of the Joint Committee for Traceability in Laboratory Medicine



How can you explain traceability in laboratory medicine to your clinician users?

A recent article by Graham Jones in his local hospital journal provides one approach to answer this question.

Clinicians who use laboratory medicine services take it for granted that the laboratory provides 'the right result'. They believe that the result they get back from their laboratory is both accurate and capable of comparison with results obtained from other laboratories or retrieved from the medical/scientific literature. It comes as a shock to most clinicians to learn that for many results they receive there is significant between-method variability. In some cases, the variability may be such that clinical outcomes and even patient safety may be compromised if they compare the results that they get from their local laboratory with literature or clinical practice guideline results that were obtained using a different method.

Traceability in laboratory medicine (TLM) is the key to reducing between-method variability. IFCC is a founder member of the Joint Committee for Traceability in Laboratory Medicine (JCTLM), which "supports world-wide comparability, reliability and equivalence of measurement results in laboratory medicine, for the purpose of improving health care and facilitating national and international trade in *in vitro* diagnostic devices".

The website www.jctlm.org provides freely available resources to help laboratory medicine specialists to understand TLM and to train others to appreciate its importance. These resources take the form of webinars, PowerPoint presentations, symposia at scientific meetings and publications.

As part of the support provided to its users the clinical laboratory has a responsibility to alert clinicians to between-method variability and the pitfalls that could arise. At the same time clinicians can be reassured that there is a global effort to reduce the problem to make results more comparable. The article by Graham Jones from St Vincent's Hospital in Sydney, Australia provides an excellent template for communication with clinician users. Entitled 'Chemical Pathology – Getting the Right Answer' the article is written in non-technical language using examples that may be understood by clinicians and other healthcare professionals. Key references are included.

The article is published in the St Vincent's Clinic, Proceedings (Sydney) Volume 25, 1 December 2017. It may be downloaded here. The article may be reproduced or modified for local use as long as an acknowledgement is provided to the original publication. The article provides you with an opportunity to educate and support your clinical users.