Editor: Edgard Delvin Ph.D
CHU Sainte-Justine
Centre de Recherche
3175 Côte-Ste-Catherine
Montréal, Québec
H3T 1C5, Canada
e-mail: edgard.delvin@recherche-ste-justine.qc.ca

March –April 2010 issue

News from Regional Federations and National Associations International Conference on European Education in Laboratory Medicine and Recognition of Professional Qualifications – March 25-27th 2010, Warsaw, Poland

Contributed by Grazyna Sypniewska, Editor in Chief of the IFCC eJournal and Chair of the Conference Scientific Committee

Speakers: From right to left: Vladimir Palicka, Victor Blaton, Grazyna Sypniewska and Katarzyna Chmielewska, Deputy Director, Department of Science and Higher Education, Polish Ministry of Health.

Grazyna Sypniewska

The international Conference "European Education in Laboratory Medicine and Recognition of Professional Qualifications" was held on March 25-27th in the Ministry of Health, Warsaw, Poland. The Conference, under the auspices of IFCC, was organized by the Polish Chamber of Diagnosticians under the leadership of its President Dr Henryk Owczarek, and the Polish Ministry of Health. We had an honor and pleasure to host almost

150 participants from all over the world, mostly from Poland but some from Czech Republic, UK, Montenegro, Austria and Africa.

The conference was divided into four sessions during which participants had an opportunity to listen to presentations given by invited speakers who came from 12 European countries: Belgium (prof. V. Blaton), Czech Republic (prof. V. Palicka, prof. J. Drsata), France (Dr S.Zerah), Ireland (M.Culiton), Italy (prof.G.C.Guidi), Norway (P.Haugum), Poland, Portugal, Slovakia (prof.G.Kovacs), Spain (prof. J.Queralto), Sweden (Dr M.Silvestri), UK (Dr J.Mc Murray, A. Lubasinska and R. Houghton) and outside Europe from Croatia (prof. A.M.Simundic) and Serbia (prof. N.Majkic-Singh). During the first session on "Teaching and Training of Laboratory Professionals", chaired by Prof. V. Blaton (BE) and Prof. G. Sypniewska (PL), the pre- and post-graduate teaching and training curricula in laboratory medicine in Serbia, Czech, Italy, Belgium, Spain, Poland and Slovakia were presented and discussed. The second and third session were dedicated to different specializations in the Field of Laboratory Medicine for Medical Doctors and Diagnosticians in Poland, to e-learning platforms and public sources on laboratory medicine in the internet (Labtestonline project).

The last session on "Recognition of Professional Qualifications", chaired by Prof. R. Danielewicz from the Ministry of Health, included presentations from Croatia, France, UK, Ireland, Norway, Sweden, Serbia and Poland was followed by a vivid discussion. Participants appreciated the opportunity to share their experience and discuss most burning issues concerning recognition of professional qualifications. It was emphasized by all participants that in the view of the free movement of professionals within the EU, in accordance with the 2005 European Directives, the main aim is to ensure a high quality of professional standards and practice in the field of Laboratory Medicine. Hosts and participants of the conference expressed their hope that the conference will trigger future cooperation among participating countries. After the conference participants were invited to visit the Central Medical Library Museum and Warsaw Rising Museum.

IFCC Task Force for Young Scientists

In this issue of the eNewslettter, we highlight the opinions and vision of young scientists through a collection of texts that they have provided and that have been assembled by Dr. Damien Gruson.

Edgard Delvin eNewsletter Editor

Contributed by Damien Gruson, eNewsletter Working Group Member

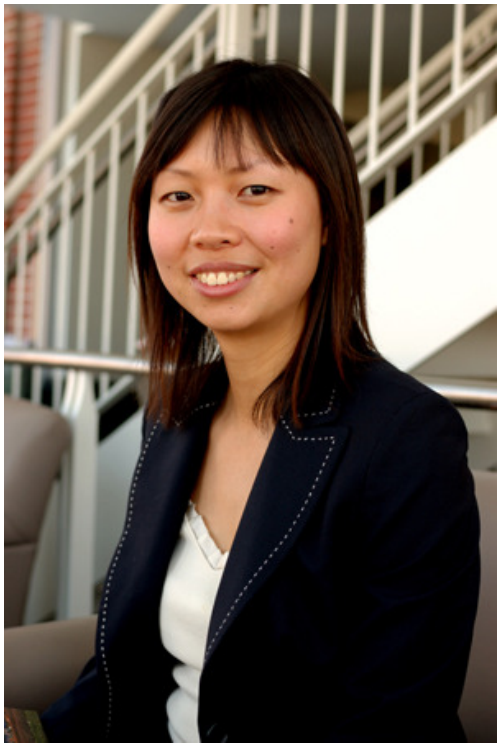
IFCC has released at the beginning of 2010 a Task Force for Young Scientists. The aim of this Task Force is to ensure that young scientists make a significant and growing contribution to the activities of IFCC and to the promotion of laboratory medicine at the center of healthcare. Here are opinions of young scientists from different areas over the world. We would like to recall that every young scientist is welcomed to participate to the task force activities and to improve this dynamic movement.

Lab vision and expectations for the future: the young scientists opinion.

Andriv Kost, Ukraine

Accreditation should be based on inspection visits and peer review. The aims of the accreditation system should include improvement of standards of practice through dissemination of information and through continuing professional education. Standard-setting and the inspection process should be implemented by accreditation bodies in which medical and scientific professional societies are strongly represented.

Government agencies or health insurance organisations should participate in these bodies to the exten necessary to ensure acceptance and public accountability of the accreditation system. The accreditation system should be revised regularly. The major responsibility for standard-setting remains with the medical and scientific professionals engaged in clinical laboratory work. The standards should include: organisation and administration, staff qualifications (there must be sufficient staff with appropriate education and training, with provision for continuing education and assurance of staff competencies. Staff performing testing should have post-secondary education in appropriate scientific disciplines, and training in laboratory procedures. Laboratory directors may have initial university qualifications in medicine or science, but must have specialised post-graduate professional education and training in clinical laboratory work), quality policy (internal and external quality assurance procedures, and systems evaluation, must cover the preanalytical, analytical and postanalytical phases of sample analysis or examination). It is necessary to facilitate the creation of networks for the exchange of information on effective laboratory practices, improve decision making and health care policy through evidence-based recommendations, and develop new systematic methods to conduct laboratory medicine quality improvement evidence reviews, conduct systematic evidence reviews to identify what works in laboratory medicine.



Danni Meanni, USA

Still transitioning into my new role as Director of General Chemistry Laboratories after my two years of fellowship training in Clinical Chemistry, I wouldn't say that I have a vision. But I do have a few related thoughts for the future of Laboratory Medicine. First of all, I believe the future lies in people. People, who work in clinical labs, direct the labs, discover new tests and translate them into clinics, develop diagnostic tests that have good analytical and clinical performance, and promote the tests for patient care, all play

important roles. Laboratory Medicine would not prosper without any of them. Therefore, making sure we have good pipelines of young people that will excel at their jobs is very important. This could be potentially achieved through better education/continuing education, improved in job satisfaction, fostering young leadership in all areas of Laboratory Medicine and more. Second, I believe that lab automation, LEAN, and middleware will continue to shape up our daily practice. All of them will help improve productivity and reduce TAT, which will be translated into better service to physicians. Last, I believe in translational research that applies scientific knowledge in novel ways to create diagnostic tests. As a researcher, I know this is easier said than to be done. There are many layers of difficulties. One of the biggest ones is shortage of funding for long-term commitment of such high-impact and high-risk undertaking. I believe the future of Laboratory Medicine lies in marriage of private-sector investment, rather than government funding, with the talents of scientists to develop more innovative tests for unmet medical needs.

Andjelo Beletic, Serbia

An attempt to briefly describe a vision of clinical laboratory future, from a young laboratorian standpoint, is a rather challenging task. The indisputable advantage constantly facing young clinical laboratorian with special responsibilities is that of serving as a liaison between basic biomedical and clinical sciences. New opportunities are constantly arising, but each of them should be evaluated concerning educational requirements and possibilities for optimal attainment. The absolute prerequisite for successful fulfilling of young laboratorians' expectations is

appropriate and continuous education. The fact that laboratory medicine is a multidisciplinary field focuses the postgraduate education on those aspects, which had been less represented in undergraduate curricula. In such manner, young laboratorians will become fully capable to successfully accomplish tasks, both in routine and scientific work. The implementation of innovative tests is a particularly demanding task for young laboratorians, who require high degree of knowledge and experience. One of them is the establishment of standardized protocols for laboratory diagnosis and monitoring various diseases. Such "disease oriented" laboratory protocols should include methods originating from different branches of laboratory medicine. Precise algorithms for their use and intensive communication with clinicians are mandatory for the accurate use of such protocols, which would yield substantial benefits both in prevention of disease and treatment of affected individuals. Concerning the legislative aspects of laboratory medicine, continuous education in the field of laboratory accreditation is mandatory for each young laboratorian. Special efforts should be made to document each "state-of-art" activity in laboratory medicine concerning the ISO Standards, QLP and QCP requirements.

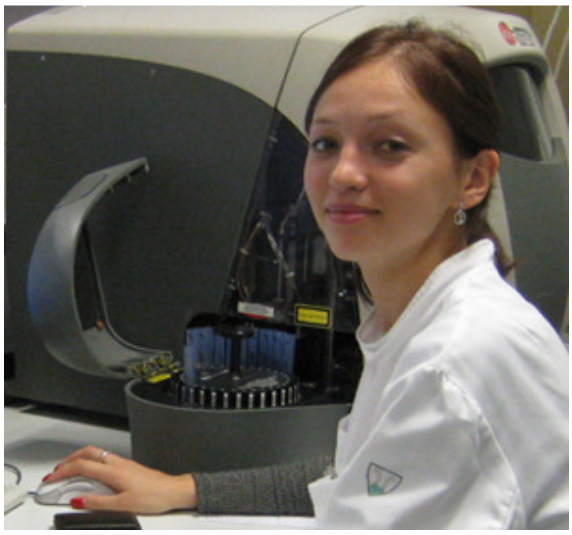
Pradeep Kumar Dabla, India

Clinical laboratories represent an area of healthcare that has always undergone major changes because of technological advances as a result of research on the fundamental pathogenesis of diseases and the development of new methods for diagnosis and prevention. It is essential to realize the impact of laboratory tests on the improvement of management and of patients' outcomes. Instead of concentrating only on the technical performance, laboratory professionals should value the associated clinical information of tests. This requires the laboratory scientists to have knowledge in a diverse group of medical specialties with organizational and leadership skills to advise their clinical colleagues in regard to the appropriate test selection and interpretation. Such examples are HbA1c in diabetes and HDL as a biomarker in dyslipidemias. In recent decades, there have been striking changes in automation and informatics. Cost savings have been realized by creation of central core laboratories and addition of automated robotic pre-analytical specimen handling. Revolutionary image management systems may allow archiving of clinical

cases and diagnostic tests results along with the traditional text descriptions and diagnosis. Telecases will link smaller centers with expert consultants in tertiary centers and connection to digital hospital infrastructure. Continued improvements in biosensor technology and miniaturization will increase the ability to test for many analytes at, or near the patient. Nanotechnology is also a promising tool with the development of industrial lower-cost nanochips, carbon nanotubes, nanofluidics and nano-optics that will lead in the forthcoming years to labs-on-chip. These will be applied to a variety of laboratory fileds such as genetics cytogenetics and molecular diagnostics (proteomics and functional genomics) and pharmacogenetics. Thus, laboratory medicine is embracing an increasingly vast domain and will impact on clinical outcomes in terms of quality, satisfaction and cost.

Evgenia Konsta, Greece

I am a young scientist (Chemist, MSc in Clinical Chemistry, PhD) working in the field of clinical chemistry and laboratory medicine as a researcher, specialized in flow cytometry, in a Greek Universital Hospital of Athens. Immunophenotyping by flow cytometry has become standard practice in the evaluation and monitoring of patients with hematological malignancies and other diseases. Therefore, instrument and methodological quality control procedures have become absolutely necessary. Today, every “flow cytometrist” recognizes that continuous improvement in the quality of the information provided by flow cytometric analysis should be a driving principle in every laboratory. Each flow cytometry laboratory could incorporate in the internal quality control performance evaluation as well as the lymphocytes immunophenotype method validation. A future aim is the validation of other diagnostic or investigation tolls based on this technology One such example is the use of flow cytometry for the determination of NK and T lymphocytes (effector cells) cytotocicity against leukaemic cells and/or of cancer cells (target cells). The successful study cytotoxic lymphocyte subsets will have direct application in the clinical laboratory in the sector of stem cells transplantation. Finally in the future, I would like to participate in scientific, clinical and educational meetings as well as to share experience of laboratory medicine and other healthcare practice around the world, that IFCC Task Force for Young Scientists (TF-YS) will provide.



Ekatarina Rusanova, Russia

We need to assure that young laboratory scientists to be more proficient in the medical field and yet be well informed of latest technology development. This requires that basics of the laboratory rules be thought and that newcomers in the clinical laboratory field be confronted with new technology and innovations. This has to be done in conjunction with quality control and quality assurance platforms that will ensure patient safety and quality of care. Exchanging knowledge and experience between laboratory professionals from different countries is the guarantee of a common success. This requires, among other things, that the number of workshops be increased.. This is how I see the laboratory environment in the future:

1. More young scientists. Youth is the future;
2. Wider world exchange of experience;
3. Better visibility of clinical laboratories by lay people;
4. Increased data sharing to ensure better clinical research;
5. Increased number of training sessions for Russian laboratories: 2 or 3 per year instead of 1.

Welcoming new corporate members

I have the pleasure to announce that the following corporate member has joined the ranks of IFCC as Corporate Members:

SCIPAC – 25 years of progress and growth

SCIPAC provides a wide selection of human proteins, disease plasma and depleted serums and antibodies for the worldwide clinical diagnostics manufacturers.

Diagnostics assays are a major component of modern medical examination and many hospital laboratories across the world use diagnostics kits containing SCIPAC components. With "Raising the Standard" as a key pursuit they have ISO 9001 and 13485 registration and a constant striving for better standards of production and customer service. This is appreciated by SCIPAC customers and reflected in the company's expansion and reach. Assay manufacturers in over 30 countries now use their products, with 60% of sales to the USA. Expansion, in both bulk sales and increased product range, has meant steady growth with sales have doubling in the past three years. The aim of the founders to provide the complete SCIentific PACkage has been fulfilled very successfully.

The link with academia has always been highly valued and has been expanding over the past few years. Sunny-Lab.com is a new business venture, which enables the researcher to obtain smaller packages by direct credit card purchase. This e-commerce site also encourages academics to share information and get feedback on their work. An exciting new venture for a visionary, outward looking company.

SCIPAC is situated at Sittingbourne, 40 miles southeast of London.