



OUR MISSION IS TO BE THE LEADING ORGANIZATION IN THE FIELD OF CLINICAL CHEMISTRY AND LABORATORY MEDICINE WORLDWIDE

eNewsletter



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EDITORIAL: IFCC CONGRESS AND CONFERENCE DIVISION PROGRAM UPDATE

Prof. Albert D Fraser, Chair of the IFCC Congress and Conference Division



The IFCC offers educational programmes and supports the presentation of new advances in clinical aspects and research in our discipline through the regional and international congresses of clinical chemistry and laboratory medicine. The Congress and Conference Division (CCD) has the mandate to coordinate all congress and conference activities for the federation. Our activities include:

1. Monitoring of the organization and development of the international congresses of Clinical Chemistry and Laboratory Medicine (ICCCLM). CCD is focused on the upcoming triennial international congresses scheduled for Fortaleza, Brazil (IFCC Worldlab 2008 ICCCLM) from 28 September – 02 October 2008 and the IFCC Worldlab 2011 scheduled for Berlin, Germany. Prof. U Tuma, a CCD member from Brazil, is the CCD liaison for the IFCC Worldlab 2008 ICCCLM in Fortaleza, Brazil. National societies were recently informed that they can bid to host the 2014 Congress now!

2. Monitoring the organization of the four regional congresses of clinical chemistry and laboratory medicine (RCCCM). Since 2005, a CCD member has been a full member of the organizing committee for each regional and international congress. CCD participation will assure that there is always someone speaking for IFCC on the organizing committees and providing IFCC support and advice to each congress organizing committee. For example, in the Asia Pacific region, CCD member Dr. Sunil Sethi from Singapore is the CCD liaison for the Asian Pacific Congress of Clinical Biochemistry in Beijing, China held in October 2007

3. Oversight and management of the triennial IFCC General Conference. Approximately half way between each international congress, an IFCC General Conference is held. These conferences are scheduled at a time and location where each individual IFCC working units can get together for division and working group meetings and offer an opportunity to learn about other IFCC programmes. Representatives of each national society member and corporate members of IFCC are invited to attend the general Conference. The location for the next General Conference (2008) is Antalya, Turkey in April 2008.

4. CCD is responsible for reviewing applications from national society member meetings and other scientific meeting organizers who apply for IFCC auspices for their conference and congresses. Granting of IFCC auspices is straightforward and is based primarily on the scientific content of meetings which must be open to all scientists. IFCC auspices can be applied for by completion of a one page form available on the IFCC web site. Two major benefits of obtaining IFCC auspices is that your meeting announcement is sent out electronically to a very large IFCC distribution list at no cost and your meeting is also able to use the IFCC logo in promotional material.

6. Selection of future IFCC Worldlab sites CCD developed a point rating system that is used when evaluating the member country applicants for future IFCC Worldlab congresses. This system is transparent to member countries applying to host future IFCC Worldlab congresses (ICCCLM). It is sub-divided into five categories that are: 1)

Participation; 2) Facilities; 3) Accommodation; 4) Financial and 5) Miscellaneous. The application and point system are available for review via a link on the IFCC web site: [ICCLM_Guidelines_2004_Revised_May_2005.pdf](#)

National societies were recently informed that they can bid to host the 2014 Congress now!

As of October 2007, there are six CCD executive committee members: Ulysses Tuma (Brazil), Tomris Ozben (Turkey), Sunil Sethi (Singapore), Istvan Vermes (Netherland), Patricia Noterman (Corporate member), the EB representative Daniel Mazziotta (Argentina) and the Chair, Albert D. Fraser (Canada)

NEWS FROM NATIONAL ASSOCIATIONS AND FEDERATIONS

3rd FESCC Symposium for the Balkan region

Belgrade, September 20-22, 2007

Contributed by Professor Dr Nada Majkić-Singh, President Society of Medical Biochemists of Serbia and Director Institute of Medical Biochemistry Clinical Centre of Serbia Belgrade, Serbia

The 3rd FESCC Symposium for Balkan Region entitled "Theory and Application of Evidence-Based Laboratory Medicine", held September 20–22, 2007 in Belgrade, was jointly organized by the Society of Medical Biochemists of Serbia, Institute of Medical Biochemistry of the Clinical Centre of Serbia, and the Committee on Evidence-Based Laboratory Medicine of the International Federation for Clinical Chemistry and Laboratory Medicine (IFCC). The Symposium was held under the auspices of the IFCC, European Federation for Clinical Chemistry and Laboratory Medicine (EFCC) and the Balkan Clinical Laboratory Federation (BCLF). The Symposium for Balkan Region is organized in Belgrade on a regular basis, since Belgrade has been chosen as the regional centre by the EFCC with the purpose of hosting meetings dealing with the education and promotion of experts in the field of Laboratory Medicine in the Balkan region.

The 3rd Symposium focused on the application of Evidence-Based Laboratory Medicine, as part of Evidence-Based Medicine, with the aim of introducing to the experts from the Balkan region the possibilities of selecting best laboratory evidence, that is, laboratory diagnostics, and applying them both in diagnostic procedure and in the treatment of patients.

Some two hundred participants from Serbia and the Balkan region attended the meeting, which was opened by Professor Dr Nada Majkić-Singh, president of the

Society of Medical Biochemists of Serbia. Professor Dr Victor Blaton, EFCC president, spoke about the new organization of the EFCC and about its goals, and Professor Dr Rita Horvath, Chair of the Committee on Evidence-based Laboratory Medicine and EFCC President Elect, introduced the activities of the IFCC-EBLM Committee to the participants, as well as the content and purpose of the Belgrade Symposium.



The Society of Medical Biochemists of Serbia that coordinated the Meeting in cooperation with Professor Victor Blaton, EFCC President, and Professor Dr Rita Horvath, chair of the IFCC C-EBLM organized the symposium into three Sections in which the lecturers, members of the EBLM Committee, presented their own experiences as well as the opinions and conclusions of the EBLM Committee in reference to the following topics:

- What is evidence-based laboratory medicine? (Rita Horvath, Hungary);
- How to ask the right questions? (Dunja Rogić, Croatia);
- Principles about searching the literature (Biljana Kosanović, Serbia);
- How should you read an article about a diagnostic test? (Sverre Sandberg, Norway);
- Simple statistics used in diagnostic test evaluations (Diler Aslan, Turkey); What is a systematic review and how can it be performed?, and Evidence-based monitoring (Rita Horvath, Hungary);
- How to appraise guidelines? (Demonstration of the use of the AGREE Instrument with practical examples) (Rita Horvath, Hungary);
- Is there a correlation between the methodological quality and the validity of content of guidelines? (Joseph Watine, France);
- Special subjects to be addressed in diagnostic guideline compared to therapeutic guidelines (Wytze Oosterhuis, The Netherlands);
- How to implement EBLM in every day practice? (Sverre Sandberg, Norway).

Experiences in Evidence-Based Laboratory Medicine in the Balkan region were shared by local speakers, i.e. from Serbia by Svetlana Ignjatović and Nada Majkić-Singh, from Romania by Manole Cojocaru, and by Diler Aslan from Turkey.

The participants in the Symposium were given the opportunity to learn first-hand from top lecturers about the principles on which Evidence-Based Laboratory Medicine is based, as well as about the application in practice of evidence and protocols in the field of laboratory medicine. The fact that this Symposium has for the first time allowed the "philosophy" of the principles of EBLM to spread in this part of Europe only raises its significance.

Owing to nice weather conditions, our distinguished lecturers joined the Belgrade Sightseeing Tour, enjoyed in the nice view from Kalemegdan fortress to the mouth of River Sava and Danube, and had the chance to experience traditional Serbian hospitality, offered to them by the Society of Medical Biochemists of Serbia, as their host.

REPORT FROM THE 6TH ROMANIAN NATIONAL CONGRESS OF LABORATORY MEDICINE

Contributed by Dr. Manole Cojocaru, President of the Congress



The 6th National Congress of Laboratory Medicine, under the auspices of IFCC, FESCC, BCLF and WASPaLM, and under the high patronage of the Academy of Medical Sciences, was held in conjunction with the 2nd Symposium of Immunopathology and the 2nd National Congress for Clinical Laboratory Assistants from October 11-13, 2007. The venue was the Cercul Militar in the special ambiance in the beautiful city of Sibiu (a 2007 European Cultural Capital together with Luxemburg) localized in the center of Romania. Sibiu is both extraordinary and miraculous. Founded over 800 years ago, Sibiu has a fascinating history, enriched by cultural, ethnic and religious diversity, for which it is well known. The venue offered a unique opportunity to interact intensively with colleagues of various specialties: molecular biology, hematology, microbiology, immunology, clinical chemistry and genetics.

Thanks to the major efforts of and the excellent organization by the Romanian Society of Laboratory Medicine (RSLM), many of our colleagues have attended the congress that translated into friendly exchanges between laboratory medical professionals in Europe and USA. RSLM is a growing society with active memberships that embraces all aspects of laboratory medicine. We have invited world experts who

presented paper and shared their views on clinical laboratory. The challenges in our discipline have never been more exciting. However, in order to meet them, we need to learn from each other and create mechanisms through which we can work together to accomplish the many formidable tasks that will demand our best.

The 6th National Congress, the largest Romanian gathering of laboratory medicine professionals that we experienced, was a frank success and was well attended by mass-media representatives. All participants joined efforts in continuing to improve the development of laboratory medicine. Updating the Romanian professionals, the first goal of the meeting, was assured by personalities from a number of European countries. Their presence ensured the international nature of the Congress.

The opening ceremony was held on the evening of 11th October at the Cercul Militar where the President of the congress delivered his welcome speech to over 400 participants from the whole country. He emphasized the importance of laboratory medicine and the progress of evidence-based medicine (EBM). Professors Elmer W. Koneman, Michael Oellerich, Bernard Gouget, Enrico Granieri, Nada Majkic-Singh received a Honorary Membership Diploma of the RSLM.

Professor E. Koneman, a well-known supporter of young doctors and a promoter of important international studies in Romania, honored the event by his presence. The latest knowledge about laboratory medicine were discussed by prestigious scientific personalities: E. Granieri (Italy), M. Cojocaru (Romania), Camelia Gurban (Romania), A. Udristoiu (Romania), V. M. Popilian (Romania), Camelia Grigore (Romania), Dragana Begovici (Serbia), M. Boros (Hungary), E. W. Koneman (USA), M. Oellerich (Germany), S. Handjiev (Bulgaria), Manuela Anda Andrei (Romania), Claus Muss (Germany), Nada Majkic-Singh (Serbia), B. Gouget (France), L. Muszbek (Hungary), M. Cucuianu (Romania), Maria Greabu (Romania), Maria Mohora (Romania), Simona Alexandra Iacob (Romania), Zoran Mijuskovic (Serbia), Janet McMurray (United Kingdom), Simona Berbecar (Romania), Suzana Elena Cilievici (Romania), Ioana Culea (Romania), Olga Mihaela Dorobat (Romania), Crezante Lazar (Romania), Constanta Popa (Romania), Mariana Patiu (Romania), I. A. Gutiu (Romania), Gabriela Oprisan (Romania), Alexandra Dana Maria Panait (Romania), Corneliu Zeana (Romania) and many others.

The 2nd Symposium of Immunopathology represented a new step in furthering the knowledge on laboratory investigation and clinical research, thus enhancing the evaluation of the potential of new drugs. The symposium was meant to introduce new concepts, new products and new information related to the development of diagnostic tools and clinical medicine. This year's "Professor Constantin Voiculescu" Prize was awarded to Doctor Camelia Gurban, Associate Professor of Biochemistry at "Victor Babes" University of Medicine and Pharmacy in Timisoara. This is the second year that the RSLM rewards a distinguished specialist from our country as well as a young doctor with special merits in this field.

The Romanian Society of Genetics, whose President is Professor Victor I. Pop, organized a satellite symposium on medical genetics, and the Romanian Society of Transfusion Medicine, whose President is Doctor Daniela C. Marinescu, organized one on the advances in transfusion medicine. Each allowed the attendants to receive up to date information on those two fast-growing fields. The heated discussions that followed each presentation demonstrated the talents, expertise and involvement of the younger generation.

The Clinilab and Tehnomedica exhibitions of diagnostic products allowed the different companies to present their latest advances in laboratory technology and their application to medical biology. This well attended event was mutually beneficial for all. The social programme offered a wide range of cultural activities drawn from abundance that Sibiu provides. The participants also had the opportunity to visit this beautiful medieval city and meet with its hospitable inhabitants, making this a truly memorable event.

The closing session was held on the afternoon of October 13th during which Professor Gheorghe Benga, of exceptional professional and human qualities and discoverer of the red blood cell water channel, aquaporin, congratulated the organizers for the success of the congress, and the participants for their contribution.

In closing, I would like to express my sincere appreciation and gratitude to the RSLM staff that has worked hard behind the scenes for the success of this congress. I truly appreciate the active support and participation of colleagues and friends from abroad, and from Romania. I would also like to underline the exceptional contribution of Doctor Camelia Grigore, for the organization of the Congress, and that of Ms Andrea Munteanu from Ralcom Exhibition. I would also like to extend my thanks to all session moderators and collaborators mentioned in the program. Without them, the Congress would not have met the success it has had.

The RSLM manages no effort to enhance the impact of the National Congress of Laboratory Medicine, as it is essential to raise the level of understanding of the importance of diagnostic laboratories in the complex field of patient treatment. Romania, a member of EU to be, and its healthcare and medicine sectors, are working intensely to meet international standards.

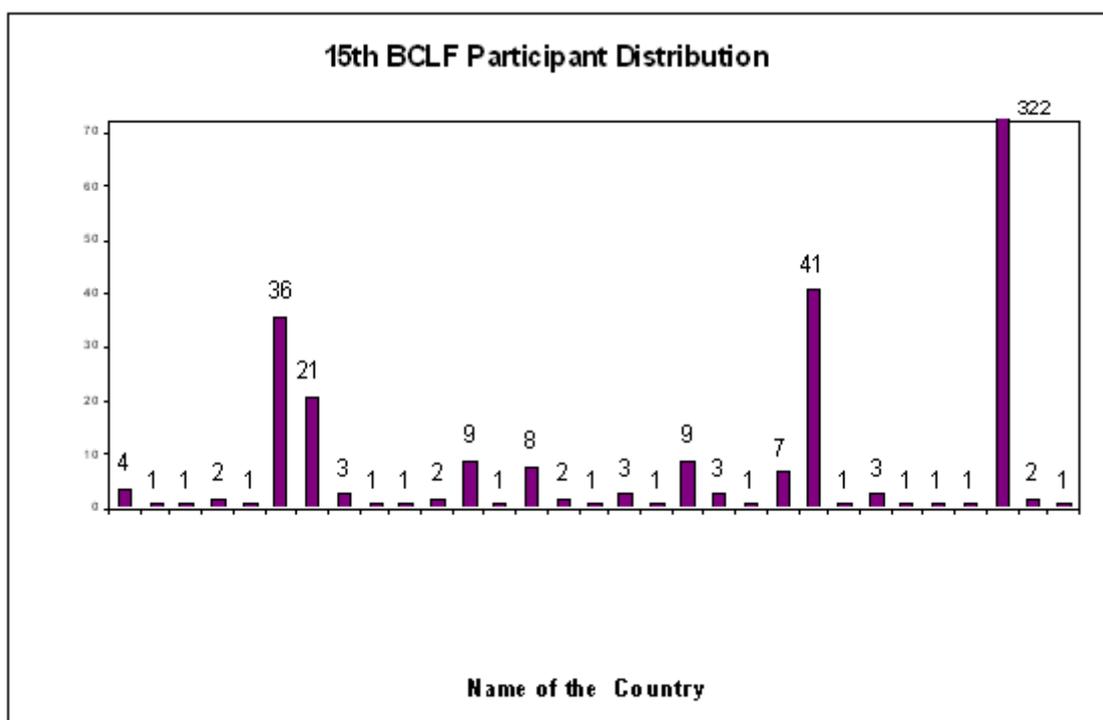
I am extremely proud to say that the meeting had a high-standard scientific content. It consisted of plenary sessions, educational lectures, free communications, symposia, and poster presentations on topics of wide ranging interest. The themes of the congress reminded us of the great opportunity we had to meet people from different parts of a now united Europe, that allows working together to seek common solutions to the improvement of care and treatment of people.

Good luck for the future and lets meet for the 7th Congress of Laboratory Medicine that will be held in Bucharest October 20th –22th 2008

REPORT ON THE 15TH MEETING OF THE BALKAN CLINICAL LABORATORY

Contributed by Prof. Nazmi Ozer, President of the Turkish Biochemical Society and Prof. Nada Majkić-Singh, President of the Balkan Clinical Laboratory Federation

The 15th Balkan Clinical Laboratory Federation (BCLF) Meeting was held on September 4–7, 2007 in Antalya, Turkey. Organized by the Turkish Biochemical Society (TBS) under the auspices of the International and European Federations of Clinical Chemistry (IFCC and EFCC), the Meeting attracted 490 participants (322 from Turkey, 133 from the other Balkan countries and 35 from the rest of the world). The participant distribution is depicted in Figure 1. The scientific program included 24 lectures (four in the form of a "Round Table Discussion on Continuing Education"), 32 oral and 249 poster presentations.



The Meeting started with welcoming addresses from Professors Nazmi Ozer (Meeting President and President of TBS), Nada Majkić-Singh (President of BCLF), Victor Blaton (President of EFCC) and Jocelyn Hicks (President of IFCC).

Professor Hicks' Opening Lecture, "*Laboratory Medicine, Past, Present and Future*", an overview of the incredible advances in clinical chemistry in the last 50 years, was received with great interest by the attending body. The Welcoming Cocktail, that

followed, was held in the swimming pool area with a view of both the sea and the purple Aladağ stretch of the Taurus Mountains, and served to mingle the participants in warm conversation.

The program on September 5 focused on the importance of knowledge and experience. The first lecture, delivered by Professor Mathias Mueller (past president of IFCC), dealt with "*Diagnostic Guidelines – A Service for Clinicians and Patients*". Professor Victor Blaton (EFCC President) lectured on "*Targeting HDL for Prevention and Management of Cardiovascular Disease*", followed by Professor Gabor Kovacs' (FESCC member at large) delivery on "*Posterior and Intermediate Pituitary Lobes: Neuroendocrine, Clinical and Diagnostic Implications*".

The Program proceeded with lectures by Professor Israel Pecht (FEBS General Secretary) on "*Regulation of Mast Cell Mediator Secretion – Hope for Allergy Treatment*" and Professor Manole Cojocaru on "*Anca-Associated Vasculitis in Ischemic Stroke and Hepatitis*".

The Panel on "*Molecular Diagnostics in Clinical Practice*", moderated by Professor Pinar Uzand, highlighted recent trends in molecular diagnostics with presentations from 3 distinguished scientists: Professors Michael Fountoulakis (Roche, Basel, Switzerland), Michel Eichenbaum (Dr. Margarete Fischer-Bosch Institute, Stuttgart, Germany) and Fikret Erdoğan (MPI, Berlin, Germany) respectively focused on clinical proteomics in "*Discovery of Biomarkers in Diagnostic Industry*", pharmacogenomics in "*From Gene to Patient: Towards Individualized Drug Therapy*" and DNA chips in "*High Resolution Array Comparative Genomic Hybridization: Application and Experiences*".

IFCC President Professor Jocelyn Hicks and EFCC President Professor Victor Blaton attending the BCLF Board Meeting, held as parallel session to the oral and poster presentations, during the Congress, expressed their appreciation of the progress of BCLF and promised continued support in developing relations between the federations.

The "*Molecular Diagnostics in Clinical Practice*" panel was followed by oral and poster presentations by young investigators.

The day closed with a Wine and Cheese party in the exquisitely impressive historical atmosphere of Antalya Museum.

The scientific program resumed on September 6 and was enriched with the following contributions of invited scientists from Balkan countries:

- Professor Yahya Laleli (Duzen Laboratories, Ankara, Turkey) – "*Target Value for Inaccuracy and Importance of Harmonization*",

- Professor Ana Stavljenic–Rukavina (Zagreb, Croatia) – "*Management of Risk in Laboratory Practice*";
- Professor Danica Popovic–Pribilovic (Podgorica, Montenegro) – "*Rational Laboratory Diagnostics and Possibilities of Inadequate Analysis Application*";
- Professor Pika Mesko Brguljan (Ljubljana, Slovenia) – "*The Initial Experiences in Auditing of Quality Management Implementation in Slovenia*";
- Professor Demetrios Rizos (Athens, Greece) "*New Perspectives in Antenatal Screening for Down's Syndrome*";
- Professor Etleva Refatllari (Tirana, Albania) – "*The Prevalence of Beta–Thalassemia in Students Screening Lushnja District*";
- Professor Adlija Jevric–Causevic (Sarajevo, Bosnia and Herzegovina) – "*Prediction of Type II Diabetes: New Diagnostic Perspectives*";
- Professor Anna Vassileva Tzontcheva (Sofia, Bulgaria) – "*Abdominal Obesity, Diabetes and Cardiovascular Risk*".
- Professors Nada Majkic–Singh and Eser Yıldırım Süzmen (IFCC Educational Committee Member) moderated the Round Table Discussion: "*Continuing Education*".

The contributors and the topics they covered were: Professor Angeliki Stahati–Ferdeigou (Athens, Greece) – "*The Greek Experience*"; Professor Nada Majkic–Singh (Belgrade, Serbia) – "*Serbian Experience in Continuing medical Education*"; Valentina Koloska (Skopje, Macedonia) – "*Organization of Continuing Medical Education in Laboratory Medicine in Republic of Macedonia*"; Professor Doğan Yöcel (Ankara, Turkey) "*Continuing Education and Training of Specialists of Clinical Chemistry and Laboratory Medicine in Turkey*". Professor Victor Blaton (EFCC President) also attended to the RTD and gave information about EFCC approach for this matter.

The Closing Lecture, delivered by Professor Svetlana Ignjatovic, recounted a collaborative study of Professors Ignjatovic and Nada Majkic–Singh on "*Biomarkers for Cardiovascular Disease: Evidence–Based Considerations*" and was followed by a survey by Professor Stoyan Danev of the founding period and "*15 Years of BCLF*".

Professors Singh and Ozer closed the meeting with invitations to the Gala Dinner in the evening and to the 16th BCLF Meeting to be held in Athens in 2008.

The Gala Dinner gave the participants an opportunity to relax, socialize and dance to the sound of music. A further attraction was the presentation of Balkan Awards. Sponsored by Biosystems, the Awards will be a feature of future BCLF Meetings as well. This year the Balkan Award was given to Marica Markovic (Belgrade, Serbia) for work entitled "*Short–term hyperthermia prevents activation of proinflammatory genes in fibroblast–like synoviocytes by blocking activation of the transcription factor *nf–kb**"; the Finalist Prize went to Christina Kostara (Ioannina, Greece) for "Investigation

of lipidemic profile in patients with coronary heart disease (chd) by proton nuclear magnetic resonance (^1H nmr) spectroscopy and pattern recognition techniques".

The last day of the Meeting featured tours to near-by historical sites including Perge, Aspendos and Antalya city tour, after which the group bade farewell, looking forward to meet in Athens the coming year.



(from left to right), Dr. Nada Majkic-Singh, Dr. Nazmi Ozer, Dr. Marica Markovic, Dr. Xavier Palomer, Dr. Christina Kostara

One Site, One Source for Preanalytical Education

Contributed by Dr. Steve Kitchen, Ph.D., Head Clinical Scientist, Sheffield Haemophilia and Thrombosis Centre, Royal Hallamshire Hospital, Sheffield, England, and Editor, specimencare.com

The European Preanalytical Scientific Committee (EPSC), a group of clinicians and scientists launched a new resource at the 2007 EUROMEDLAB Congress in Amsterdam in June, a Web site called specimencare.com.

Prior to the launch of specimencare.com, laboratorians had no choice but to search multiple sites and other sources to answer vexing questions about the preanalytical phase, which begins when a physician orders a test and continues until the specimen is loaded onto an analyzer. The in-vitro measurement may not reflect the true in-vivo status due to preanalytical variables that impact the specimen quality. Therefore, preanalytical variables can directly impact a doctor's diagnosis and a patient's care.

specimencare.com is designed to be an extensive resource for laboratorians and medical professionals, and to specifically address the varied preanalytical needs of laboratories in Western and Eastern Europe, the Middle East and Africa. Further, specimencare.com provides a principal resource for information about how to reduce preanalytical variability, as well as access to guidelines, event news, links, and training tools.

The site's goals are to: (1) provide a quick, easy path to a comprehensive selection of relevant literature; (2) raise awareness in the laboratory and medical community of

preanalytical variables and their effects; (3) improve the safety and efficiency of laboratory services by controlling preanalytical variables; and (4) promote industry best practices.

specimenscare.com periodically features an "In Focus" column that addresses topical issues. The first "In Focus" feature discussed haemolysis, a leading factor in sample rejection, and includes details of practices and procedures designed to help minimize haemolysis.



From Left:

- Prof. Norbert Blanckaert, M.D., Ph.D., M.B.A., Professor Ordinarius, Faculty of Medicine, Catholic University of Leuven, Leuven, Belgium
- Dr. Anne J. Vassault, Ph.D., Associate Professor, Université de Paris XI, Collège d'Enseignement Pharmaceutique Hospitalier, Paris, France
- Prof. Pierangelo Bonini, M.D., Ph.D., Professor, Clinical Biochemistry, School of Medicine, University of San Raffaele, Milano, Italy
- Prof. Giuseppe Lippi, M.D., Associate Professor, Clinical Biochemistry, University of Verona, Italy
- Prof. Vladimir Palicka, M.D., Ph.D., Professor, Biochemistry and Professor of Internal Medicine, Charles– University of Prague, Czech Republic
- Dr. Sol Green, Ph.D., FACB, Director of Medical & Clinical Affairs, Europe, Middle East and Africa, BD Diagnostics – Preanalytical Systems, New Jersey, U.S.A.



Dr. Steve Kitchen, Ph.D., Head Clinical Scientist at the Sheffield Haemophilia and Thrombosis Centre, Royal Hallamshire Hospital, Sheffield, England

EPSC members Profs. Bonini, Blanckaert, and Lippi presented a workshop at the EUROMEDLAB Congress, entitled "Improving Patient Outcomes Through Excellence in Preanalytical Phase".



What goes wrong in the preanalytical phase? Prof. Bonini pointed out that, because the preanalytical phase is largely performed outside the clinical laboratory, it is not within the control of laboratory management. Yet considerable evidence in the literature demonstrates the impact of the preanalytical phase on patient safety and the quality of the clinical laboratory process. According to seven separate studies conducted at different healthcare facilities, errors occurring in the preanalytical phase ranged from 32% to 75% of total clinical laboratory errors, compared to the analytical phase, at 13% to 32%¹. (See "Improving patient outcomes through excellence in the preanalytical phase, slide 7). Utilizing analytical quality control methods has led to a

reduction of errors in the analytical phase. Improving preanalytical processes will likely have a major impact on reducing the overall test error rate, as well.

What is the impact of preanalytical errors? Prof. Blanckaert described another study that showed 71% of a healthcare organization's incidents were classified as preanalytical problems, and 5% of those incidents were phlebotomy-related and led to an adverse event². (See "Improving Patient Outcomes Through Excellence in Preanalytical Phase," slide 40).

So, what can be done? Prof. Lippi emphasized the development of a multifaceted strategy to enhance quality throughout the total testing process. This starts with a systematic analysis of specimen workflows, continues with education and thorough monitoring via error tracking systems, and ends with the elimination or redesign of flawed procedures³. (See "Improving Patient Outcomes Through Excellence in Preanalytical Phase", slide 54).

Dr. Sol Green, Ph.D., FACB, EPSC member and Director of Clinical Affairs, Europe, Middle East and Africa, BD Diagnostics – Preanalytical Systems, says, – specimen care.com aims to be the single source for laboratory professionals who need answers to questions – no matter how unique – regarding preanalytical variables that can affect the quality of laboratory testing. It supplies information to help them determine what actions to take to insure that they can provide physicians with the best results, and ultimately, the best patient care.

The EPSC gratefully acknowledges the sponsorship of specimen care.com by BD Diagnostics – Preanalytical Systems. Comments and suggestions are welcomed at www.specimenscare.com.

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2. Classifying Laboratory Incident Reports to identify problems that jeopardize patient safety. Michael L. Astion, Kaveh G Shojania, Tim R Hamill, Sara Kim & Valerie L NG. Am J Clin Pathol 2003; 120: 18–26.
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NEWS FROM AACC

Contributed by Michele Horwitz, AACC Membership Director, mhorwitz@aacc.org

The AACC Awards Committee wishes to promote the International Travel Fellowship Award to members of the IFCC in order to solicit nominations for the 2008 award.

The award consists of a plaque and a \$5,000 cash travel award which will be presented at the 2008 AACC Annual Meeting in Washington, DC July 27–31 2008.

This award provides a well-recognized, widely experienced clinical chemist with the opportunity to promote the profession of clinical chemistry internationally or to raise the quality of clinical chemistry as it is practiced there. The recipient of this award is expected to travel to specific countries outside his or her own to teach, lecture, consult, or provide other assistance to hospitals, laboratories, universities, or other health organizations.

For your reference, information on the award can be found on our website at: <http://www.aacc.org/>, together with and the necessary nomination information to

Nominate a colleague to receive the AACC 2008 International Travel Fellowship Award

The deadline to apply for this award is December 31, 2007.

REPORT FROM THE ASIAN PACIFIC FEDERATION OF CLINICAL BIOCHEMISTRY

The APFCB's Education Activities in 2006

Contributed by Joseph Lopez, President of the APFCB and Member of the IFCC Executive Board

The APFCB's education programme constitutes the bulk of its activities in the period between its triennial congresses. These activities have grown in recent years. They may indeed be the most valuable contribution of the APFCB to the Asia-Pacific region. The activities are made up of travelling lectureships, the APFCB's scholarship programme funded by its Philanthropic Fund and educational meetings that are held within the region.

The traveling lectures

The traveling lectures of the APFCB are organized on the understanding that corporate sponsors meet the travel costs of the lecturer while the host association is generally responsible for local costs in most instances. Three such lectureships were undertaken in 2006.

The APFCB Traveling Lectureship: The APFCB TL was established in 1999. Its purpose is to bring to clinical biochemists in the Asia-Pacific region the latest advances in

knowledge in our discipline. Five eminent speakers have thus far served as Traveling Lecturers since its inception.

Professor Chris Lam of Hong Kong, the most recent lecturer, spoke on the laboratory medicine of infectious diseases at their national meetings of 8 APFCB members. Starting his tours in the early part of 2006, he visited, in chronological order, Taiwan, Singapore, Kuala Lumpur, Japan, Mainland China, Australia and Indonesia before concluding his lectureship in India in November. Roche Diagnostics Asian Pacific Pte Ltd., a corporate member of the APFCB sponsored this lectureship. The next Traveling Lecturer will be APFCB Vice-President Dr Leslie Lai whose lectureship will be on diabetes mellitus and the metabolic syndrome. It will be jointly sponsored by Abbott Diagnostics, which is also an APFCB corporate member, and, Abbott Diabetes Care.

The APFCB-Beckman Coulter Educational Symposium lectures: The focus of this series of lectures is the day-to-day activities of the laboratory, and, in particular, laboratory management. The series is sponsored by Beckman-Coulter and, the lecturer is selected jointly by the sponsor and the APFCB. Though the Symposium lectures were initially intended to last for 3 years ending 2005, Beckman-Coulter has graciously extended this program till 2008.

The lecturer in 2006 was Dr Ralph Dadoun of Canada, an expert on laboratory automation, visited Kuala Lumpur, Bangkok, Hong Kong and Qingdao in Mainland China as the Symposium lecturer on the subject for 2006 in late August and September. In China, Dr Dadoun spoke at the meeting of the Chinese Association of Clinical Laboratory Management, an affiliate member of the APFCB.

The IFCC Visiting Lectureship: The IFCC Visiting Lectureships to the Asia-Pacific region are unique in its origin and execution. The Visiting Lectureship to the region are based on the agreement, between the IFCC and the APFCB, on the Asia-Pacific Congresses of Clinical Biochemistry (the APCCBs). The APCCB is the triennial congress of the APFCB. The IFCC provides the lecturer and pays for the airfare of the VL while the APFCB arranges the itinerary and the national association provides local hospitality. This is an excellent example of multilateral cooperation where national/area associations of clinical biochemistry, which are members of the IFCC, and a regional federation, work cooperatively with the world federation for the benefit of an entire region. It should serve as a cost-effective model for the execution of the VL Programme in other regions of the IFCC.

The first Visiting Lecturer under this scheme was Professor Jean-Claude Forest. The VL to the region in 2006 was Professor Rita Horvath of Hungary. Professor Horvath visited India, Malaysia and Indonesia from 7 - 26 November, to deliver lectures and conduct workshops on Evidence-Based Laboratory Medicine. She will visit the region

again in 2007 and conclude her lectureship as a plenary speaker at the 11th APCCB, in Beijing.

The APFCB Philanthropic Fund and the APFCB Scholarship Programme

The APFCB Philanthropic Fund was established in 2005. It was seeded by the recently introduced annual grant to regional federations from the IFCC. A further grant received in 2006 was added to bolster it. The Philanthropic Fund will be primarily used to provide scholarships to young deserving scientists from our region to attend major meetings to present their work and to receive training in specialized areas of clinical biochemistry.

Funding for the APFCB's scholarship programme comes, in the main, from the APFCB Philanthropic Fund. The scholarship programme got off to its start when the recipient of the APFCB–Anon Scholarship, the first scholarship ever awarded by the APFCB, was announced. The recipient was Dr Ronald CC Wang of the Chinese University of Hong Kong. The scholarship is sponsored for 3 years by a senior clinical biochemist from the Asia–Pacific region and is meant to enable a young scientist from the region to attend the Annual Scientific Meeting of the Australasian Association of Clinical Biochemists.

The APFCB expects to award a number of travel awards to young scientists from our region to present their work at the 11th Asian–Pacific Congress of Clinical Biochemistry (APCCB) to be held in Beijing in October next year and training scholarships in the future.

In addition to the above, the APFCB has signed an agreement with Dade Behring in late 2006, to administer the Emile von Behring scholarships that will be provided by the company.

Joint meetings within the Asia–Pacific Region

A recent development has been the organization of meetings jointly undertaken between the APFCB members and other organizations. The following are some recent activities that have taken place:

In 2005, the Singapore ACB conducted a workshop on laboratory automation in conjunction with the AACC and later in the year hosted the International Congress of Paediatric Laboratory Medicine, both in Singapore.

The Australasian ACB and the AACC had joined together, for the first time, to offer a two–day conference on future trends in laboratory medicine themed, "Planning for Tomorrow's Technology", from May 29–30, 2006, in Cairns, Australia.

In June 2006, the AACB conducted a workshop on laboratory quality in Kuala Lumpur, Malaysia, in conjunction with the MACB.

It should be emphasized that while the APFCB cannot claim to have initiated any of these activities, the APFCB strongly encouraged them and has in some instances, acted as catalyst.

LETTER TO THE EDITOR: perspectives: RBP4 testing and screening of metabolic disorders

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Recently, two articles published in the BBC news (June 2006 and September 2007), have focused the public attention on RBP4 testing. Indeed, the two BBC news articles discussed the evidence existing in the literature for this Biomarker and introduced RBP4 as an "*Early warning hope for diabetes*" and a "*Test that measures fat around organs*". This text is devoted to RBP4 and its link with obesity and diabetes.

Industrialized and developing countries are characterized by a marked increase in people presenting with diabetes, obesity, metabolic syndrome and hypertension. These disorders are associated with adverse cardiovascular events such as heart disease, stroke and peripheral vascular diseases. The worldwide rise of obesity and diabetes reflects a significant change in diet habits, physical activity levels, and tobacco consumption. It also results from industrialization, urbanization, economic development and food market globalization. Individuals are simultaneously consuming an energy-denser and nutrient-poorer diet as well as being less physically active.



Retinol binding protein 4 (RBP4) is the vitamin A-transport protein secreted into the circulation by adipocytes and is perceived as an adipocyte-derived signal that may contribute to the pathogenesis of type 2 diabetes .

The build-up of visceral fat has been linked to an increased risk for heart disease and type-2 diabetes. RBP4 has recently been correlated to the level of visceral fat and a link between obesity and insulin resistance.

Indeed, a 2 to 3-fold increase in serum RBP4 in obese subjects was positively correlated with abdominal fat mass and inversely with insulin sensitivity, independently of age, gender and body mass index . Furthermore, in 102 healthy women, serum RBP4 levels were independently associated with visceral fat and LDL-cholesterol levels.

This observation was confirmed in different populations, as illustrated by Qi *et al.* (4) who have measured RBP4 plasma levels in 3289 Chinese individuals, aged from 50 to 70 years, and demonstrated a strong and independent association with metabolic syndrome. This association in the Chinese population was confirmed by another group



RBP4 is also described in the literature as a good risk estimate of insulin resistance and diabetes. Cho *et al.* (6) have reported that plasma RBP4 concentrations were elevated in subjects with impaired glucose tolerance or type 2 diabetes and Graham *et al.* (7) have demonstrated that serum RBP4 levels correlated with the magnitude of insulin resistance in subject with obesity, impaired glucose tolerance, or type-2 diabetes, and in non-obese, non-diabetic subjects. Moreover, Takebayashi *et al.* (8) have reported that RBP4 is associated with variables related to insulin resistance and diabetic complications (triglycerides, systolic blood pressure, urinary albumin and low HDL cholesterol. These observations are completed by the study of Craig *et al.* (9) who have shown that SNPs -804 and +9476 in the RBP4 gene were associated with reduced insulin secretion and while SNP +390 was linked to reduced insulin sensitivity.

Over-secretion of RBP4 may negatively affect beta-cell function directly or indirectly by preventing the binding of transthyretin to its receptor. These mechanisms could explain, at least partly, the association between increased circulating RBP4 and type-2 diabetes .

Therefore, these data provide a rationale for antidiabetic therapies aimed at lowering serum RBP4 levels and hence at reducing the risk of full-blown disease. This therapeutic perspective was recently illustrated by Haider *et al.* (11) who have shown that rosiglitazone reduced RBP4 in HIV-positive subjects thereby contributing to the pharmacodynamic action of thiazolidinediones on glucose homeostasis.

Presently, RBP4 is essentially measured by radioimmunoassay or ELISA, which are time consuming. The recent evidence for its importance in the pathogenesis of type-

2 diabetes warrants the promotion for a fully and friendly automated assay that would allow an easier and wider use of this biomarker.

In summary, as RBP4 may prove to be a reliable estimate of the amount of visceral fat and a marker for identifying individuals at risk of diabetes before symptoms become apparent, its measurement could provide an opportunity for patients to take preventive measures and could contribute to public health benefits.

Announcements: Establishment of Abbott Visiting Lecturer Program

Amsterdam, Netherlands, 5th June 2007, The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) today announced that they had received an annual grant from Abbott Diagnostics to significantly expand their Visiting Lecturer Program. This program supports international cooperation in educational activities through the funding of lectureships on scientific, educational and managerial topics.

"We are delighted and very grateful to Abbott for their generous grant that will allow us to develop this program considerably. There is a real need for the continued communication of scientific and clinical advances and techniques in clinical chemistry and laboratory medicine, especially in developing countries. We intend to use this program as a platform to contribute to the creation of educational networks, bringing together activities in different regions" said Professor Jocelyn Hicks, President of IFCC. Jaime Contreras, vice president of Commercial Operations, Abbott Diagnostics, said "Abbott has always been passionate about assisting laboratories in continuous improvement. In funding this multi-year grant we look forward to enhanced communication between clinical laboratories in the many countries across the Federation. The International Federation of Clinical Chemistry and Laboratory Medicine, composed of 76 full member national societies of clinical chemistry representing over 30,000 clinical chemists, 38 Corporate members and 5 affiliate members, strives to enhance the scientific level and quality of diagnostics and therapy for patients throughout the world". Further information can be found at www.ifcc.org

UPCOMING IFCC RELATED MEETINGS

11th Bergmeyer Conference: Markers of kidney diseases. Eibsee Hotel, D-82491 Grainau, Garmisch-Partenkirchen, Germany. March 3 – 5, 2008

IFCC General Conference for National Representatives and Corporate Representatives, Antalya, Turkey, 14–15 April 2008,

RECENTLY PUBLISHED IFCC DOCUMENTS & RELATED PUBLICATIONS

Contributed by H Peter Lehmann

The following documents have been published by IFCC Divisions/Joint Committees /Working Groups in 2006 up to August 2007

C–NPU: Nomenclature, Properties and Units (C–NPU) Joint Committee of IFCC/IUPAC

1. Fuentes–Arderiu X .Description of examinations and their results and the standard ISO 15189. Clin Chem Lab Med 2006;44(9):1164–1167.
2. Fuentes–Arderiu X. Vocabulary of terms in protometry. Accred Qual Assur 2006; 11:640-643.

C–PP: Plasma Proteins (C–PP)

1. Johnson AM, Merlini GP, Sheldon J and Ichihara K Clinical Indications for Plasma Protein Assays: Transthyretin (Prealbumin) in Inflammation and Malnutrition. Clin Chem Lab Med 2007; 45: in press

C–SMCD: Standardisation of Markers of Cardiac Damage (C–SMCD)

Update on publications regarding NACB IFCC analytical recommendations.

- 1.1. Apple FS, Jesse RL, Newby LK, Wu AHB, Christenson RH, Analytical issues for biomarkers of acute coronary syndromes. For the National Academy of Clinical Biochemistry and IFCC Committee for Standardization of Markers of Cardiac Damage. National Academy of Clinical Biochemistry and IFCC Committee for Standardization of Markers of Cardiac Damage Laboratory Medicine practice guidelines. Clin Chem 2007; 53:4 547–551.

C–RSE: Reference Systems of Enzymes (C–RSE)

1. Schumann G, Aoki R, Ferrero A, Ehler G, Féraud G, Gella F–J, Jörgensen PJ, Kanno T, Kessner A, Klauke R, Kytzia H–J, Lessinger J–M, Miller WG, Nagel R, Pauwels J, Schimmel H, Siekmann S, Weidemann G, Yoshida K, Ceriotti F. IFCC primary reference procedures for the measurement of catalytic activity concentrations of enzymes at 37 C, Part 8. Reference procedure for the measurement of catalytic concentration of α -amylase. Clin Chem Lab Med 2006;44:1146–1155.

C–POCT: Point of Care Testing (C–POCT)

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IFCC recommendation on reporting results for blood glucose. Clin Chem Lab Med 2006; 44: 1486–1490.

C–RIDL: Reference Intervals and Decision Limits (C–RIDL)

1. Ceriotti F, Schumann G, Panteghini M. Redefining reference limits needs more attention to the analytical aspects. [Letter] Liver Int. 2006;26:1155–6.

WG–SEB: Selective Electrodes and Biosensors (WG–SEB)

1. Ben Rayana MC, Burnett RW, Covington AK, D'Orazio P, Fogh–Andersen N, Jacobs E, Katakly R, Külpmann W, Kuwa K, Larsson L, Lewenstam A, Maas AHJ, Mager G, Naskalski JHJ, Okorodudu AO, Ritter Ch and St John A. Recommendation for measuring and reporting chloride by ISEs in undiluted serum, plasma or blood. Clin Chem Lab Med 2006; 44: 346–352.

WG–A: Apolipoproteins:

1. Myers GL, Miller WG, Coresh J, Fleming J, Greebergs N, Greene T, Hostetter T, Levey AS, Panteghini M, Welch and Eckfeldt. Recommendations for Improving Serum Creatinine Measurement: A Report from the Laboratory Working Group of the National Kidney Disease Education Program. Clin Chem 2006; 52:1 5–18

WG–SHCG: Standardisation of Human Chronic Gonadotropin (WG–SHCG)

1. Sturgeon CM, Ellis AR Standardization of FSH, LH and hCG Current position and future prospects- Mol Cell Endocrinol 2007; 260–262: 301–9

WG–HbA1c: Standardisation of Hemoglobin A1c (WG–HbA1c)

1. Konnert A, Berding C, Arends S, Parvin C, Rohlfing CL, Wiedmeyer HM, Little R, Siebelder C and Weykamp C. Statistical Rules for Laboratory Networks. Journal of Testing and Evaluation 2006; vol.34: No.2: 1–7.

2. Konnert A, Arends S, Schubert S, Berding C, Weykamp C and Siebelder C. Uncertainty Calculation for calibrators of the IFCC HbA1c Standardisation Network. Accred Qual Assur 2006;11:319–328.

WG–STFT: Standardisation of Thyroid Function Tests (WF–STFT)

1. Van Uytfanghe K, Stöckl D, Ross HA, Thienpont LM. "Use of Frozen Sera for FT4 Standardization: Investigation by Equilibrium Dialysis Combined with Isotope Dilution–Mass Spectrometry and Immunoassay. Clin Chem 2006;52:1817–21.

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of a candidate international conventional reference measurement procedure for free thyroxine in serum. Clin Chem Lab Med 2007;45:934–936.

WG– HbA2: Standardisation of Hemoglobin A2 (WG–HbA2)

1. Paleari R, Giambona A, Cannata M, Leto F, Maggio A, Mosca A for the IFCC WG–SHbA2. External Quality Assessment of HbA2 measurement: data from an Italian pilot study with fresh whole blood samples and commercial HPLC systems. Clin Chem Lab Med 2007; 45(1):88-92

WG–SCDT: Standardisation of Carbohydrate–Deficient Transferrin (WG–CDT)

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