



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 SCIENTIFIC DIVISION: REVIEW OF ACTIVITIES AND FUTURE DIRECTIONS

Contributed by : Ian S.Young, Vice-Chair, on behalf of IFCC SD



The goal of the Scientific Division (SD) of the IFCC is to advance the science of Clinical Chemistry and its application to the practice of Clinical Laboratory Medicine. To further this goal, the SD seeks to identify scientific problems in current practice and to provide solutions and guidelines on how to overcome these. This is achieved by identifying technical innovations and diagnostic strategies of relevance to Clinical Chemistry and Laboratory Medicine and assisting the transfer of these to the profession. In particular, the SD promotes the standardization of laboratory tests through the development of reference systems, or harmonization activities where this is not possible at present. An additional role

is to establish standards for scientific and technical aspects of good laboratory practice. The SD also seeks to respond to the scientific and technical needs of IFCC Member Societies, IFCC Corporate Members and external agencies, and participates actively in the scientific programs of IFCC congresses and other scientific meetings.

The SD initiates and manages projects with its own resources or through its Committees (C) and Working Groups (WG). Work is conducted in cooperation with other IFCC units and with relevant National and International Organisations. The SD ensures that each of its C/WGs functions under clear terms of reference together with an agreed schedule of activity. The SD assists in the development of project proposals, maintains oversight of the work carried out by C/WGs, undertakes an annual review of progress, and reviews and approves any documents that result from the work.

The SD committees are theme orientated, and typically carry out a range of projects in an area of particular importance to the laboratory medicine community. Working Groups are task orientated, and focus on a single goal or closely related set of goals that can usually be achieved in a limited timescale. The SD currently coordinates the activities of eight Cs and fourteen WGs (for more details, see IFCC web site: http://www.ifcc.org/index.asp?cat=Publications&scat=Hand_Book&rif=6&dove=1)

Proposals for new C/WGs often originate from within the SD, but it is also possible for a new group to be proposed to the SD by any member of an IFCC affiliated organisation. The best initial approach is to discuss an idea with the SD Chair or one of the Members of the SD Executive, and then to prepare a formal proposal that will be considered at the next SD meeting. Current C/WG activities cover much of laboratory medicine, and it is only possible to review some of the most important issues here. Further details can be obtained on the SD web pages.

Committees and Working Groups of the Scientific Division:

The Committee on Nomenclature, Properties and Units (C–NPU) maintains a generic database of properties and units which can be accessed via the IFCC website. Current activity is focused on the possibility of linking the NPU database to the SNOMED–CT electronic health record project, a systematically organized computer processable collection covering all medical terminology which is increasingly used to underpin electronic organization of healthcare information in many countries. The Committee on Molecular Diagnostics (C–MD) has recently established networks

of seven IFCC Expert Molecular Diagnostics Centers and four IFCC Member Laboratories covering a range of clinically relevant areas in molecular diagnostics. Applications from further interested laboratories will be invited on an ongoing basis. In addition, C-MD is liaises with other international laboratory organizations and with regulatory authorities to promote standardization in molecular diagnostic testing.

The Committee on Plasma Proteins (C-PP) is currently carrying out work on the development of new reference materials for protein analysis – in particular, work has focused on solving technical issues with assigning values for CRP, C4 and ceruloplasmin. The C-PP is closely monitoring emerging technologies in the field of proteomics with a view to producing guidance on standardization and clinical utility of these methodologies at an appropriate stage. This work involves liaison with the Human Proteome Organization (HUPO). The Committee on Standardisation of Markers of Cardiac Damage (C-SMCD) (a joint initiative between the IFCC and the American Association for Clinical Chemistry) has a broad remit to produce analytical and clinical recommendations pertaining to standardization and evaluation of available biomarker assays. A particular recent focus has been the potential for cross-reactivity in B-type Natriuretic Peptide (NP) assays. Experimental work has been conducted to evaluate BNP, proBNP and NT-proBNP antigens from multiple commercial sources for cross-reactivity in commercial and experimental assays, and the final results of this work will be reported in the coming year. The Committee on Reference Systems of Enzymes (C-RSE) performs a similar role for enzyme assays. Currently, certification of an AST reference Material is being undertaken in conjunction with The Institute for Reference Materials and Measurements (IRMM). In addition, a Standard Operating Procedure for an Alkaline Phosphatase reference method is being prepared for publication, and work has commenced on establishing provisional reference intervals in cooperation with the Committee on Reference Intervals and Decision Limits (C-RIDL). C-RIDL has also published a systematic review of creatinine reference interval, including data describing pediatric age-adjusted reference intervals, and is working jointly in collaboration with the CLSI to review guidelines for establishing reference intervals. The Committee on Traceability in Laboratory Medicine (C-TLM) continues to organize IFCC ring trials for reference laboratories, an essential activity for maintaining a number of reference systems. The Committee on Point of Care Testing (C-POCT) is contributing to the development of international standards for

POCT, and is currently working on Quality Control of glucose testing in different health care settings. A workshop and a roundtable to promote these activities were organized at this year's AACC meeting.

While the tasks of all of the WGs are important, the work of three in particular will be highlighted here. The activities of the WG on Standardization of HbA₂ (WG-HbA₂) are important for the diagnosis of thalassaemia. A candidate reference method procedure has been developed, but it has become clear that some further work is required to optimise this. In addition, a pilot batch of a secondary reference material is undergoing lyophilization at IRMM and will be available for distribution by the end of 2008. The Working Group on the standardization of Insulin Assays (WG-SIA), jointly established with the American Diabetes Association, has made good progress towards the development of a candidate reference method for insulin analysis. A comparison of commercially available insulin assays has been made, with a range of calibration options, and this should result in recommendations for harmonisation of insulin assays that can be adopted by manufacturers. A new working group on Standardization of Troponin-I (WG-TnI) has been established this year. Variability in TnI assays is a considerable clinical problem, and the WG will explore ways to reduce this. WG-TnI is working with NIST to undertake fundamental studies on available cTnI antigen-antibodies, the aim being to identify antibodies to a stable part of the cTnI molecule that will provide a suitable combination for an ELISA assay.

As can be seen, the work of the SD stretches across the full remit of Clinical Chemistry, and seeks to address the issues of greatest importance to the profession, laboratory users and patients. Members of the SD are always happy to discuss ongoing or future projects with interested parties, and suggestions as to other areas that the SD might address in the future are welcome.

THE JOINT COMMITTEE FOR TRACEABILITY IN LABORATORY MEDICINE (JCTLM) IN FULL ACTION

Contributed by: Jean-Claude Forest, Chair, JCTLM



The E.U. Directive 98/78 on in vitro diagnostic laboratory devices published by the European Commission in 1998, applied progressively from 2000 until its full implementation in 2005 with the obligation to the manufacturers to have all their in vitro diagnostic devices sold in European Community Market bearing the C.E. labels, is a major driving force to achieve better standardization and comparability of laboratory assay results in medicine. The impact of this directive based on metrological traceability is however worldwide. Basically, the directive requires "that the traceability of values assigned to calibrators and/or control materials must be assured through available reference measurement procedures and/or available reference materials of a higher order". The objective of this concept is "to enable the results obtained by the calibrated routine procedures (that we use in our clinical laboratories) to be expressed in terms of the values obtained at the highest available levels of the calibration hierarchy", and in so doing enable measurement results reported from different laboratories and times to be comparable.

It became rapidly clear in 2000 that there was a real need to identify reference measurement systems, composed ideally of reference measurement procedures (RMPs) and reference materials (RMs), for specific measurands (analytes), and eventually to be able to recognize reference measurement services (laboratories able to perform the reference measurement procedures utilizing certified reference materials). Soon, manufacturers and laboratory professional alike realized that there was a necessity to form an independent body of experts who would identify those reference measurements procedures and reference materials or reference measurement services that meet the relevant ISO Standard (tr EN ISO 17511, ISO 15193, ISO 15194, ISO 15195). This is with this mission in mind that the Bureau International des Poids et Mesures (BIPM), IFCC and ILAC established in 2002 the JCTLM with the participation of more than 20 member organizations (Metrological Institutes, Governmental Agencies, Manufacturers, National and Internationals

Laboratory Professional Organizations). Two Working Groups were formed: WG1 on reference materials and reference measurement procedures (Chairs: W. May, H. Schimmel) and WG2 on reference measurement services (reference laboratories) (Chairs: L. Siekmann, L. Thienpont). These two Working Groups are assisted by 12 analyte-based review teams staffed with experts coming from various backgrounds (academic, clinical laboratories, manufacturing field, governmental agencies). Following written procedures that incorporate the criteria of the relevant ISO Standards, these expert teams assist the Working Groups to review the nominated materials, procedures and laboratories which meet these criteria. Following approval by the Executive Committee of the JCTLM (Chair: J.C. Forest; Secretary: R. Wielgosz) reference materials, reference measurement procedures and reference measurement services are published in the database of JCTLM (www.bipm.org/jctlm/). During the six years of its existence, JCTLM through its review teams and Working Groups have produced lists of more than 200 certified reference materials and 140 reference measurement procedures. Furthermore, JCTLM provides lists of reference measurement services (laboratories that can provide calibration services to industry and other organizations). These laboratories are able to conduct reference measurement procedure for specific measurands utilizing recognized certified reference material and are required to participate in appropriate external quality assurance schemes (one such scheme is under the responsibility of the Committee on Traceability in Laboratory Medicine of the Scientific Division). The list of procedures covers a significant number (over 30) of more classical analytes of clinical chemistry in particular type A analytes (quantities for which the results of measurement can be made metrologically traceable to the S.I.).

The activities of the JCTLM fulfill a missing piece for the implementation of the IVD directive, notably the independent identification of reference materials, reference measurement procedures and reference measurement services that meet the criteria of the relevant ISO Standards in order to aid IVD industry in meeting the requirements for traceability to available higher order reference materials and reference measurement procedures. Through these activities, it is hoped that the implementation of metrological traceability will help to achieve comparability of test results independent of the field methods or analytical platforms or laboratories wherever they are located in the World.

Although, progress has been made to achieve better comparability of results for a good number of measurands (analytes), the lack of comparability remains a major concern in medical decision making since it may lead to inappropriate medical management and increased cost of health services. As examples, heterogeneous analytes (proteins, peptides) and/or methods such as immunoassays still represent major challenges. In many instances, standardization following classical rules of metrological traceability is not feasible due to the lack of commutable reference materials or of reference measurement procedures. This is one concern that JCTLM wants to address now. Prior to the last AACC Meeting in Washington in July of this year, JCTLM held a two day meeting: the first day was devoted to activities of the two Working Groups and the second day was devoted to a meeting with the industry representatives for identifying their needs and particularly to discuss the challenges and needs for reference materials and methods for nucleic acid testing and for reference materials and reference methods for immunodiagnosics.

In brief, over the past six years, JCTLM has delivered for use by IVD industry, regulators and for the laboratory professionals a quality assured database of higher order reference materials, reference measurement procedures and reference measurement services based on objective criteria following the IVD directive and related to ISO/CEN Standards. For those who would like to have a brief summary of JCTLM activities, a leaflet titled 'Are your in vitro diagnostic measurement results traceable to higher order reference materials or reference methods' has been published by JCTLM and is available from the IFCC Head Office or through the BIPM website. For those who want more information on specific measurands, this can be accessed via the JCTLM Database on the Website of the BIPM. Finally, an invitation is made to those who would be interested to serve on one of the analyte based review teams to contact, either I or the secretary of JCTLM, Dr.Robert Wielgosz at the BIPM.

NEWS FROM THE BELGIAN SOCIETY FOR CLINICAL CHEMISTRY

Contributed by Joris Penders, Board member BVKC/SBCC

Scientific activities

During the past year, the activities of the BVKC–SBCC mainly concentrated on the organisation of several scientific meetings and symposia.

On October 13th2007, a symposium concerning "Clinical Biology and the elderly" was presented in close cooperation with other Belgian societies.

The main event clearly was the celebration in May of the 50th anniversary of our society, which we could celebrate during the very successful 3–day symposium entitled "New trends in clinical biology – Emerging Technologies and their Impact on Laboratory Medicine and Management". This meeting was organised in close cooperation with the IFCC and the francophone FIFBCML and with support of several other national and international scientific organisations. We were very pleased to welcome numerous international participants.

This also is an opportunity to thank all speakers since it is through their generosity that almost all presentations can be found on our website.

On October 4th2008, the next scientific meeting will be organised in Leuven (Belgium) once again in cooperation with other Belgian national societies. This event will tackle problems and issues concerning "Pre- and Postanalytical Aspects in Laboratory Medicine". We hope to welcome many guests for this interesting programme.

Royal Title

During the May symposium in Brussels, the society received official confirmation of our Royal Title: from May 15th2008 onwards, the Belgian King granted us the title of "Royal Society".

Election of a new board

In October 2007, a new president (Prof. P. Wallemacq) and vice–president (Dr. M. Langlois) were elected. Our official representatives for IFCC and EFCC are Prof. Dr. JP Chappelle and Dr. M. Langlois respectively.

Furthermore, one of the board members, Prof. emeritus V. Blaton, co-organized the merger of FESCC and EC4 organisations and is the president of the EFCC.

Website BVKC-SBCC

In the past year, our website has expanded to a three-lingual information platform concerning our society and its activities. We invite you to take a look at <http://www.bvkc.be> or <http://www.sbcc.be> and to give feedback to keep improving the site.

THE 16th CONGRESS OF MEDICAL BIOCHEMISTS OF SERBIA AND THE 4TH EFCC SYMPOSIUM FOR BALKAN REGION

Contributed by : Professor Dr. Nada Majkic-Singh, President of the Society of Medical Biochemists of Serbia and the Scientific Committees of the Congress and Symposium



The 16th Congress of Medical Biochemistry and Laboratory Medicine with international participation has been organized by the Society of Medical Biochemists of Serbia and the Institute of Medical Biochemistry of the Clinical Centre of Serbia. The Congress was organized under the auspices of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), European Federation of Clinical Chemistry and Laboratory Medicine (EFCC) and the Balkan Clinical Laboratory Federation (BCLF), as well as the Ministry of Science of the Republic of Serbia. As part of the Congress, on the 19th and 20th of June 2008 the 4th EFCC Symposium for the Balkan Region entitled *The Impact of the Preanalytical Phase on the Quality of Laboratory Results* was held.

The organization of the Congress was the result of work and effort of all the members of the Scientific and Organizational Committees, comprised of distinguished local experts in this area. More than 400 participants from Serbia and some 100 specialists from abroad participated actively in the work of the Congress.

The plenary sections of the 16th Congress of Medical Biochemistry and Laboratory Medicine have been dedicated to the latest findings in the field of biochemical markers of various diseases and states, namely to the importance of markers of atherosclerosis, cardiac markers in patient treatment, biomarkers of inflammation

and apoptosis, markers of ischemic stroke, certain forms of apolipoproteins, bone markers - their nature and application, markers of kidney diseases, prostate cancer and urinary tract tumor, diabetes, and up-to-date patient treatment in intensive care. The influence of oxidative stress on the appearance of a disease, as well the role of functional foods in the promotion of health has been also deliberated.

A separate section was dedicated to the application of quality indicators in medical laboratories relating to sensitivity and accuracy of the results, ways of avoiding errors in laboratories and the process of laboratory accreditation as a means of avoiding and diminishing errors and improving the general quality of the laboratory work. Besides the presentations by local experts, in the program of the Congress participations took the numbers of distinguished lecturers from the United States of America, Switzerland, Germany, Hungary, England, Italy, Montenegro, Macedonia, Bulgaria and the Republic of Srpska.

The majority of registered participants presented the results of their scientific and expert research as part of the poster presentations which included cardiovascular diseases and cardiac markers, methods in clinical chemistry, proteins and enzymes, lipids and lipoproteins and free topics.

The topics selected covered in a multidisciplinary fashion the field of laboratory medicine and other medical sciences. The multidisciplinary character of the Congress is further accentuated by the fact that many experts of various profiles took active part with their work. Therefore, like in the previous years, this Congress allowed for the latest scientific and expert results to be presented and for experiences to be exchanges, which will contribute to the promotion of contemporary laboratory practice.

During the Congress the 4thEFCC Symposium for Balkan Region held under the titled *The Impact of the Preanalytical Phase on the Quality of Laboratory Results*, where the latest findings regarding the application and significance of the impact of preanalytical factors on the quality of laboratory results have been presented with the goal of preventing preanalytical errors that can cause damage to the patients as well as the entire laboratory procedure. Safety measures during the process of collecting biological samples from patients e.g. during venipunctures, for the purpose of protecting the patients also have been discussed. Besides presentations on the impact of the preanalytical phase in hematology, sample stability, the

recommendations and ways of educating staff regarding the quality of diagnostic samples have been reviewed. In order to achieve the best possible results, the participants presented the new approaches in laboratory medicine dealing with the application and philosophy behind the LEAN and SIX SIGMA techniques.

Experts from Europe (Italy, Germany, and Belgium) and America participated in the Symposium. The main titles of the presentations and lecturers have been: Impact of preanalytical variables on specimen quality (Sol Green, USA), Misidentification and other preanalytical errors (Pierangelo Bonnini, Italy), Standards of safety in blood collection (Camilla Mattiuzzi, Italy), Preanalytical phase in haematology (Giuseppe Banfi, Italy), Governance of the preanalytical phase: error detection (Giuseppe Lippi). Quality of diagnostic samples, recommendations and educational tools (Walter Guder, Germany), Sample stability (Gian Luca Salvagno, Italy), and Application of Lean and Six Sigma to the preanalytical phase (Ana Stanković, USA).

The experiences in the pre-analytical phase technology in medical laboratories in Balkan region have been presented by Zorica Zumarac (Serbia), Manole Cojocar (Romania), Anna Tzontcheva (Bulgaria), Aggeliki Stathaki (Greece), Gheorghe Benga (Romania), George D. Maropoulos (Greece). Round table discussions on the topics presented served as the basis for reaching conclusions and guidelines in this area of laboratory medicine with the aim of achieving the best possible results to the benefit of patient treatment.

During the course of the Congress and Symposium a permanent exhibition of equipment and reagents has been on display, and many practical workshops have been organized by different companies.

As Society of Medical Biochemists of Serbia was appointed by EFCC as organizer of the Symposium for the Balkan Region and University of Belgrade (Serbia) the EFCC Educational Centre, Professor Victor Blaton, EFCC President during the opening of the Symposium presented the lecture on the EFCC activities and a new vision of the development of clinical chemistry and laboratory medicine in Europe.

LETTER TO THE EDITOR PRESIDENTIAL ELECTION 2008

Note of the editor: The following text has been collected under the initiative of Dr. Damien Gruson, Member of the eNewsletter Working group.

Perspectives: Five questions to the candidates for IFCC presidency.

In this issue of the IFCC news, the candidates for the election of IFCC president have kindly accepted to answer to five general questions.

DG: Please would you be so kind as to present a brief overview of your career?



Graham Beastall: My specialist training took 11 years during which I gained a PhD and FRCPath (the highest UK qualification). I have worked as a consultant in Glasgow for 27 years, the last five of which have been as Clinical Lead for a large multi-site department. I have published >170 original articles and reviews. I have held high representative roles at national (ACB), European (EC4) and International (IFCC) level. I am an adviser to the UK Government.



Victor Blaton: I was basically trained in science and Biochemistry and I was a postdoctoral Fellow at the KU-Leuven (Catholic University Leuven). I was further trained in biochemistry and biophysical techniques at the University of Uppsala (Sweden) and I became clinical biologist in 1972. He became head and scientific director of the Simon Stevin Institute for Fundamental Scientific Research in Coronary heart disease. I became Professor in Medical Biochemistry at the University in Leuven in 1982 and in 1984 I was also installed as staff member of the department clinical chemistry at the St John Hospital in Brugge and became head and director.



Jean-Claude Forest: I am pursuing an academic career as attending physician and laboratorian involved in teaching, research, clinical duties, and administrative responsibilities. I have served and continue to serve on numerous committees in healthcare, research and professional environments both nationally and internationally (e.g. President of the CSCC; member, VP, President of the Scientific Division of IFCC; currently Chair of JCTLM and IFCC delegate to the WHO

ECBS).

DG: What is your opinion about the evolution of laboratory medicine and about globalisation of healthcare services?

GB: The evolution of laboratory medicine is part of the globalization of healthcare. Drivers are:

- Rapidly growing knowledge of the molecular basis of disease
- The introduction of evidence-based medicine and clinical practice guidelines
- Recognition of the intelligent patient and the need for personalized medicine
- Technological development, including miniaturisation and micro-arrays
- Belated recognition of the need to support healthcare in developing countries

Laboratory medicine contributes to ~70% of all clinical decisions. Therefore laboratory medicine specialists need to lead in the generation, interpretation, presentation and management of knowledge that can be used at the clinical interface to inform best practice and to improve life expectancy in the population and clinical outcomes for patients.

VB: CC main target is 'Serving Clinical Care and Laboratory medicine in the world'. Laboratory specialists are confronted with a new way of thinking concerning the management and the daily practice of their laboratories. Science is a cornerstone in our profession. Globalisation of healthcare services ask for renewing and a new structure of the interaction and cooperation with the IFCC Regions, the National Societies, the members of the National Societies, and the Corporate Members. Globalisation recommend a worldwide initiative to promote and to defend the contribution of Laboratory medicine to healthcare and to medical decision makers. New programmes and projects worldwide on education, training and management of CCLM are required.

JCF: Globalization of healthcare services has a different meaning in resources rich as compared to resources limited countries. More than 80% of the world's resources are used by less than 20% of the world's population. Globalization may contribute to faster translation of knowledge into applications and better utilization of scientific and medical evidence. In a resources limited country, globalization impacts basic services of prevention, diagnosis and/or treatment of communicable diseases or nutritional disorders and reaching out in a sustainable manner to the greatest percentage of the population. In more developed countries, laboratorians face very rapid development of technologies for a wide range of purposes and these technologies are often introduced before appropriate standardization and evidence based demonstration of their added value. In resources limited regions, training

capability and quality assurance of basic laboratory services remain major challenges. IFCC leadership is essential to address all of these needs.

DG: Could you tell us the next key challenges for IFCC?

GB: The next key challenges for IFCC are:

- To promote the contribution of laboratory medicine to global healthcare
- To collaborate with international clinical organizations in best practice healthcare
- To expand scientific work on standardization and harmonization of practice
- To expand the program of educational support to developing communities
- To improve communication with and to be more accountable to its members
- To encourage appropriate devolved policy planning and local decision making
- To achieve improved financial governance and to demonstrate value for money
- To further develop the "IFCC family" of laboratory medicine specialists worldwide
- To encourage young professionals to contribute to and to enjoy IFCC activities

VB:

- A. The massive growth of biological possibility selection, decreasing over-consumption, irresponsible requests and finally implementation of biological parameters in medical decision-making;
- B. Evidence based medicine, driven by the need to cope information overload, cost control and impatience for the best in diagnostic and treatment. Impact of laboratory tests on clinical outcome;
- C. Total quality management and international;
- D. Challenges for evidence based laboratory interpretation system;
- E. Molecular diagnostic tools in diagnostic and preventive medicine;
- F. New programs and projects worldwide on education, training and management of the profession;
- G. Special projects for developing countries;
- H. New ways of cooperation with the diagnostic industry in bridging the new technology and the applied tests;
- I. Information technology based on an integrated vertical meta-network, summarized in 'total laboratory solution (TLS)'.

JCF:

- To provide well-structured interventions to improve availability of Laboratory Medicine services in resources limited countries: partnership with other experienced Organizations, and the Industry to establish on site mentoring programs for training qualified personnel in relation to needs, and for the establishment of quality assurance programs in collaboration with and support of local champions, etc.;
- To respond both technologically and professionally to new 'epidemics' such as infectious diseases, diabetes, obesity;
- To improve comparability of laboratory tests results (information) and to strongly promote greater evidence based utilization of Laboratory Medicine;
- To improve bi-directional communication skills at all levels within IFCC, and to elevate the awareness of the public and of the medical community of the value of the Laboratory Medicine professional as a health care provider;
- To find new leverage means to consolidate the worldwide leadership of the IFCC in Laboratory Medicine.

DG: The AACC has developed a subdivision for youth, STCL (Society for Young Clinical Laboratorians), which is very active and efficient. Do you think that we can imagine an equivalent within IFCC?

GB: The future of laboratory medicine lies in the hands of many excellent young professionals. In some countries these new professionals are replacing a previous generation whereas in other countries they are developing laboratory medicine for the first time. There is great merit in bringing together young professionals to share best practice and experience. IFCC can best do this by organizing sessions and events at its Regional and International congresses.

VB: Since a long time there is a discussion going on to include more young people in the meetings, symposia and other projects. Due to their financial limitations they are unable to participate especially in the continuous education programs. Since a long time I am working for changes. Creation of centers of excellence and long distance learning are a great need for them. However we have to be more active in working out new ways of better involvement with the young professionals. We can organize more activities with the young member clubs, however we have to try first with a better cooperation's between the generations in the society.

JCF: In a rapidly changing environment, IFCC must find ways of attracting young laboratorians to join the Committees and Working Groups of the Divisions. This is where the expertise of young laboratorians is most needed. With further revision of the structure of the IFCC and of the strategic plan, we must learn from the AACC experience and integrate young clinical laboratorians at all levels of the Federation.

DG: To conclude this short interview, what are for you the three most important events of the last ten years for laboratory medicine?

GB: Of the many important events during the past ten years the following three are critical:

- The introduction of molecular diagnostics, that will revolutionize future practice
- The development of bio-informatics and improved electronic communication
- Global acceptance of the need for scientific quality assurance and quality management leading to improved service delivery and harmonization of practice

VB:

1. Introduction of the molecular diagnostic tools
2. Implementation of 'Evidence based medicine'
3. IVD-tests in preventive medicine

JCF:

- Greater interdisciplinary integration of clinical laboratory testing and interventions as an indispensable means for screening, risk assessment, prognosis and diagnosis;
- Molecular medicine: genomics, proteomics, metabolomics, i.e. individualized care;
- Rapid tests, POCT, plus online availability of medical information, all leading to patient empowerment.

IFCC DOCUMENTS & RELATED PUBLICATIONS

The following documents have been published by IFCC Divisions/Committees/Working Groups:

SD-C 8.2.21 Reference Systems of Enzymes

Schumann G, Aoki R, Ferrero CA, Ehlers G, Ferard G, Gella FJ, Jorgensen PJ, Kanno T, Kessner A, Klauke R, Kytzia HJ, Lessinger JM, Miller WG, Nagel R, Pauwels J, Schimmel H, Siekmann L, Weidemann G, Yoshida K, Ceriotti F. IFCC primary reference procedures for the measurement of catalytic activity concentrations of enzymes at 37 degrees C: Part 8. Reference procedure for the measurement of catalytic concentration of alpha-amylase [alpha-Amylase: 1,4-alpha-D-glucan 4-glucanohydrolase (AMY), EC 3.2.1.1]. Clin Chem Lab Med 2006; 44:1146-1155.

The following recently published papers relate to IFCC documents and Committee–Working Group activities:

Savoca R, Jaworek B, Huber AR. New "plasma referenced" POCT glucose monitoring systems—are they suitable for glucose monitoring and diagnosis of diabetes? Clin Chim Acta 2006; 372:199–201