



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

eNewsletter



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EDITORIAL



Prof. Panteghini, Chair of the Scientific Division, IFCC

IFCC SCIENTIFIC DIVISION (SD) - AN UPDATE OF THE ONGOING ACTIVITIES RELATED TO STANDARDIZATION

As a general rule, the SD initiates and manages projects through its Committees (C) and Working Groups (WG). The Cs are theme orientated, and typically carry out a range of projects in an area of particular importance to the laboratory medicine community. WGs are task orientated and focus on a single goal or closely related set of goals which can usually be achieved in a limited timescale. The SD currently coordinates the activities of eight Cs and thirteen WGs.

For more details, see IFCC web site www.ifcc.org

The majority of C/WGs are involved, in collaboration with the IVD industry and with other organizations such as IRMM and NIST, in developing reference measurement systems (i.e. reference methods, reference materials and reference laboratories) for measurands of clinical significance to reduce whenever possible measurement

uncertainty and to promote comparability of results for a better reliability of the information obtained from routine procedures.

To illustrate the complexity and the impact of these activities on patient care, the work of C/WGs related to the standardization of some analytes is briefly summarized in this editorial. The Committee on Plasma Proteins (C-PP) is currently carrying out work on the development of a new commutable reference material for protein analysis as a substitute of the first CRM 470, which is now selling out. The C-PP is also closely monitoring emerging technologies in the field of proteomics with a view to producing guidance on standardisation and clinical utility of these methodologies at an appropriate stage. The Committee on Standardisation of Markers of Cardiac Damage (C-SMCD) has a broad remit to produce analytical and clinical recommendations pertaining to standardisation and evaluation of available and newly introduced biomarker assays. Joint NACB-IFCC guidelines on standardization of markers of cardiac damage have been updated this year, and C-SMCD is currently working on the development of a troponin I reference system and on the characterization of B-type natriuretic peptide assays. The Committee on Reference Systems of Enzymes (C-RSE), after the development and publication of six reference methods for clinically relevant enzymes, is currently focussing on the development of IFCC reference methods for alkaline phosphatase and pancreatic lipase. The C-RSE has also created a reference laboratory network, which has demonstrated its competence to certify reference materials (an ongoing activity concerns the certification of a new reference material for aspartate aminotransferase in cooperation with IRMM). The Committee on Reference Intervals and Decision Limits (C-RIDL) is promoting a standardised approach to establish common reference intervals obtained using methods traceable to validated reference systems. In particular, the C-RIDL is organizing a multicentre determination of reference intervals for aspartate aminotransferase, alanine aminotransferase and γ -glutamyltransferase, involving three IFCC reference laboratories and a number of clinical laboratories worldwide located. The C-RIDL liaises closely with the Committee on Traceability in Laboratory Medicine (C-TLM), which supports all SD activities with respect to the implementation of the concept of traceability and, specifically, is responsible of the IFCC External Quality Assessment Scheme (EQAS) created to demonstrate the competence of reference laboratories as reference measurement service providers. Finally, the Committee on Molecular Diagnostics (C-MD) has developed criteria for IFCC molecular diagnostics expert laboratories and network laboratories, and invited applications from interested laboratories via national societies. A number of applications are currently being considered and it is hoped that networks with expertise in various areas of molecular diagnostics will be established later this year. Applications from further interested laboratories will be invited on an ongoing basis. In the last ten years, the WG on Standardization of HbA1c (WG-HbA1c) has successfully developed a reference system for this measurand. It is now developing

an implementation program to educate laboratory professionals and clinicians about the importance of international standardisation of HbA1c measurements for the benefit of diabetic patients. The activities of this WG are likely to be of major importance to the laboratory community, clinicians and patients. Importantly, a joint agreement has been reached between the IFCC and the international diabetologists associations (ADA, EASD, IDF) to recommend acceptance of the IFCC reference system as the international foundation for HbA1c measurement, to issue results in both SI (mmol/mol) and traditional (%) units, and to assess the suitability of reporting an 'estimated average plasma glucose' when validation by clinical data is available. The WG on Standardisation of Thyroid Function Tests (WG-STFT) has published this year two papers on the definition of free T4 as a measurand and on a candidate international conventional reference method for free T4 measurement in serum. An inter-laboratory comparison using this methodology will be performed later this year. The WG-STFT is also discussing the issue of TSH standardization and considering alternative approaches to this as a future activity. The WG on Standardisation of Glomerular Filtration Rate Assessment (WG-GFRA) is developing further recommendations for creatinine measurement and accurate GFR estimation. Hemoglobin A2, carbohydrate-deficient transferrin (CDT), cystatin C, urinary albumin, and growth hormone (hGH) are further markers for which specific SD WGs are pursuing standardization through the creation of specific reference systems. Finally, in view of the substantial differences which exist in commercially available insulin assays, a WG on the Standardization of Insulin Assays (WG-SIA) has been jointly established with the American Diabetes Association and is currently developing a candidate reference method for insulin analysis.

As can be seen from this brief update, the work of the SD stretches across the full remit of Laboratory Medicine 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 which the SD might address in the future are welcome.

DO YOU KNOW WHO ARE THE IFCC BOARD MEMBERS?



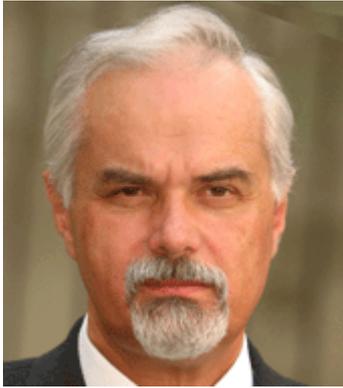
Jocelyn Hicks, President and Chair of the EB

Dr. Jocelyn Hicks is Executive Director Emeritus at Children's National Medical Center and Professor Emeritus of Pediatrics and Pathology at The George Washington University School of Medicine in Washington, DC, US. She is currently the President of JMBH Associates, a health management consulting company. She is also a scientific and marketing adviser to several major international diagnostics companies. Until recently Dr. Hicks was the Chief Operating Officer of the Genetics and Fairfax Identity Divisions of The Genetics and IVF Institute in Fairfax, Virginia. Prior to that, she was Chair of Laboratory Medicine and Pathology and Executive Director of the Center for Complex Diseases at the Children's National Medical Center (CNMC), Washington, DC.

Dr. Hicks obtained a BSc. (Honours) in Physiology and her MSc. in Biochemistry from the University of London (UK), and a PhD in Physiology and Biophysics from Georgetown University Medical School (USA). She has over 80 peer-reviewed publications, and many books, including Point-of-Care Testing and the Directory of Rare Analyses.

Dr. Hicks is a Past President of the American Association for Clinical Chemistry (AACC) and founder of the Van Slyke Society that is devoted to education and research, as well as providing funds for young clinical chemists to attend national meetings. Dr. Hicks is the founder and Past President (two terms) of the International Association of Paediatric Laboratory Medicine. Dr. Hicks was Chair of the Publications Division of the International Federation of Clinical Chemistry (IFCC), and introduced the IFCC Website and the IFCC Journal. Dr Hicks was most recently the Treasurer and a Board member of the IFCC, from 2003–2005.

Dr. Hicks' many honours include honorary memberships in the Association of Clinical Biochemists (UK), the Israel Society of Clinical Biochemistry, the Portuguese Association of Clinical Pathology and the Egyptian Society of Laboratory Medicine. Dr. Hicks has received three of the AACC's national awards, and is frequently invited to speak both nationally and internationally.



Vladimir Palicka Vice-President

Dr. Vladimir Palicka is a Professor of Biochemistry and Professor of Internal Medicine at the Charles' University of Prague, and Director of the Institute for Clinical Biochemistry and Diagnostics and Member of the Medical Staff at the University Hospital in Hradec Kralove.

Professor Palicka received his MD at the Palacky' University and after training in clinical biochemistry he obtained his PhD at the Charles' University in Prague. He is currently Director of the Institute for Clinical Biochemistry and Diagnostics, Director of the University Osteocentre (Clinic for Osteology) and Dean of the Medical Faculty. He is now the honorary president of the Czech Society for Clinical Biochemistry having served as its president for 8 year as President. In addition, he has served as President of the FESCC (Forum of the European Societies for Clinical Chemistry) and currently serves as its Past-President. He is a member of the American Association for Clinical Chemistry (AACC) and Honorary Member of the Slovak Society for Clinical Biochemistry, Polish Society for Laboratory Diagnostics and Hungarian Society for Clinical Pathology. He also serves on the editorial or advisory board for more that 10 Journals, including those published in USA, UK, or Italy.

His scientific interests are oriented mainly towards clinical biochemistry, clinical nutrition and intensive metabolic care. He also maintains a clinical practice in osteology with most of his recent publications being on this topic. He currently serves as President of the Czech Society for Metabolic Bone Diseases. Professor Palicka has published more than 300 scientific papers and presented more than 600 lectures at scientific conferences.



Mathias M. Müller, Past President

Dr. Mathias M. Müller is Professor of Medical Chemistry at the University of Vienna, Austria and Director of the Institute of Laboratory Diagnostics at the Kaiser Franz Josef Hospital and the Preyer Children's Hospital. He received his MD degree at the University of Vienna. He was trained in Laboratory Medicine and in Transfusion Medicine. He serves in senior positions in Laboratory Medicine and Clinical Biochemistry at the 2nd Department of Medicine and the 2nd Department of Surgery, University of Vienna.

Professor Müller's major research interests include purine metabolism in clinical and applied biochemistry. His recent studies are related to laboratory diagnosis in transplantation medicine and to the rational use of tumour markers. His institute was part of a European research project for the establishing services for inborn errors in purine and pyrimidine metabolism. He has published more than 290 scientific papers; he is author and co-author in more than 250 abstracts, and editor and co-editor in 8 books and proceedings. He is Associate Editor of *Clinical Biochemistry* and serves on the editorial boards of *Clinica Chimica Acta*, and *Advances in Clinical Pathology*. Professor Müller has served in various professional organisations: He was Secretary, Treasurer, Vice-President and President of the Austrian Society of Clinical Chemistry. In addition he was elected President of the Austrian Society of Quality Assurance after having served as its General Secretary from 1981 to 1992. He has also served as President of the European Society for Study of Purine and Pyrimidine Metabolism in Man.

Within IFCC, he has served as Secretary (1985 – 1987), Vice President (1997–1999), President (2000–2005) and is currently Past-President. From 1988 to 1996 he was Vice-Chairman and Chairman of the Scientific Division. During this time his main interest was oriented towards further development of the "Reference System" by starting within IFCC several projects on certified Reference Materials. Recently, he succeeded in establishing a working-collaboration with the European Institute of Reference Measurements and Materials (IRMM). He was also heavily involved in the formation of the Joint Committee of Traceability in Laboratory Medicine (JCTLM) in 2002. The JCTLM is a joint venture of professionals, metrologists and the in vitro diagnostic industry with the aim to establish globally traceability of diagnostic measurements. Clinical Chemistry and Laboratory Medicine. He has also managed the

establishment of the IFCC Professional Scientific Exchange Programme for young scientists, a scholarship for individual training and initiated the global IFCC campaign for disease management on diabetes mellitus.



Dr. Päivi Laitinen Secretary

Päivi Laitinen is a clinical biochemist in the Laboratory of Oulu University Hospital, Oulu Finland where she is responsible for endocrinology and toxicology. She also is a lecturer in clinical chemistry in the Oulu University and in the Institute of Health and Social Care in Oulu. She obtained her PhD degree in Biochemistry in 1986 and MS in Health Care Administration in 2002 from Oulu University. She received her specialist training in clinical biochemistry in Tampere University Hospital, Tampere, Finland. In 2003 she was appointed a Docent in Clinical Biochemistry. Dr. Laitinen started her scientific research on polyamine metabolism. At present, her main interests include prenatal screening, first and second maternal trimester screening for Down syndrome.

Dr. Laitinen has been an active member of the Finnish Society of Clinical Chemistry since 1987 and has served as a member of the Board of Directors (1992–1995), Vice President (1996–1997) and President (1998–2002). She also had other activities in Finland including being member at-large of Labquality LTD from 1998 to 2002, Chairwoman of the Finnish Clinical Chemistry Register Committee (EC4) from 1998 to 2002, member of the editorial board of *KliinLab* (2002), and a member of the working group on laboratory nomenclature of the Finnish Union of Counties since 1999.

In addition to her professional interests, Dr Laitinen has served as a technical assessor for the Finnish Accreditation Service. She is also a Change Laboratory coach (Center for Activity Theory and Developmental Work Research of Helsinki University) and she has led a Change Laboratory project (development of work process of laboratory) in her laboratory. Her international activities include membership of several boards. She has been a member at-large of the Scandinavian Society of Clinical Chemistry since 1998, member at-large of the Board of the European Communities Confederation of Clinical Chemistry (EC4) (2003–2005) and a member of the IFCC Awards Committee since 2003. She has also been a member of the Scientific Advisory Committee of several international congresses of clinical chemistry. At present she also serves on several working groups of EC4.

In addition to her professional interests, Dr Laitinen has served as a technical assessor for the Finnish Accreditation Service. She is also a Change Laboratory coach (Center for Activity Theory and Developmental Work Research of Helsinki University) and she has led a Change Laboratory project (development of work process of laboratory) in her laboratory.



Ghassan Shannan, Treasurer

Dr. Ghassan Shannan graduated with a B.Sc., from the Faculty of Pharmacy, Damascus University in 1969. He followed extensive training programme in Laboratory Medicine for three years under a special scheme organized by the Ministry of Health. Dr. Shannan received his Ph.D. in Clinical Biochemistry from the University of Newcastle upon Tyne, England in 1977. He followed several short courses on topics in Laboratory Medicine as well as in other disciplines such as Management, Finance, Reproductive Health, Family Planning and Disaster Management. He started his career in 1970 as a junior Clinical Biochemist at one of Damascus Hospitals, followed by several positions including Manager and Director of various Medical Laboratories in Damascus, Syria. In 1992 he was appointed as Director of the Supply Department at the Military Medical Service. In addition to his official public positions, Dr. Shannan has maintained his professional work in his Private Laboratory in Damascus. At the same time, he worked as a lecturer for postgraduate students at Damascus University and the Ministry of Health. He is involved in various Scientific and Professional Committees and/or Working Groups for the Evaluation of Laboratory Equipment for various Ministries in Syria including the Ministry of Health, the Ministry of Higher Education and the Military Medical Service. He was appointed by WHO/EMRO and the Ministry of Health to chair the National Committee of Quality Assurance in Medical Laboratories in Syria. He is also, a member of the Accreditation Committees at the Ministry of Health. He is an active member of the Syrian Clinical Laboratory Association (SCLA) since 1979 and he held several positions at the Executive Board of SCLA including Treasurer, Secretary and President. Also, he has played a major role in the reform of the Arab Federation of Clinical Biology (AFCB) in 1991, since then he has been an active member promoting the federation and its activities. He was a member of the Executive Board of AFCB for several periods.

Dr. Shannan has also been active in the affairs of the IFCC having served as a Member-at-Large on its Executive Board and is its current Treasurer (2006–2008).



Norbert Madry, Corporate Representative

Dr. Norbert Madry is currently Vice President PSI for Dade Behring, and has over 20 years of experience in the in-vitro Diagnostics industry. He has held various positions ranging from Research & Development, Manufacturing, Strategy & Business Process Development, General Manager and Managing Director in charge of Dade Behring's Marburg/Germany site. He graduated from the University Münster/Westphalia and holds a PhD in Microbiology from that same university. In the IVD industry, he has worked as a Lab Manager on tumour marker assay development, as a Scientific Director on assay and system development for the OPUS immunoassay system, and as a Production Head on urine test strip and blood glucose test strip manufacturing. Dr Madry has actively collaborated with many IFCC Committees and Working Groups and will serve as the Corporate Representative on the IFCC Executive Board for 2006–2008 where he will emphasize areas of mutual benefit between laboratory medicine professionals and the IVD industry which would enhance the value of Clinical Chemistry and Laboratory Medicine in modern health care and its appreciation by all stakeholders around the globe.



Joseph Lopez, Member

M Joseph Lopez obtained his BSc Honours in Biochemistry from the University of Malaya in Kuala Lumpur in 1973 and then joined the Institute for Medical Research (IMR) as a clinical biochemist where he served for more than 32 years. While serving

at the IMR, he obtained the Membership of the Australasian Association of Clinical Biochemists (by examination) and the MSc from the University of Malaya. At IMR he has been active in research, the provision of reference diagnostic services, training of allied health personnel and the provision of consultancy services in clinical biochemistry. In addition, for many years, he was closely associated with the IMR's activities in connection with the support it received from the World Health Organization.

His research interests and publications have been in the areas of laboratory methodology and evaluation, quality assurance and tumour markers. He has been closely involved with laboratory quality throughout his career and coordinated the introduction of the first inter-laboratory quality assurance scheme for government hospitals in Malaysia.

He is a founding member of the Malaysian Association of Clinical Biochemists where he held office for some years. Joseph Lopez was elected President of the Asian and Pacific Federation of Clinical Biochemistry (APFCB) in September 2004. Prior to his election as President of the APFCB, he was its Secretary from 1998 to 2004. Together with his colleagues, he has been responsible for the introduction of several new initiatives within the APFCB, including the APFCB Travelling Lectureship, the corporate and affiliate membership schemes, the APFCB Distinguished Service Award and the APFCB Philanthropic Fund. He is currently editor of the APFCB News and the APFCB web-site. He is a member of the Editorial Board of the Indian Journal of Clinical Biochemistry.



Daniel Mazziotta, Member

Prof. Daniel Mazziotta is Professor of Clinical Chemistry at National University of La Plata (1989–), Director of the External Quality Assessment Program of the Argentine Biochemical Foundation (1987–) and Director of the Reference and Standardization Laboratory in Clinical Biochemistry of Argentine Biochemical Foundation (1997). He graduated in Chemistry in 1974 and Biochemistry, Clinical Orientation in 1976 at the National University of La Plata, Argentina. From 1974 to 1982, he served the Central Laboratory Service of the Hospital San Juan de Dios of La Plata working for the Intensive Care Unit and the Heart and Lung Functional Exploration Service. He

became a member of the Central Commission of External Quality Control of the Ministry of Health of Province of Buenos Aires in 1978 and he was the organizer of External Quality Control Program for the same Ministry from 1980 to 1986.

Professor Mazziotta was a member of the Executive Board of the Specialists on Biological Analyses Association between 1984 and 1986. Also, he was Secretary of the Biochemical Federation of the Province of Buenos Aires from 1986 to 1992. He has been a member of the Permanent Scientific Section of the Latin–American Confederation of Clinical Biochemistry since 1987. He was National Representative of Argentina at several IFCC meetings.

He is member of the Editorial Board of Acta Bioquímica Clínica Latinoamericana, the official journal of the COLABIOCLI, Member of the Intercontinental Advisory Board of Accreditation and Quality Assurance journal and member of the International Advisory Group of the American Association of Clinical Chemistry. He received the American Association of Clinical Chemistry International Fellowship Award in 2000. He has developed intensive post-graduate education courses on Quality Control covering all Argentina as well many Latin–American countries, including Bolivia, Chile, Paraguay, Uruguay, Dominican Republic, Ecuador, Guatemala, Costa Rica, Honduras, Mexico, Venezuela and Brazil. He acts as adviser and professor for the Pan–American Health Organization in Guatemala and Ecuador. Professor Mazziotta has been active in the IFCC since 1992 when he was a corresponding member of the Committee on Analytical Quality (C–AQ) of the Education and Management Division. In 1994 he became member of the Nomination Committee and in 1997 became a member of the C–AQ. Between 1998 and 2002, he was the chairman of the same committee (C–AQ). In 2002, he was elected to a three–year term as a Member of the IFCC Executive Board and was re–elected to that position in 2005 for the term 2006–2008.



Michael Thomas, Member

Dr Michael Thomas, PhD is Clinical Director – Pathology and Head of Clinical Biochemistry at the Royal Free Hospital, Hampstead, London, UK. He trained in chemistry and biochemistry at the University of Liverpool and subsequently completed a research degree on the non–collagenous proteins of mineralized tissues

(bone and dentine) during which time he also received a Leverhulme Travelling Scholarship. His professional training was done in Chelmsford and Guildford and subsequently at the Royal London Hospital. He then moved to the Royal Free Hospital in 1983 as Head of the endocrine laboratory and assumed overall responsibility for clinical biochemistry in 1993.

He has been Assistant Secretary and Secretary of the Association of Clinical Biochemists and as a Regional Tutor and was Chairman of the Organising Committee for the ACB national meeting Focus held at Excel, London Docklands in 2001. He is currently a National Assessor for the Department of Health. He has been an accreditation inspector for Clinical Pathology Accreditation (UK) Ltd and now represents the ACB on its Board. In 2005, he was elected as a Member-At-Large for the IFCC and will serve on its Executive Board for the term 2006-2008.

Dr Thomas' department has recently achieved recognition as a Specialist Centre for Cardiovascular Biomarkers. He is a member of the NHS R&D funded research programme into the effect of prescribed exercise on health (EXERT) and has collaborated on the mechanism of HIV lipodystrophy. He also still retains an interest in both bone and thyroid disease. More recently he has become a proponent of the benefits of total laboratory automation; the Royal Free Hospital became the first fully automated laboratory in the UK in 2000, and he has been an invited speaker on this topic at both national and international meetings.

He is currently involved with colleagues in developing ways in which pathology can be effectively delivered across the North Central Sector of London under a challenging modernising agenda of the Department of Health.

DO YOU KNOW WHO ARE THE IFCC STAFF MEMBERS?



Paola Bramati

Ms Paola Bramati has been working at the IFCC Head Office since November 2005. Her field of experience is in the area of communication and has been working in the tourism field for more than 15 years. Her first job experience was at the Milan Airport

as passengers' assistance agent. Later she elected to work for an airline company, where I had the chance to have direct passenger contact as well as gaining experience in sales, marketing and pricing. Her education is related to foreign cultures and languages. After High-School she moved to Spain, where she attended a 2 years Course at the University of Málaga on the topic of 'Spanish language and culture' and on 'Tourism Management' skills. She also had the opportunity to follow a fellowship programme to learn English in the United States and UK. Always attracted to foreign cultures, she learned other languages in her spare time, attending courses of French and German. Daily basis job being never the same, she finds it challenging to deal with Officers from all over the world, getting to know different traditions, experiences and backgrounds. She finds that this particular environment allows opening minds and she is looking forward to working with IFCC for a long time!



Lisa Ionescu

Ms Lisa Ionescu was born in Canada where she completed studies in Business Administration and specialization in Communication and Management at the Notre Dame School of Business in Ottawa, Canada. She speaks fluent English, French, Italian and Romanian. She has had working experience at the Royal Bank of Canada initially as a bank teller and later was entrusted with investments and loans. She moved to Italy in 1995 and started working for the Rome branch office of Ernst & Young, one of the world's leading professional services organizations, in the capacity of assistant to companies across the globe in identifying and capitalizing on business opportunities. In 1997, she re-located to Milan where she collaborated at the International School of Business English teaching young students, between the ages of 15 -18, intermediate business English. Her career with the IFCC Head Office started in July 2001. She participates to IFCC Executive Board meetings and she is responsible for planning events, congresses and conferences. She also has a direct involvement with sponsorships, grants and administrative issues together with the EB.

LETTER TO THE EDITOR

Eradication of tuberculosis in Europe so near and yet so far

Contributed by **By Bernard GOUGET SFBC–European Federation of Clinical Chemistry Representative Manager for Public Health, Fédération Hospitalière de France**

By affecting important historical figures, tuberculosis (TB) has particularly influenced European history, and has become a theme in art, mostly literature, music and film. Frederic Chopin died of consumption in 1849 at age 39 and historical records indicate episodes of hemoptysis during his performances. The Bronte's family of writers, poets and painters was particularly struck by TB, with Anne, Branwell, and Emily all dying of it within two years of each other. Charlotte's death in 1855 was stated as due to TB. Edward Munch (1843–1944), the famous painter who produced 'The Scream', lost two members of his family to tuberculosis: his mother and his beloved sister. The loss of his sister was immortalized in the painting 'The Sick Child'. Mimi, the heroine of Puccini's opera, *La Bohème* suffers from tuberculosis. Violette Valery, heroine of *La Traviata* (G. Verdi) also died of the disease. The pale haunted appearance of tuberculosis was fashionable at times and affected the portrayal issues in European art.

Today, Western Europeans tend to think of tuberculosis as a disease of the dim past. In fact, the TB incidence in the EU is among the lowest in the world and comparable with other industrialised areas like the USA and Australia. This is even lower when considering only the EU–25, which has an incidence of only 13/100,000 in 2005. However, a massive epidemic is now raging in the eastern portion of Europe. The incidence of TB increased progressively when moving from west to east, mirroring the geographical gradient of mortality. In Eastern Europe nearly 50,000 people die from the disease each year. The fight against TB is not restricted to the medical field. It is an important issue in public health, in the socio–economical and scientific areas. It is also an issue for Europe because of the large differences among countries. In 2005, 92 129 TB cases were reported in the EU (27 countries). This represents 22% of the total number reported (426 717) in the European Region (53 countries). The challenges TB poses to the EU are related to the current epidemiological patterns. There are 20 countries with low TB incidence (between 4–20 cases per 100,000 population) and 7 countries with moderate to high incidence (between 24–135, in increasing order Poland, Portugal, Estonia, Bulgaria, Latvia, Lithuania and Romania). The problem is compounded by the steeply rising prevalence of HIV, especially in Russia and several former soviet republics, which makes people far more susceptible to developing active tuberculosis.

The available BCG vaccine has no proven effect on reduction of TB transmission. Control of the disease is achieved by case detection and treatment with a combination of drugs. The two main drugs to treat TB (isoniacid and rifampicin) have been used for the last 40 years with no significant addition of powerful treatments. The last EuroTB report shows that in the Baltic states 18% of TB cases are from Multi-drug resistance strain (MDR-TB) meaning that the bacteria are resistant to the two most potent "first-line" TB drugs. Of the 20 countries in the world with the highest rates of MDR-TB, 14 are in Europe. If MDR-TB cases are not detected or managed properly with second-line drugs, patients can develop extensively drug-resistant tuberculosis, or XDR-TB. This is a result of poor TB-control practices and a high percentage of people dropping out of treatment

The epidemiological situation in European countries calls for concerted EU action. That means mobilizing all necessary internal and external resources to expand TB control programmes within strengthened health systems, to implement joint measures against TB/HIV, to strengthen laboratory capacity, to develop scientific guidance and to invest in research. Areas to be covered include developing tools for rapid diagnosis, devising drugs that can be given for a much shorter period, and development of a vaccine.

As citizens and members of the international scientific organizations of laboratory medicine, we should build effective partnerships with the EU-funded surveillance network Euro TB. Active participation is needed in communication and social mobilization as well as in operational research programmes. Infectious diseases that are spread through the air, such as tuberculosis, know no borders. Although tackling tuberculosis means resources, it is also a question of whether collectively, lay people, scientists and the world community have the will to eradicate this ancient scourge of humanity.

Harmonizing genetic testing across Europe

Contributed by Bernard GOUGET, SFBC-EFCC representative

EuroGentest is an EU-funded Network of Excellence (NoE) with 5 Units looking at all aspects of genetic testing – Quality Management, Information Databases, Public Health, New Technologies and Education. Through a series of initiatives EuroGentest encourages the harmonization of standards and practice in all these areas throughout the EU and beyond. Eurogentest (www.eurogentest.org) is the first version of the Quality Assurance database (QAu) for genetic testing laboratories. Accurate genetic diagnosis testing is essential for rare disease patients and their families. To date, there is no standardised mechanism in place to easily evaluate the quality of a given laboratory for every diagnostic test. QAu was developed to meet this need. It is expected that the database will quickly become a necessary resource

for geneticists and other professionals around the world in order to provide accurate and reliable test results to patients and their families. To be updated annually, version 1.0 of the database includes profiles for the more than 50% of laboratories surveyed that replied to an in-depth survey. The database provides a search engine that is simple to use and has different features depending on the needs of the user. It also has a guide for novice users. The EuroGentest website provides detailed information on the development of the database, including the survey created and the complex and thorough validation process employed to ensure the accuracy of the data received. The web-based survey made an in-depth probe of quality management data while taking confidentiality into account. Accreditation, certification, and licensing status were all considered. The QAu database includes all laboratories offering any form of genetic testing (molecular, cytogenetic, biochemical). All the data for the quality assurance of genetic testing laboratories will also be available on the new version of the Orphanet website.

Report on the Clinical Molecular Biology Course Organized by the IFCC Committee on Clinical Molecular Biology Curriculum

Contributed by Dr. Leila N Shami, Medical Care Centre, Damascus, Syria

I was one among other Syrian doctors who had the opportunity to travel to Milan, Italy to attend the Clinical Molecular Biology Course.



The group that attended the course In the Medical Laboratory of San-Raffaele Hospital

This intensive annual course, supported by IFCC, Saint Raffaele Foundation and Roche, lasts 5. Days and is held during the first week of July at Saint Raffaele Hospital in Milan. The speakers and the tutors come from various countries to deliver up-to-date information on Molecular Biology Techniques.

In addition of being an important industrial and commercial centre in Italy, Milan is, without a shadow of a doubt, a unique scientific centre for the development of Medical Sciences in general and Laboratory Medicine in particular.

The Medical Laboratory of Saint Raffaele Hospital is considered one of the largest reference laboratories in Italy and Europe. The lab is fully equipped with state-of-the

art technology in various laboratory disciplines, especially genetics and molecular biology.

The course covers the basic knowledge on clinical molecular biology from both theoretical and practical points of view. Basic theoretical concepts related to the field were discussed in morning sessions given by highly qualified speakers specialized in different fields of molecular biology and genetics. These sessions were followed with discussions and exercises. Many issues were discussed, starting with the basic knowledge on DNA/RNA extraction, PCR principles, restriction enzyme specificities, problems related to contamination, safety and setting up a PCR laboratory. On the last day we had lectures about PCR application in cancer, genetic diseases, microbiology and pharmacokinetics fields.

The practical sessions were organized through afternoon sessions in the lab supervised by an excellent team of tutors with remarkable experience. After a phenol-chloroform DNA extraction from whole blood we started the analysis of G2021 mutation of prothrombin gene by PCR amplification and enzymatic restriction digestion. The results varied. We discussed many problems that could have been encountered through the process. We toured the laboratories of the Molecular Biology Department, where we had detailed explanation about the process of work and the principle of instruments such as thermocyclers for PCR, HPLC, and gene sequencing. Before the end of the tour we were briefed about the latest in nano-chip technology.

The course included many social events. The hospitality of the Italians was great. They were great company and very helpful. We exchanged some details about life in Syria, Italy and other countries.

Although it may seem a long way to go for developing countries to catch up with the western medical development, I found the course very helpful in opening a window to introduce the latest technology used in the field of molecular biology. This course will enable us to stand out in our respective countries and introduce new technologies in PCR and gene sequencing.

I would like to extend my sincere thanks and gratitude to the speakers, tutors, Saint-Raffaele staff and to IFCC office staff who, with their organization, made our stay in Milan a pleasant and unforgettable one. I address special thanks to the IFCC, the Saint-Raffaele Foundation and Roche for supporting this course.

Finally, I would recommend this course to all colleagues who are interested in this field and its applications. Good luck to everyone.