



e-NewsLetter



Editor: Edgard Delvin Ph.D, FCACB, FACB

CHU Sainte-Justine - Centre de Recherche - 3175 Côte-Ste-Catherine - Montréal, Québec - H3T 1C5, Canada
e-mail: delvine@sympatico.ca

March – April 2012 issue

- NEWS FROM THE IFCC EXECUTIVE BOARD AND COUNCIL
- NEWS FROM REGIONAL FEDERATIONS AND NATIONAL ASSOCIATIONS
- BRIEF REPORT ON THE THE 13TH BERGMEYER CONFERENCE
- FORTHCOMING MEETINGS

NEWS FROM THE IFCC EXECUTIVE BOARD AND COUNCIL

NEW TASK FORCE ON POINT OF CARE TESTING (TF-POCT) HAS BEGUN ITS ACTIVITIES

The Terms of Reference of the TF-POCT are the promotion of the quality in the use, performance, interpretation and reporting of POCT across the full spectrum of clinical chemistry and laboratory medicine; the creation of a forum for high level discussion on a wide range of POCT related topics; the provision of an international leadership for developing the clinical practice of POCT in Laboratory Medicine.

The Task Force is chaired by Ms Rosy Tirimacco, Network Operations and Research Manager, Integrated Cardiovascular Clinical Network, Country Health, South Australia (iCCnet CHSA). For further information on the aims and the projects of the new TF-POCT, please visit the [TF section of the IFCC Website](#)

NEWS FROM REGIONAL FEDERATIONS AND MEMBER SOCIETIES

NEWS FROM THE EXECUTIVE BOARD OF THE EUROPEAN FEDERATION OF CLINICAL CHEMISTRY AND LABORATORY MEDICINE

By Ian Watson, President

CHANGE IN THE ACRONYM



The Executive Board of the European Federation of Clinical Chemistry and Laboratory Medicine has become aware that the abbreviation EFCC is often misidentified as IFCC by other international organizations, National Societies and other stakeholders as well as by individuals from the profession. In the past, this has caused confusion and sometimes has undermined the identity of the Federation.



After consultation with National Representatives and Presidents of our Member Societies, the Executive Board has agreed to adopt EFLM to replace EFCC as the acronym to describe our Federation. The full name of the Federation remains unchanged: European Federation of Clinical Chemistry and Laboratory Medicine. We take this occasion to thank all our National Society Members for supporting the Executive Board in this important decision for the future “branding” of our Federation.

The change in emphasis towards Laboratory medicine reflects the agreement of European National Societies to use the description 'Specialists in Laboratory Medicine' as our job role title. This helps identify us as a coherent group within Healthcare and is a useful identifier for politicians and organizations alike. We feel this is a positive expression for the future recognition of our profession.

NEWS FROM THE GREEK SOCIETY OF CLINICAL CHEMISTRY - CLINICAL BIOCHEMISTRY
Contributed by A. Grigoratou, Member of the scientific committee of Greek Society of Clinical Chemistry - Clinical Biochemistry

REPORT ON THE 2-DAY CONFERENCE OF CLINICAL CHEMISTRY HELD IN ATHENS IN NOVEMBER, 2011.

The 2-day conference consisted of four roundtables:

- a) Greek Forensic Science Laboratories: Chemistry and Molecular Biology in the service of Law and Justice. The Greek CSI experts presented their work on the police forensic evidence investigation during a roundtable organized in cooperation with Professor Sot. Athanasselis (Athens University) and Chr. Psahoulia-Christodouli, PhD, EurClinChem (Evangelismos Hospital, Athens). It included the lectures Forensic Chemistry, DNA Analysis and genetic testing in the service of law, Forensic Toxicology, Forensic matrix for the detection, Forensic car accident investigation, presented by M. Mendoni, PhD, P. Maniati, PhD, Professor A. Donna, M. Stefanidou and Professor K. Pistos.
- b) The role of clinical chemistry in pregnancy: It included the lectures Pregnancy complicated by disease, Immunoassay of β -hCG, its subunits and its metabolites, Gestational diabetes mellitus, Thyroid dysfunction and high blood pressure in pregnancy and First trimester antenatal screening for chromosomal anomalies, by C. Iavazzo, MD, PhD, Professor D. Rizos (Athens University), V. Loe (Benakio Hospital, Athens).
- c) Glycosylated Hemoglobin HbA1c: It included the lectures Standardization of HbA1c measurement, HbA1c in the diagnosis of type 2 diabetes mellitus, by K. Makris, PhD (KAT Hospital, Attica), A. Mavrogiannaki MD, PhD (NIMTS Hospital, Athens).
- d) The Young Scientists Committee presented two lectures: Optical DNA biosensors in the molecular diagnostics, Bioinformatics and Computational Biology, by Fr. Papanikos, MSc (Athens University) and Sp. Matsangos MSc (Tzanio Hospital, Piraeus).

2011 is the International Year of Chemistry and commemorates the achievements of chemistry and its contributions to the well-being of humankind. The theme of IYC2011 is "Chemistry—our life, our future". The Greek Society of Clinical Chemistry - Clinical Biochemistry also participated in the celebrations. G. Palaiologos (PhD) presented the history of chemistry through the ages and its role in the healthcare science. He focused on the importance of chemistry and its role in the improvement of our lives. Emphasis was placed on the importance of making an informed decision in clinical chemistry and medicine.

Two hundred participants and students from all over the country attended the 2-day conference. We would like to express our deepest thanks to the Evangelismos Hospital that offered free of charge its

congress room as well as to all speakers and participants. It was a successful meeting that brought together several aspects of modern and classical clinical chemistry.

NEWS FROM THE SOCIETY OF MEDICAL BIOCHEMISTS OF SERBIA
Prepared by Snežana Jovičić for the Society of Medical Biochemists of Serbia
Institute of Medical Biochemistry Clinical Centre of Serbia, Belgrade,
Member of the IFCC eNews Working Group



DR SNEZANA JOVICIC

The European Pharmacy Student Association (EPSA), among other activities, organizes TWIN projects that are probably one of the most attractive. TWIN represents bilateral student exchange for pharmacy students from different European countries. This means that 15-20 students from one country visit their colleagues from abroad, who afterwards return the visit. The average duration of TWIN is five to seven days. Recently, one TWIN project has included medical biochemistry students from Belgrade University School of Pharmacy, Serbia, and Zagreb University School of Pharmacy and

Biochemistry, Croatia. Considering that training in clinical chemistry and laboratory medicine in most European countries begins after graduation, this was a rare opportunity for students from two countries with a tradition of laboratory medicine education starting from the first year of undergraduate studies, to share experience and to connect.

This particular TWIN project started in October 2011 with the visit of Serbian students to their Croatian colleagues, who have returned their visit in the end of February this year. Each year EPSA establishes one universal topic for all TWIN projects that is elaborated through lectures, workshops and discussions. This time it was "Antimicrobial resistance". Besides interesting lectures on this topic both in Zagreb and Belgrade, students were introduced to the work of both national societies for medical biochemistry. Society of Medical Biochemists of Serbia was the patron of the Belgrade meeting, so besides lectures on the role of PCR in diagnostics of antimicrobial resistance, the role of sepsis biomarkers in antimicrobial therapy selection and the follow-up of antimicrobial drug concentration in body fluids, Prof. Dr Nada Majkić-Singh President of the Society of Medical Biochemists in Serbia presented to our young Croatian colleagues and guests the history of the Serbian Society and of laboratory medicine practice in Serbia. They also visited the Departments for Policlinic and Emergency Laboratory Diagnostics of the Institute of Medical Biochemistry in the Clinical Centre of Serbia. One of the lecturers was Andjelo Beletić, acting liaison for the TWIN project and responsible for the collaboration of the Society of Medical Biochemists of Serbia with the IFCC Task Force for Young Scientists (IFCC TF-YS) and a Full Member of the Young Scientist of the EFCC Working Group on Congresses and Post-Graduate Education (EFCC WG-CPE). Mr. Beletić emphasized that through lectures and discussions addressing professional development and education, as well as positions in health care systems, specific experiences and ideas for improving current state had been exchanged. The overall impression was that our young colleagues recognized the specific advances of their education, integrating various biomedical, pharmacological and clinical disciplines, in management of antimicrobial resistance. He concluded that the success of this particular TWIN project strongly suggests that similar meetings be organized more often and incorporated into regular activities of the corresponding IFCC and EFCC working groups.

Beside the educational activities, the TWIN projects play also a social role and represent a great opportunity to meet new people, learn on their cultures and customs. Young medical biochemists from both Croatia and Serbia were excellent hosts to each other, presenting traditional food specialties, music, and a good time and adventures of nightlife. This unique experience assured new friendships for life.



STUDENTS FROM ZAGREB AND BELGRADE AT THE EXCURSION IN VARAZDIN, CROATIA.

NEWS FROM THE CANADIAN SOCIETY FOR CLINICAL CHEMISTS

MEET THE NEW CACB FELLOWS



DR. KAREENA SCHNABL

Hey! I'm Kareena and I grew up in Edmonton. My background combines pharmacology (BSc University of Alberta), toxicology (MSc University of Manitoba), and experimental medicine (PhD University of Alberta). I have a passion for teaching and helping others that began as a soccer referee, lifeguard, and biochemistry laboratory TA. The most rewarding years of my life were as a graduate student engaged in pediatric nutrition and clinical immunology research. I completed the clinical chemistry program in Toronto with expertise in point-of-care testing and mass spectrometry and started my career in Edmonton as a metabolomics consultant for biomarker discovery projects. Upon completing CACB fellowship, I joined DynaLIFEDx and am now a clinical chemist and an assistant clinical professor. I am involved in our quality program and am developing expertise in routine chemistry, proteins, hemoglobin disorders and clinical immunology. I co-supervise two student research projects; component resolved diagnostics for allergies and ganglioside metabolism in inflammatory bowel disease. I teach clinical chemistry, applied toxicology, and clinical immunology to medical laboratory science students and mentor pathology residents. Interests include multiplex immunoassays, autoimmune disease diagnosis, therapeutic drug monitoring and pharmacogenomics. Just got married in Jasper and we're happily settled into our new home.



DR. YU CHEN

After receiving my medical degree from Xiang-Ya (Yale-in-China) School of Medicine, I conducted 3 years of residency training in Surgery, during which I obtained a M.Sc. in surgical sciences. I received a Ph.D. in

Anatomy & Neurobiology with a thesis on cardiovascular inflammation and immunity, graduating as a Killam Scholar from Dalhousie University in 2005. Later, I went on to finish research postdoctoral training in cardiology and kinesiology at University of Toronto and University of Western Ontario. In 2009, after finishing Clinical Chemistry fellowship training at University of Toronto, I took on the position of Division Head of Clinical Biochemistry of Horizon Health Network-zone 3, based at the Dr Everett Chalmers Regional Hospital at Fredericton, New Brunswick. Our laboratory is a busy regional chemistry laboratory with over 2 million annual reportable patient tests as well as 5 satellite laboratories in the region. My interests are broad and include clinical biochemistry, medicine and surgery. Besides work, I enjoy family time with my wife and three little ones of 2, 4 and 6, and gardening in the back yard.

The texts were first published in the November issue of the CSCC Newsletter

***DR. ELEFTHERIOS P. DIAMANDIS ELECTED
FELLOW OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE***



On February 18th at the 2012 AAAS Annual Meeting in Vancouver, Dr. Eleftherios P. Diamandis, Biochemist-in-Chief, University Health Network, Division Head of Clinical Biochemistry, Mount Sinai Hospital and Division Head of Clinical Biochemistry, Department of Laboratory Medicine and Pathobiology, University of Toronto, was elected Fellow of the American Association for the Advancement of Science (AAAS), publisher of the prestigious Journal, Science.

For the worldwide elected Fellows in 2011 in the section of Medical Sciences, two Canadians were elected, one of them being Dr. Diamandis. Dr. Diamandis was elected for his distinguished contributions to the field of genomics and pathobiology of serine proteases, especially the kallikrein family, and their application as diagnostic cancer biomarkers.

Dr. Diamandis is also a Member of the Royal Society of Canada (the Canadian Academy of Sciences) and a corresponding member of the Academy of Athens.

Adapted from the March issue of the CSCC Newsletter.

NEWS FROM THE AMERICAN ASSOCIATION FOR CLINICAL CHEMISTRY (AACC)

AACC WELCOMES NEW EXECUTIVE VICE-PRESIDENT LANA VUKOVLJAK

Lana Vukovljak assumed the top executive leadership position at AACC as its new executive vice president. She succeeds Richard Flaherty, who retired at the end of December after 20 years of distinguished service to the organization.

Ms. Vukovljak comes to AACC from the American Association of Diabetes Educators (AADE) where she served as chief executive officer.

NEWS FROM THE URUGUAYAN SOCIETY OF BIOCHEMISTRY



Contributed by Dra Ana Piana- Member of the eNewsletter Working Group

GUSTAVO BRAÑAS PEREIRA RECEIVES THE WIENER AWARD

On December 2011, Gustavo Brañas Pereira, a young clinical biochemist, received the Wiener Foundation award for the best graduate in the field of Clinical Biochemistry. He received the prize during the end of the year meeting of the Uruguayan Society of Biochemistry that took place in Montevideo, Uruguay.



FROM LEFT TO RIGHT: DRA. PATRICIA ESPERON, B.C.GUSTAVO BRAÑAS PEREIRA, Q.F. ARTURO ARRUABARRENA.

FOUR DOCTORS RECEIVE THE MEDICINE NATIONAL AWARD

Doctors Mario Stoll, Victor Raggio, Patricia Esperon and Mariana Lorenzo received the Medicine National award in recognition of their research on the prevention, the diagnosis and the treatment of cardiovascular disease.

The award ceremony took place in the amphitheatre of the Ministry of public health. Dr Patricia Esperon is currently President of the Uruguayan association of biochemistry and coordinates the course of molecular biology at the Faculty of chemistry.

The Uruguayan biochemists welcome this important award made to their beloved colleague Patricia Esperon in recognition of her tireless research on cardiac diseases that, in Uruguay is a major social and public health issue.



FROM LEFT TO RIGHT: DR VICTOR RAGGIO, DR PATRICIA ESPERON, DR MARIO STOLL.

DRA GRACIELA QUEIRUGA HONOURED BY THE URUGUAYAN UNIVERSITY

Dra Graciela Queiruga, who received last fall the Reina Sofia award in Spain, was honoured by the Uruguayan University in recognition of her significant work on the National newborn screening programme. According to this programme each child born in Uruguay is tested to detect diseases that can lead to important disabilities if not precociously treated.

NEWS FROM THE SPANISH SOCIETY OF CLINICAL BIOCHEMISTRY AND MOLECULAR PATHOLOGY *Contributed by Felip Antoja Ribó, Liaison to the IFCC eNewsletter*

POST-TRAINING SCHOLARSHIPS

The Fundación José Luis Castaño, created to honor the late President of the Sociedad Española de Bioquímica Clínica y Patología Molecular (Spanish Society of Clinical Biochemistry and Molecular Pathology, SEQC), in collaboration within vitrodiagnostics companies, gives SEQC members the opportunity to apply for travel grants, attendance to courses and scholarships for studies or projects. In 2010, four Post-training Scholarships were awarded to 4 young scientists who each developed a one-year project. Once completed, each awardee submitted a written report, that was approved by the Advisory Committee of the Foundation.

The four award winners were:

Teresa Arrobas Velilla (Hospital Virgen Macarena de Sevilla): Study of lymphocyte subpopulations in patients with an isolated neurological syndrome capable to become definite multiple sclerosis.

Natalia Lampón Fernández (Hospital Clínico Universitario de Santiago de Compostela): New pharmacokinetic and pharmacodynamic aspects of Valproic Acid.

Silvia Martínez Couelo (Hospital de la Santa Creu i Sant Pau, Barcelona): Study of a region on chromosome 3 involved the possible development of type 2 diabetes in the Spanish population.

Raquel Ramos Corral (Complejo Hospitalario de Toledo): Biochemical diagnosis of organic acidemias.



FROM LEFT TO RIGHT: TERESA ARROBAS, NATALIA LAMPÓN, SILVIA MARTÍNEZ AND RAQUEL RAMOS.

BRIEF REPORT ON THE 13TH BERGMAYER CONFERENCE MEETINGS

THE 13TH BERGMAYER CONFERENCE ON VITAMIN D IN HEALTH AND DISEASE

KEPT THE PANDORA'S BOX OPENED

Contributed by Edgard E Delvin, eNewsletter Editor

From March 5th-7th, 161 clinical chemists, biologists, clinicians, nutritionists and epidemiologists attended the 13th Annual Bergmeyer Conference in the bucolic Bavarian environment of Grainau to discuss the impact of vitamin D in health and disease. Dr Ian Young, Chair of the IFCC Scientific Division co-chaired the conference with Dr Joseph Passarelli, from Roche Diagnostics GmbH and Member of the Bergmeyer Conference Steering Committee.

This conference was topical as a large proportion of the world population is considered either vitamin D deficient or insufficient, and as vitamin D is believed to be involved in physiological processes beyond bone.

Subjects addressed by the invited world-renowned experts varied from the traceability of the measurement methods for 25-hydroxyvitamin D (25-OHD), to the association of vitamin D nutritional status to bone health, cancer, diabetes, cardiovascular diseases, immune function and cognitive problems.

The different presentations revealed the complexity of the vitamin D field and, while showing beneficial effects of vitamin D supplements in different situations, called for caution in the interpretation of the historical data. They also provided a forum of discussion on the definition of the thresholds to define vitamin D deficiency and insufficiency in the light of the evolution that has taken place in the measurement of 25-OHD in the course of the past 40 years. One of the conclusions was that the measurement of this metabolite had to be tightly monitored and that laboratories had to standardize methods, taking the tandem mass spectrometry method as the reference.

Identified key questions in vitamin D research included a better understanding of the role of vitamin D in skeletal and non-skeletal health outcomes such as sub-clinical rickets and osteomalacia, diabetes, cardiovascular diseases and cognitive disorders. Other proposed issues to be addressed included interaction between genotypes and responses to vitamin D, body pool distribution, fluxes and transport kinetics, and last but not least in terms of clinical importance, the appropriateness of using 25-OHD as biomarker of the effect of vitamin D.

The small size of the conference and the setting were conducive to friendly discussions between the participants, the speakers and the organizers. This meeting definitively kept the vitamin D Pandora's box opened and advocated the continuity of research in this field, not only in bone and musculoskeletal health but also on numerous non-bone conditions.

Historical note

The series of IFCC Bergmeyer Conferences, under the scientific leadership of IFCC Scientific Division and generously supported by Roche Diagnostics, started 22 years ago thanks to a fund that Prof. Hans Ulrich Bergmeyer, then Head of research and development at Boehringer Mannheim, established after his retirement in 1985. The initial objective of these Conferences was the "Improvement of Comparability and Compatibility of Laboratory Assay Results in Life Sciences", a topic that is still amidst the preoccupations of the recent Conferences.

FORTHCOMING MEETINGS

Evidence-based medicine and laboratory medicine practices: diagnostic accuracy studies Course of the Turkish Biochemical Society. April 26-28, 2012 -Izmir, Turkey, www.turkbiyokimyadernegi.org.tr

Focus 2012 - Annual Meeting of the Association for Clinical Biochemistry, April 30-May 3, 2012 - Liverpool, UK, <http://www.focus-acb.org.uk/>

ArabMedLab 2012 - 13th Arab Congress of Clinical Biology (AFCB) and 12th Moroccan Congress of Clinical Chemistry and Laboratory Medicine 2-5 May 2012 - Marrakech, Morocco. For more information please visit: www.smccbm.org

11th Baltic Congress in Laboratory Medicine, May 10-12, 2012 -Vilnius, Lithuania, <http://www.balm2012.lt/>

17th Chilean Congress of Clinical Chemistry. May 16-18, 2012 - Santiago, Chile. For more information please visit:www.schqc.cl/congreso

Clinical Biochemistry International Symposium May 18-19, 2012 -Quito, Ecuador. For more information please contact: mariapasquelc@yahoo.com

5th Symposium on Critical Care Testing and Blood Gases. May 30-June 1, 2012 - Deauville, France, www.criticalcaretesting-deauville2012.com

NFKK Pre-congress Course in Evidence Based Laboratory Medicine June 11-12, 2012 - Reykjavik, Island. For more information please visit: www.nfkk2012.is/PreCongress.html

XXXIII Nordic Congress in Clinical Chemistry. June 12-15, 2012 -Reykjavik, Iceland For more information please visit: www.nfkk2012.is

Primer Congreso Bioquímico del Nea. June 13-16, 2012 -Resistencia Chaco, Argentina For more information please visit: www.congresobioquimiconea.com/

Joint Conference of the Canadian Society of Clinical Chemists& Société Québécoise de Biochimie Clinique June 17-20, 2012 -Quebec City, Canada, <http://www.csc.ca>

RAML 2012 - 7th Conference of the Romanian Association of Medical Laboratories. June 20-23, 2012 - Sinaia, Romania, <http://www.raml-conference.ro/>

Journals of Clinical Laboratory update. June 23-24, 2012 -Guayaquil, Ecuador. For more information please contact: mariapasquelc@yahoo.com

30th World Congress of Biomedical Laboratory Science. August 18-22, 2012 - Berlin, Germany, <http://www.ifbls-dvta2012.com/>

XIX Jornadas Bioquímicas del Noa. September 13-15, 2012 -Catamarca, Argentina. For more information please contact: cubraa@yahoo.com.ar

20th Meeting of the Balkan Clinical Laboratory Federation, 8th EFCC Symposium for Balkan Region, 18th Congress of Medical Biochemists of Serbia. September 17-22, 2012 - Belgrade, Serbia, [click here](#)

EQAS 2012 - a 3-day Conference organised by the UK National External Quality Assessment Services (UK NEQAS) for Endocrinology and Cardiac Markers. September 24-26, 2012 - Edinburgh, UK, <http://www.eqas2012.org.uk/6430.html>

XXIV National Congress of the Turkish Biochemical Society (TBS). September 25-28, 2012 - Konya, Turkey, www.turkbiyokimyadernegi.org.tr

9th Annual Congress of the German Joint Society for Clinical Chemistry and Laboratory Medicine. September 26-29, 2012 -Mannheim, Germany, www.dgkl2012.de

IX National Congress of the Bulgarian Society of Clinical Laboratory. September 27-29, 2012 - Sofia, Bulgaria, ktzatchev@gmail.com

6th Santorini Conference Biologie Prospective "Systems Biology and Personalized Health - Science and Translation", September 30 - October 2, 2012 - Santorini, Greece. For more information please visit: www.santorini2012.org

Clinical Chemistry Conference on "Impact of Biomarkers on Cardiovascular Disease". October 1-2, 2012 - Singapore, Republic of Singapore, <http://www.aacc.org/events>

Promoting a Culture of Quality and Consistency in Critical and Point-of-Care Testing. 24th International Symposium. October 3-6, 2012 - Prague, Czech Republic. For more information please visit: www.aacc.org/events/meetings/Pages/6752.aspx#

2nd EFCC-UEMS European Joint Congress - Laboratory Medicine at the Clinical Interface. October 10-13, 2012 -Dubrovnik, Croatia, www.dubrovnik2012.com

Vitamin D: minimum, maximum, optimum. October 19-20, 2012, Warsaw, Poland. For more information please visit: www.ifcc.org/media/145727/Programme.pdf

XI Ecuadorian and VII International Congress of Clinical Biochemistry. October 23-27, 2012 - Cuenca, Ecuador. For more information please contact: mariapasquelc@yahoo.com

International Conference of National Strategies for TORCH complex, Chlamydia Trachomatis, and Human Papillomavirus. November 15-16, 2012 - Kiev, Ukraine, <http://www.iecclm.org>

EuroMedLab 2013 - 20th IFCC-EFCC European Congress of Clinical Chemistry and Laboratory Medicine. May 19-23, 2013 -Milano, Italy. www.milan2013.org

2nd EUROPEAN JOINT CONGRESS OF EFCC AND UEMS 10-13 October 2012, Dubrovnik, Croatia Under the auspices of the International Federation of Clinical Chemistry and Laboratory Medicine. Visit: www.dubrovnik2012.com

12th EFCC Continuous Postgraduate Course in Clinical Chemistry: New trends in Classification, Diagnosis and Management of Gastrointestinal Diseases. November 10-11, 2012 - Dubrovnik, Croatia. For more information please visit: www.dubrovnik-course.org/

International Conference of National Strategies for TORCH complex, Chlamydia Trachomatis, and Human Papillomavirus. November 15-16, 2012 - Kiev, Ukraine. For more information please visit: www.iecclm.org

EuroMedLab 2013 - 21th IFCC-EFCC European Congress of Clinical Chemistry and Laboratory Medicine - 45th Congress of the Italian Society of Clinical Biochemistry and Clinical Molecular Biology. May 19-23, 2013, Milano, Italy. For more information please visit: www.milan2013.org

APCCB 2013 - 13th Asian Pacific Congress of Clinical Biochemistry November 17-20, 2013 - Bali, Indonesia. For more information please visit: www.apccb2013.org

COLABIOCLI 2013 - XXI Congreso Latinoamericano de Bioquímica Clínica. October 29 - November 1, 2013 - Lima, Perú

WorldLab 2014 - 21st International Congress of Clinical Chemistry and Laboratory Medicine. June 22-26, 2014 - Istanbul, Turkey. www.istanbul2014.org