The IFCC Award Recipients for 2014

On behalf of IFCC I have pleasure and pride in introducing the IFCC Awards recipients for 2014.

All seven of these Awards recognise outstanding achievement in clinical chemistry and laboratory medicine in clinical, scientific and/or educational endeavour.

Each of the Awards recipients was selected by an independent panel of experts after open advertisement. Many high quality nominations were received and so the Awards recipients selected from this process may truly be considered as worthy winners who are deserving of our and your congratulations.

IFCC is grateful to the many listed sponsors who have contributed generously to enable us to give appropriate recognition to the outstanding achievements of these Awards recipients.

Graham Beastall
(President of IFCC)
IFCC Awards Programme

The Federation presents seven distinguished awards to scientists and clinicians who work in clinical chemistry and laboratory medicine or related disciplines. These triennial awards are the highest honours that our Federation can bestow to colleagues worldwide in recognition of their outstanding achievements, to publicize their exceptional research and other contributions that have improved medical and healthcare, and to stimulate and encourage other scientists to accelerate their efforts in advancing clinical chemistry and laboratory medicine. The sponsors of these awards have made it possible for IFCC to honour these extraordinary colleagues; their support illustrates the commitment and partnership between our profession and the industry for the growth and advancement of Clinical Chemistry and Laboratory Medicine worldwide.

IFCC Awards
Awards presented by the IFCC include:
1. IFCC Distinguished Clinical Chemist Award
2. IFCC-Henry Wishinsky Award for Distinguished International Services
3. IFCC Award for Distinguished Contributions in Education
4. IFCC Award for Significant Contributions in Molecular Diagnostics
5. IFCC Distinguished Award for Laboratory Medicine and Patient Care
6. IFCC-Robert Shaffer Award for Outstanding Achievements in the Development of Standards for Use in Laboratory Medicine
7. IFCC Young Investigator Award

Conferment is held at the triennial International Congress of Clinical Chemistry.

IFCC Awards Committee
Prof. H. Morris Chair AU
J.C. Forest (CA)
M. Jouma (SY)
L. Lai (MY)
R. Sierra-Amor (MX)
G. Sypniewska (PL)
The IFCC is pleased and honoured to announce that Professor Matthew McQueen, MB, ChB, PhD has been selected to receive the 2014 IFCC Distinguished Clinical Chemist Award. This award recognizes an individual who has made outstanding contributions to the science of Clinical Chemistry and Laboratory Medicine, or the application of Clinical Chemistry to the understanding or the solution of medical problems.

Professor McQueen has made outstanding contributions to the science of clinical chemistry as a researcher, educator, administrator, and leader. His work has advanced the science of Clinical Chemistry as a tool for solving medical problems.

His research has been focused over the years on using clinical chemistry and laboratory medicine as a tool to solve medical problems. He is a full Professor in the Department of Pathology and Molecular Medicine at McMaster University, Director of the Lipid Clinic, Fellow of the Royal College of Physicians of Canada, and a physician and medical biochemist at Hamilton Health Sciences.

His contribution to clinical chemistry and medicine has been remarkable. From 1978 to 1986 he had a key role in the conversion in Canada of medicine from traditional to SI units. He was also a consultant to the Ontario task force for SI conversion in Pharmacy and to the Metric Commission of Canada.

In 1987 Dr. McQueen established the Clinical Research Clinical Trials Laboratory (CTCRL) and Biobank at the Hamilton General Hospital to meet the needs of the local researchers for laboratory services and to serve as a central laboratory for clinical research in Canada and beyond. Over the following 25 years this facility has grown to be one of the largest biorepositories in Canada. Dr. McQueen has had an extremely active and productive research career. He has published over 200 peer-reviewed papers (30 since January 2011). Since 2008 he has been a Primary- or Co-Investigator on 23 research grants totaling over $125 million CDN. He is a key member of the Population Health Research Institute at McMaster University. Amongst his many research contributions to medicine and clinical chemistry, four examples are highlighted in this document. Dr. McQueen was a key investigator on the INTERHEART project. This study investigated associations between a wide array of risk factors and AMI within populations defined by ethnicity and/or geographic region, and assessed the relative importance of these risk factors across these populations.
He is also an investigator for the VISION Study. This study examines the risk of peri- and postoperative myocardial infarction during non-cardiac surgery, and the ability of troponin measurement to diagnose and predict these events.

In a sub-study of the ONTARGET trial, Dr. McQueen and colleagues investigated the ability of urine albumin measurement to predict mortality and cardiovascular and renal outcomes in patients with vascular disease or high risk diabetes.

In 2006, Dr. McQueen and colleagues completed a systematic review for the US Agency for Health Care Research and Quality (AHRQ). This project evaluated the evidence for the use of natriuretic peptides in the diagnosis and prognosis of heart failure.

Dr. McQueen has been a leader for our profession in Canada. From 1983 to 1985 he was president of the Canadian Society of Clinical Chemists. Dr. McQueen was instrumental in establishing the Canadian Academy of Clinical Biochemistry, the academic arm of the CSCC responsible for the training, certification and maintenance of professional competence of clinical biochemists in Canada. From 1988 to 1990 he served as the chair of the academy.

Dr. McQueen has made similar outstanding contributions to our profession internationally. He served as a consultant to the WHO and his service to the IFCC began in 1982, when he joined the scientific committee. From 1988 to 2004, he served on the executive board, as treasurer, vice president, president and past president. He continues to serve as a member of the Task Force on Ethics and the joint IFCC/NKDEP Task Force for standardization of urine albumin measurement.

Over his career, Dr. McQueen has been recognized around the world for his expertise and has been invited to present papers and lectures in more than 45 countries. He has served as an external assessor or examiner for universities in Canada and nine other countries.

Five international societies (Cuban Society of Clinical Pathology, Colombian Federation of Clinical Laboratory Specialists, Japan Society of Clinical Chemistry, Hungarian Society of Clinical Pathology, Association of Clinical Biochemistry - UK) have awarded honorary membership to Dr. McQueen. In 2012, the Royal College of Pathologists of the United Kingdom awarded Dr. McQueen honorary fellowship.
IFCC HENRY WISHINSKY AWARD FOR DISTINGUISHED INTERNATIONAL SERVICES

Sponsor: Siemens Healthcare Diagnostics
Presented to: Doctor Robert Dufour, MD

IFCC is pleased and honoured to announce that Doctor Robert Dufour, MD will receive the 2014 Henry Wishinsky Award for Distinguished International Services. This award honours an individual who has made unique contributions to the promotion and understanding of Clinical Chemistry and Laboratory Medicine throughout the world.

Throughout his career Dr. Dufour has contributed his time and expertise toward the advancement of clinical chemists and the field of clinical chemistry and laboratory medicine. He has volunteered his time through active leadership and participation in the programs of many professional societies including, AACC, CAP, IFCC, NACB, CLSI and ATA. He is a sought after lecturer and is well known as an outstanding educator.

Dr Dufour’s work with Lab Tests Online (LTO) has made him as an outstanding recipient for this important award. Dr Dufour has spent the last 12 years teaching the world what we, as laboratory scientists, do. LTO is dedicated to the patients we serve and the medical laboratory specialists we represent. LTO is a comprehensive, accurate, dynamic and interactive website now existing in 17 countries and in 14 languages, to inform the public about clinical laboratory testing.

Dr. Dufour began his involvement with LTO in 2001 as one of the original editors. He has continued as an editor/contributor since that time and now serves as the Executive Editor working with the Editorial teams around the world. Dr Dufour’s dedication and commitment to LTO is one of the key elements of the program’s success. Dr. Dufour’s efforts through LTO have increased the understanding and promote the field of clinical chemistry and laboratory medicine.

Dr. Dufour has served AACC as Board Member and Treasurer. He has published more than 200 peer-reviewed papers, abstracts, and book chapters, and has been lead editor on nine books, with an emphasis on liver disease and endocrine testing, and is the Associate Editor for case studies in Clinical Chemistry.

He is on a Centers for Disease Control and Prevention working group developing new guidelines for testing for hepatitis C. He has been involved in training residents in pathology as well as fellows in gastroenterology and endocrinology. Dr. Dufour has received numerous awards, including the 2012 College of American Pathologists Excellence in Education Award.
IFCC is pleased and honoured to announce that Doctor Carl Burtis, PhD has been selected to receive the 2014 IFCC Award for Distinguished Contributions in Education. This award honours an individual who has made extraordinary contributions in establishing and developing educational materials for our discipline to improve training and educational programs worldwide or in a region.

Dr. Burtis has been an international leader in our discipline for four decades and has devoted his career to enhancing our profession and to serving health care internationally. Within IFCC, Dr. Burtis has served in many capacities including member and Chairman of the Expert Panel on Instrumentation, Chairman of the Committee on Analytical Systems, Chairman of the Scientific Division, and two terms as Vice President. Currently he is serving as a member of the Task Force on Ethics. Within AACC he has served in numerous capacities including President in 1989 and General Chairman of the Organizing Committee of the memorable IFCC-AACC 9th International Congress on Clinical Chemistry held in San Francisco in 1990. From 1994–1997, he was Chairman of the Board of Editors of Clinical Chemistry. Dr. Burtis has been the senior editor of four editions of the authoritative “Tietz Textbook of Clinical Chemistry and Molecular Diagnostics”. He has also been the senior editor of the last four editions of the “Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics”, the leading textbook for students and colleagues of clinical laboratory science. He also co-edited the “Fundamentals of Molecular Diagnostics”. These books have been translated into multiple languages including Farsi, Korean, Portuguese and Turkish. During the last 25 years, Dr. Burtis has devoted enormous amounts of time and energy to ensuring that these books are a trusted reference source and a valuable educational tool for colleagues around the world. In addition, he has represented our profession in multiple organizations including the International Union of Pure and Applied Chemistry, the (US) Clinical Laboratory Standards Institute (CLSI), and the (US) National Institute of Standards and Technology (NIST).
Dr. Burtis received his BSc degree in nutrition from Colorado State University (1959) and MSc (1964) and PhD (1967) degrees in biochemistry from Purdue University. In 2004 he was conferred an honorary DSc degree by Purdue University. He has held positions as a senior chemist at Varian Aerograph in Walnut Creek, California and for three years as the chief of the Analytical Biochemistry Branch for the Centres for Disease Control and Prevention in Atlanta. He has been on the staff of the Oak Ridge National Laboratory for 40 years from where he retired in 2012.

Those who know Dr. Burtis are aware of his high ethical standards, his dedication to service to the profession and his warm personality. He is perpetually interested in people wherever he is around the world, and remains energized by new ways to bring laboratory testing to people.
IFCC is pleased and honoured to announce that Doctor Francis Barany, PhD will receive the 2014 IFCC Award for Significant Contributions to Molecular Diagnostics. This award honours an individual who has made unique contributions to the promotion and understanding of Molecular Biology and its application in Clinical Chemistry and Laboratory Medicine worldwide.

Dr. Francis Barany received his PhD in 1981 in Microbiology at The Rockefeller University with Professor Alexander Tomasz. He was a Helen Hay Whitney postdoctoral fellow with Professor Hamilton O. Smith at the Johns Hopkins University School of Medicine from 1982-1985. Upon appointment as an Assistant Professor in Microbiology at Weill Cornell Medical College in 1985, he was named a Cornell Scholar in Biomedical Sciences, and in 1992 received a five year Hirschl/Monique Weill-Caulier Career Scientist Award. He currently holds the rank of Full Professor in the Department of Microbiology at Weill-Cornell. He held adjunct appointments at The Rockefeller University in the Dept. of Chemistry, Biochemistry, and Structural Biology, as well as Director of Mutation Research at the Strang Cancer Prevention Center. Dr. Barany has served as the chair of Partnerships for Point of Care (POC) Diagnostic Technologies, and Innovative Technologies for the Molecular Analysis of Cancer NIAID and NCI review groups.

A prolific inventor with 45 issued US patents, he is best known for developing the ligase chain reaction (LCR), ligase detection reaction (LDR), and Universal DNA arrays, which are the foundation of commercial tests to diagnose genetic diseases (i.e. cystic fibrosis), detect infectious pathogens, identify cancer mutations, and identify diseases using DNA microarrays and targeted Next-Gen sequencing. The Barany Laboratory patents and intellectual property have generated over $30 million in NIH, NIST and Industrial Grants, over $13 million in royalties to Weill-Cornell, and over $2 billion in sales to biotechnology companies. In 2009 he co-founded Coferon, Inc. ($19M raised), based on his invention of a new class of drugs that enter cells and self-assemble on the target. With Coferon, Inc., the Barany Laboratory established in vitro inhibition of beta-tryptase with coferons, as well as potent inhibition of the target in animals. In 2012 he co-founded iCareDx Inc., to develop a highly accurate blood test for early detection of colorectal cancer. Dr. Barany was honoured as Medical Diagnostics Research leader, Scientific American 50 in 2004, and the Ezra Innovation Award, Cornell University in 2011.
IFCC DISTINGUISHED AWARD FOR LABORATORY MEDICINE AND PATIENT CARE
Sponsor: Unilabs
Presented to: Doctor Mario Plebani, MD

IFCC is pleased and honoured to announce that Professor Mario Plebani, MD will receive the IFCC Distinguished Award for Laboratory Medicine and Patient Care. This award recognizes an individual who has made unique contributions in laboratory medicine that have improved patient care and had a worldwide impact in clinical medicine.

Dr. Mario Plebani obtained his medical degree summa cum laude from the Medical School of the University of Padova in 1975. He completed residency training and specialization in Laboratory Medicine (1978), and subsequently in Gastroenterology (1983), at the same University. He is full Professor of Clinical Biochemistry and Clinical Molecular Biology at the School of Medicine, University of Padova. He is Chief of the Department of Laboratory Medicine at the University-Hospital of Padova, Chief of the Center of Biomedical Research (a specialized Center for quality in laboratory medicine for the Veneto Region). Currently, he is member of the Board of Management of the University of Padova in which he covered the position of Director of the Post-graduate School in Clinical Biochemistry at the Medical School from 2006 to 2012, and President of the Course for Medical Technologists from 2008 to 2012. Honorary Professor at the University of Buenos Aires (Argentina), Facultad de Farmacia y Bioquimica he served as President of the International Society of Enzymology for four years (2004-2008), as President of the Italian Society of Clinical Biochemistry and Molecular Clinical Biology for five years (in 2003 and from 2007 to 2009) and President of the Federation of Italian Societies of Laboratory Medicine (FISMeLab) from 2009 to 2012. He is a member of the Study Group on Biomarkers in Cardiology of the European Society of Cardiology (ESC) Working Group on Acute Cardiac Care and, more recently of the TC - Study group on Biomarkers of the Acute Cardiovascular Care Association (ACCA).

Prof. Plebani is Editor-in-Chief of Clinical Chemistry and Laboratory Medicine, and co-Editor in Chief of Diagnosis and Associate editor of the International Journal of Biological Markers. He is the Chairman of the IFCC Working group on “Laboratory errors and patient safety” (WG LEPS).
He has published 880 full papers, more than 900 abstracts and several books and book chapters, HI 64 (13.351 citations with an average per year of 371 citations), and an Impact
Factor of 877.495 in the last three year. Invited speaker at many national and international meetings and conferences such as the AACC annual meetings in 1998, 2005 and 2007-2012, the IFCC/EFCC International Congresses in Florence (1999), Kyoto (2002), the IFCC-FESSC EuroMedLab in Prague (2001), Barcelona (2003), Glasgow (2005), Innsbruck (2009), Berlin (2012) and Milan (2013). He has been invited as key-note speaker at many national meetings of IFCC member societies, including Australia, UK, Ireland, Spain, Switzerland, Belgium, Finland, Turkey, Chile, Argentina, Uruguay and Peru. Awards received: 1991-King Prize for achievement and original research in Clinical Enzymology, International Society for Clinical Enzymology (ISE); 2007-AACC Management Sciences Division, Outstanding Contributions to Management Sciences Award; 2008-AACC Award for Outstanding Clinical Laboratory Contributions to Patient Safety; 2011-ACB (UK) International Lecture Award, and 2014 AACC-NACB Award for Outstanding Contributions to Clinical Chemistry in a Selected Area of Research. His main areas of research are quality in laboratory medicine, diagnostic and laboratory errors, biomarkers in cancer and cardiovascular diseases, and in vitro allergy diagnostics.
IFCC is pleased and honoured to announce that Professor Greg Miller, PhD, DABCC has been selected to receive the IFCC Robert Schaffer Award for Outstanding Achievements in the Development of Standards for Use in Laboratory Medicine. This award is named after Robert Schaffer, an organic chemist at the NIST who dedicated his career to the development of reference methods and materials for use in the clinical laboratory. It honours an individual who has made unique contributions to the advancement of reference methods and/or reference materials for laboratory medicine to facilitate improved quality of clinical diagnostics and therapies, which would in turn lead to reduced costs and improved patient care.

Dr. Miller is Professor of Pathology at Virginia Commonwealth University and serves the Medical Center as Director of Clinical Chemistry and Director of Pathology Information Systems. He received a PhD in Biochemistry from the University of Arizona; did post-doctoral training in Clinical Chemistry at the Ohio State University; and is a Diplomat of the American Board of Clinical Chemistry. He currently serves in the following positions: Associate Editor of the journal Clinical Chemistry; President of the Clinical and Laboratory Standards Institute, Chair of the Harmonization Oversight Group of the International Consortium for Harmonization of Clinical Laboratory results; Chair of the Laboratory Working Group of the National Kidney Disease Education Program; Chair of the IFCC Working Group for Commutability; Member of IFCC Working Groups for Standardization of Albumin in Urine in collaboration with the National Kidney Disease Education Program, and for Standardization of Insulin Assays in collaboration with the American Diabetes Association; Member of the Executive Committee of the US Technical Advisory Group to ISO Technical Committee 212; Member of the Steering Committee of the National Glycohemoglobin Standardization Program; Member of the College of American Pathologists Accuracy Based Surveys committee.

Dr. Miller is a former president of the American Association for Clinical Chemistry and recipient of the AACC Outstanding Lifetime Achievement Award in Clinical Chemistry and Laboratory Medicine.
IFCC is pleased and honoured to announce that Doctor Geoffrey Baird, MD, PhD has been selected to receive the 2014 IFCC Young Investigator Award. This award recognizes and encourages the academic and professional development of a young investigator (under 40 years of age) who has demonstrated exceptional scientific achievements in Clinical Chemistry and Laboratory Medicine early in his / her career.

Dr. Baird is an assistant professor in the department of Laboratory Medicine at the University of Washington in Seattle, WA and also an adjunct assistant professor in the department of Pathology at UW, the director of Clinical Chemistry at Harborview Medical Center, and the Laboratory Director of Airlift Northwest. His clinical interests include rational utilization of routine laboratory testing, clinical toxicology including comprehensive drug screening and chronic opioid therapy monitoring, and immunohistochemistry.

Dr Baird has worked in a clinical chemistry laboratory since he was 17 years old. In that early work, he developed a novel method for blood concentration using reverse isotope dilution gas chromatography-mass spectrometry (GCMS), resulting in his first lead-author paper in Clinical Chemistry at the age of 21. He continued investigative work in chemistry research laboratories, both as an undergraduate at Stanford University, where he worked on porphyrin synthetic chemistry, and abroad, in Essen (De), where he worked on surfactant synthesis and MALDI mass spectrometry. After graduating with high honours and university-wide distinction as a Chemistry major from Stanford University, he entered the laboratory of Dr Tsien and the University of California, San Diego, where he obtained his PhD and MD degrees. In Dr Tsien’s laboratory, Dr Baird discovered and engineered several novel fluorescent proteins mutants that could be used as indicators in cell biology experiments, resulting in several patents, and today one can purchase the florescent proteins invented by Dr Baird. A more noteworthy recognition of Dr Baird’s work is that his PhD thesis work comprised a significant part of the body of work for which Dr Tsien was awarded the 2008 Nobel Prize in Chemistry.

Dr Baird has developed and refined multiplex proteomic assay methodologies with a specific focus on methods that are suited for quantifying proteins in solid tissues. His work on using multiplex immunoassays for diagnosing tumours and using oligonucleotide aptamers arrays to measure biomarker patterns in both cancer tissues and body fluids has been recognized with invited presentations and awards, including the 2012 George Grannis Award for Excellence and Scientific Publication by a Young Investigator, awarded by the National Academy of Clinical Biochemistry. He has published numerous articles on the clinical research area of laboratory test utilization management and he is considered a national expert in this area.