IFCC Awards Program

The Federation presents several awards to clinical chemists, laboratorians, and others who work in the field of clinical chemistry, laboratory medicine, and clinical laboratory science. These awards are presented to recognize the outstanding achievements by these individuals; to make the scientific community and general public aware of exceptional contributions by them to scientific research and development and the improvement of health care; and to stimulate and encourage other scientists and laboratorians to accelerate their efforts to contribute to the advancement of the field of clinical laboratory medicine and science.

The sponsors of these awards make it possible for IFCC to honor these outstanding individuals; in addition, the sponsors have shown their strong commitment to the growth and advancement of the field. Their support can be viewed as an example of the true partnership that exists between our profession and industry in attaining these goals.

IFCC Awards

Awards presented by the IFCC include the
1. Distinguished Clinical Chemist Award
2. Henry Wishinsky Distinguished International Services Award
3. Distinguished Award for Contributions in Education
4. Distinguished Award for Contributions in Molecular Diagnostics.
5. Distinguished Award for Laboratory Medicine and Patient Care.

The awards are bestowed at the triennial International Congress of Clinical Chemistry or Regional Congresses.

IFCC Awards Committee

Prof. Vladimir Palicka, Chair
Dr. Carl Burtis
Prof. Tsutomu Nobori
Dr. Rosa I Sierra-Amor
Prof. Mohamed Shaarawy
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is pleased and honored to announce that Professor Donald Stirling Young, MB, PhD has been selected to receive the 2008 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 Young has had a distinguished career as a scientist, clinical laboratorian and educator and has dedicated his career to the advancement of our profession. His many contributions to the international science and practice of laboratory medicine make him a deserving recipient of this high honor.

Professor Young received M.B. and Ch.B. degrees from the University of Aberdeen, Scotland in 1957 and a PhD in Chemical Pathology degree from the University of London, England in 1962. From 1957-1958 he served his internship as a House Physician and House Surgeon at the University of Aberdeen Teaching Hospitals. He is Board certified by the American Board of Pathology with a Special Competence in Chemical Pathology.

Dr Young is Professor of Pathology and Laboratory Medicine and Vice-Chair for Laboratory Medicine, Department of Pathology and Laboratory Medicine, at the University of Pennsylvania. He had previous appointments as Chief of the Clinical Chemistry Service at the National Institutes of Health and Head of the Section of Clinical Chemistry at the Mayo Clinic. He has authored or co-authored over 200 papers or book chapters and served as editor, co-editor, author or co-author of more than 10 books. He is recognized especially for his excellent series of books ("Young's Effects") which emphasize the importance of the effects of drugs, disease, pre-analytical variables and herbs and natural products on laboratory tests. He also is the co-editor of the popular text "Directory of Rare Analyses" that is now in its 5th edition. Professor Young also is a proponent of the use of SI units in clinical medicine.
and has authored the book entitled "SI Units for Clinical Medicine."
The research interests of Professor Young are far ranging and include (1) laboratory quality control and improvement in quality of results, (2) laboratory uses of computers, (3) management of laboratory utilization, (4) biological and analytical components of variation of serum constituents, (5) development of original and specific laboratory diagnostic procedures, (6) laboratory efficiency, and (7) assessment and correlation of laboratory findings with disease.

Dr. Young has contributed to the advancement of the science of Clinical Chemistry and Laboratory Medicine through his extensive service in several organizations including having served as President of the American Association for Clinical Chemistry (1980) and the IFCC (1985-1991). He has served as a member of the World Health Organization Advisory Panel on Health Laboratory Services and several organizational units of the International Union of Pure and Applied Chemistry. Also, he has been an active member of the Clinical and Laboratory Standards Institute (CLSI, former National Committee of Clinical Laboratory Standards, NCCLS) and has served in various senior leadership roles in that organization.

Professor Young also has served on the Board of Editors of several publications including serving as Chair of the Editorial Board of Clinical Chemistry. Professor Donald Young has received over 24 awards from organizations of at least 7 countries represented within IFCC.
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is pleased and honoured to announce that Dr David Burnett, OBE, PhD, FRCPath has been selected to receive the 2008 Wishinsky Award For Distinguished International Service.

This award honours an individual who has made unique contributions to the promotion and understanding of Clinical Chemistry and Laboratory Medicine throughout the world. Dr Burnett has been very active in many areas and in particular in the development and promulgation of laboratory accreditation which has had the impact of improving the quality of services and how they should be delivered to patients across the world with the development of International Standards arising from this activity.

David Burnett was educated at a Quaker School in Saffron Walden, Essex (1949-1956) and obtained an honours degree in Botany with Zoology and Chemistry (1956) from University College, London. In 1964, he received a PhD from Bedford College, London. A post doctorate appointment followed at Rothamsted Experimental Station, Harpenden. He was then appointed a Senior Biochemist at Hill End Hospital, St Albans. During the initial period at Hill End Hospital and during the early years in Hertfordshire he built up a biochemical service that initially embraced the District General Hospitals at Welwyn Garden City and St Albans and later expanded to include hospitals at Hertford and Hemel Hempstead.

In 1968, Dr Burnett was appointed Principal Biochemist and shortly afterwards Consultant Clinical Biochemist to North West and East Hertfordshire NHS Early in his career, Dr Burnett developed an active interest in the assessment of the quality standards in clinical laboratories. In a collaboration with the four major clinical laboratory professional societies in the UK, he played a major part in the development of in a voluntary accreditation scheme for laboratories in 1992. The resultant scheme, known as the Clinical Pathology Accreditation (CPA) UK, was rapidly adopted as the de facto standard for clinical laboratories in the UK, which continues to be a leading organisation in clinical laboratory accreditation.
With his knowledge of the need for the development of system based standards for accreditation and the infrastructure to support a National accreditation scheme, Dr Burnett subsequently assisted in the development and implementation of regional and national schemes in other countries. Progression of the international aspects of standardisation through international organisations was a natural development and Dr Burnett was and is heavily engaged in the work of ISO/TC212.

Dr Burnett has (1) served as Chairman of the CPA Standards, Training and Education Group; (2) helped draft and promulgate international standards with the British Standards Institute; (3) served as a member of the European Communities Confederation of Clinical Chemistry (EC4) Working Party on Quality Systems and Accreditation, and (4) represented the Federation of European Societies of Clinical Chemistry & EC4 in the European Cooperation for Accreditation. He also has been involved with development and implementation of ISO standards 15189 (Medical Laboratories-Particular Requirements for Quality and Competence) and its supplement ISO 22870 (Point-of-Care Testing (POCT)- Requirements for Quality and Competence).

His key role in developing the quality of laboratory practice in the United Kingdom was recognised by the award by the Queen of the prestigious honour of an OBE (Order of the British Empire) for services to Laboratory Medicine.
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is pleased and honoured to announce that Professor Norbert Tietz PhD has been selected to receive the 2008 IFCC/Beckman Coulter Award for Distinguished Contributions in Education. This award honours an individual who has made extraordinary contributions in establishing and developing educational material for our discipline to improve training and educational programs world-wide or in a region. Throughout his career, Professor Tietz has been involved in educating and furthering the careers of clinical chemists, laboratorians, and pathologists and his textbooks have served as the basis of many teaching programs around the world for almost four decades.

Professor Norbert W. Tietz received the degree of Doctor of Natural Sciences from the Technical University Stuttgart, Germany, in 1950. In 1954 he immigrated to the United States where he subsequently held positions or appointments at several Chicago area institutions including the Mount Sinai Hospital Medical Center, Chicago Medical School/University of Health Sciences and Rush Medical College. In 1976 Dr. Tietz moved to Lexington, KY, where he served as Professor of Pathology and Laboratory Medicine, and Director of Clinical Chemistry at the University of Kentucky Medical Center. Upon retirement he moved to San Diego where he now serves as an adjunct professor in the Department of Pathology of the University of California, San Diego, where his educational contributions continue.

Professor Tietz is best known as the editor of the Fundamentals of Clinical Chemistry. This book, now in its sixth edition, remains a primary information source for both students and educators in laboratory medicine. It was the first modern textbook that integrated clinical chemistry with the basic sciences and pathophysiology; it has been translated into Spanish, Italian, Portuguese, and Turkish. Dr. Tietz also edited the Textbook of Clinical Chemistry, which bridges the gap between the clinical laboratory and medical management by relating pathophysiology to analytical results in health and disease. Both
books have been supplemented by the Study Guide to Clinical Chemistry, a "road map" for studying the continuously expanding subject of clinical chemistry. Dr. Tietz also edited three editions of the Clinical Guide to Laboratory Tests; this handbook contains data from the various laboratory disciplines for use by practicing physicians, paramedical personnel, and laboratorians. It has been published in English, Spanish, Italian, and Russian. Dr. Tietz also served as editor for the clinical chemistry sections of the Dictionary and Encyclopedia of Laboratory Medicine and Technology. The first edition of Applied Laboratory Medicine was published in 1992. The second edition of Tietz's Applied Laboratory Medicine followed in 2007.

In addition to his many editorial accomplishments, Dr. Tietz has made many other significant contributions in education. Throughout his career, Dr. Tietz has taught a range of students from the undergraduate through post-graduate level including (1) medical technology students, (2) medical students, (3) clinical chemistry graduate students, (4) pathology residents, and (5) practicing chemists. For example, in the late 1960's he began the first master's of science degree program in clinical chemistry in the United States at the Chicago Medical School. This program subsequently evolved into one of the first Ph.D. programs in clinical chemistry. Later, he directed a postdoctoral program at the University of Kentucky. He also organized three international symposia on Clinical Enzymology and lectured in 21 countries.

He has written over 150 scientific publications covering topics from laboratory instrumentation, gas chromatography, clinical enzymology, acid-base balance, and gastric function. Recently his research interests have focused on reference intervals for the geriatric population, particularly nonagenarians and centenarians.

Dr. Tietz served as president of the AACC and has received numerous local, national, and international awards which include the AACC Award for Outstanding Efforts in Education and Training; AACC Award for Outstanding Contributions to Clinical Chemistry; The Professor Alvin Dubin Memorial Award in Recognition of Continuous Contributions, Dedication and Distinguished Services and the IFCC Distinguished International Service Award.

Although retired, Professor Tietz remains a vocal advocate of clinical chemistry, encouraging clinical chemists to advance their profession by linking progress in laboratory medicine to the practice of medicine.
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is pleased and honoured to announce that Professor Olli Kallioniemi, MD, PhD has been selected to receive the 2008 IFCC Award for Significant Contributions to Molecular Diagnostics. This award has been created to honour an individual who has made unique contributions to the promotion and understanding of Molecular Biology and its worldwide application in Clinical Chemistry and Laboratory Medicine. Throughout his research career, Professor Kallioniemi has successfully combined development of technologies, cancer research and diagnostic development. His research has contributed to the development of many new tools that are now in wide-spread use throughout the world.

Professor Kallioniemi was trained at the University of Tampere, Finland receiving an MD degree in 1984 and a PhD degree in 1988. He received residency training in Clinical Chemistry (board certification in 1991) with an initial research focus in flow cytometry. During his career, he has been employed in various research positions in the USA and Finland. For example, in 1996-2002 he was Section Head at the National Human Genome Research Institute (NHGRI) of the National Institutes of Health (NIH) in Maryland.

In 1992, Professor Kallioniemi published the first report describing the use of fluorescence in situ hybridization (FISH) for the detection of gene amplifications in breast cancer patients. A second paper described the development of comparative genomic hybridization (CGH) for the diagnosis of genetic alterations in cancer and other diseases. In 1993 he applied the CGH technology to the discovery of key genetic alterations in cancer. A key paper of his describes a novel mechanism of disease progression and therapy failure in prostate cancer and constitutes the first example where a novel disease mechanism was discovered by CGH and the first time gene amplifications were linked to therapy resistance in human patients. Along with the discovery of CGH, Professor Kallioniemi is
globally recognized for the first description of the tissue microarray (TMA) technology. This technology is now routinely used by many molecular pathology laboratories worldwide. Professor Kallioniemi is currently Director of the Institute of Molecular Medicine at the University of Helsinki as well as Director of the Academy of Finland Centre of Excellence in Translational Genome-Scale Biology in the Universities of Turku & Helsinki. Recent work has resulted in the development of cell microarrays for RNA interference screening and in the discovery of molecular mechanisms of prostate cancer, with both diagnostic and therapeutic implications.

Professor Kallioniemi was elected a member of the Finnish National Academy of Sciences in 2005 and of the European Molecular Biology Organization in 2006. He has received several prestigious awards and grants, such as the Nordic Anders Jahre Prize in 1998, NIH Director's lecture in 2000, Medal of the Swedish Medical Society in 2003, EU Marie Curie Centre of Excellence Grant, as well as the Harold G. Pritzker Memorial Lecture in Laboratory Medicine at the University of Toronto in 2006.

A prolific author, Professor Kallioniemi has authored or co-authored 224 peer reviewed scientific articles, which have been cited 20,336 times. He is on the editorial board of seven journals and has participated in many committees at the EU and international level, such as recently for the remarkable international project for sequencing genomes of 50 cancer types. The significant technological and translational impact of his work also is demonstrated by his 15 international patents and 11 patent applications, many of which are licensed for diagnostic development.
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is pleased and honoured to announce that Professor Christopher Lam, PhD has been selected to receive the IFCC/Ortho Distinguished Award for Laboratory Medicine and Patient Care. This is a new award that recognizes an individual who has made unique contributions in laboratory medicine that have improved patient care and had a world-wide impact in clinical medicine. Professor Lam has had a distinguished career as a clinician, scientist, and educator.

Professor Lam is Chairman and Chief of Service of the Department of Chemical Pathology, Director of the Clinical Immunology Unit, and Assistant Dean of Medicine (Research) at the Prince of Wales Hospital, the Chinese University of Hong Kong, Hong Kong. At the Prince of Wales Hospital, Professor Lam, has research, service, and teaching responsibilities.

Professor Lam's research accomplishments are extensive and he has published over 360 peer-reviewed papers in allergy and clinical immunology, lipidology, nephrology, endocrinology, and other aspects of chemical pathology including the laboratory medicine of infectious diseases. During the Severe Acute Respiratory Syndrome (SARS) epidemic in Hong Kong in 2003 Professor Lam's group developed a reverse transcription-polymerase chain reaction (RT-PCR) assay for early diagnosis of SARS corona virus infection. They also discovered that elevated serum LD1 activity and decreased blood lymphocyte subsets were the best biochemical prognostic indicators for death and ICU admission and characterized the hyperimmune cytokine and chemokine profiles which were useful markers of disease severity.

Subsequent to his SARS study, Professor Lam developed a postulate that many acute infections and chronic illnesses are in fact communication diseases caused by cytokine and chemokine aberrations resulting in deranged intercellular
communication and intracellular signal transduction. This new concept in laboratory medicine has enhanced the understanding of the pathogenesis and pathophysiology of acute and chronic diseases, with clinical applications in patient care via using cytokines and chemokines for monitoring and their corresponding antibodies (e.g. anti-tumour necrosis factor (TNF) antibody) for treatment.

Professor Lam continues to teach chemical pathology to medical students in Hong Kong and China. This includes coordinating and serving as chief examiner of a Masters in Science course in Clinical Biochemistry conducted by his department. He has supervised and graduated 8 MSc, 10 MPhil and 15 PhD students.

In addition to his research and teaching responsibilities, Professor Lam also is very active in academic and professional activities in laboratory medicine and patient services to Hong Kong, the Asian Pacific region, and international community. For example, he has served as President and Accreditation Board Chairman cum Chief Examiner of the Hong Kong Society of Clinical Chemistry, and is currently Member of Cluster Management Committee and Chairman of Pathology Service Liaison Committee for his regional hospitals. Internationally, he has served as APFCB President (2001-2004), IFCC Executive Board Member (1999-2005), Roman Traveling Lecturer (2002) of the Australasian Pacific Association of Clinical Biochemists (AACB), and APFCB Traveling Lecturer (2005-2006). The above dedicated work has resulted in his receiving the APFCB Distinguished Service Award in 2007. He serves in three visiting professorships in clinical biochemistry and laboratory medicine, is currently on the Editorial Board of the European journal Clinical Chemistry and Laboratory Medicine, and is an advisor of the Clinical Laboratory Standards Institute (CLSI), USA.
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is pleased and honoured to announce that Professor Lothar Siekmann, PhD has been selected to receive the first Robert Schaffer Award for Outstanding Achievements in the Development of Standards for Use in Laboratory Medicine. This is a new IFCC award named after Robert Schaffer, an organic chemist at the National Institute of Standards and Technology who dedicated his career to the development of reference methods and materials for use in the clinical laboratory.

The Robert Schaffer Award honours an individual who has made unique contributions to the advancement of reference methods and/or reference materials for laboratory medicine, thereby (1) improving the quality of clinical diagnostics and therapies, (2) reducing costs of patient care, and (3) promoting internationally recognized and accepted equivalence of measurements and traceability to appropriate measurement standards.

Professor Siekmann has dedicated his career to the development and application of reference methodology for use in Clinical Chemistry and Laboratory Medicine. His contributions to mass spectrometric methodology and in particular the development of isotope dilution mass spectrometry were seminal developments.

Dr Siekmann is Professor of Clinical Chemistry of the Medical Faculty of the University of Bonn, Germany and Director of the Reference Laboratory I of the German Society of Clinical Chemistry (DGKL). He received a Ph.D. in Chemistry from the University of Bonn and has devoted his entire academic career in improving the analytical techniques used in the clinical laboratory. He has been involved in the standardization of many of them. Accomplishments of note include (1) development of isotope dilution mass spectrometry (IDMS); (2) development of IDMS reference measurement procedures for hormones (aldosterone, testosterone, progesterone, cortisol, estradiol-17β, estriol, 17- hydroxy-progesterone, thyroxine, trijodo-thyronine) in
human serum; (3) development of IDMS reference measurement procedures for metabolites and substrates (cholesterol, total glycerol, creatinine, uric acid, urea in human serum and urine; (4) development of IFCC reference measurement procedures for the measurement of the catalytic concentrations of enzymes at 37°C; (5) use of reference methods in proficiency testing; (6) certification of reference materials; and (7) implementation of the concept of traceability. Much of his scientific work has been transferred to clinical chemistry practice and many reference methods he developed are still in use. He has authored or co-authored over 100 peer-reviewed publications and has been awarded the Gabor Szasz Award of the German Society of Clinical Chemistry.

Professor Siekmann also has actively participated in the work of national and international scientific societies in the field of reference systems. For example, he has been chair of the IFCC's Scientific Division Committees on Reference Systems for Enzymes (C-RSE) and on Traceability in Laboratory Medicine (C-TLM) and he still is member of the IFCC's Scientific Division Executive Committee. Currently, he is the chair of the Working Group II of the Joint Committee on Traceability in Laboratory Medicine.