FONDATION LOUIS-JEANTET

25 years Jubilee Symposium
Geneva, October 7 - 9, 2008

SPEAKERS' BIOGRAPHIES

ROLF M. ZINKERNAGEL

Full Professor at the Department of Pathology of the University and University Hospital of Zürich, and Co-Head of the Institute of Experimental Immunology

Born and raised in Basel, Rolf M. Zinkernagel went through Medical School at the University of Basel, received his M.D. degree in 1968 and wanted to become a surgeon. After about 1 ½ year he decided to look into immunological research problems, went through the Postgraduate Course in Experimental Medicine at the University of Zürich, and spent 2 ½ years at the Institute of Biochemistry of Lausanne working on immunity against infections. From 1973 to 1975, he was a postdoc and a Ph.D. student at the Australian National University John Curtin School of Medical Research in Canberra, where Peter Doherty and he made seminal observations on how cytotoxic T cells recognize virus infected cells in an infected host (Nobel Prize in Physiology or Medicine 1996). From 1975 to 1979, he stayed at the Scripps Clinic and Research Foundation in La Jolla, where he studied T cell maturation and the development of the T cell repertoire as it depends on the transplantation antigen expression in the thymus. In 1980, he joined the Department of Pathology of the University of Zürich as an associate Professor, where he studied immune protection and immunopathology caused by virus infections, together with Hans Hengartner.

In the past 25 years, the group of Experimental Pathology, and after 1992 the Institute of Experimental Immunology, studied the role of antigen dependent beneficial immune protection or detrimental immunopathology, and compared these mechanisms with the ideas of immunological memory and immunological tolerance.

Beside the interest in solving uncertainties and discrepancies in immunology, Rolf M. Zinkernagel seeks to further biomedical research and its application in Zürich, in Switzerland and in Europe. He has supported gene technology and animal experimentation in various votes in Switzerland and in Europe. He was a member of the Swiss Science Council and is now a member of the European Research Council and of the Executive Council of the International Union of Immunological Societies. He has also helped to popularize science in tabloid newspapers.

In addition to the Nobel Prize, Professor Rolf M. Zinkernagel has received the Louis-Jeantet Prize for Medicine (1988), among other scientific awards.

FONDATION LOUIS-JEANTET

25 years Jubilee Symposium
Geneva, October 7 - 9, 2008

SPEAKERS' BIOGRAPHIES

PHILIPPE J. SANSONETTI

Professor and Head of the Unité de Pathogénie Microbienne Moléculaire at the Pasteur Institute of Paris, Professor of Microbiology of Infectious Diseases at the Collège de France

Professor Sansonetti received his M.D. in 1979 from the University of Paris. From 1979 to 1981, he conducted research in the Department of Enteric Infections at the Walter Reed Army Institute of Research in the United States. He is a Chevalier de la Légion d'Honneur and received the Prix d'Excellence Jacques Monod en Biologie Moléculaire, the Prix AGIR du Conseil Pasteur-Weitzmann, the Grand Prix de l'Académie de Médecine, the Louis-Jeantet Prize for Medicine, and the Robert Koch Prize and Medal. He is a member of the French Academy of Sciences and a corresponding member of the French Academy of Medicine. In 2007, he was elected to the American Academy of Arts and Sciences.

Philippe Sansonetti studies Shigella, Gram-negative bacteria that cause dysentery. His goal is to decipher the molecular and cellular bases of Shigella's rupture, invasion and inflammatory destruction of the intestinal lining. He also is analysing the mechanisms of immunity against Shigella, hoping to use his findings to develop vaccine candidates.

JULES A. HOFFMANN

Professor and Director at the CNRS Institute of Molecular and Cellular Biology (IBMC) at Strasbourg, President of the French Academy of Sciences

Jules Hoffmann was born in Luxembourg and moved to Strasbourg, France, in 1960 to study biology and chemistry. He received his Ph.D. in 1969 at the Department of General Biology at Strasbourg University. From 1993 to 2005, he was the Director of the IBMC at Strasbourg, an Institute of 200 persons, of which the Hoffmann Research group comprises one-third.

Dr. Hoffmann holds the position of Distinguished Class Research Director with the French National Research Agency CNRS and is a Member of the Board of Administration of this agency. He is also a Member of the German Academy of Sciences Leopoldina, of the European Molecular Biology Organization, of the Academia Europaea, of the American Academy of Arts and Sciences, and of the Russian Academy of Sciences. He is a recipient of several international awards, namely the 2003 William B. Coley Award for Distinguished Research in Basic and Tumor Immunology, the 2004 Robert Koch Prize for Immunology, and the 2007 Balzan Prize for Innate Immunity.

FONDATION LOUIS-JEANTET

25 years Jubilee Symposium
Geneva, October 7 - 9, 2008

SPEAKERS' BIOGRAPHIES

WOLFGANG BAUMEISTER

Director and Head of the Department of Structural Biology at the Max-Planck-Institute of Biochemistry in Martinsried

Wolfgang Baumeister studied biology, chemistry and physics at the Universities of Münster and Bonn, Germany, and he obtained his Ph.D. from the University of Düsseldorf in 1973. He spent time at the Cavendish Laboratory in Cambridge, England, and in 1978 became lecturer in biophysics in Düsseldorf. In 1983, he moved to the Max-Planck-Institute of Biochemistry in Martinsried, Germany. He is also a Honorary Professor of physics at the Technical University of Münich. Wolfgang Baumeister is the recipient of numerous prizes including the Otto Warburg Medal, the Schleiden-Medal, the Louis-Jeantet Prize for Medicine, the Stein and Moore Award, and the Harvey-Prize in Science and Technology.

Wolfgang Baumeister's research interests are in the field of cellular protein quality control. He has discovered and characterized several novel complexes which play key roles in protein folding and degradation and he made seminal contributions to our understanding of the structure and function of the proteasome. Moreover, he has pioneered the development of cryoelectron tomography, an emerging imaging technique with unique potential for bridging the divide between molecular and cellular structural biology.

C. RONALD KAHN

Professor of Medicine at the Harvard Medical School and President of the Joslin Diabetes Center at Boston

Dr. C. Ronald Kahn received his B.S. and M.D. at the University of Louisville. After training in internal medicine at Washington University's Barnes Hospital, he went to the NIH for 11 years, where he rose to head the Section on Cellular and Molecular Physiology of the Diabetes Branch of NIDDK. In 1981, he became the Research Director of the Joslin Diabetes Center. Since 1986, he has been the Mary K. Iacocca Professor of Medicine at Harvard Medical School. In 1997, he was named Executive Vice-President and Director of Joslin. In 2000, he was named Joslin's President.

Dr. C. Ronald Kahn has received the major research awards of the American Federation of Clinical Research, ADA, JDF and IDF, and holds honorary D.Sc. degrees from the University of Paris and the University of Geneva. He is a member of the U.S. National Academy of Sciences, the Institute of Medicine, and the American Academy of Arts and Sciences.

FONDATION LOUIS-JEANTET

25 years Jubilee Symposium
Geneva, October 7 - 9, 2008

SPEAKERS' BIOGRAPHIES

HELEN H. HOBBS

Investigator of the Howard Hughes Medical Institute, Professor of Internal Medicine and Molecular Genetics at the University of Texas (UT) Southwestern Medical Center at Dallas

Helen Hobbs received her undergraduate degree from Stanford University and her medical degree from Case Western Reserve University. She trained in internal medicine and endocrinology at the UT Southwestern where she is now Director of the McDermott Center of Human Growth and Development. She is a member of the Institute of Medicine, of the American Academy of Arts and Sciences, and of the U.S. National Academy of Sciences. She received the Heinrich Wieland Prize and the 2007 Distinguished Scientist Award from the Heart Association.

She has used human genetics to elucidate key pathways in cholesterol and triglyceride trafficking and provided evidence that sequence variations with major effects collectively contribute significantly to common traits and diseases.

RICHARD P. LIFTON

Investigator of the Howard Hughes Medical Institute, Sterling Professor of Internal Medicine, and Molecular Biophysics and Biochemistry at Yale University School of Medicine in New Haven

Richard Lifton received his B.A. from Dartmouth College, his M.D. and Ph.D. degrees from Stanford University, and was resident and chief resident in internal medicine at Brigham and Women's Hospital. He has served as Chair of the NIH Advisory Committee for Large Scale Genomic Sequencing, a member of the Public Policy Committee of the American Society for Cell Biology and the U.S. National Advisory Council for the National Human Genome Research Institute. He is currently Chairman of the Department of Genetics at Yale University School of Medicine, Director of the Yale Center for Human Genetics and Genomics, and Director of the Yale Specialized Center of Research in Hypertension. His awards include the Basic Science Prize of the American Heart Association, the Homer Smith Award of the American Society of Nephrology, the Novartis Award for Hypertension Research of the American Heart Association Council for High Blood Pressure Research, and the Medical Research Award of the Pasarow Foundation. He is a member of the U.S. National Academy of Sciences and of the Institute of Medicine.

Dr. Lifton's laboratory has used molecular genetic analysis to dissect physiologic processes that regulate cardiovascular function in humans, with an emphasis on blood pressure regulation. By coupling characterization of hundreds of families from around the world with human genetic studies, his group has mapped over 30 human disease genes and has identified functional mutations underlying 22 of these. These have provided new insight into the mechanisms underlying hypertension, stroke, osteoporosis, and renal diseases including disorders of electrolyte and pH homeostasis.

FONDATION LOUIS-JEANTET

25 years Jubilee Symposium
Geneva, October 7 - 9, 2008

SPEAKERS' BIOGRAPHIES

BERT SAKMANN


Photo Svein Erik Dahl/Samfoto

Emeritus Professor and Group Leader at the Max-Planck-Institute of Neurobiology in Martinsried

Dr. Bert Sakmann studied medicine in Tübingen, Paris, Berlin and Münich, and biophysics at University College London. He received is M.D. at the Medical Faculty of the University of Göttingen. In 1983, he rose to head the Membrane Physiology Unit and became Director of the Department of Cell Physiology at the Max-Planck-Institute for Biophysical Chemistry in Göttingen. In 1987, he was named a Professor at the Medical Faculty of the University of Göttingen. In 1989, he became Director of the Department of Cell Physiology at the Max-Planck-Institute for Medical Research in Heidelberg. In 1990, he was named a Professor at the Medical Faculty of the University of Heidelberg, and in 1991 a Professor at the Biological Faculty of this University. From 1999 to 2005, he was Laureate Professor under the Eminent Scholars Programme of the University of Melbourne (Australia).

Dr. Bert Sakmann is the recipient of numerous prizes namely the Louis-Jeantet Prize for Medicine (1988), the Gairdner Prize (1989), the Ernst Hellmut Vits Prize (1990), the Carus Medal (1991), the Harvey Prize (1991), the Gerard Prize (1991), the Landesforschungspreis Baden-Württemberg (1991), the Nobel Prize in Physiology or Medicine (1991) - most prizes jointly with Prof. Dr. Erwin Neher.

THOMAS J. JENTSCH

Group Leader at the Max-Delbrück-Center for Molecular Medicine (MDC) and at the Leibniz-Institute for Molecular Pharmacology (FMP) in Berlin

Thomas J. Jentsch received his Ph.D in physics (1982) and his M.D. (1994) from the Free University of Berlin. After investigating epithelial ion transport with Michael Wiederholt in Berlin, he joined the laboratory of H.F. Lodish at the Whitehead Institute (MIT) in Cambridge, where he began his work on the molecular biology of anion transport.

He cloned the first voltage-gated chloride channel in his own laboratory at the University of Hamburg in 1990 and unravelled the function of most members of this newly discovered gene family, using a combination of molecular cell biology, biophysics, knock-out mice, and human genetics.

Other areas of research include KCNQ potassium channels and KCC potassium-chloride cotransporters, again focusing on physiology, mouse pathologies, and human diseases. In 2006, he moved to Berlin and established his laboratory at the Max-Delbrück-Center for Molecular Medicine (MDC) and at the Leibniz-Institute for Molecular Pharmacology (FMP).

Thomas J. Jentsch is the recipient of numerous prizes including the Wilhelm-Vaillant Prize (1992), the Leibniz Prize (1995), the Alfred Hauptmann Prize and the Franz Volhard Prize (1998), the Zülch Prize (1999), the family Hansen Prize and the Louis-Jeantet Prize for Medicine (2000).

FONDATION LOUIS-JEANTET

25 years Jubilee Symposium
Geneva, October 7 - 9, 2008

SPEAKERS' BIOGRAPHIES

RIITTA HARI

Group Leader at the Helsinki University of Technology, Espoo, Finland

Professor Riitta Hari, M.D., Ph.D., was trained as a clinical neurophysiologist and received her degrees from Helsinki University. Since 1982, she leads the Brain Research Unit (BRU) of the Low Temperature Laboratory and since 2003 the Advanced Magnetic Imaging Centre at the Helsinki University of Technology. She currently directs the National Centre of Excellence on Systems Neuroscience and Neuro-imaging, appointed by the Academy of Finland.

She is a member of the U.S. National Academy of Sciences, of the Academia Europaea, and of the Finnish Academy of Sciences and Letters. She received the Louis-Jeantet Prize for Medicine in 2003.

Since the early 1980s, Professor Hari's research team has been developing magneto-encephalography (MEG) with a broad scope, including new instruments, sophisticated signal analysis methods, with a special focus on studies of all sensory systems and of various cognitive brain functions of healthy subjects and of various patient groups. Professor Hari's main interest is in temporal dynamics of human cortical functions, most recently related to the brain basis of social interaction.

PAUL NURSE

President of The Rockefeller University in New York

Paul Nurse, FRS, who shared the 2001 Nobel Prize in Physiology or Medicine, became President of The Rockefeller University in September 2003. He had previously served as Chief Executive of Cancer Research UK, the largest cancer research organization in the world outside the United States. Dr. Nurse is noted for his discoveries about the molecular machinery that regulates the cell cycle, the process by which a cell copies its genetic material and then divides to form two cells.

In addition to the Nobel Prize, Dr. Nurse has received the Albert Lasker Award for Basic Medical Research, the Gairdner Foundation International Award, the Louis-Jeantet Prize for Medicine, the Royal Society's Wellcome and the Royal and Copley medals, amongst other scientific awards. A fellow of the Royal Society, he is a founding member of the U.K. Academy of Medical Sciences, a member of the American Academy of Arts and Sciences, and a foreign member of the U.S. National Academy of Sciences. He was knighted in 1999 and received France's Légion d'Honneur in 2002.

Dr. Nurse plays an active role in science and society issues and makes regular TV appearances including as a co-host for a science series on PBS.