forefronts IN NEPHROLOGY

Proteinuria: From glomerular filtration to tubular handling

September 22-25, 2011
Aarhus, Denmark

ISN FOREFRONTS 2011

PROGRAM

Advancing Nephrology around the World

ISN INTERNATIONAL SOCIETY OF NEPHROLOGY 1960

Program

Thursday 22 September 2011	
17:00-17:15	**John Feehally, ISN President, UK** **Erik I. Christensen & Allan Flyvbjerg**, Aarhus, Denmark ***Welcome and opening remarks***
17:15-18:00	**Opening Plenary Lecture** ***Chair: Erik I. Christensen, Aarhus, Denmark*** **Carl Erik Mogensen**, Aarhus, Denmark *Paradigm shifts related to proteinuria*
18:00-20:00	**Welcome Reception**

Friday 23 September 2011	
08:30-10:30	**Session 1: Biology of the glomerulus** **Chair: *Corinne Antignac, Paris, France*** **Karl Tryggvason**, Stockholm, Sweden *The podocyte* **Billy G. Hudson**, Nashville, USA *The basement membrane* **Tobias B. Huber**, Freiburg, Germany *The slit diaphragm*
10:30-11:00	**Coffee Break and poster viewing**
11:00-13:00	**Session 2: The podocyte: Experimental models** **Chair: *Jeffrey H. Miner, St. Louis, USA*** **Marcus Moeller**, Aachen, Germany *Electrical forces determine glomerular permeability* **Peter Mundel**, Boston, USA *Podocytes in culture: functional aspects* **Corinne Antignac,** Paris, France *Conditional inactivation of podocin*

13:00-14:00	**Lunch and poster viewing**
14:00-16:00	**Session 3: Glomerular filtration barrier** **Chair: *Bengt Rippe, Lund, Sweden*** **Barbara J. Ballermann**, Alberta, Canada *Endothelium and permselectivity* **Börje Haraldsson**, Gothenburg, Sweden *Properties of the barrier and proteinuria* **George A. Tanner**, Indianapolis, USA *Imaging techniques to visualize the filtration barrier*
16:00-16:15	**Coffee Break**
16:15-18:15	**Session 4: Signalling pathways in the glomerulus** **Chair: *Pierre Ronco, Paris, France*** **Susan Quaggin**, Toronto, Canada *VEGF* **Maria P. Rastaldi**, Milan, Italy *Glutamate* **Youhua Liu**, Pittsburgh, USA *Wnt/ß-catenin signaling*
19:00-21:00	**Reception at Aarhus City Hall**

Saturday 24 September 2011	
09:00-10:30	**Session 5: Glomerular proteinuria and fibrosis/controversy** **Chair: *Pierre Verroust, Paris France*** **Guiseppe Remuzzi,** Bergamo, Italy *Tubular hypothesis* **Wilhelm Kriz,** Mannheim, Germany *Glomerular hypothesis*
10:30-11:00	**Coffee Break**

11:00-13:00	**Session 6: Dynamics of endocytosis** **Chair: *Pierre J. Courtoy, Brussels, Belgium*** **Enrique Javier Rodriguez-Boulan**, New York, USA *Linkage between cell polarity and endocytosis* **Thomas J. Jentsch**, Berlin, Germany *Regulation of endocytosis: role of chloride* **Paul Saftig**, Kiel, Germany *Lysosomal processing*

13:00-14:30	**Lunch and poster viewing**
14:30-16:30	**Session 7: Biology of the proximal tubule** **Chair*: Henrik Birn, Aarhus, Denmark*** **Erik I. Christensen**, Aarhus, Denmark *Receptor mediated endocytosis* **Olivier Devuyst**, Brussels, Belgium / Zurich, Switzerland *Congenital and acquired disorders* **Michael Zeisberg**, Goettingen, Germany *Epigenetics of kidney fibrosis*
	FREE TIME
19:00-23:00	**Symposium Dinner - Aarhus Old Town**

Sunday 25 September 2011	
09:00-11:00	**Session 8: Future developments** **Chair: *Olivier Devuyst/Erik I. Christensen*** **Pierre Ronco**, Paris, France *New collagen diseases* **Enyu Imai**, Nagoya, Japan *Drug delivery to the glomerulus* **Paola Romagnani**, Florence, Italy *Renal regeneration*
11:00-11:15	**Coffee Break**
11:15-13:15	**Jeffrey H. Miner**, St. Louis, USA *Next challenges in the glomerular barrier* **Thomas E. Willnow**, Berlin, Germany *Drug development: Preventing kidney damage* **Ole Skøtt**, Odense, Denmark *Distal consequences of proteinuria* **Concluding remarks** **Erik I. Christensen, Olivier Devuyst, Corinne Antignac**

Speakers Portfolio

Corinne Antignac

Corinne Antignac is Professor of Genetics since 2001, in the Department of Genetics at Hospital Necker, University Paris-Descartes. She is the Head of the Inserm Research Laboratory "Hereditary Nephropathies and Kidney Development". She studied medicine in Paris and received her degree of Doctor in Medicine in 1982, her certification in Nephrology and in Paediatrics in 1988, and a PhD in Human Genetics in 1994. Her research programs are devoted to the identification of genes involved in rare hereditary renal diseases and to the characterization of the proteins encoded by these genes. She is author or co-author of ~200 publications in peer reviewed journals. She was awarded the Eloi Collery prize from the French National Academy of Medicine in 2001and the Lillian Jean Kaplan International Prize for Advancement in the Understanding of Polycystic Kidney Disease in 2009.

Barbara J. Ballermann

Barbara J. Ballermann, M.D. is Professor of Medicine and Chair of the Department of Medicine at the University of Alberta, Canada. She is a Nephrologist who has devoted much of her career to the study of glomerular endothelium. Dr. Ballermann is a graduate of the University of Calgary (M.D., 1976). Her training in clinical Nephrology (1979-1981) at the Royal Victoria Hospital in Montreal was followed by research training (1981-1985) in the laboratory of Barry Brenner, M.D. at Harvard Medical School. She held Faculty Appointments at Harvard Medical School (1986-1990), Johns Hopkins University (1990-2000) and the Albert Einstein College of Medicine (2000-2003) before returning to Canada in 2003. Until 2010 she was Director of the Division of Nephrology at the University of Alberta and was President of the Canadian Society of Nephrology (2008-2010). Dr. Ballermann is credited for the first successful culture of glomerular endothelial cells in vitro. She also first defined the role of TGFbeta1 in glomerular endothelial differentiation and recently identified novel regulators of actin/myosin dynamics in endothelial cells.

Erik Christensen

Education:

1974	M.D. (cand.med.), University of Aarhus, Aarhus, Denmark.
1981	Doctor of Medical Sciences (dr. med.), University of Aarhus

Appointments:

Since 1970	Research at Department of Cell Biology, Institute of Anatomy, University of Aarhus, from 1977 as associate professor
1979	Visiting associate professor, Department of Pathology, Northwestern University Medical School, Chicago, Ill.
1996	Professor, Department of Cell Biology, Institute of Anatomy, University of Aarhus

Research Interests:

Published 214 peer reviewed papers/invited reviews/book chapters, 49 since 2005.
Fields of interest: Renal ultrastructure and function especially concerning proteinuria, protein- and

vitamin absorption, intracellular transport and degradation. Endocytosis and membrane receptors and other membrane proteins in the kidney and in other tissues, including immunocytochemical localization studies.

Pierre Courtoy

Pierre Courtoy holds an MD, PhD, and board-certified internist degrees. He is the Head of the Cell Biology Laboratory at de Duve Institute, Brussels, and of the Platform for Imaging of Cells and Tissues at the Brussels campus of the Université catholique de Louvain, where he teaches Cell biology and General pathology. Trained by G. Palade and M. Farquhar at Yale and by C. de Duve at Louvain, he spent 3 decades scrutinizing the endocytic apparatus in a variety of experimental

systems and methods, with strong emphasis on advanced morphology. Since last decade, he focused on apical endocytosis for which kidney proximal tubular cells are a model of efficiency, in collaboration with E.I. Christensen, O. Devuyst, C. Antignac and S. Cherqui a.o. Current interests in the kidney field are the regulatory machineries of apical recycling, the physiopathology of cystinosis, and the mechanisms underlying its correction by stem cell grafting. His work has received 6000 citations.

Olivier Devuyst

Olivier Devuyst, MD, PhD, is a full Professor at the Institute of Physiology of the UZH and invited Professor at the Universite catholique de Louvain (UCL) Medical School in Brussels, Belgium. He has a joint appointment in the Division of Nephrology of the USZ in Zurich and the Saint-Luc Academic Hospital in Brussels. Dr. Duvuyst and his group investigate the molecular mechanisms of the transport of water and solutes across epithelia, and the pathophysiology of inheritate renal tubular diseases and their progression.

Dr. Duvuyst has been the laureate of several international prizes and was elected at the Royal Academy of Medicine in 2005. He is Associate Editor of Nephrology Dialysis Transplantation and services on the Editorial Board of Kidney International and Pflugers Arch. Since 2008, Dr. Duvuyst coordinates EUNEPHRON, the European Network for the Study of Orphan Nephropathies.

Börje Haraldsson

Since July 2001, Haraldsson holds on of the four chairs in Nephrology in Sweden. In Gothenburg, he is chief physician at the university hospital and has daily contact with patients. For five years, 2005 – 2010, he was vice dean at the faculty. The Swedish Research council supports the research since more than 20 years. The research group has five PhD students full time that are involved in projects in different areas of Nephrology. The projects deal with mechanisms behind proteinuria and nephrotic syndrome (main project), endothelial glycocalyx components, glomerular and tubular expression of proteins in the kidney patiens with glomerulonephritis or diabetic nephropathy, mechanisms of tolerance after combined liver-kidney transplantation, and finally studies on new treatment options for metastatic renal cancer.

David Harris

David Harris is Professor of Medicine, The University of Sydney and Associate Dean and Head of Sydney Medical School, Westmead Hospital. He is Director of the Renal Failure Laboratory in the Centre for Transplantation and Renal Research, Westmead Millennium Institute, a nephrologist at Westmead Hospital and the newly appointed Chair of the Medical Staff Council, Westmead Hospital.

David is Chair of the ISN's Education Committee, Fellowship Program & Publication Committee. He is also President-elect of the Asian Pacific Society of Nephrology (APSN), and Chairman of the Advisory Board of the Australasian Kidney Trials Network. He has recently retired from an 8-year tenure as Editor-in-Chief of the journal Nephrology, APSN's official journal. Previously he was President of the Australian and New Zealand Society of Nephrology (ANZSN). In 1988 he was awarded the TJ Neale Award for outstanding contributions to Nephrological Science, he delivered the

Ross Bailey Lecture at the 11th Asian Pacific Congress of Nephrology in 2008 and was the 2008 ANZSN Established Investigator.

His major clinical and clinical research interests are the prevention and management of chronic kidney disease (CKD), as well as the management of patients with end stage kidney disease by peritoneal and haemodialysis. His laboratory research interests are focussed on progression of CKD, most recently the use of cellular and other novel approaches to slow progression.

Tobias Huber

Associate Professor of Medicine, Attending Physician , University Medical Center, Freiburg Dr Tobias Huber graduated from the University of Freiburg Medical School in 1999 and from there followed positions in the Division of Nephrology at the University Medical Center, Freiburg as a resident and then as a fellow in medicine. In 2003, Dr Huber joined the Department of Immunology and Pathology at Washington University, St Louis, as a postdoctoral fellow, before returning to the University Medical Center Freiburg in 2006. Dr Huber is an Attending Physician at the University Medical Center, Freiburg, and is also an Associate Professor of Medicine. Dr Huber's main research interests are in understanding the molecular mechanisms underlying glomerular disease. His team uses transgenic mouse and invertebrate models to understand signaling pathways that regulate glomerular function and disease. Huber's studies provided the first evidence of how the kidney filtration barrier serves as a signalling platform for glomerular functions and promoted the concept that slit diaphragm proteins participate in signal transduction events to regulate glomerular physiology and function. The latest research of Huber's team in Freiburg includes the study of mTor-autophagy signalling networks in glomerular disease and kidney aging. Dr Huber is also the Coordinator and chair of NephAge, a collaborative systems biology program that is designed to identify and analyze the complex and dynamic interplay of factors that control glomerular disease.

Billy G. Hudson

Billy G. Hudson is the Elliot V. Newman Professor of Medicine, Biochemistry and Pathology, and Director of the Center for Matrix Biology at Vanderbilt University Medical Center. He received his BS degree in chemistry from Henderson State Teachers College, MS degree in biochemistry from University of Tennessee and Ph.D. degree in biochemistry from the University of Iowa. He was a postdoctoral fellow at Harvard Medical School.

His research has focused on collagens that compose basement membranes. His research group discovered two collagen proteins, and named them alpha-3 and alpha-4 chains of collagen IV, and described how they, together with an alpha-5 chain, assemble into a complex α3α4α5 network that functions as a key component of the kidney filtration barrier and underlie Goodpasture disease and Alport syndrome. Recently, his team discovered a new chemical bond in collagen that helps hold tissues together. He is the co-author of over 200 scientific publications and 30 patents.

Enyu Imai

No bio available at time of printing

Thomas Jentsch

Thomas Jentsch is Professor at the Charité University Medicine in Berlin and Head of the Department '*Physiology and Pathology of Ion Transport*' at the Leibniz-Institut für Molekulare Pharmakologie (FMP) and the Max-Delbrück-Centrum für Molekulare Medizin (MDC) in Berlin.

While being Junior Group Leader at the ZMNH in Hamburg, he discovered the CLC gene family by cloning of a Cl^- channel from *Torpedo* electric organ. He then quickly identified mammalian CLC anion transport proteins, studied their structure-function relationship and their role in physiology and disease. He later extended his studies to K^+ channels, K-Cl cotransporters, and Ca^{++}-activated Cl^- channels. He discovered and analyzed several ion transport diseases ('channelopathies') including myotonia, epilepsy, deafness, osteopetrosis, renal salt loss and kidney stone diseases. The generation and analysis of genetic mouse models in his laboratory provided intriguing insights into human disease. A major focus of his lab concerns the ion homeostasis of intracellular organelles.

Wilhem Kriz
From 1974 - 2005: Full Professor and Chairman
Department of Anatomy and Cell Biology
University of Heidelberg

2005-2006: Professor emeritus

Since September 2006: Acting chairman of the newly founded Department of Anatomy and Developmental Biology, Medical Faculty Mannheim, University of Heidelberg

Major Research Interests:

1. Structural Organization of the Mammalian Kidney

2. Structure-Function-Correlations in the Renal Glomerulus, the Juxtaglomerular Apparatusand the Thin limbs of Henle's loop

3. Renal Pathology – Progressive Renal Disease

Youhua Liu
Dr. Youhua Liu is currently a Professor of Pathology at the University of Pittsburgh School of Medicine. He obtained his Ph.D in cell biology from the Peking Union Medical College in Beijing, China. After receiving his postdoctoral training at the National Institutes of Health and the University of Pittsburgh, he joined Brown University faculty as an Assistant Professor of Medicine. He then moved to the University of Pittsburgh as an Associate Professor of Pathology, and was subsequently promoted to Professor. Dr. Liu's research is primarily focused on dissecting the cellular and molecular pathways leading to chronic renal fibrosis, and exploring novel strategies for therapeutic interventions. He is also interested in elucidating the mechanism underlying podocyte injury in proteinuric kidney diseases.

Jeffrey Miner
Dr. Jeffrey Miner, Ph.D., is Professor of Medicine in the Renal Division at Washington University School of Medicine in St. Louis, Missouri. For almost 20 years he has studied the glomerular basement membrane, with the goals of defining the major components of the GBM and determining the roles of these components in glomerular development and function using in vivo genetic approaches in mice. He received the American Physiological Society-Renal Section Young Investigator Award in 2003 and the American Society of Nephrology's Young Investigator Award in 2004 for his studies of laminin-521 and collagen alpha3/4/5, components of the GBM that are defective in Pierson syndrome and in Alport syndrome, respectively. His lab is currently focused on 1) understanding why specific laminin mutations in human patients cause filtration barrier defects; and 2) investigating whether the mature GBM exhibits the plasticity necessary to make it amenable to repair.

Marcus Moeller
1989-1996 Study of Human Medicine at the Universities of Heidelberg, Munich, Freiburg (Ger) and London (UK), and passed complete US-MLE certificate
1992-1996 Medical thesis at Institute for Immunobiology and Cancer Research at the University of Freiburg i.Br., grade: "magna cum laude", Prof. Dr. Dr. S. von Kleist
1996-1999 Medical Internship and Residency at the University Hospital in Munich (Prof. Schlondorff)
1999-2002 Post-doctoral fellow at the Div. of Nephrology, University of Michigan, Ann Arbor, USA (Prof. L. Holzman)
2003 – 2004 senior research fellow and group leader in the Dept. of Anatomy and Cell Biology (Prof.

W. Kriz), University of Heidelberg
2004 – present: group leader and resident at the Medical Clinic II, Nephrology and Immunology (Prof. J. Floege), RWTH University of Aachen, Germany
2008 Board certificates for Internal Medicine, since then Consultant for Internal Medicine
2008 Habilitation for Internal Medicine at the RWTH University of Aachen
2009 Award for the best Habilitation of the RWTH University of Aachen
2009 Board certificates in Nephrology

Carl Erik Mogensen

1. Graduate from Aarhus University in 1967

2. Received Dr. Med. Scienice in 1972
3. Professor of Medicine at the University of Aarhus 1980

4. Published approximately 450 publications on Proteinuria, glomerular function, tubular function, diabetes and hypertension. Papers widely cited.

Peter Mundel

No bio available at time of printing

Susan Quaggin

Susan Quaggin graduated from the Faculty of Medicine at the University of Toronto in 1988 and received her specialty degree in Internal Medicine in 1992. She completed her sub-specialty training in Nephrology in 1993 at U of T and did a post-doctoral fellowship at Yale University where she studied the genetic basis of kidney development. In 1997, she returned to Toronto to do a second post-doctoral fellowship in mouse genetics in the laboratory of Janet Rossant. She is a Professor in the Department of Medicine, at the University of Toronto, a Senior Scientist at the Samuel Lunenfeld Research Institute and is a practicing Nephrologist at St. Michael's Hospital. She holds a Canada Research Chair Tier II in Vascular Biology and a Premier's Research of Excellence Award and was recently named the Gabor-Zellerman Professor in Renal Medicine.

Dr Quaggin serves as a councillor of the ASCI (2010-2013), is the Deputy Editor of the Journal of the American Society of Nephrology, and is an editorial board member of the Journal of Clinical Investigation, Stem Cells, Disease Models and Mechanisms, and the American Journal of Kidney Disease and is Chair of the Endothelial Phenotypes Gordon Conference, 2012.

Susan's research program focuses on the genetic pathways required to establish and maintain the glomerular filtration barrier – a highly selective filter that separates the blood from the urinary space. To understand the pathways and interactions between different cell types in the glomerulus that are critical to set up the filtration barrier, Susan's research team has developed a number of genetic tools that permit cell and time-specific manipulation of gene expression.

Her research laboratory is funded by: the Canadian Institutes of Health Research, the National Cancer Institute of Canada, the Kidney Foundation of Canada, the Banting and Best Diabetes Centre, and the National Institutes of Health.

Maria Rastaldi

Education: MD in Internal Medicine and Nephrology. PhD in Molecular Medicine.
2001-2006: Principal Investigator, Renal Immunopathology Laboratory, San Carlo Hospital, Milan, Italy.
2007-present: Director of the Renal Research Laboratory at Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy

Memberships: The Histochemical Society, The Italian Society of Nephrology, ERA-EDTA, ASIP, Renal Pathology Society, European Calcified Tissue Society, European Foundation for Clinical Nanomedicine, UMDF.

Recognised expert in glomerular kidney diseases, Dr Rastaldi has more than 80 publications in peer reviewed international journals. After the discovery that podocytes use a neuron-like system of signalling, her research aims at dissecting both molecular and functional aspects of this type of communication and their role in physiology and pathophysiology of the glomerular filtration barrier.

Giuseppe Remuzi

Giuseppe Remuzzi, M.D. – Bergamo, Italy. Actually Professor of Nephrology and Director of the Department of Immunology and Clinical Transplantation of the Ospedali Riuniti di Bergamo, Italy and Director of the Division of Nephrology and Dialysis of the same hospital. He also directs the Negri Bergamo Laboratories of the "Mario Negri" Institute for Pharmacological Research, a unique group of basic scientists and clinicians devoted to the study of renal disease, with particular focus on platelet endothelial interactions, vascular prostaglandin biology, coagulation and renal disease, progression of renal disease, experimental models of glomerular damage, and transplant immunology and tolerance. Particularly far-reaching are his contributions to our understanding of the pathophysiology of hemolytic uremic syndrome, prostaglandin metabolism in pregnancy, renal vascular biology in uremia, the role of protein trafficking in renal disease progression, the induction of graft tolerance by intrathymic injection of donor antigens, and the role of the co-stimulatory CD28-B67 pathway in transplant rejection and the prevention of renal and cardiovascular damage in diabetes. He authored and co-authored more than 1065 scientific articles, reviews and monographs. Prof. Remuzzi serves on editorial boards of numerous journals including the prestigious New England Journal of Medicine and is member of the International Advisory Board of The Lancet. During his professional career Giuseppe Remuzzi received many national and international awards, among them the ISN Jean Hamburger Award (WCN 2005, Singapore), the John P. Peters Award (ASN 2007, San Francisco) and the ISN AMGEN Award (WCN 2011, Vancouver). In Vancouver (april 2011), he was also appointed as President- elect of the ISN for the period 2013-2015.

Bengt Rippe

Bengt Rippe is Professor and Chair of the Department of Nephrology in Lund since 1990. His research over the years has been focused on the exchanges of solutes, especially of macromolecules, and water across capillary walls. The work has resulted in mathematical descriptions of the transport across the capillaries, the so-called "two-pore model", and of peritoneal membrane transport, the so-called "three-pore model". The latter model is generally used for modeling solute and water transport in conjunction with peritoneal dialysis (PD) and has been successful in e.g. describing the phenomenon of sodium sieving in PD. In order to shed light on the mechanisms of microalbuminuria, the group has studied the pathophysiology and dynamics of the glomerular filtration barrier in, e.g. inflammation, diabetes etc. Bengt Rippe has published ~200 scientific papers. He was awarded the "Lifetime Achievement Award" in the field of PD at the 29th Annual Dialysis Conference (Houston, Texas, in 2009). He is on the Editorial Board of PDI and BMC Nephrology.

Enrique Rodriguez

Enrique Rodriguez-Boulan received his MD from University of Buenos Aires, Argentina, and is Professor of Cell Biology in Ophthalmology at Weill Cornell Medical College, New York. He has published over 180 peer-reviewed articles on fundamental aspects of the organization and function of epithelial cells. His laboratory focuses on the MDCK model, which he introduced with Cereijido and Sabatini in 1978, and the Retinal Pigment Epithelium (RPE), which performs key support functions for photoreceptors and the retina. His group has contributed much of our current knowledge of trafficking pathways and mechanisms involved in delivering plasma membrane proteins to apical and

basolateral membrane domains in MDCK and RPE cells. His retinal research has resulted in the discovery of a major RPE receptor for phagocytosis of rod outer segments, a new pathogenetic mechanism for Age Related Macular Degeneration and potential new therapies for this disease, which affects over 30% of the senior population.

Paola Romagnani

Paola Romagnani was born in Florence, Italy, in 1970. She graduated at the School of Medicine and Surgery, University of Florence in 1995 and obtained her PhD in 2001. In 1999, she has won the Hoechst Marion Roussel Foundation Award as best young Italian scientist. From 2006 she is Associate Professor of Nephrology and from 2009 Chair of Nephrology and Director of the Specialty School of Nephrology of the University of Florence. From 2010, she is Head of the Nephrology and Dialysis Unit at the University Hospital Meyer, Florence. She has published 112 manuscripts, with a total Impact factor of over 650. Her studies received over 5000 citations, with an H-index of 41. In 2007, she has won the first Edition of the European Research Council Starting Grant Young Investigator Award. From 2008, she also coordinates a Cooperative European Project of the FP7 Program. From 2011 she is Ambassador of the European Commission for the Programme “Youth on the move”.

Pierre Ronco

Dr. Ronco graduated from the University Pierre et Marie Curie (UPMC, Paris, France) where he was appointed in 1986 as a Professor of Renal Medicine. He became chief of the renal division at Tenon hospital (Paris) in 1995 and of the INSERM Unit 489/702 in 1998. His main fields of interest are renal immunopathology, and genetics, and the mechanisms of kidney repair. He wrote over 300 articles in peer-reviewed journals, book chapters and monographs. He received several national and international prizes including the *Jean Hamburger* Award (1999, City of Paris); *Marguerite Delahautemaison* Award (2000, French Foundation for Medical Research); the *Jean Valade* Award (2005, *Fondation de France*); and the 2007 ISN Jean Hamburger Award, for his conbtribution to clinical and translational nephrology in the area of pathomechanisms of glomerular disease. He is a member of the French Academy of Medicine, the Royal Academy of Medicine (Belgium), and the *Institut Universitaire de France*. He has been a member of American Society of Nephrology Programme Committee for the 2008 Annual Meeting (Philadelphia) and a co-chair of the Scientific Programme Committee of the World Congress of Nephrology in Milan 2009. He is currently serving as the President of the ERA-EDTA meeting in Paris, 2012. He trained over 50 PhD and postdoc fellows in the past 20 years and received a special award for excellence in teaching from UPMC University.

Paul Saftig

Paul Saftig, is director of the Biochemical Institute at the University Kiel. Since many years he is interested in studying the biology and cell biology of lysosomes and lysosomal membrane proteins. The other focus of the past and present work of his group is the in vivo analysis of the various roles of the secretase proteases which mediate the processing of the amyloid precursor protein, a central protein in the pathogenesis of Alzheimer Disease. Paul Saftig is currently coordinating various national and international networks and his work is highly cited.

Ole Skott

Ole Skøtt born in 1955 in Denmark. MD, U Copenhagen in 1982, dr. med. 1989. OS trained as a renal physiologist with Paul P. Leyssac at Univ Copenhagen, Denmark and with JP. Briggs and J Schnermann at Univ Michigan, USA. Professor in Physiology at Univ Southern Denmark from 1995, Dean of Medicine and Health Sciences at Univ Southern Denmark from 2008. Secretary General of the Scandinavian Physiological Society 2004-2010. Was or is Associate Editor or member of Editorial

Boards of Am J Physiol Reg Comp Integr Physiol, Acta Physiol, Am J Physiol, Renal Physiol; and Pflügers Arch, Eur J Physiol Main scientific interests: renin, renal vascular function, and renal function at large.

G.Tanner

George A. Tanner is professor emeritus of physiology at Indiana University School of Medicine in Indianapolis. He received his Ph.D. in Physiology from Harvard University in 1964, and did postdoctoral work at Cornell University Medical College with Drs. Gerhard Giebisch and Erich Windhager. He has used primarily kidney micropuncture and clearance techniques in his laboratory. Dr. Tanner's research interests include tubular transport of organic compounds, acute kidney injury, effects of tubular obstruction, polycystic kidney disease, and glomerular filtration. In recent years, he has employed two-photon microscopy to image the kidney in vivo.

Kalr Tryggvason

Karl Tryggvason, MD, PhD, is Professor of Medical Chemistry at the Karolinska Institute in Stockholm. His research mainly concerns the molecular nature and diseases of basement membranes, the main focus being the glomerular basement membrane and renal filtration barrier. He has elucidated the genetic causes Alport and congenital nephrotic syndrome, the latter work leading to the discovery of nephrin a key component of the podocyte slit diaphragm. His work has opened up for a new understanding of the renal filtration barrier and its diseases. Tryggvason's current research focuses on a systems biology approach to the glomerulus in order to identify novel glomerular proteins, molecular signatures of glomerular disease processes and identification of susceptibility genes for diabetic nephropathy. Tryggvason has published over 300 original articles, he is a member of the Swedish Royal Academy of Sciences and the Nobel Assembly, and has received several international awards primarily for his kidney research, including the ASN Homer Smith and Louis Jeantet awards.

Pierre Verroust

No bio available at time of printing.

Thomas Willnow

Thomas E. Willnow is a graduate in Biology from the University in Munich, where he also obtained a Ph.D. in Biochemistry in 1992. After a post doctorate at the UT Southwestern Medical Center in Dallas (1992-1996) he joined the Max-Delbrueck-Center for Molecular Medicine (MDC) as faculty member. In 2000, he was appointed Full Professor for Molecular Cardiovascular Research at the Charité, Medical Faculty of the Universities of Berlin. He also acts as chief scientific officer of NeuronIcon ApS. Research in his lab is focused on the functional characterization of endocytic receptors, specialized cell surface proteins that transport metabolites, hormones, and signaling molecules into cells. Using transgenic mouse and zebrafish models, he and his colleagues aim to elucidate hitherto unknown roles of orphan endocytic receptors in the cardiovascular and nervous systems and to identify their relevance for human disease.

Michael Zeisberg

No bio available at time of printing.