Program

Thursday

Welcome & Opening Plenary Lecture

16:30 - 16:45	Welcome and Opening Remarks *Kai-Uwe Eckardt, Germany* *Robert Unwin, United Kingdom* *Zhi-Hong Liu, China* *Youfei Guan, China*
16:45 - 18:00	Evolutionary medicine: The hypertension pandemic *Bernard Rossier, Switzerland*
18:00 - 19:00	*Welcome & Networking Reception*

Friday

Session 1:

Moderator: Zhi-Hong Liu, China

Transcriptomics, Genomics and Epigenetics

09:00 - 09:30 **Keynote Lecture:**
Transcriptomic imaging
Joakim Lundeberg, Sweden

09:30 - 09:55 A million genomes and the Beijing Genome Institute (BGI)
Jun Wang, China

09:55 - 10:20 Epigenetics and diabetic kidney disease
Alexander Maxwell, United Kingdom

10:20 - 10:35 Oral presentation from abstract submission: DNA methylation sequencing identifies CTCF regulated genes implicated in diabetic complications
Assam El-Osta, Australia
Poster Board: P01

10:35 - 11:05 Coffee Break & Poster Viewing

Session 2:

Moderator: Alan Salama, United Kingdom

Innate and Adaptive Immunity, and Renal Pathophysiology

11:05 - 11:30 Innate lymphoid cells – New players in tissue injury and repair
Jan-Eric Turner, Germany

11:30 - 11:55 Interaction of the innate and cognate immune system in nephritis
Stephen Alexander, United Kingdom

11:55 - 12:20 The diverse function of macrophages in renal disease
Jeremy Hughes, United Kingdom

12:20 - 12:35 Oral presentation from abstract submission: Angiotensin-converting enzyme 2/MAS receptor double deficiency promotes angiotensin II-induced renal fibrosis by enhancing the ERK1/2 map kinase-SMAD3 crosstalk pathway
Jun Ni, China
Poster Board: P05

12:35 - 14:00 Networking Lunch & Poster Viewing

Session 3:

Moderator: Ming-Hui Zhao, China

Immunology and Metabolism - Immuno-Metabolism, an Emerging Frontier

14:00 - 14:30 **Keynote Lecture:**
Modulating mTOR activity to control T cell function
Hans Stauss, United Kingdom

14:30 - 14:55 AMPK: Linking inflammation and metabolism
Morgan Fullerton, Canada

14:55 - 15:20 Prostaglandin (PG) E2 in the regulation of immunity and inflammation
Youfei Guan, China

15:20 - 15:35 Oral presentation from abstract submission: Increased serum platelet microparticle contributes to glomerular endothelial injury in diabetic nephropathy
Kun Ling Ma, China
Poster Board: P18

15:35 - 16:05 Coffee Break & Poster Viewing

Session 4:

Moderator: Hans Stauss, United Kingdom

The Gut Microbiome, Immunity and Physiology

16:05 - 16:35 **Keynote Lecture:**
Structural modulation of gut microbiota and antigen load from the gut
Liping Zhao, China

16:35 - 17:00 Microbiome, immunity and human disease
Gregory F. Sonnenberg, USA

17:00 - 17:25 Microbiome remodeling leads to inhibition of intestinal farnesoid X receptor signaling and decreased obesity
Frank J. Gonzalez, USA

17:25 - 17:40 Oral presentation from abstract submission: NMN, a NAD+ precursor, can rescue the age-associated susceptibility to cisplain induced acute kidney injury in a SIRT1-dependent manner
Yi Guan, China
Poster Board: P54

Saturday

Session 5:

Moderator: Ming Yu Liang, USA

Immunogenetics, Autoimmunity, and Inflammasome

09:00 - 09:30 **Keynote Lecture:**
LN susceptibility gene: MHC or non-MHC?
Xueqing Yu, China

09:30 - 09:55 ANCA associated vasculitis and immunity
Ming-Hui Zhao, China

09:55 - 10:20 The inflammasome in health and disease
Felix Knauf, Germany

10:20 - 10:35 Oral presentation from abstract submission: Megalin/cubilin-lysosome-mediated albumin reabsorption is involved in the tubular cell activation of NLRP3 inflammasome and tubulointerstitial inflammation
Dan Liu, China
Poster Board: P15

10:35 - 11:20 Coffee Break & Poster Viewing

Session 6:

Moderator: Chuanming Hao, China

Hypertension, Metabolism and Immunity

11:20 - 11:45 Autonomic regulation of the immune system and its implications for hypertension
Matthiew Bailey, United Kingdom

11:45 - 12:10 (Pro)renin receptor and hypertension
Tianxin Yang, China

12:10 - 12:35 Neuroimmune communication in hypertension and obesity: A new therapeutic angle?
Mohan Raizada, USA

12:35 - 12:50 Oral presentation from abstract submission: The reduction of fumarase activity contributes to elevation of blood pressure in Dahl salt-sensitive rats
Entai Hou, China
Poster Board: P22

12:50 - 14:00 Networking Lunch & Poster Viewing

Session 7:

Moderator: Liming Lu, China

Novel Mechanisms in Salt and Water Homeostasis

14:00 - 14:25 Th17 cell regulation: The link to salt-sensing and SGK1 Th17 cell phenotype induction
Chuan Wu, USA

14:25 - 14:50 The role of proximal tubule sodium transport in regulation of extracellular fluid volume and blood pressure
Alicia McDonough, USA

14:50 - 15:15 Gut-kidney interactions, metabolism and fluid and electrolyte homeostasis
Jens Titze, Germany

15:15 - 15:30 Oral presentation from abstract submission: Dual activation of the bile acid nuclear receptor FXR and G-protein-coupled receptor TGR5 attenuates lithium-induced nephrogenic diabetes insipidus
Weidong Wang, China
Poster Board: P23

15:30 - 16:00 Coffee Break & Poster Viewing

Session 8:

Moderator: Xiaoling Zhang, China

Immunity, Atherogenesis and Vascular Function

16:00 - 16:30 **Keynote Lecture:**
Macrophage activation and atherogenesis
Andrew Newby, United Kingdom

16:30 - 16:55 AMP-activated protein kinase in vascular function and kidney disease
Ming-Hui Zou, USA

16:55 - 17:20 The role of transient receptor potential (TRP) channels in the pathogenesis of hypertension
Zhiming Zhu, China

17:20 - 17:35 Oral presentation from abstract submission: Glycogen synthase kinase 3ß (GSK 3ß) inhibition promotes macrophage polarization and reduces inflammation and acute and chronic damage following acute kidney injury
Rujun Gong, China
Poster Board: P31

Sunday

Session 9:

Moderator: Jill Norman, United Kingdom

Immunity, Fibrosis and Kidney Disease

09:00 - 09:30 **Keynote Lecture:**
Mechanisms of fibrosis: Therapeutic translation for fibrotic disease
A. Richard Kitching, Australia

09:30 - 09:55 The role of the circadian clock in matrix synthesis: Implications for fibrosis
Karl E. Kadler, United Kingdom

09:55 - 10:20 Epithelial-Mesenchymal Communication: New Paradigm in Fibroblast Activation and Kidney Fibrosis
Youhua Liu, China

10:20 - 10:35 Oral presentation from abstract submission: Target deletion of numb in proximal tubules attenuates interstitial fibrosis by mitigating G2/M arrest
Jing Nie, China
Poster Board: P35

10:35 - 11:05 *Coffee Break & Poster Viewing*

Session 10:

Moderator: Kai-Uwe Eckardt, Germany

Key Signaling Pathways in Renal and Cardiovascular Disease

11:05 - 11:30 Sphingolipid signaling in kidney disease
Mark Okusa, USA

11:30 - 11:55 TGF-beta/Smad signaling pathway in kidney and cardiovascular diseases
Hui Yao Lan, Hong Kong, China

11:55 - 12:10 Oral presentation from abstract submission: Podocyte-specific knockout of SIRT6 promotes renal injury by exacerbating inflammation in diabetic nephropathy
Fan Yi, China
Poster Board: P52

12:10 - 12:25 *Closing Remarks*

Kai-Uwe Eckardt, Kermany
Robert Unwin, United Kingdom
Zhi-Hong Liu, China
Youfei Guan, China

Biographies

Stephen Alexander

Stephen Alexander is a paediatric nephrologist who received his medical training at the University of Sydney, his paediatric training in Perth, and his fellowship training in Boston. He has worked as a consultant nephrologist at Mass General Hospital and at Children's Hospital at Westmead where he heads the Nephrology Department. He leads a research group into the role of Tregs in nephritis and transplantation.

Matthew Bailey

Matt Bailey is a Reader in Renal Physiology in the British Heart Foundation Centre for Cardiovascular Science at the University of Edinburgh. He has a PhD from The University of London, received postdoctoral training at University College London and the Centre and Le Centre National de la Recherche Scientifique in Saclay, France. Matt held Wellcome Trust Fellowships at Yale University and the University of Edinburgh, joining the faculty at Edinburgh in 2008. Matt leads a multidisciplinary research team focused on defining mechanisms of hypertension and kidney disease. Major research areas include i) defining brain/kidney interactions in salt-sensitive hypertension and ii) investigating how renal vascular dysfunction generates a pro-inflammatory environment in the early stages disease. Research in the Bailey group is funded by the British Heart Foundation, Kidney Research UK, the NC3Rs and the Medical Research Council.

Kai-Uwe Eckardt

Kai-Uwe Eckardt is Professor of Medicine and Head of the Department of Nephrology and Hypertension at the University of Erlangen-Nuremberg, Germany. He attained an MD from the University of Münster in 1985 and obtained residency and fellowship training in pathology, physiology, internal medicine and nephrology at the Universities of Münster, Hannover, Zurich, Oxford and the Charité in Berlin. He serves as Vice Dean for research and internationalisation at the medical faculty of the University of Erlangen-Nürnberg.
Dr. Eckardt´s major scientific interests lie in the molecular mechanisms and physiological / pathophysiological relevance of oxygen sensing, the development of acute and chronic renal injury and the management of anemia. He was chairman of a collaborative research center on kidney injury, founded by the German Research Foundation and is principal investigator of the German Chronic Kidney Disease (GCKD) study, a national CKD cohort study in Germany. He serves on the editorial boards of the KI, NDT, JMolMed and the BMJ. He is a past council member of the ERA-EDTA, current member of the ISN council and chair of the ISN Forefronts Committee and was recently appointed to the ISN executive committee. Until 2012 he served as a co-chair of KDIGO (Kidney Disease: Improving Global Outcomes) and he is currently member of the KDIGO Executive Committee. Professor Eckardt has published more than 300 publications in international journals.

Morgan Fullerton

The Fullerton laboratory is interested in understanding the interplay between metabolism and immunity. Obesity is a chronic metabolic and inflammatory condition that predisposes diseases such as insulin resistance (which precedes type 2 diabetes) and atherosclerosis (which precedes cardiovascular disease). We use genetically engineered (knock-out and knock-in) mice that have targeted mutations to specific metabolic pathways, in combination with molecular, biochemical and cellular biology techniques to investigate how metabolism can alter inflammation (and vice versa). Obesity-related diseases (type 2 diabetes and cardiovascular disease) pose a threat to human health on a global scale. Our aim is to better understand how metabolic pathways dictate immune regulation so to potentially develop novel strategies to prevent and treat chronic metabolic and inflammatory diseases.

Frank Gonzalez

Frank Gonzalez is Chief of the Laboratory of Metabolism, Center for Cancer Research, National Cancer Institute. His group studies drug and carcinogen metabolism and mechanisms of chemical carcinogenesis, primarily using mouse models. They have developed several valuable gene knockout and humanized mouse lines and have considerable experience in mouse disease models and cancer bioassays. His laboratory also uses high resolution and high throughput LCMS-based metabolomics for the discovery of cancer biomarkers in mouse models and in human case control studies. Urine biomarkers have been discovered for lung and colon cancer. In addition, Gonzalez's group studies metabolic diseases such as obesity, insulin resistance and fatty liver disease, all of which are risk factors for cancer and increase mortality in cancer patients. Recent studies uncovered a nuclear receptor-driven pathway by which the gut microbiota influences these metabolic diseases, that has led to novel insights into the potential clinical intervention for these disorders.

Youfei Guan

Professor Guan is currently the Vice President of Dalian Medical University and Dean of Advanced Institute for Medical Science (AIMS). After receiving his medical degree from Nantong Medical College (NMC) in 1986, he earned his Master of Science degree (MS) in the Affiliated Hospital of NMC in 1989 and then served as a resident physician in the same hospital. Between 1991 and 1994, Dr. Guan studied at the Institute of Nephrology at Beijing Medical University and received his Ph.D. under the supervision of Professor Haiyan Wang, a world famous nephrologist. After 5 years of postdoctoral training as a member of Professor Matthew Breyer's group at Vanderbilt University, he became an assistant professor in the Division of Nephrology and Hypertension of Department of Medicine at Vanderbilt University, where Dr. Guan initiated his own research on the biological effects of membrane-associated prostaglandin receptors and related nuclear receptor transcription factors. Since 2002, Dr. Guan has returned to Beijing Medical University (Peking University Health Science Center), where he was appointed as a Professor of Physiology. He served as the Chair of the Department of Physiology and Pathophysiology between 2006 and 2013 and the Associate Dean at Peking (Beijing) University Health Science Center between 2008 and 2013. Dr. Guan was a recipient of the Outstanding Young Investigator Award from the National Natural Science Foundation of China in 2007 and has been a Changjiang Professor at Peking University selected by the Ministry of Education since 2005. He has become the Chief Scientist leading the "973" program on fatty liver and dyslipidemia research sponsored by the Ministry of Science and Technology since 2011. Dr. Guan has published more than 130 articles in peer-reviewed journals including Nature Medicine, Journal of Clinical Investigation, Diabetes, PNAS, Hepatology, JASN, Kidney Int, and American Journal of Physiology and has contributed more than 20 invited reviews and editorial commentaries. He also organized several international symposiums and workshops in the fields of nuclear receptors and prostaglandins

and trained more than 25 PhD students and 6 postdoctoral fellows. Dr. Guan has been invited to serve as either an associate editor or as an editorial board member for many journals, including Journal of Diabetes, PPAR Research, Kidney International and Biochemical Journal. He has served as an invited reviewer for many peer-review journals including Journal of Biological Chemistry, Diabetes, Diabetologia, Journal of the American Society of Nephrology, Hypertension, American Journal of Physiology, and Kidney International and as an Ad hoc review committee member for NIH-NIDDK, the Glaxo Wellcome Foundation, the National Natural Science Foundation and the Ministry of Education of China.

Jeremy Hughes

Jeremy Hughes is Professor of Experimental Nephrology at the University of Edinburgh and an honorary consultant nephrologist at the Royal Infirmary, Edinburgh. He graduated in medicine from the Universities of Cambridge and London and focused upon glomerular inflammation for his PhD studies as a MRC Clinical Training Fellow at the Royal Postgraduate Medical School in London. After a University lectureship in Nottingham, he was a Wellcome Trust Advanced Fellow in Professor Richard Johnson's laboratory in Seattle where he studied various experimental models of renal disease. He became a Wellcome Trust Senior Fellow in Clinical Science at Edinburgh University in 2000. His research interests include macrophage biology, hemeoxygenase-1, acute kidney injury, renal fibrosis, diabetic nephropathy and aging. He is a member of the Editorial Board of Kidney International (2007-10 & 2012-current). He is a member of the Kidney Research UK Research Grants Committee (2011-current) and was appointed Chair of the committee in 2013.

Karl Kadler

Karl Kadler obtained his PhD from the University of Manchester in 1984 for developing computer-based methods of using protein sequence information to interpret electron microscope images of collagen fibrils. He then moved to the USA to take up a postdoctoral position with Prof. Darwin J. Prockop (UMDNJ, Rutgers Medical School, New Jersey) and developed a cell-free system for studying collagen fibrillogenesis by cleavage of procollagen (the biosynthetic precursor of collagen) with the procollagen metalloproteinases. In 1989 he moved back to the University of Manchester as a Wellcome Trust for a Senior Research Fellowship in Basic Biomedical Sciences and in 2000 was appointed Professor of Biochemistry. The focus of his laboratory is to understand how cells make mechanically-strong fibrous tissues that are rich in collagen fibrils. He has recently shown that the circadian clock controls the expression of genes that regulate collagen fibril assembly and removal, which will be the focus of his talk. Professor Kadler holds positions on grant decision-making panels at the Wellcome Trust and the Finish Academy of Sciences. In 2013 he was awarded the honour title of Affiliate Professor in Matrix Biology, Faculty of Health and Medical Sciences at the University of Copenhagen, Denmark.

A. Richard Kitching

Richard Kitching is an academic nephrologist-scientist focused on defining the pathogenesis of severe immune renal disease, especially the contribution of leukocytes. He holds Monash University and Monash Heath appointments. He is the director of the Monash Centre for Inflammatory Diseases and serves on the Editorial Boards of both Kidney International and The Journal of the American Society of Nephrology. Professor Kitching has contributed to our understanding of how leukocytes mediate kidney disease in several areas. His work helped establish the importance of T cell subsets and effector T cells in the pattern and severity of immune renal disease. Professor Kitching's work has used new ways to image glomeruli in vivo to understand leukocyte behaviour in glomeruli and he has also worked in role of dendritic cells in renal disease.

Felix Knauf

Dr. Felix Knauf was born in Freiburg, Germany, and studied medicine at the University Freiburg and Charite Berlin. He completed his doctoral thesis in the laboratories of Professors Peter Aronson and Gerhard Giebisch in the Department of Physiology and Internal Medicine at Yale University.
Dr. Knauf completed his medical training in Internal Medicine and Nephrology at Yale University. He completed his postdoctoral training with Professors Peter Aronson and Richard Flavell. In 2011 he joined the Yale Faculty as instructor in internal medicine and nephrology.
In 2013, Dr. Knauf took a position at the University Erlangen, Germany, as an attending physician and research group leader. He continues to be an Assistant Professor Adjunct at Yale University. Dr. Knauf's research focus is on defining the role of the inflammasome in hyperoxaluric kidney disease.

Hui Yao Lan

Professor Hui Yao Lan is a Chon-Ming Li Professor of Biomedical Sciences and an Assistant Dean (Research) in Faculty of Medicine; an Associate Director in Li Ka Shing Institute of Health Sciences; Director of Inflammatory Diseases Research, Chinese University of Hong Kong.
Professor Lan received his Medical Degree in 1977, his Master Degree in Pathology in 1986 at Sun Yat-Sen University, China, and his PhD degree in Medicine at Monash University, Australia in 1990. He previously held an Assistant Professorship/Lectureship at Sun Yat-Sen University (1977-1987), Senior Lectureship (Hon) at Monash University (1995-1998), Associate and Full Professorship at the University of Hong Kong (1998-2001/2006-2009), and a tenured Associate and Full Professorship at the Department of Medicine at Baylor College of Medicine, Houston, USA (2001-2006).
Professor Lan's major research interest is focusing on TGF-/Smad signaling in chronic kidney and cardiovascular diseases. He obtained many research grants/programs and published >275 publications with over 11,000 citations and h-index 59. Currently, he services as an Editorial Board member/Associate Editor in many biomedical journals.

Youhua Liu

Dr. Youhua Liu is currently a Professor of Pathology at the University of Pittsburgh School of Medicine and a Professor of Medicine at the Nanfang Hospital, Southern Medical University. He obtained his PhD in cell biology from the Peking Union Medical College in Beijing, China. After receiving his postdoctoral training at NIH and the University of Pittsburgh, he joined the faculty at Brown University as an Assistant Professor of Medicine. He relocated to the University of Pittsburgh as an Associate Professor of Pathology, and then as Professor of Pathology. Dr. Liu's research is focused on dissecting the cellular and molecular pathways that lead to kidney fibrosis, and exploring novel strategies for therapeutic intervention. Currently, his group is investigating several key signal pathways such as Wnt/beta-catenin and sonic hedgehog in the pathogenesis of kidney fibrosis, podocyte injury and proteinuria.

Zhi-Hong Liu

Zhi-Hong Liu, professor of medicine; Academician of Chinese Academy of Engineering; Dean of Nanjing University School of Medicine; Director, National Clinical Research Center of Kidney Disease; Director of Research Institute of Nephrology, Jinling Hospital, Nanjing University School of Medicine.
President of Chinese Society of Nephrology; Councilor of International Society of Nephrology (ISN); The board member of KDIGO (Kidney Disease: Improving Global Outcomes); Adjunct Professor of Medicine, Brown University, USA. She is the editor-in-chief of Chinese Journal of Nephrology, and served on editorial boards of different journals, including associated chief editor of AJKD.
She has devoted herself to patient care, research and medical education. Her primary interest is in the field of kidney disease, with special interest in glomerulonephritis, diabetic nephropathy and renal replacement therapy. She has published 500 articles, edited 3 books on kidney disease, and contributed chapters to the textbooks on nephrology. She is the chief scientist of the National Basic Research Program of China (973 Program), and was honored with the National Science and Technology Progress Award of China.

Joakim Lundeberg

Professor Joakim Lundeberg heads the division of Gene Technology, KTH Royal Institute of Technology and has a leading competence in technology development such as in single cell technology, exemplified by spatial transcriptomics. His research group is since May 2010 located at the Science for Life Laboratory (SciLifeLab, www.scilifelab.se), a national center for molecular biosciences with focus on health and environmental research and JL is one of scientific directors of the center. The center combines frontline technical expertise with advanced knowledge of translational medicine and molecular bioscience. JL also heads the National Genomics Infrastructure (NGI), that provides Swedish researchers access to state of the art instrumentation for massively parallel sequencing and genotyping. In total NGI has a staff of ~70 FTEs and during 2014 more than 27 000 samples were handled. The availability of 17 HiSeq 2000/2500 instruments and 10 HiSeq XTen instruments (for human genome sequencing) renders NGI as one of the largest sequencing centers in Europe.

A. Peter Maxwell

Peter Maxwell is a consultant nephrologist at the Belfast City Hospital. He is also the Professor of Renal Medicine at Queen's University Belfast where he has developed his interests in medical education and research. Peter completed his nephrology training in the UK and Canada. He is the Training Programme Director in Northern Ireland for nephrology and has helped to drive a rapid expansion in the local renal medicine workforce.
Prof Peter Maxwell has research interests in the genetic and epigenetic risk factors for chronic kidney disease (including diabetic nephropathy). He leads an active Nephrology Research Laboratory at Queen's University Belfast which has helped train a number of junior doctors and postgraduate students in scientific methods relevant to renal disease.

Alicia McDonough

Alicia McDonough is Professor of Cell and Neurobiology at the Keck School of Medicine of the University of Southern California in Los Angeles, CA. She trained in Physiology at UC Berkeley, Univ. Hawaii, UC San Francisco and Columbia University. The McDonough lab investigates the molecular mechanisms responsible for regulation of sodium, blood pressure and potassium balance, specifically, how homeostasis is disrupted in disease states and can be corrected therapeutically. By investigating ion transporters' phosphorylation, abundance, subcellular distribution and activity, the lab has defined how stimuli (AngII, injury, immune infiltration) increase renal sodium transport and how the resultant hypertension provokes renal responses to decrease sodium reabsorption (via pressure natriuresis). Dr. McDonough is recipient of the 2009 E.H. Starling Distinguished Lectureship from American Physiological Society, The 2014 Donald Seldin Lectureship, actively serves on committees for American Physiological Society, American Heart Association and American Society of Nephrology and enjoys teaching Medical and PhD students.

Andrew Newby

Andrew Newby is British Heart Foundation Professor of Vascular Cell Biology. He graduated in Biochemistry from Cambridge, studied for a PhD with Professor CN Hales FRS and then worked on adenylate cyclase with Nobel Laureate Martin Rodbell. As a Beit Memorial Fellow in Cambridge he elucidated production of the cardioprotective metabolite, adenosine. Progressing from lecturer to Professor in Cardiff he contributed to the identification of endothelium-derived nitric oxide and discovered a role for matrix degrading metalloproteinases in vascular smooth muscle cell migration and proliferation. His elucidation of the inflammatory basis of metalloproteinase production using adenovirus-mediated gene transfer and other post-genome technologies is continuing to shed light on plaque rupture and myocardial infarction. Professor Newby has published >200 research papers (H>60). He was co-director of the EC-funded European Vascular Genomics Network, Chairman of the European Society of Cardiology Council on Basic Cardiovascular Science and President of the European Vascular Biology Organisation.

Mark Okusa

Dr. Okusa received his M.D., residency training at the Medical College of Virginia, Richmond, VA and nephrology fellowship training at Yale University, New Haven, CT. Dr. Okusa joined the faculty at the University of Virginia in 1991 as a clinician investigator combining clinical care, education and research. His clinical and research interest focus on acute kidney injury. He is the principal investigator of several NIH grants including a T32 training grant. He has published over 130 original manuscripts and book chapters. He has served on advisory committees and study sections for the NIH, ASN, AHA, and NKF and as Chair of the Program Committee of the ASN (2011). Dr. Okusa is on the editorial board for several journals. Dr. Okusa has been listed in Castle Connally's America's Top Doctors (2001-2014), member of the American Clinical and Climatological Association and elected Councillor to the American Society of Nephrology in 2012.

Mohan Raizada

Dr. Mohan Raizada received his BSc and MSc degrees from University of Lucknow and PhD from Central Drug Research Institute Lucknow/Kanpur University. After postdoctoral training at Medical College of Wisconsin and Lady Davis Institute, Montreal, Dr. Raizada joined the faculty of the University of Iowa's Department of Physiology and Biophysics. He moved to the University Of Florida (UF) in 1981 where he has been a Distinguished Professor of Physiology and Functional Genomics since 2007. Dr. Raizada has received many awards: 2015 Life-time Achievement Award from the UF, 2014 Carl Ludwig Distinguished Lecturer, NCAR, APS, 2013 Arthur C. Corcoran memorial award from the Council of HBPR, AHA, 2014 Ranbaxy Award, NIH MERIT Award, UF Foundation Professorship and Established Investigator of the AHA. Dr. Raizada has published ~310 papers and edited ten books. He has extensive service to various scientific communities, including membership of NIH study sections and AHA grant review panels, and has had consistent NIH funding for 28 years. Dr. Raizada's research focuses on the field of brain renin-angiotensin system, autonomic regulation of bone marrow progenitors, and delineating the importance of vasoprotective axis of the RAS in vascular progenitor cells in CVD and hypertension. His group's studies have led to the proposal that a dysfunctional autonomic-bone marrow communication may be key in the initiation of neuroinflammatory sequence of events responsible for establishment of vascular pathophysiology associated with hypertension and CVD. If proven, this hypothesis would have significant implications in the development of therapeutic strategies for neurogenic hypertension.

Bernard Rossier

Dr. Bernard Rossier (MD) is Emeritus Professor at the University of Lausanne, Switzerland, former Director of the Department of Pharmacology and Toxicology, former Dean of the Faculty of Biology and Medicine of the same University. He is recipient of many international Prizes in the field of nephrology and hypertension. He is a member of EMBO, the Academia Europaea, the deutsche Akademie der Naturforscher Leopoldina. He is a Foreign Honorary member of the American Academy of Arts and Sciences. He is Dr. Honoris causa of the University Pierre et Marie Curie in Paris. He is presently project coordinator and board member of the Health Science eTraining Foundation (HSeT), a not-for-profit organization that develops distance learning programs worldwide in the field of pharmacology and toxicology, and of experimental and translational nephrology.

Gregory F. Sonnenberg

Gregory F. Sonnenberg received his undergraduate degree in 2007 from the State University of New York at Buffalo and earned his Ph.D. in 2011 from the University of Pennsylvania. Sonnenberg studies how interactions between the mammalian immune system and commensal bacteria can regulate health and disease in the gastrointestinal tract. The main goals of his lab are to interrogate the pathways that regulate normally beneficial host interactions with commensal bacteria; to determine how these pathways become disrupted in chronic human diseases; and to identify novel therapeutic targets to prevent or limit dysregulated host-commensal bacteria relationships in human disease. His current focus is on recently identified populations of intestinal-resident innate lymphoid cells (ILCs), which have been found to be critical regulators of cytokine-mediated intestinal epithelial cell responses that promote immunity to extracellular bacteria, inflammation, and tissue repair in the intestine.

Hans Stauss

Professor Hans J. Stauss is the Head of Clinical Immunology at the Royal Free Hospital, as well as the Head of the UCL Research Department of Immunology and co-Director of the UCL Division of Immunity and Transplantation. He is also the Director of the Infection, Immunology and Inflammation program of the Academic Health Science Centre of UCLP.
Previously he was the Head of the Tumour Immunology section at Hammersmith Hospital. He studied for his Doctor of Medicine (MD) in 1982 at the University of Freiburg and went on to do his PhD at the University of Chicago in 1987. He is a fellow of the Royal College of Pathologists (FRCPath) since 2007.
The main focus of his work is the analysis of antigen-specific T lymphocyte responses to tumours and the development of immunotherapy approaches for the treatment of cancer and chronic infection. He is one of the international leaders in genetic engineering of T cell immunity. His group led the first TCR gene therapy treatment of a cancer patient in Europe. At present, two TCR gene therapy trials in leukaemia and a CMV infection are open and led by members of his group. The expertise in the analysis of T cell responses against cancer and viral antigens will greatly benefit the proposed project.

Jens Titze

The main goal of my preclinical research activity is to discover how immune cells regulate internal environment composition and control blood pressure. My main contributions to the field are the demonstration that Na+ is stored in the skin, and that macrophages regulate interstitial electrolyte homeostasis and thereby systemic blood pressure by modulating interstitial electrolyte clearance through cutaneous lymph capillaries. The main goal of my patient-oriented research activity is transfer of these findings into clinical practice. Through these studies, I have developed a strong expertise in interstitial physiology, immune cell and vascular biology, and quantitative approaches for innovative phenotyping of electrolyte storage in preclinical and clinical research. As a PI on grants of the NIH, the American Heart Association, the German Research Foundation (DFG), Federal Ministry for Education and Research (BMBF), and Federal Ministry of Economics and Technology (BMWi) of the Federal Republic of Germany, I have laid ground for a research program on extrarenal regulation of electrolyte homeostasis and blood pressure. We have successfully transferred our basic research findings into the clinical arena. The newly awarded Vanderbilt University Strategically Focused Prevention Research Center has a strong clinical focus on Na+ storage as a cardiovascular risk factor. Our clinical research projects, combined with our basic research program, promote research on lymphatic control of interstitial Na+ storage and its role in cardiovascular disease.

Jan-Eric Turner

Jan-Eric Turner studied Medicine at the University of Göttingen, Germany, 1998-2005.
After finishing his studies in Göttingen, he moved on to Hamburg and worked as an Assistant Physician and Postdoc at the Department of Nephrology at the University Medical Center Hamburg, Germany (Head: Prof. R. Stahl) between 2005-2011. During this time he contributed several research articles on the role of T cells in crescentic glomerulonephritis.
After successfully completing a two-year Postdoctoral Research Fellowship funded by the Deutsche Forschungsgemeinschaft (DFG) in London at the MRC National Institute for Medical Research, Division of Molecular Immunology (Head: Dr. B. Stockinger) he returned to Hamburg, now focusing on the role of innate lymphoid cell subsets in renal injury and repair. He finished his clinical specialisation in Internal Medicine and Nephrology in 2014.
In 2015 Dr. Turner was appointed a Junior Research Group Leader funded by the DFG Emmy-Noether-Programm (Topic: “Innate Lymphoid Cells in Renal Inflammation”).

Robert Unwin

Robert Unwin has been Professor of Nephrology and Physiology at UCL since his appointment in 1997. He was a Wellcome Senior Clinical Research Fellow at St Mary's Hospital Medical School and a Research Affiliate in the Department of Cellular and Molecular Physiology at Yale University from 1985-89. From 1989-1991 he was a Senior Lecturer in Clinical Pharmacology at the Royal Postgraduate Medical School (Hammersmith Hospital) and Senior Lecturer and then Reader in Nephrology and Physiology at UCL from 1991-1997. He was also Head of the UCL Centre for Nephrology, Royal Free Campus, and is Head of the Research Department for Internal Medicine, Division of Medicine, UCL Medical School, and is currently on secondment as acting Chief Scientist with AstraZeneca R&D. His clinical interests lie mainly in renal tubular disorders and renal stone disease as well as renal tubular and GI transport physiology. He has published on various aspects of renal physiology and pathophysiology, hypertension, renal tubular disorders, and renal stone disease.

Jun Wang

Jun Wang is the Director of the BGI (previously known as the Beijing Genomics Institute). He was instrumental in the 1999 founding and the growth of the BGI Bioinformatics Department, which is now widely recognized as one of world's premier research facilities committed to excellence in genome sciences. Dr. Wang also holds a position as an Ole Rømer professor at the University of Copenhagen. He has authored 200+ peer-reviewed original papers – of which 100+ are published in Cell, Nature (including Nature series), N Engl J Med., and Science (26 as cover story). He has been recognized with an award from His Royal Highness Prince Foundation, Nature's 10 - the year in Science (2012); "Highly Cited Researchers (2013/2014)" "The Hottest Scientific Researchers of 2012" (by Thomson Reuters), "Rebels, leaders, innovators for the next 25 years" (by CNBC), "Fortune's 40 under 40" from Fortune Magazine (2013), Lundbeck Talent Price, Outstanding Science and Technology Achievement from the Chinese Academy of Sciences, Outstanding Technical Talent, ZhouGuangZhao Award, TanJiaZeng Life Science Innovation Award, Top 10 Scientific Achievements In China, Major Award from Shenzhen Municipal Government, The first "TopSUN" Scientific Paper Award from Peking University, Tan Jiazhen Life Science Award from Fudan University, and Prize for Important Innovation and Contribution from Chinese Academy of Sciences. His research focuses on genomics and related bioinformatics analysis of complex diseases and agricultural crops, with the goal of developing applications using the genomic information.

Tianxin Yang

Tianxin Yang, Ph.D., is Professor of Medicine at University of Utah and Qianren Professor and Director of Institute of Hypertension at Sun Yat-sen University School of Medicine.

Professor Yang's research program is focused on the role of prostaglandins and PPARgamma in renal physiology and pathophysiology. His research contributes to defining COX-2/mPGES-1/PGE2 pathway and PPARgamma in renal control of fluid metabolism and blood pressure also in renal injury. The major contributions include the following: 1) elucidation of the distinct regulation and function of renal cortical and medullary COX-2 expression by dietary salt intake; 2) elucidation of physiological role of mPGES-1 in regulation of renal handling of sodium and blood pressure, 3) the use of conditional knockout technology to define the sodium-retaining action of PPARgamma in the collecting duct, which has unraveled the molecular mechanism of fluid retention side effect of PPARgamma agonists, thiazolidinediones, and 4) the development of nitrated free fatty acids, a new class of endogenous PPARgamma agonists, as a novel therapy for major metabolic and inflammatory diseases. In recognition of his accomplishments, he received numerous prestigious awards including Harry Goldblatt New Investigator from High Blood Pressure Council, Established Investigator Award from American Heart Association, Margret Amundsen Endowed Professorship from University of Utah, and Research Career Scientist Award from the Department of Veterans

Affairs. He serves as Ad Hoc and permanent members at grant review committees for American Heart Association and National Institutes of Health. He published over 100 articles, with 60 as first or senior author. These articles appear in Cell Metabolism PNAS, Circulation Research J Clin Invest, Hypertension, with an accumulative impact factor of 350, and citation times of over 3500. In his position at Sun Yat-sen University, he received funding for two Key Projects from National Science Foundation of China, together with a subproject from 973 Program and also grants from industry.

Xueqing Yu

Professor Xueqing Yu is currently the Vice President of The First Affiliated Hospital of Sun Yat-sen University, Guangzhou, China. Changjiang Scholarship Professor, Ministry of Education. His academic positions include Chairmen of Chinese Nephrologists Association, President-elect of Chinese Society of Nephrology, Associate Editor of <American Journal Kidney Diseases>, and Subject Editor of <Nephrology>.

His research focused on identifying susceptible gene and function study in IgAN and Lupus Nephritis, Peritoneal Dialysis, and translational research. So far, his study were supported by 31 scientific research grants, including National Nature Science Foundation for Distinguished Young Scholars, Program projects of MOST, Innovation Team Project of Ministry of Education, and Key Clinic Programs of Ministry of Health and etc. He has 328 publications, among which 146 papers were indexed by SCI, including Nature Genetics, Lancet, JASN, Kidney Int, Am J Pathol, etc. He has also won 7 awards, including the 2nd-class Prize of the National Sci-Tech Advance Award.

Liping Zhao

Professor Liping Zhao got his PhD in 1989 from Nanjing Agricultural University and worked in Cornell University as visiting scholar from 1993-1995. He is currently a professor for microbiology and the director of Laboratory of Microbial Ecology and Ecogenomics in School of Life Sciences and Biotechnology, Shanghai Jiao Tong University. He is the director of the Laboratory of Nutritional Systems Biology in Shanghai Center for Systems Biomedicine. He is also the director the SJTU-Perfect (China) Joint Research Center on Microbiota and Health. He served as a Board member of the International Society for Microbial Ecology from 2006-2012. He is a current editorial board member of FEMS Microbiology Ecology, Journal of Molecular Medicine, and a senior editor of the ISME Journal.

His team has been applying molecular and genomic tools for systems understanding and predictive manipulation of the complex microbial communities in human and animal guts. They have published more than 30 research papers in PNAS, Nature Communications, ISME Journal, AEM, FEMS Microbiology Ecology etc. He also published reviews in Nature Reviews Microbiology, Journal of Proteome Research, Molecular Aspects of Medicine etc. He has been invited to give keynote and plenary talks in ASM general conference, ISME conference etc. His current focus is the interactions between nutrition and gut microbiota in onset and progression of chronic diseases such as obesity and diabetes, and how traditional Chinese medicine and medicinal foods may modulate this relationship for achieving preventive healthcare. The Science magazine featured a story on how he combines traditional Chinese medicine and gut microbiota study to understand and fight obesity (Science 336: 1248).

Ming-Hui Zhao

Dr. Zhao is Chairman of ISN North & East Asia Regional Board; Vice President of Chinese Society of Internal Medicine and Vice President of Chinese Society of Nephrology.
Dr. Zhao had his medical training in Beijing Medical University in the 1980s and PhD training in Department of Medicine, University Cambridge, UK in the 1990s. His major research interest focuses on CKD prevention and autoimmune renal diseases.
He is currently supported by a major grant from National Natural Science Foundation of China for Innovative Research Group (81021004). Dr. Zhao has over 200 papers published in peer-reviewed journals.

Zhiming Zhu

Zhu Zhiming, MD, Professor of Cardiovascular Medicine and Metabolism
Director of Center for Hypertension and Metabolic Diseases, Department of Hypertension and Endocrinology, Daping Hospital, Third Military Medical University, Chongqing Institute of Hypertension, China
Dr. Zhu received his medical degree in 1985 and Master of Science in cardiology from the Third Military Medical University, Chongqing in 1988 and obtained his MD from School of Medicine, Muenster University, Germany in 1993. He received postdoctoral training and as a research associate at Department of Cell Biology and Physiology in University of North Carolina at Chapel Hill from 1994-1997. Dr. Zhu's research interests focus on: mechanism and treatment of hypertension and metabolic syndrome. Of special interest is the role of transient receptor potential (TRP) channels in the pathogenesis of cardio metabolic diseases. He is a fellow of AHA and member of ISH. He has published over 70 peer-reviewed articles such as Cell Metab, Circ Res, Diabetes, Hypertension, et al. He serves on the editorial board of Clinical Science, Pflugers Archiv, Hypertension Research, PloS One, BMC Obesity (associate editor).

Ming-Hui Zou

Ming-Hui Zou, M.D. Ph.D. is the founding director of the Center of Molecular and Translation Medicine and he is the Associate Vice President for Research of Georgia State University. He is also the eminent scholar of Molecular Medicine in Georgia Research Alliance. Dr. Zou has been very productively working in the area of cardiovascular biology and diseases over 20 years. An independent investigator of the National Institutes of Health and the Juvenile Diabetes Research Foundation International (JDRF) and a National Established Investigator awardee of the American Heart Association, Dr. Zou has used these (and many other awards) to make scientific observations in fields with great potential for immediate clinical relevance. Dr. Zou's contributions in this area are important and his work represents outstanding breakthroughs research which has been recognized by many other investigators in the fields. In 2008 he was elected to the American Society for Clinical Investigation.