ISN nexus

LINKING RESEARCH TO PRACTICE

BONE AND THE KIDNEY

September 20 - 23, 2012
Copenhagen, Denmark

PROGRAM

ISN Nexus Symposium 2012

Program at a Glance

ISN nexus

Thursday, 20 September 2012

12:00 – 18:00	Arrival & Registration	
17:00 – 17:10	Welcome, President of ISN, John Feehally	
17:10 – 17:15	Welcome, Kumar Sharma, Chairman of the NEXUS Committee	
17:15 – 17:20	Awards to the two best Abstracts by Susan Allison, Chief Editor of "Nature Reviews Nephrology"	
17:20 – 17:25	Welcome, Klaus Olgaard, Copenhagen	
17:30 – 18:30	**Opening plenary lecture** **Klotho, disturbed mineral metabolism and aging** **Chairmen:** Klaus Olgaard & Kumar Sharma **Speaker:** Makoto Kuro-o, USA	*Congress Hall*
18:30 – 21:00	Opening Reception	

Friday, 21 September 2012

07:00 – 08:15	Meet the Professor Breakfast	*Pjerrot Room*
08:30 – 09:30	**Bone-Kidney axis & vascular calcification** **Chairmen:** Keith Hruska & Sharon Moe **Speaker:** Cathy Shanahan, UK	*Congress Hall*
09:30 – 10:00	Coffee Break & Exhibition	
10:00 – 12:00	*Harlekin & Colombine Room* **Phosphate and PTH** **Chairmen:** Rajiv Kumar & Heini Murer • **Phosphate homeostasis and the renal-gastrointestinal axis** **Speaker:** Robert Unwin, UK • **Genetic disorders of renal phosphate transport** **Speaker:** Harald Jüppner, USA • **New insights into phosphate toxicity** **Speaker:** Mohammed S Razzaque, USA • **PTH and beta-arrestin dependent signalling** **Speaker:** Serge L Ferrari, Switzerland	*Congress Hall* **Vitamin D & calcimimetics** **Chairmen:** Grahame Elder & David Goldsmith • **What should be the target levels of 25(OH)D and 1,25(OH)2D in CKD ?** **Speaker:** Ravi Thadhani, USA • **Post transplant renal/bone/endocrine interactions** **Speaker:** Elizabeth Shane, USA • **New therapies in CKD-MBD including calcimimetics and calcilytics** **Speaker:** Seiji Fukumoto, Japan • **Vitamin D sterols versus calcimimetics in the treatment of CKD-MBD** **Speaker:** John Cunningham, UK
12:15 – 13:15	*Congress Hall* **Industry Lunch Symposium** • **20 Years Later : Our Understanding of the Role of the Calcium-Sensing Receptor** AMGEN Nephrology	*Harlekin & Colombine Room* • **Chronic Kidney Disease : Factors Influencing Cardiovascular Risk** Mitsubishi Tanabe Pharma Group
13:15 – 14:45	Poster Sessions & Coffee Break	
14:45 – 16:45	*Congress Hall* **Hyperparathyroidism and CKD** **Chairmen:** Justin Silver & Mohammed S Razzaque • **Molecular basis of parathyroid hyperplasia** **Speaker:** Adriana Dusso, Spain • **Mechanisms of the increased FGF23 in sHPT** **Speaker:** Justin Silver, Israel	• **Biological importance of PTH fragments** **Speaker:** Pierre D'Amour, Canada • **Parathyroids and klotho** **Speaker:** Ewa Lewin, Denmark
16:45 – 17:15	Coffee Break & Exhibition	

Plenary Lectures | Basic Science Sessions | Clinical Sessions
Translational Sessions | Corporate Symposia

17:15 – 18:15 — *Congress Hall*

Renal and intestinal divalent ion transport
Chairmen: Jürgen Floege & Harold Jüppner
Speaker: Rene Bindels, The Netherlands

- **Gene therapy for sHPT**
  Speaker: Masafumi Fukagawa, Japan

18:15 – 20:00

CKD-MBD : New approaches and results
Chairmen: Tilman Drüeke & Masafumi Fukagawa

- **The Phosphate Normalization Trial in CKD Patients not yet on Dialysis**
  Speaker: Ravi Thadhani, USA

18:15 – 20:00

Oral presentations from the best poster submissions

- **L-lysine ameliorates vascular calcification in adenine-induced uremic rats**
  Speaker : Isao Matsui
- **The HNF1 transcription factor regulates human PTH gene transcription**
  Speaker : Silvia Ferrè

Saturday, 22 September 2012

07:00 – 08:15 — Meet the Professor Breakfast — *Pjerrot Room*

08:30 – 09:30 — *Congress Hall*

New understanding of phosphate metabolism
Chairmen: Myles Wolf & Mariano Rodriguez
Speaker: Rajiv Kumar, USA

09:30 – 10:00 — Coffee Break & Exhibition

10:00 – 12:00

Vascular calcification & vascular disease — *Harlekin & Colombine Room*
Chairmen: Ravi Thadhani & Ziad A Massy

- **Signalling pathways in vascular calcification in CKD-MBD**
  Speaker: Cecilia M Giachelli, USA
- **Bone morphogenetic proteins and vascular calcifications in CKD-MBD**
  Speaker: Keith Hruska, USA
- **Klotho and vascular calcification**
  Speaker: Orson W Moe, USA
- **CaSR in vascular disease**
  Speaker: Ziad A Massy, France

Renal Osteodystrophy — *Congress Hall*
Chairmen: Isidro B Salusky & Hartmut H Malluche

- **Bone quality in CKD-MBD**
  Speaker: Mary B Leonard, USA
- **Renal Osteodystrophy and Osteoporosis - a complex clinical challenge**
  Speaker: Hartmut H Malluche, USA
- **Bisphosphonates, teriparatide and denosumab in CKD-MBD**
  Speaker: Susan Ott, USA
- **Calcitriol-independent effects of 25(OH)D**
  Speaker: Grahame Elder, Australia

12:15 – 13:15 — *Congress Hall*

Industry Lunch Symposium SANOFI RENAL

- **Calcium Use and the Precautionary Principle : Lessons from Nephrologists from General Population and Early CKD Studies**

13:15 – 14:45 — Poster Sessions & Break

14:45 – 16:45 — *Congress Hall*

Bone and kidney
Chairmen: Makoto Kuro-o & John Cunningham

- **Pkd1 localization to primary cilia in osteoblasts and osteocytes**
  Speaker: L Darryl Quarles, USA
- **FGF23, bone biology and cardiovascular disease**
  Speaker: Tobias Larsson, Sweden
- **New factors in the crosstalk between bone and kidney in CKD and after renal transplantation**
  Speaker: Pieter Evenepoel, Belgium
- **Non-classical actions of vitamin D**
  Speaker: Adriana Dusso, Spain

Plenary Lectures | Basic Science Sessions | Clinical Sessions
Translational Sessions | Corporate Symposia

16:45 – 17:15	Coffee Break & Exhibition	
17:15 – 18:15	**Regulations of PTH biosynthesis** **Chairmen:** Adriana Dusso & Pierre D'Amour **Speaker:** Tally Naveh-Many, Israel	*Congress Hall*
18:15 – 20:00	**Industry symposium** ● **Phosphorus Controversies in CKD: Pathophysiology, Nutritional and Clinical Management** Vifor Fresenius Medical Care Renal Pharma	*Congress Hall*

Sunday, 23 September 2012

08:30 – 09:30	**The fascinating osteocyte** **Chairmen:** Susan Ott & Marie-Helene Lafage-Proust **Speaker:** Susan C Schiavi, USA	*Congress Hall*
09:30 – 10:00	Coffee Break	
10:00 – 12:00	**Bone and vasculature** **Chairmen:** Cathy Shanahan & Tally Naveh-Many ● **Acidosis and intracellular calcium in osteoblasts** **Speaker:** David A Bushinsky, USA ● **Bone remodelling and energy metabolism** **Speaker:** Cyrille B. Confavreux, France ● **Mechanisms of vascular calcification in CKD** **Speaker:** Rukshana Shroff, UK ● **Bone vascularisation in health and disease** **Speaker:** Marie-Hélène Lafage-Proust, France	*Harlekin & Colombine Room*
	Cardiovascular complications & CKD-MBD **Chairmen:** Gérard M London & Markus Ketteler ● **How to best detect early vascular changes in CKD** **Speaker:** Gérard M London, France ● **Imaging of cardiovascular calcifications in CKD-MBD** **Speaker:** Antonio Bellasi, Italy ● **FGF23, regulation and function in CKD-MBD** **Speaker:** Myles Wolf, USA ● **Mechanisms of drug resistance in sHPT** **Speaker:** Mariano Rodriguez, Spain	*Congress Hall*
12:15 – 13:15	Exhibition & Lunch	
13:15 – 14:45	Poster session and coffee break	
14:45 – 16:45	**Vascular calcifications in CKD-MBD** **Chairmen:** Klaus Olgaard & Orson W Moe ● **Pyrophosphate and vascular calcifications** **Speaker:** Charles W O'Neill, USA ● **Vitamin K and vascular calcifications in CKD-MBD** **Speaker:** Jürgen Floege, Germany ● **Calcium balance and vascular calcification in CKD-MBD** **Speaker:** Sharon M Moe, USA ● **Reversibility of calcifications in CKD-MBD?** **Speaker:** Markus Ketteler, Germany	*Congress Hall*
16:45 – 17:00	Close of meeting **Chairmen:** Klaus Olgaard and Tilman Drüeke, France	

Speaker's Portfolio

Antonio Bellasi

After various internships at University hospitals in Spain, Sweden, and Italy, Dr Bellasi graduated from the Medical School of the University of Milan, Italy, in October 2002. Dr Bellasi finalized his post-graduate training in Nephrology and graduated from the University of Milan in November 2007. Dr Bellasi attended a cardio-nephrology research fellowship at Tulane University in New Orleans (LA), U.S.A and at Emory University in Atlanta (GA), U.S.A.. Furthermore, Dr Bellasi successfully completed a master in Epidemiology and Statistics at the University of Milan in 2009. Dr Bellasi is presently serving as Nephrology consultant at Sant'Anna Hospital, Como, Italy. His current interest is cardiovascular disease in chronic kidney disease patients. Dr Bellasi is a coauthors of more than 50 publications mainly focused on screening, imaging, prevention and treatment of vascular calcification and mineral metabolism abnormalities.

René Bindels

René Bindels is a physiologist interested in the regulation of ion transport processes in kidney and small intestine in health and disease. Current projects involve the molecular mechanisms controlling the calcium and magnesium balance in general and the regulation of the new family of epithelial calcium and magnesium channels (TRPV5, TRPV6, TRPM6 and TRPM7) in particular. In addition, the functional consequences of mutations in the human ROMK2, NKCC2 and NCC transporters identified in Bartter and Gitelman syndrome and hypertension are investigated. The studies include use of established epithelial cell lines, tissue-specific knockout mice models, and electrophysiological and biochemical analysis of channel activity. He is an elected member of the Academia Europaea and recipient of the Robert Pitts Lectureship of the International Union of Physiological Sciences, Carl W. Gottschalk Lectureship of the American Physiological Society and Homer Smith award of the American Society of Nephrology. Since 2010 he is the scientific director of the Nijmegen Institute for Molecular Life Sciences (NCMLS).

David Bushinsky

David A. Bushinsky, is the John J. Kuiper Distinguished Professor of Medicine and of Pharmacology and Physiology at the University of Rochester School of Medicine. He is Chief of the Nephrology Division at the University of Rochester Medical Center and Associate Chair for Academic Affairs in the Department of Medicine. Dr Bushinsky has published several hundred peer-reviewed articles, invited reviews, chapters and editorials focusing on disorders of divalent ion metabolism. His has developed a strain of rats that exhibit genetic hypercalciuria, the most common metabolic abnormality in humans with nephrolithiasis, and spontaneously form kidney stones. The pathophysiolgy of the hypercalciuria closely parallels that of man and is thus a useful model to study stone formation in humans. He has also extensively studied the mechanism by which metabolic acids induce physicochemical bone dissolution and cell-mediated bone resorption. His research has been consistently funded by grants from the National Institutes of Health for 3 decades. Dr Bushinsky has lectured throughout the world on stone formation, effects of acid on bone and other disorders of divalent ion metabolism. Dr Bushinsky received his medical degree from Tufts University School of Medicine in Boston, Mass. He completed an internship and residency at Tufts New England Medical Center Hospital in Boston, Mass. He also completed a fellowship in clinical nephrology and a research fellowship in nephrology at Tufts New England Medical Center Hospital in Boston, Mass. Dr Bushinsky is a member of a number of organizations including the Association of American Physicians and the American Society for Clinical Investigation. He is married to Nancy Krieger, a pharmacologist and collaborator, and they have two children, Joshua and Seth.

Cyrille Confavreux

He trained with Pierre Delmas in Lyon and obtained his MD in 2005. During one year he worked as chief resident in oncology at the Leon Berard Cancer Center. He spent two years in genetics in Gérard Karsenty's laboratory as postdoctoral research scientist in Columbia University, New York, USA. He is a member of the Cancer and Bone Society of the International Bone Mineral Society (IBMS), the French Society of Rheumatology (SFR) and the American Society for Bone and Mineral Research (ASBMR). Since 2008 he has worked in the Rhumatology Department of Roland Chapurlat.

Beside bone metastases, his research focuses on integrative physiology between bone and energy metabolism. That osteocalcin was a hormone, secreted by osteoblast and active on insulin and testosterone, opened new fields of investigation. Transfer to humans showed that osteocalcin activity was conserved. In older males, osteocalcin was independently associated to metabolic syndrome and vascular calcifications progression.

John Cunningham

Biography not available at time of print.

Pierre D'Amour

Dr. Pierre D'Amour obtained his M.D. from Montreal University in 1968. He completed training in endocrinology at McGill University, and in his post‑doctoral research in phosphocalcic metabolism at Harvard University, under the guidance of Gino Segre and John T. Potts Jr. He returned to Montreal at Hôpital Saint‑Luc in 1976 and has remained affiliated with the Montreal University where he eventually became professor of medicine. He is a member of several endocrine societies and also serves as an expert for various medical journals.

His research career has been oriented toward the clinical signification of circulating PTH immunoheterogeneity. He has been funded by MRC and CIHR since 1976. He has made significant contributions to the comprehension of the nature and origin of circulating PTH immunoheterogeneity, and on the role of carboxyl-terminal PTH fragments in PTH biology through a carboxyl‑terminal PTH receptor. He has published more than 100 peer‑reviewed papers.

Tilman Drüeke

Tilman Bernhard Drüeke, MD, RFCP, is Emeritus Director of Research at the INSERM laboratory U 1088, UFR Médecine/Pharmacie, Université de Picardie Jules Verne, Amiens, France. He received his MD degree at the University of Tübingen Medical School, Germany in 1968. From 1969 through 2009, he exerted his medical and scientific activities at Necker Hospital/Necker Medical School, Université Paris V, Paris, France. Professor Drüeke's research interests focus on chronic renal failure, hemodialysis, metabolic and endocrine abnormalities, anemia, cardiovascular complications and arterial hypertension. He is a member of several scientific societies, committees and advisory boards, is former co-chair of the KDIGO-MBD work group and at present, member of the KDIGO anemia work group. Professor Drüeke is Editor Emeritus of NDT, former Associate Editor of CJASN, editorial board member of JASN and present Associate Editor of Kidney International. He has published more than 500 original articles and reviews in peer-reviewed journals.

Adriana Dusso

Adriana Dusso is a Senior Investigator in the Division of Experimental Nephrology at the IRB Lleida (Lleida Institute for Biomedical Research), in Lleida, Spain. She obtained her PhD in Biochemistry from the Universidad Nacional de Rosario, Rosario, Argentina. In 1985, Dr Dusso joined Dr Eduardo Slatopolsky's laboratory in the Renal Division at Washington University for a two-year post doctorate, where she progressed through the ranks to Research Associate Professor until September 2010. She has published numerous peer-reviewed articles, invited reviews, and book chapters on extrarenal calcitriol production, abnormalities in vitamin D metabolism and actions, mechanisms for the selectivity of calcitriol analogs, and the molecular basis of parathyroid hyperplasia and vitamin D resistance in kidney disease. She has trained nephrology fellows, directed and served as jury of PhD theses and postdoctoral work, lectured on her research at national and international meetings, and participated as faculty in undergraduate and postdoctoral courses.

Grahame Elder

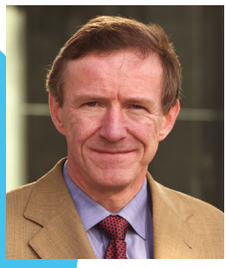
Grahame Elder is a renal physician, whose principal interest is in abnormalities of bone and mineral metabolism resulting from chronic kidney disease and following transplantation. He is a staff specialist in the Department of Renal Medicine at Westmead Hospital Sydney, clinical associate professor University of Sydney and University of Notre Dame and works in the Osteoporosis and Bone Biology Program of the Garvan Institute for Medical Research, Sydney. He has been a work group member for Australasian (CARI) and international (KDIGO) guidelines on mineral and bone disorders associated with kidney disease and is an author of Cochrane reviews and research studies in those areas.

Pieter Evenepoel

Prof. Pieter Evenepoel is a member of the Department of Nephrology of the University Hospitals Leuven, Leuven, Belgium, where he is clinically active both in the field of dialysis and renal transplantation. He received his medical training at the Catholic University of Leuven, Belgium, from where he graduated in 1992, receiving his Ph.D. from the same institution for research on protein assimilation and fermentation in 1997. In 2000, he joined the University Hospitals Leuven, Belgium where he gained his degree as Specialist in Internal Medicine and became a permanent staff member. His main research interests comprise uremic toxins, mineral and bone disorders, nutrition and anticoagulation. Prof. Evenepoel is member of the "Nederlandstalige Belgische Vereniging voor Nefrologie (NBVN)", the "Belgische Vereniging voor Nefrologie (BVN)" and the American Society of Nephrology and authored or co-authored over 140 papers in numerous international journals, including Kidney International, American Journal of Transplantation and The Lancet. He is member of the international editorial board of Kidney International.

Serge Ferrari

Biography not available at time of print.



Jürgen Floege

Professor Jürgen Floege's interest in renal diseases developed during various research periods in physiology, pharmacology, nephrology and pathology at the Hannover Medical School, Germany, the Albert Einstein College of Medicine, New York and the University of Washington, Seattle, USA. He was appointed as head of the Division of Nephrology and Immunology at the RWTH University of Aachen, Germany in 1999. Since 2001 he is Vice Dean of the Medical School. Jürgen Floege is a current member of ERA's scientific advisory board and vice-president of the German Society of Nephrology. Together with Professors Richard Johnson and John Feehally he is editor of best-selling textbook "Comprehensive Clinical Nephrology". Professor Floege is co-editor of Nephrology Dialysis Transplantation, section editor of Clinical Nephrology and a member of the editorial board of several other prominent journals, including Journal of the American Society of Nephrology, Kidney International and the Journal of Nephrology. Finally, he is chair of the scientific committee of the ERA-Congress, Paris 2012.

Masafumi Fukagawa

Masafumi Fukagawa, MD, PhD received his MD in 1983 from University of Tokyo School of Medicine. Following subspecialty training and PhD program in Tokyo, he was Research Fellow at Vanderbilt University School of Medicine, TN (USA) until 1995. From 2000 to 2009, Dr Fukagawa was Associate Professor at Kobe University School of Medicine (Japan). Since 2009, he has moved to Tokai University School of Medicine, Isehara, Japan, as Professor of Medicine and the Director of Division of Nephrology, Endocrinology, and Metabolism. Dr. Fukagawa's major research interest is mineral metabolism, in which field he has published many clinical and basic papers. He was a member of KDIGO Work Group on CKD-MBD guidelines, and chaired the committee for the new version of Japanese clinical guideline. He also serves as Editorial Board member for Kidney International and Clinical Journal of the American Society of Nephrology.

Seiji Fukumoto

Dr. Fukumoto is a Lecturer of the Division of Nephrology and Endocrinology, Department of Internal Medicine at the University of Tokyo Hospital. He received his MD degree in 1982 and PhD degree in 1990 from the University of Tokyo. After receiving PhD degree, he spent a couple years in the laboratory headed by Prof. T.J. Martin in Melbourne. His areas of interest include homeostatic control and derangements of mineral metabolism, and pathogenesis and treatment of metabolic bone diseases. He has contributed to the cloning of FGF23, the development of assay for FGF23 and the clarification of mechanisms of actions of FGF23. He is now involved in the clinical, educational and research works in the University of Tokyo.

Cecilia Giachelli

Dr. Giachelli is Professor of Bioengineering, Adjunct Professor of Pathology, and Adjunct Professor of Oral Biology at the University of Washington, Seattle, Washington. She obtained her BS degree in Biochemistry from the University of California at Davis, and PhD degree in Pharmacology from the University of Washington School of Medicine. She did postdoctoral work in Cardiovascular Pathology at the University of Washington. Her research focuses on understanding mechanisms of vascular calcification associated with disease and medical devices, and development of potential therapeutics. Her work contributed to the "phosphate hypothesis" of vascular calcification in chronic kidney disease, and she was one of the first to identify endogenous inhibitors of vascular calcification. Dr. Giachelli was a recipient of an American Heart Association Established Investigator Award, the ASN J.W. Coburn Endowed Lectureship, and is an inducted fellow of the American Institute for Medical and Biological Engineering.

Keith Hruska

Dr. Hruska is Professor of Pediatrics, Medicine and Cell Biology and Director of the Division of Pediatric nephrology at Washington University in St. Louis, MO. He obta ined his MD degree from Creighton University and his residency training in internal medicine at Cornell University. He performed his renal fellowship at the renal division of Washington University whe re he has remained during his faculty career, rising through the ranks. His laboratory studies focus on the cardiovascular mor tality associated with chronic kidney disease looking at the role of the CKD-MBD in the mortality. His laboratory discovered the skeletal contribution to cardiovascular morbidity in chronic kidney disease during studies of a critical rena l morphogen and differentiation factor, BMP-7. How renal injury affects the skeleton and how the ske leton contributes to cardiovascular disease is the current focus of the Hruska laboratory.

Harald Jüppner

Biography not available at time of print.

Markus Ketteler

After completing nephrology training in Berlin, Germany, and a post-doctoral fellowship Salt Lake City, USA, Markus Ketteler moved to the Department of Nephrology and Clinical Immunology at the University Hospital Aachen in the year 2000. His research focus was aimed at the understanding of pathomechanisms involved in extraosseous calcifications (e.g., fetuin-A, MGP) and at the pathophysiology of phosphate and vitamin D metabolism in chronic kidney disease (CKD). In 2007, he was appointed Professor of Medicine and Division Chief of Nephrology at the Klinikum Coburg in Coburg, Germany. Markus Ketteler is currently author on > 130 peer-reviewed publications. He is on the editorial boards of nephrology journals such as JASN, Kidney Int and NDT (theme editor), was a member of the KDIGO workgroup on CKD-MBD guidelines, and leads the German Calciphylaxis Registry. He is Council member and "Chairman of the Office" of the ERA EDTA as well as Chairman of the Paper Selection Committee of the ERA EDTA Congresses.

Rajiv Kumar

Dr. Kumar is the Ruth and Vernon Taylor Professor of Medicine, Biochemistry and Molecular Biology, Distinguished Investigator, and Chairman Emeritus of Nephrology at the Mayo Clinic, Rochester, Minnesota. He has conducted research in mineral, vitamin D, and phosphate metabolism. He has made contributions to each of these fields through the study of patients with unusual clinical syndromes, and the application of biochemical and physiological methods to the study of transport mechanisms. His work has been recognized through awards from the American Society of Bone and Mineral Research (Fuller Albright and Louis Avioli awards), the American Society of Nephrology (Young Investigator award), the American Society for Nutrition (E. V McCollum award) and the American College of Physicians (John Phillips Memorial award). He is a member of the American Society for Clinical Investigation and the Association of American Physicians, a fellow of the AAAS and master of the American College of Physicians.

Makoto Kuro-o

Makoto Kuro-o is Professor of Pathology Department at the University of Texas Southwestern Medical Center at Dallas (UT Southwestern). He received his M.D. in 1985 and Ph.D. in 1991 from the University of Tokyo, Japan. He had been a cardiologist until he discovered the klotho gene in 1997. In 1998, he moved from Japan to UT Southwestern to focus on basic research to understand function of the klotho gene family. His laboratory identified multiple endocrine axes mediated by Klothos and fibroblast growth factors that regulate energy and mineral metabolism. His major research interests include molecular mechanisms of aging and age-related diseases with special reference to chronic kidney disease and phosphate metabolism.

Tobias Larsson

Biography not available at time of print.

Mary Leonard

Dr. Mary Leonard, MD, MSCE is a Professor of Paediatrics and Epidemiology at the Perlman School of Medicine at the University of Pennsylvania, and the Director of the Office of Clinical and Translational Research at the Children's Hospital of Philadelphia. Her multidisciplinary research program is focused on the assessment of bone health in children, the detrimental effects of glucocorticoid therapy, muscle deficits and inflammation on bone development in chronic paediatric disease, and the assessment of the unique effects of kidney disease on skeletal structure in children and adults. Her research in renal osteodystrophy uses novel micro-imaging techniques. She is also conducting a trial of low magnitude mechanical stimuli as an anabolic bone therapy in children with Crohn's disease. Her research program is supported by multiple NIH investigator-initiated grants.

Ewa Lewin

She received her M.D. from the University of Copenhagen, 1982 specializing in Nephrology and Internal Medicine. She received her Doctoral Thesis at the University of Copenhagen in 2004: “Parathyroid Hormone Regulation in Normal and Uremic Rats – Reversibility of Secondary Hyperparathyroidism after Experimental Kidney Transplantation”. Furthermore, she has 43 Scientific Publications on topics related to Calcium Metabolism, PTH, PTHrP and Renal Osteodystrophy and Experimental Secondary Hyperparathyroidism and is a member of the Editorial Board for Nephrology Dialysis Transplantation (NDT) since 1999. Her current position is Consultant at Nephrological Department B, Herlev Hospital, at the University of Copenhagen, Denmark.

Gérard London

Dr.Gérard M. London (born 03/04/1943 in Paris) graduate from medical school of Charles University in Prague in July 1966. He specialized in Nephrology (1967-1971) at Paris Medical School and became the chief of the department of Nephrology-Hemodialysis of the Manhes Hospital from 1970-2009. From 1991 to 1998 he was member of the Council of French Society of Nephrology and from 1994 to 1999 of the Council of French Society of Hypertension. Member of the Council of European Renal Association (ERA-EDTA) from 2002 to 2006, he is presently member of the Scientific Council of International Society of Hypertension. President of ERA-EDTA (European Renal Association – European Dialysis and Transplant Association from for 2008-2011, he is presently the Chair of EUROCAm working group.

Member of International/American/French Societies of Hypertension, and Honorary Member of the Czech Society of Hypertension, Dr London is Member of International/European/American/ French Societies of Nephrology, and Honorary Member of Czech/Italian/Slovak/Spanish/Polish Societies of Nephrology, and European Society of Cardiology Dr. London was awarded the Gold Medal of Charles University in Prague, and Paul Milliez Award of European Soc. of Hypertension. Dr.London is presently member of the Editorial Board of Journal of Nephrology, Journal of Hypertension, Nephrol. Dial. Transplant., Blood Purification, and serves as reviewer for Circulation, Hypertension, Circulation Research, Kidney International, Journal of American Society of Nephrology, and several others. He published in this field more than 350 publications in peer review journals and several chapters in the books. Present Hirsch index 76.

Hartmut H. Malluche

Hartmut H. Malluche, MD, FACP, is the Robert G. Luke Chair in Nephrology, Professor of Medicine, and Chief of the Division of Nephrology, Bone, and Mineral Metabolism at the University of Kentucky, in Lexington, Kentucky. Prior to his current position, he served as Associate Professor of Medicine in the Department of Internal Medicine, Division of Nephrology, at the University of Southern California Medical Center in Los Angeles.
Dr. Malluche has served as a member on numerous scientific advisory councils and clinical research committees, including the National Institution of Health and the Food and Drug Administration. He was Director of the General Clinical Research Center at the University of Kentucky and has published over 400 articles in various scientific journals, including Journal of Clinical Investigation, American Journal of Physiology, Endocrinology, Kidney International, Journal of Bone and Mineral Research, Journal of the American Society of Nephrology, and Transplantation. He is Editor in Chief of the International Journal, “Clinical Nephrology”, and the textbook, Clinical Nephrology, Dialysis and Transplantation. Dr. Malluche received the Distinguished Lecturer Award from the Chinese Society of Nephrology in 1992 and the Award of Excellence in Research from the University of Kentucky. He is an honorary member of the Australian and New Zealand Society of Nephrology, the South African Renal Society, and he is the founder and first president of the International Society of Bone Morphometry. He is a fellow of the American College of Physicians and a member of the American Society for Clinical Investigation, the American Society of Nephrology, the International Society of Nephrology, and the American Society for Bone and Mineral Research, among many others. He has been listed in Who’s Who in the World annually since 1987 and is a Who’s Who Life Member since 2001. He has been listed in 100 Best Doctors in America annually since 2002.

Dr. Malluche received his medical degree summa cum laude from J.W. Goethe University in Frankfurt am Main, Germany, and completed a residency and fellowship at the Center of Internal Medicine, University Hospitals, J.W. Goethe University.

Tally Naveh-Many

Tally Naveh-Many is a graduate of the Hebrew University of Jerusalem, Israel, where she also received her Ph.D. Since 1985 she is a senior scientist, at the Minerva Center for Calcium and Bone Metabolism, Hadassah Hebrew University Medical Center in Jerusalem. Her main research interests are the molecular biology of parathyroid hormone, and in particular the post-transcriptional mechanisms regulating parathyroid hormone gene expression in experimental models of secondary hyperparathyroidism. She and her collaborator Professor Justin Silver have made significant contributions to the regulation of the parathyroid by calcium, vitamin D, fibroblast growth factor 23 and chronic kidney disease. Their research contributions are relevant to the clinical management of the secondary hyperparathyroidism of patients with chronic kidney disease. Professor Naveh-Many is the author of 100 publications and chapters in books, many of them in the most prestigious scientific journals. She and members of her laboratory are the recipients of several national and international awards. She is a Professor of Molecular Biology at the Hebrew University Medical School.

Ziad A. Massy

Ziad A. Massy MD, PhD is Professor at the University of Picardie Jules Verne and Amiens University Hospital, Vice Director of Amiens University Hospital (Research), Coordinator of the Clinical Research Centre, and Director of Research Unit INSERM U-1088. Professor Massy is a current member and former co-chairman of the European Uremic Toxins group, Core-member of the EURECAM Working Group Advisory Board–ERA-EDTA, as well as Board member of the Council of EVBO (European Vascular Biology Organisation). In September 2012, he was presented with the Fondation du Rein Award. He is on the editorial boards of Kidney International, NDT, Journal of Renal Nutrition, Journal of Nephrology and Néphrologie et Thérapeutique (where he served as Editor in Chief from 2007 to 2010, and is currently Emeritus Editor). His research areas of special interest include cardiovascular disease, vascular calcifications, hyperlipidemia, uremic toxins, oxidative stress, and chronic renal failure. He has published many original articles, reviews and chapters of books in his domain of interest.

Sharon Moe

Dr. Moe received her medical degree from the University of Illinois- College of Medicine at Chicago in 1989. She completed her internship and residency in the Department of Internal Medicine at Loyola University Medical Center in Maywood, Illinois. Her research and clinical fellowships were completed in the Section of Nephrology of the Department of Medicine at the University of Chicago in Illinois. She has been a faculty member at Indiana University since 1992 and is currently Division Director for Nephrology in the Department of Medicine at Indiana University School of Medicine. Dr. Moe is the principal investigator for several ongoing clinical and basic research studies in the field of vascular calcification and bone and mineral metabolism in kidney disease. Her research is funded by the Veterans Affairs Department, the National Institutes of Health, and Pharmaceutical Companies. She has authored over 130 scientific manuscripts, teaching manuscripts and textbook chapters about CKD-Mineral Bone Disorders, Renal Osteodystrophy and Vascular Calcification. Dr. Moe served on the National Kidney Foundation's Bone and Mineral metabolism K!DOQI clinical practice guidelines in 2003 and was co-chair of the international KDIGO Mineral and Bone guidelines released in 2009. She has been a Councilor to the International Society of Nephrology from 2005-2007. She is currently one of six Councilors for the ASN, and will be President elect of the ASN in 2014. Key Honors include election to the American Society for Clinical Research in 2005; the National Kidney Foundation in Gareb Eknoyan Award for exceptional contributions to key initiatives of NKF such as the Kidney Disease Outcomes Quality Initiative (KDOQI) in 2009; the National Kidney Foundation of Indiana Legion of Honor Award in 2011.

Orson Moe

Dr. Moe is a nephrologist and investigator in renal physiology and pathophysiology. His research is disease-oriented and focuses on acid-base and mineral disorders, kidney stones, and renal insufficiency. His research projects encompass both basic bench science in physiology, biochemistry, and cell biology, to metabolic studies in humans.

Heini Murer

Heini Murer earned his Ph.D. in Biochemistry in 1972 from the University of Fribourg. The next three years he spent as a Postdoc at the ETH Zurich. In 1975 he joined the Renal Physiology Laboratory at the Max-Planck Institute in Frankfurt. In 1979 he joined the faculty of the Institute of Biochemistry in Fribourg as an Assistant Professor. In 1981 he moved on to professorship at the Institute of Physiology of the University of Zurich where he initiated a renal physiology laboratory and later served as director of the Institute. From March 2006 to August 2010 he served as Vice-president for Medicine and the Sciences at the University of Zurich. In August 2010 he became an Emeritus. He is a recipient of the Homer Smith Award, the Franz Volhard Medal, the Robert Berliner Lectureship, the Robert Pitts Memorial Lectureship, the Donald W. Seldin Award and of the Richard Award.

Klaus Olgaard

Klaus Olgaard is Professor of Nephrology and Internal Medicine at the University of Copenhagen and at Department of Nephrology, Rigshospitalet, Copenhagen, Denmark. His scientific interests are basic and clinical research in nephrology/endocrinology and uremia, especially related to physiology and pathophysiology of parathyroid hormone regulation and mineral metabolism. Professor Olgaard was the President for the ERA-EDTA Congress held in Copenhagen in 2002. He is Past President of several national nephrology and transplantation societies including the Danish Society of Nephrology. He has been subject editor for Nephrology Dialysis Transplantation, and is or has been member of several editorial boards. Professor Olgaard has authored more than 210 publications in peer-reviewed international journals and was editor on the K/DIGO guidelines, from the National Kidney Foundation, 2006 on: “Bone and Mineral Metabolism in CKD” and Editor on ”The Spectrum of Mineral and Bone Disorders in Chronic Kidney Disease” from Oxford University Press, 2010. He is member of the ISN/Nexus Scientific Committee and Co-Chair of the Organizers of the Nexus Symposium in Copenhagen on ”Bone and the Kidney”, September 2012.

Charles O’Neil

Dr. O’Neill received his undergraduate training at the Massachusetts Institute of Technology and his M.D. degree from Tufts University in Boston. Following residency at Albany Medical Center, he had fellowship training in Endocrinology and Metabolism at Tufts-New England Medical Center and in Nephrology at Emory University. He is currently Professor of Medicine and Physiology at Emory University School of Medicine. His research has focused on the role of endogenous inhibitors in the pathogenesis of vascular calcification and the use of pyrophosphate and related compounds as therapeutic agents. Additional research has focused on the epidemiology and clinical significance of medial arterial calcification in chronic kidney disease.

Susan Ott

Dr. Ott graduated from Stanford University and attended medical school at the University of Washington. After residency at the University of California at Davis she was a nephrology fellow at the University of Washington. She stayed there and is now a professor of medicine. Her first research projects involved renal osteodystrophy, histomorphometry, and how aluminum caused calcitriol resistance; this led to calcitriol studies in osteoporosis where she learned about bone density. She has been an investigator in clinical trials of osteoporosis therapies, and is currently studying atypical femur fractures related to bisphosphonates. Another interest is the effects of pregnancy and contraceptives on bone physiology. Colleagues have called her a cassandra and an iconoclast for her physiological approach to treatment with bisphosphonates. She served on the KDIGO guidelines committee about mineral and bone disorders. Her main claim to fame is the web page about osteoporosis and bone physiology.

Marie Hélène Lafage-Proust

Pr MH Lafage-Proust, MD, PhD teaches Cell Biology at the Medical School of the J Monnet University, member of “University of Lyon”, Saint-Etienne, France. She belongs to the INSERM U1059 research team “Integrative Bone Biology Laboratory”. Her main fundamental research interests are the role of bone vascularisation in bone metabolism and the involvement of VEGF in bone remodeling. She has been involved in several projects including the effects of mechanical strain on bone in vivo in rodents, and in vitro. She is rheumatologist and she is responsible for the unit of bone histomorphometry for the diagnosis of metabolic bone diseases. As a clinician, she currently takes care of patients with metabolic bone diseases, especially osteoporosis and uremic bone disease in the Rheumatology Department of St-Etienne University Hospital, She has published 100 papers and more than ten chapters in medical books and has given a number of invited lectures worldwide.

Darryl Quarles

Dr. Quarles is the UTMG Endowed Professor, Director of the Division of Nephrology and Associate Dean for Research in the College of Medicine at the University of Tennessee Health Sciences Center.

Dr. Quarles graduated magna cum laude from Duke University. He earned his medical degree and completed residency training in Medicine at the University of Alabama at Birmingham. He completed a Nephrology fellowship at Duke University Medical Center, followed by 22 year tenure as faculty, where he was Professor of Medicine. From 2004 to 2009 he served as the Director of the Kidney Institute and Nephrology Division at the University of Kansas Medical Center. He is a member of the American Society of Clinical Research and the Association of American Physicians. He is a recent recipient of the Coburn Endowed Lecture from the American Society of Nephrology for his work in discovery of the endocrine functions of bone.

Mohammed Razzaque

Dr. Razzaque has received his medical doctor degree (MBBS) from Chittagong Medical College in Bangladesh, and earned his PhD degree from Nagasaki University in Japan. His PhD research work was devoted to exploring underlying mechanisms of organ fibrosis; he identified the crucial role of heat shock protein 47 (HSP47) in both human and experimentally induced renal and other organ fibrosis. In addition to research works, Dr. Razzaque has also received Renal Pathology training at the Nagasaki University School of Medicine, where he later joined as a faculty in the Department of Pathology, and worked for more than four years before moving to the USA. Dr. Razzaque completed a year of post-doctoral fellowship in the Division of Nephrology at the Pennsylvania State College of Medicine in Hershey and then moved to the Harvard School of Dental Medicine as a faculty, where he is currently studying the cause and consequences of phosphate toxicity.

Mariano Rodriguez

Presently is Professor of Medicine at the Hospital Universitario Reina in Sofia. Graduated from Seville Medical School, performed training in Internal Medicine and Nephrology in Oklahoma Health Science Center. Then he moved to UCLA as Assistant professor and Staff in Nephrology al West LA Medical Center. Major research interest is parathyroid hyperplasia in uremic patients, regulation of parathyroid cell receptors, role of phosphate in secondary hyperparathyroidism abnormalities in calcium metabolism including regulation of FGF23 and the genesis and management of vascular calcifications. Member of Scientific Committees and Reviewer for large number Nephrology and Endocrinology Journals. 216 manuscirpts published in the field.

Susan Schiavi

Susan Schiavi is a Senior Scientific Director of Mineral Metabolism within the Tissue Protection and Repair Division of Genzyme, Sanofi. She received her PhD from the University of Massachusetts Medical School and completed a postdoctoral fellowship at Harvard Medical School. As a veteran scientist within Genzyme's R&D, her primary role has focused on identification of novel therapeutic targets and translational research associated with genetic and acquired bone and renal diseases. Within this framework, her team's investigations have centered on the role of critical proteins associated with bone mineralization in addition to renal and intestinal control of phosphate transport.

Cathy Shanahan

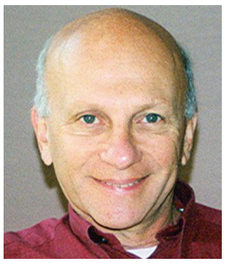
Professor Shanahan obtained a PhD from the University of Adelaide and began research in the field of cardiovascular medicine as a post-doctoral scientist in 1990 when she moved from Australia to the University of Cambridge, UK. She was appointed as a British Heart Foundation Lecturer and later Senior Fellow in the Department of Medicine, University of Cambridge. In 2007 she became Chair of Cellular Signalling in the Cardiovascular Division at King's College in London. She is currently on the Editorial Boards of Arteriosclerosis, Thrombosis and Vascular Biology (ATVB) (2002-), Kidney International (2007-) and Circulation Research(2011).
Her work focuses on mechanisms of vascular smooth muscle cell (VSMC) dysfunction in ageing and disease. Her group has made a significant contribution to understanding the mechanisms of vascular calcification and has published over 50 papers and reviews in the field focussing on understanding the mechanisms of both medial and atherosclerotic, intimal calcification. More recently her work has focussed on the role of a VSMC ageing in mediating phenotypic changes that promote calcification.

Elizabeth Shane

Elizabeth Shane, M.D. is Professor of Medicine, Vice Chair of Medicine for Clinical and Epidemiological Research at Columbia University, College of Physicians & Surgeons in New York. She received her M.D. from the University of Toronto and completed her medical residency and training in Endocrinology at Columbia University in New York. Her research interests include transplantation osteoporosis, premenopausal osteoporosis, bone disease associated with HIV/AIDS, renal bone disease and bone loss due to medications and gastrointestinal diseases. Dr. Shane was Associate Editor of the Journal of Clinical Endocrinology and Metabolism (2000-2004), Associate Editor of the First through Sixth Editions of the Primer of the Metabolic Bone Diseases and Disorders of Mineral Metabolism, and serves on the Editorial Boards of Bone and the Journal of Bone and Mineral Research. Dr. Shane is past President of the American Association for Bone and Mineral Research (ASBMR). She chaired or co-chaired three ASBMR Task Forces, on Ethics in Publishing in 2005, Osteonecrosis of the Jaw in 2006-7 and Atypical Femur Fractures in 2009-10.

Rukshana Shroff

Dr Rukshana Shroff (PhD) is a Consultant in Paediatric Nephrology at Great Ormond Street Hospital, and holds a special interest in the management of children with chronic kidney disease (CKD). She has completed a PhD at University College London, investigating key modifiable risk factors that lead to cardiovascular disease in children with CKD. Dr Shroff has published over 50 peer-reviewed articles and invited reviews, and three book chapters. Dr Shroff actively participates in research alongside her clinical work and leads clinical trials and translational research studies. Her current research involves vitamin D trials in pre-dialysis and dialysis patients as well as in vitro studies examining mechanisms of vascular calcification in CKD. She maintains a keen interest in teaching, and is involved in university teaching programmes. Also, she is an Associate Editor for Pediatric Nephrology.



Justin Silver

Justin Silver is a graduate of the University of the Witwatersrand, Johannesburg. He trained at Baragwanath Hospital, Johannesburg and the Hammersmith Hospital and Royal Postgraduate Medical School in London where he also received his Ph.D. and boards in internal medicine. Since 1973 Dr. Silver has been at Hadassah Hospital in Jerusalem, Israel, and was appointed head of the Mineral Metabolism Unit in 1990. He was head of the Nephrology and Hypertension Services from 2001 to 2010. His main research interests are calcium and bone metabolism particularly their abnormalities in patients with chronic renal failure. He and his collaborator Professor Tally Naveh-Many have made significant contributions to the molecular biology of parathyroid hormone, vitamin D and fibroblast growth factor 23. Research contributions from his laboratory are relevant to the clinical management of the secondary hyperparathyroidism of patients with chronic kidney disease. Dr. Silver serves on the editorial boards of a number of international scientific journals and is the author of 170 publications and chapters in books, many of them in the most prestigious scientific journals. He and members of his laboratory are the recipients of several national and international awards. He is Professor of Medicine at the Hadassah Hebrew University Medical School.

Ravi Thadhani

Dr. Thadhani is an Associate Professor of Medicine at Harvard Medical School and Director of Clinical Research in Nephrology at the Massachusetts General Hospital. He has been at Harvard for approximately 20 years. The focus of his research has been performing hypothesis generating observational and experimental studies then testing these in humans through randomized clinical trials. His two main areas of research include understanding the importance of vitamin D in cardiovascular disease and infection, and in bringing a therapy for women with severe preterm preeclampsia to the clinic. He has published over 130 original articles in peer review journals, he is a medical reviewer for the major medical and renal journals, and he serves on several committees focused on clinical research within the Harvard community and nationally.

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 1991-1997 he was a Senior Lecturer and a Reader in Nephrology and Physiology at UCL, and a Senior Lecturer in Clinical Pharmacology at the Royal Postgraduate Medical School (Hammersmith Hospital) from 1989-1991.He is currently Head of the UCL Centre for Nephrology, Royal Free Campus and Hospital, UCL Medical School. His clinical interests lie mainly in renal tubular disorders and renal stone disease, as well as in renal tubular physiology and gut-renal interactions. He has published on various aspects of renal physiology and pathophysiology, renal tubular disorders, and renal stone disease.

Myles Wolf

Biography not available at time of print.