TÍTULO:

World Congress of Nephrology in Mexico City 2017

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Summary:

ISN's biennial World Congress of Nephrology (WCN) is the premiere educational event in nephrology which rotates between continents and is organized in collaboration with local and regional nephrology societies. The congress is targeted to the international nephrology community as well as other healthcare professionals involved in multidisciplinary nephrology care, thus enabling professionals from all parts of the world to exchange views on a wide variety of topics affecting nephrology and those suffering from kidney disease around the world.

For the first time, an international nephrology congress focuses on diabetes and kidney disease, a worldwide problem, but one very important to Latin America and Mexico in particular. Join the ISN World Congress of Nephrology (WCN) in Mexico City from April 21 to 25, 2017.

Keywords:

Word Congress, Nephrology, Kidney disease, Diabetes, Mexico City, 2017.

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Uniquely placed as a truly global meeting, WCN gives access to international medical expertise in renal treatment, research and care, from bench to bedside. You will get a genuinely enriching and professional exchange of knowledge with world-renowned nephrologists, and endocrinologists at this meeting.

The scientific program is complemented by novel Nephrology Biennial Review (NBR) courses given in three languages, covering the most important research of the past two years from various fields within nephrology. You can also participate in hands-on courses on Interventional Nephrology, organized jointly with the Brazilian Society of Nephrology, as well as lectures on Renal Pathology, Renal Systems Biology, clinical epidemiology and clinical trials, which will be given by some of the most highly-respected peers within THE field, from multiple countries.

Maintaining sustainable kidney health on a global scale through education and training is our mission for each congress. WCN 2017 is your chance to connect with the nephrology community in a compact setting, and take advantage of this great opportunity to interact with colleagues as well as explore and understand the critical importance of diabetic kidney disease.

On behalf of the International Society of Nephrology (ISN) and the Sociedad Latinoamericana de Nefrología e Hipertensión, we are pleased to invite you to participate in the 2017 World Congress of Nephrology

Plenary Program

1.- The Diabetes Pandemic: Prevention is Primary

Sam Dagogo-Jack (USA)

21/04/2017 at 17:00

Sam Dagogo-Jack, MD is the A. C. Mullins Professor in Translational Research, Professor of Medicine, and Chief of the Division of Endocrinology, Diabetes and Metabolism at the University of Tennessee Health Science Center, Memphis, TN. He is also Director of the Endocrinology Fellowship Training Program and Director of the General Clinical Research Center at UTHSC. Dr. Dagogo-Jack graduated from the University of Ibadan College of Medicine, Nigeria, and completed Internal Medicine residency training at the Royal Victoria Infirmary, University of Newcastle, UK. He was certified Member of the Royal College of Physicians (UK) in 1982, following which he underwent bench research training at the University of Newcastle, earning the Master of Science and the Doctorate in Medicine research degrees before undergoing postdoctoral fellowship training in Endocrinology, Diabetes and Metabolism at Washington University School of Medicine, St Louis, Missouri.

Dr. Dagogo-Jack's current research focuses on the interaction of genetic and environmental factors in the prediction and prevention of prediabetes and diabetes. He is Principal Investigator of the Pathobiology of Prediabetes in a Biracial Cohort (POP-ABC)Study, the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) and the Diabetes Prevention Program (DPP)/DPP Outcomes Study (DPPOS), all funded by the National Institutes of Health. Dr. Dagogo-Jack has served on (and chaired) research grants review panels and study sections for the National Institutes of Health, American Diabetes Association, Medical Research Council (UK), Qatar National Research Foundation, among others. He has served as Editor of the Journal of Clinical Endocrinology & Metabolism (2009-2014) and Associate Editor of

Diabetes Care (2007-2011), and currently serves as Associate Editor of the American Journal of the Medical Sciences, Experimental Biology & Medicine and Frontiers in Endocrinology. Dr. Dagogo-Jack's publications include 3 books, 24 book chapters and more than 200 scientific papers.

Dr. Dagogo-Jack has been elected to the American Association of Physicians, Alpha Omega Alpha, Southern Society for Clinical Investigation, and Fellowships of the Royal College of Physicians of London, the American College of Physicians, and the American College of Endocrinology, and has served as Visiting Professor to more than 100 institutions worldwide. Other honors include the Banting Medal for Leadership from the American Diabetes Association (2015); Dorothy I. Height Mentoring Award in the Biomedical Sciences, Baylor College of Medicine-UTHSC (2015); Max Miller Lecturer, Central Society for Clinical & Translational Research (2014); 1st Prof. M. Viswanathan Gold Medal Oration, Chennai, India (2014); Mark Dodge Lecturer, St. Luke's Hospital/University of Kansas/University of Missouri, Kansas (2013); Auerbach Lecturer, Norwalk Hospital-Yale Dept. of Medicine (2013); Kroc Lecturer, Ohio State University (2011); Meritorious Achievement Award from the National Medical Association (2009), and the Distinction in Endocrinology Award from the American College of Endocrinology (2008).

Dr. Dagogo-Jack has served on the National Boards of Directors of the American Association of Clinical Endocrinologists and the American Diabetes Association, and Board of Trustees of the American College of Endocrinology. He is the 2015 President, Medicine & Science, of the American Diabetes Association.

2.- Title: Dysbiosis – Immunoregulation by the Gut (Stewart Cameron Lecture)

Richard Flavell (USA)

22/04/2017 at 10:45

Dr. Flavell is Sterling Professor of Immunobiology at Yale University School of Medicine, and an Investigator of the Howard Hughes Medical

Institute. He received his B.Sc. (Honors) in 1967 and Ph.D. in 1970 in biochemistry from the University of Hull, England, and performed postdoctoral work in Amsterdam (1970-72) with Piet Borst and in Zurich (1972-73) with Charles Weissmann. Before accepting his current position in 1988, Dr. Flavell was first Assistant Professor (equivalent) at the University of Amsterdam (1974-79); then Head of the Laboratory of Gene Structure and Expression at the National Institute for Medical Research, Mill Hill, London (1979-82); and subsequently President and Chief Scientific Officer of Biogen Research Corporation, Cambridge, Massachusetts (1982-88). Dr. Flavell is a fellow of the Royal Society, a member of EMBO, the National Academy of Sciences as well as the National Academy of Medicine.

Dr. Flavell's research uses gene-edited mice to study innate and adaptive immunity. He co-discovered introns and showed that DNA methylation correlates inversely with, and prevents, gene expression. He was the first to develop reverse genetics; he is a pioneer in the use of this approach. He showed how inflammasomes maintain homeostasis with the gut microbiota. In its absence, dysbiosis and disease result. He showed that dysbiotic microbes drive intestinal inflammation and elicit specific IgA responses that are identified in Crohn's Disease and Ulcerative Colitis.

3.- Title: Epigenetics in Development and Disease

Susan Gasser (Switzerland)

22/04/2017 at 14:45

Susan M. Gasser is the director of the Friedrich Miescher Institute for Biomedical Research, a position she assumed in 2004. In parallel, she holds a professorship at the University of Basel and runs an active research laboratory at the FMI. Prior to joining the FMI, she was a professor in the Department of Molecular Biology at the University of Geneva.

Susan studied at the University of Chicago and completed her PhD at the University of Basel (Biochemistry; G. Schatz), working on the import of mitochondrial proteins. As a postdoctoral fellow, she studied

the long-range folding of the genome in flies and human cells. She identified topoisomerase II as a structural component of mitotic chromosomes, and AT-rich sequences as elements of loop organization. From 1986-2001, as a research group leader at the Swiss Institute for Experimental Cancer Research, she combined genetic approaches and fluorescence microscopy to examine the impact of nuclear organization on genome function – specifically on heritable gene repression in yeast.

Susan Gasser's studies have continued to examine how nuclear organization impinges on mechanisms of repair and replication fork stability and on epigenetic inheritance of cell fate decisions. She exploits the genetics of model organisms in her studies, as well as quantitative live fluorescence imaging. Her laboratory identified mechanisms that tether telomeres and silent chromatin at the nuclear envelope. In parallel, they identified roles for RecQ helicases, checkpoint kinases and ORC in the maintenance of genome integrity. Over the last 10 years she has examined the role of nuclear organization and heterochromatin in the development of the nematode, C. elegans. The laboratory has contributed to our understanding of signals and anchors involved in chromatin positioning, both for active and inactive genes, and for various types of DNA double strand break repair.

4.- Title: From Embryogenesis to Kidney Engineering (Donald Seldin Lecture)

Melissa Little (Australia)

24/04/2017 at 16:30

Professor Melissa Little heads the Kidney Development, Disease and Regeneration Laboratory at the Murdoch Childrens Research Institute, Royal Children’s Hospital, Melbourne and is a Professor in the Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Australia. For more than 20 years her research has focussed on the molecular basis of kidney development, renal disease and repair. She is internationally recognised for her work on the systems biology of

kidney development and also her pioneering studies into potential regenerative therapies in the kidney. Her work on the developing kidney has driven studies into the recreation of nephron stem cell populations via transcriptional reprogramming and directed differentiation of pluripotent stem cells. As a result, her research now focuses on the generation of mini-kidneys from stem cells for use in drug screening and disease modelling and bioengineering. A Fellow of the Australian Academy of Health and Medical Sciences, Professor Little's work has been recognised by many awards, including the GlaxoSmithKline Award for Research Excellence (2005), AAS Gottschalk Medal in Medical Sciences (2004), Eisenhower Fellowship (2006), ANZSCDB Presidents Medal (2015) and a Boorhaave Professorship, Leiden University (2015). A graduate of the Australian Institute of Company Directors, she founded Nephrogenix Pty Ltd and from 2007-2008, she served as the Chief Scientific Officer at the Australian Stem Cell Centre. Melissa is Vice President of the Australasian Society for Stem Cell Research and a member of Stem Cells Australia. She currently serves as a Special Editor for Development and on the editorial board of the Journal of the American Society for Nephrology, Kidney International and Developmental Biology.

5.- Title: Amyloidosis (Claude Amiel Lecture)

Mark Pepys (United Kingdom)

23/04/2017 at 10:45

Mark Pepys was educated at Trinity College Cambridge, University College Hospital Medical School and the Royal Postgraduate Medical School London, where his 1986 invention of serum amyloid P component (SAP) scintigraphy for diagnosis and monitoring of systemic amyloidosis created the de facto national referral centre. In 1999 he was invited to the Royal Free Campus of University College London (UCL), established the Centre for Amyloidosis and Acute Phase Proteins and set up the UK National Health Service National Amyloidosis Centre. It provides diagnostic and management advisory

services for the whole national caseload and many international patients.

His research has been supported by the Medical Research Council, with more than £18 million since 1969, and also by the Wolfson Foundation, the Wellcome Trust and others. His 2005 invention of the combination of his drug, CPHPC, with antibody to SAP, for treatment of systemic amyloidosis, has been developed since 2009 with GlaxoSmithKline. Its unprecedented, clinically beneficial, clearance of visceral amyloid deposits was reported in the New England Journal of Medicine and Blood in 2015. In 2011 he formed the UCL Wolfson Drug Discovery Unit, funded by the Wolfson Foundation and the UK National Institute for Health Research's UCLH/UCL Biomedical Research Centre, which is also funding the 2016-9 DESPIAD phase 2b clinical trial of CPHPC alone in Alzheimer's disease.

He is a Fellow of the Royal Society, a Founder Fellow of the Academy of Medical Sciences, and has been a Council member of both. He was the 2007 Harveian Orator of the Royal College of Physicians and won the 2007 Royal Society GlaxoSmithKline Prize and 2008 Ernst Chain Prize for Medical Discovery. He was created Knight Bachelor for Services to Biomedicine in 2012 and was elected Honorary Fellow of Trinity College, Cambridge in 2014.

6.- Title: Metabolism and Obesity (Brenner/Dirks Lecture)

Philipp Scherer (USA)

24/04/2017 at 10:45

Philipp Scherer is Professor and Director of the Touchstone Diabetes Center at the University of Texas Southwestern Medical Center in Dallas. He received his Ph.D. degree from the University of Basel, Switzerland, followed by post-doctoral training the Whitehead Institute at MIT in Cambridge. In 1997, he joined the faculty of the Albert Einstein College of Medicine where he was a Professor for Cell Biology and Medicine. Throughout his career, he has maintained an interest in processes related to cellular and systemic energy homeostasis. He identified adiponectin, one of the first secretory factors to be described

that almost exclusively originate in adipose tissue and which is currently widely studied by many different research groups.

Current efforts in his laboratory are focused on the identification and physiological characterization of novel proteins that serve as potential links between the adipocyte, liver, the pancreatic beta cell and the processes of whole body energy homeostasis, inflammation, cancer and cardiovascular disease.

Scherer has been on the faculty of UT Southwestern Medical Center since 2007 as a member of the Departments of Internal Medicine and Cell Biology. He holds the Touchstone Distinguished Chair in Diabetes Research and is a member of the Simmons Comprehensive Cancer Center. He won the 2005 Outstanding Scientific Achievement Award from the American Diabetes Association and the 2012 O'Donnell Award in Medicine from the Academy of Medicine, Engineering & Science of Texas. In 2013, he received the Naomi Berrie Award for Outstanding Achievement in Diabetes Research from Columbia University, the Britton Chance Memorial Award of the Agency for Science, Technology and Research (A*STAR), Singapore and he was awarded the 2015 Banting Medal for Scientific Achievement from the American Diabetes Association.

7.- Title: The New New Genomics: Implications for Understanding and Treating Renal Disease (Hugh de Wardener Lecture)

John Stamatoyannopoulos (USA)

23/04/2017 at 14:45

Dr. Stamatoyannopoulos' laboratory is using high-throughput molecular and computational technologies to decode the regulatory circuitry of the human and other complex genomes. Major ongoing efforts are (i) to create comprehensive atlases of regulatory DNA encoded in the human and mouse genomes; (ii) to define the regulatory networks that control cell fate and response; (iii) to map regulatory variants associated with common human diseases and define their mechanism(s); and (iv) to develop next-generation technologies for analyzing and reprogramming the regulatory genome.

Dr. Stamatoyannopoulos directs the UW ENCODE Project Center, the Northwest Epigenome Center, and the UW High-Throughput Genomics Center. He holds degrees in Biological Sciences, Symbolic Systems, and Classics from Stanford University, and an M.D. from the University of Washington School of Medicine. Dr. Stamatoyannopoulos completed his medical training at Harvard Medical School, including internship and residency in Internal Medicine at Brigham and Women's Hospital, and fellowship in Oncology and Hematology at the Dana Farber Cancer Institute and Massachusetts General Hospital.

Education & Courses

Innovative High Level Education – Ten Courses, Intermingled with Main Program

1.- Clinical Epidemiology and Trial Design Course

This course is aimed at health care professionals interested in improving patient outcomes through clinical trials and observational studies. It will cover topics such as efficient trial design, the practicalities of setting up studies and recruiting patients as well as the challenges of retaining patients and generating high-quality data. Speakers will also look into running trials in low-resource setting and will set the minimum requirement for centers considering participation in clinical research.

2.- Clinical Physiology Course

The 3-day Clinical Physiology course is an opportunity not only to refresh your knowledge of basic renal physiology, which still underpins much of renal medicine today, but also to learn of the new and exciting developments that are being applied to our understanding of disease pathophysiology. The speakers are a mix of basic and clinical scientists who are leaders in their field, and there is a strong emphasis on the practical application and relevance of old and new physiological principles for diagnosing and managing patients. The course should

appeal to all who are curious and want to know why renal physiology is still relevant and a cornerstone of nephrology.

3.- Nephrology Biennial Review (NBR) Courses (in English, Portuguese and Spanish)

In contrast to usual Continuing Medical Education programs, these courses are organized as a structured review of published literature over the last two years since the last WCN. Each course covers 15 topics, introducing and summarizing state-of-the-art nephrology, focusing on a review of up to seven important studies published over the last two years and concluding with a summary with special emphasis on how the new data impact clinical practices.

4.- Peritoneal Dialysis (PD) Course

Peritoneal dialysis is a very well recognized form of renal replacement therapy and in some circumstances is more cost-effective than hemodialysis. Several countries, in fact, use peritoneal dialysis in a higher proportion to treat patients with kidney failure. During the WCN 2017 in Mexico City, we have organized a PD Course (April 21st), with a fabulous program that covers the main issues and problems in peritoneal dialysis; from basics and clinical practice to education and cost analysis aspects, imparted by an outstanding team of experts from around the world. Come and join the PD Course of the WCN 2017. Do not miss the opportunity to update your knowledge of this fascinating form of dialysis!

5.- Renal Nutrition Symposium

This course is intended to provide a notable opening to the experts in the field of renal nutrition to discuss the latest topics. The course will provide a special platform for clinical nutritionists, registered dieticians, and other healthcare professionals, researchers and students working in the field to consciously exchange visions and understandings in front of a large intercontinental audience. This Nutrition Symposium includes keynote presentations, plenary sessions and poster presentations.

6.- Renal Pathology Course

We have envisioned a fantastic renal pathology course for pathologists and nephrologists interested in improving their knowledge and clinical diagnostic skills. The course will consist of a comprehensive program from worldwide expert speakers that includes formal lectures, digital case review sessions, round table debate of challenging issues and clinicopathological case discussion. Participants will be exposed to all the aspects of renal pathology, from basic concepts, to native and transplant pathology of the kidney, including new classifications. The highlights include exposure to the technical aspects of histology, immunofluorescence, immunohistochemistry and electron microscopy; the clinicopathological correlation and how to integrate and interpret a pathology report.

7.- Renal Systems Biology at Your Fingertips Course:

Introduction into Web-Based Data Mining of Large Scale Renal Data Sets

Nephrology research is rapidly changing, allowing us to capture the molecular determinants of renal diseases in our patients and link them to the disease course. This influx of genome scale data has the potential to improve patient care by making it easier to identify mechanisms of action, detect targetable biomarkers, and quickly match patients to the best treatments for their specific disease. To fully harness the potential of these publicly available resources, researchers and clinicians need the tools and skills to mine all of the various data being collected for use in translational medicine. The fastest way to master these tools is through hands-on, one-on-one tutorials. This session will highlight four solutions that have been proven to support multi-disciplinary -omics data mining. We will survey these applications and provide an opportunity for individual sessions with experienced users, focusing on real-world application of these powerful resources.

IMPORTANT!

The World Congress of Nephrology (WCN) includes over 80 sessions including plenary lectures by world experts, five theme tracks on diabetes and diabetic kidney disease, translational and clinical nephrology, acute kidney injury, chronic kidney disease, and dialysis and transplantation. Ten innovative high-level education courses are also open to participants, including Biennial Nephrology Review Courses in English, Spanish and Portuguese.