

Excellent achievements honoured

ISN awards outstanding Nephrologists from around the world



The claimed mission of the philanthropic organization International Society of Nephrology (ISN) is to advance kidney health worldwide. For this, outstanding nephrologists are needed. As chosen by the ISN membership, this year's winners were proudly honoured in various categories for their commitment to nephrology during this year's ISN World Congress of Nephrology.

Alfred Newton Richards Award

Prof. Melissa Little [1], Theme Director of Cell Biology at the Murdoch Children's Research Institute in Melbourne (Australia) received the Alfred Newton Richards Award for her outstanding basic research on the molecular and cellular basis of kidney development and disease. She and her research group have developed approaches for directing the differentiation of human pluripotent stem cells to human kidney organoids and are applying this knowledge to disease modelling, drug screening, cell therapy and tissue engineering. Little is President of the Australasian Society for Stem Cell Research and a Fellow of the Australasian Academy of Science and the Australian Academy of Health and Medical Sciences.

Jean Hamburger Award

The Jean Hamburger Award was presented to Dr. Detlef Schlöndorff [2]

for his outstanding research in nephrology with a clinical emphasis. He is considered one of the leading nephrologists world-wide. The Schlöndorff laboratory in Munich established the foundations for a renal biopsy bank which led to the establishment of the European Renal cDNA Bank (ERCB); this laid the foundation for targeted therapies to be developed for common and rare renal diseases. Dr. Schlöndorff also serves the scientific community as a reviewer of many journals and as a member of several editorial and grant review and selection committees. "Kidney International" and "KI Supplements" especially benefited from his excellent stewardship as Editor in Chief.

Roscoe R. Robinson Award

The Roscoe R. Robinson Award acknowledges Prof. Agnes Borge Fogo's [3] (Vanderbilt University Medical Center) achievements in the field of education and medicine. Fogo is dedicated to diagnostic renal pathology and has created an online Atlas of Renal Pathology with the American Journal of Kidney Disease and NKF. She has been a councilor of the ISN, and served as Chair of its Renal Pathology Committee, with focus on developing educational tools related to kidney biopsy interpretation. Her main research interests are progres-

sion and potential regression of chronic kidney disease, and crosstalk of tubules and glomeruli. Fogo is Associate Editor for "Kidney International" and "Laboratory Investigation".

Lilian Jean Kaplan International Prize

Prof. York Pei [4], University of Toronto, and Prof. Bradley K. Yoder [5], Department of Cell, Developmental, and Integrative Biology at the University of Alabama at Birmingham Medical School, were honoured with the Lilian Jean Kaplan International Prize.

Pei's research program has focused on genetic, genomic, clinical and translational research and has made a significant contribution to advance diagnosis, prognosis, and development of novel treatment in autosomal dominant polycystic kidney disease.

Yoder's recent research has uncovered roles for primary cilia in regulating innate immune responses following renal injury that accelerates cyst progression.

ISN Bywaters Award

For their outstanding contributions to the understanding of Acute Kidney Injury, Dr. Mehmet Sever [6], Istanbul Medical Faculty, Istanbul University, and Dr. Raymond Vanholder [7], currently chairman of the

European Kidney Health Alliance and of European Chronic Disease Alliance, earned the ISN Bywaters Award. In addition to many other contributions in the field, they co-chaired the workgroup that prepared "Recommendations for the Management of Crush Victims in Mass Disasters" and served as coordinators of the Renal Disaster Relief Task Force (RDRTF) of the ISN.

Young Nephrologists Awards

The Young Nephrologist Awards in the category Best Basic Science Abstract were given to Dr. Titi Chen [8], University of Sydney, and Dr. Aruna Rakha Arora [9], Department of Translational and Regenerative Medicine, Post Graduate Institute of Medical Education and Research, Chandigarh (India).

Dr. Eugene Chan Yu-hin [10], Paediatric Nephrology Centre, Department of Paediatrics and Adolescent, Princess Margaret Hospital, Hong Kong, and Dr. Sidy Mohamed Seck [11], Faculty of Health Sciences, University Gaston Berger Saint-Louis, Senegal, received the awards in the category Best Clinical Abstract.

ISN Pioneer Awards

These special awards reward doctors on a regional level who have carried

Continued on page 15 ►

► Continued from page 14

out extraordinary efforts to advance nephrology in a specific country or region.

The following nephrologists were honoured this year:

• Africa

Prof. emeritus Oladipo Olujiimi Akinkugbe [12], University of Ibadan, established the first Nephrology and Hypertension Clinics in Sub-Saharan Africa and was Founding President of the Nigerian Association of Nephrology as well as President of the Board of Trustees of the Africa Heart Network.

• Central and Eastern Europe

Prof. Halima Resic [13], Medical Faculty University of Sarajevo, Bosnia and Herzegovina, is President of the Society of Nephrology, Dialysis and Transplantation of Bosnia and Herzegovina, and President of BANTAO

(Balkan Association of Nephrology, Dialysis, Transplantation and Artificial Organs). She is also President of the Mediterranean Kidney Society, member of the Editorial Board of "BANTAO" Journal, Global Kidney Academy Ambassador from 2011 and President of the Donor Network of Bosnia and Herzegovina.

• Latin America

Prof. Edgar Sanclemente [14], Loma Linda University, Colombia, is investigating the burden of AKI and CKD in Latin-America. His research has been focused on animal venoms, infectious diseases and parasitic diseases as one of the causes of AKI in tropical areas as well as on environmental pollution as an additional factor for the increase in the prevalence of CKD.

• NIS and Russia

Prof. Valery Pilotovich [15], Department of Urology and Nephrology in

Belarussian Medical Academy of Postgraduate Education, was the author and chief of the state program "Haemodialysis" in the Ministry of Public Health Belarus Republic. He was the first Belarussian nephrologist to use peritoneal dialysis in patients with CKD and to perform kidney transplantation from a living relative donor.

• Oceania and South East Asia

Prof. emeritus Supat Vanichakarn [16], Mission Hospital Dusit, Bangkok, Thailand, has performed exceptional work to improve the quality of renal care in Thailand by raising about 40 million USD, which have been used for the acquisition of hospital equipment, for the medical training of staff and for the performance of kidney transplantations, amongst others. Vanichakarn is also the Secretary-General of the Prince Mahidol Award Foundation under the Royal Patronage.

Schrier Award

Malawi's Queen Elizabeth Central Hospital and the UK's Barts Health NHS Trust hospital won the 2019 Schrier Award. The Schrier Award rewards the most deserving partnership of the recently graduated pairs of the ISN Sister Renal Centers and the ISN-TTS Sister Transplant Centers Programs. Over the last six years, the teams of the two hospitals have developed dialysis services and training schemes so doctors can improve care for all kidney disease patients visiting the renal center in Blantyre, Malawi.

The collaboration began when the centers were paired up through the ISN Sister Renal Centers Program. They have now successfully established a comprehensive, sustainable and high-quality nephrology service for adults and children at Queen Elizabeth Central Hospital, run entirely by Malawian staff.

Immune risk monitoring

How precision medicine helps to stratify the risk of transplant rejection

Precision medicine is an emerging integrative approach for disease prevention, early detection, and treatment, taking into account individual variability in genetic and other molecular measurements, medical history, environmental exposures, and lifestyle. The development and availability of genomic and other molecular profiling technologies provide an unprecedented opportunity to apply precision medicine strategies in transplantation (tx) research.

Developing integrative computational methods to analyze these diverse types of data provides new opportunities to impact diagnostics and therapeutics. We can leverage molecular data sets to develop new hypotheses for disease mechanisms, identify new disease biomarkers, and reposition drugs for diseases with unmet needs. We can also now apply novel computational methods that can be applied to achieve these goals in the context of organ transplant.

In this talk, I will discuss ways to harness genomic precision medicine to stratify the risk of rejection before tx and to also be able to discern

the relative risk of a recipient developing T cell mediated rejection, antibody mediated rejection or have a stable, immunologically quiescent allograft. This stratification can be specific to each donor recipient (D/R) pair. In addition to current D/R histocompatibility antigen (HLA) mismatch evaluation, additional mismatch non-HLA D/R variants will enhance the stratification of post-tx rejection risk even

before engraftment of the organ. This innovative study design is applicable in all solid organ transplants, where the impact of mitigating antibody-mediated rejection on graft survival may be greater, with considerable benefits on improving human morbidity and mortality and opens the door to precision immunosuppression and extended tx survival. In addition, I will also discuss how immune reper-

toire sequencing of recipient pre-transplant blood can be sampled to also provide an independent assessment of rejection risk after tx. These new technologies and assays can offer ways to improve vigilant monitoring for rejection after tx and customize immunosuppression to recipient risk.

I will also discuss a new urine based diagnostic assay that can allow for completely non-invasive prediction of biopsy confirmed transplant rejection after renal allo-tx. Together, all these approaches provide a road map to proactive risk assessment and precision transplant patient management.

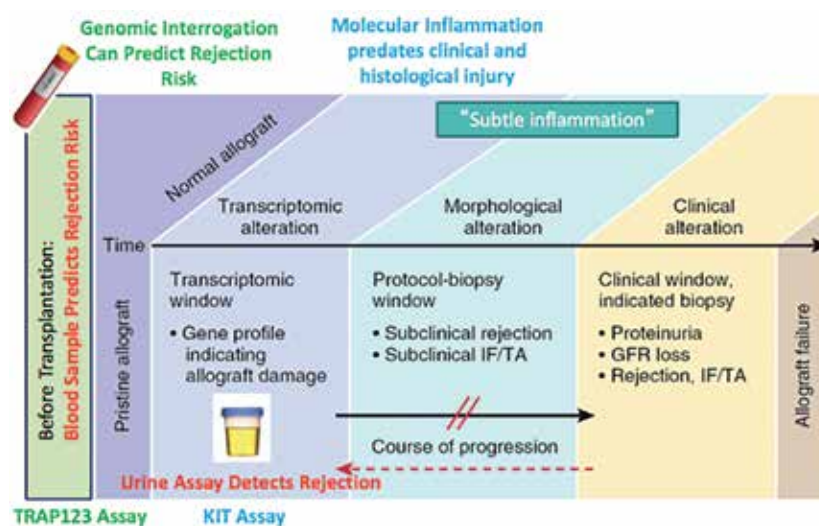


Figure: Precision Diagnostic Markers for Customizing Immune Risk and Immunosuppression Exposure

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Topic: Introducing innovations in transplantation – Joint session, in partnership with The Transplantation Society (TTS)
Room 212/213

Date: Sunday, April 14
From 16:30 until 18:30