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EDITORIAL

A World Kidney Day resolution

Welcome to the new year edition of ISN News. If it is not too late already, we would like to wish you a happy and prosperous 2016. The start of a new year is a chance to make resolutions, grasp exciting opportunities and face new challenges.

There is therefore no better time to highlight the importance of raising awareness about healthy kidneys. The World Kidney Day team has put forward the theme of kidney disease and children, focusing on how much adult kidney disease is actually initiated in childhood.

Kidney disease affects millions of people worldwide, including many children who may be at risk from an early age. It is therefore crucial that we encourage and facilitate education, early detection and a healthy lifestyle in children, to fight the increase of preventable kidney diseases and treat children worldwide as early as possible.

World Kidney Day is as popular as ever. During every campaign, we see members of the general public, doctors, politicians and celebrities come together to spread the word with fantastic enthusiasm whether it is through social media or by organizing activities in towns and cities globally.

This year will be no exception. So, make a resolution by lending your support to this year’s campaign, raise awareness about kidney health so everybody has access to the best care and information.

Philip Li and Guillermo Garcia Garcia from the World Kidney Day Steering Committee.

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News in brief

Elsevier- new publisher of KI

As of January 2016, Elsevier, a world-leading provider of scientific, technical and medical information products and services, is publishing Kidney International (KI).

“We are extremely pleased to have entered into this relationship with Elsevier,” says ISN Executive Director Luca Segantini. “Kidney International serves as ISN’s primary journal for disseminating original research in basic science and clinical medicine to our readers and members worldwide. We are excited about making our journal more readily accessible and discoverable through Elsevier’s innovative tools.”

The decision to publish with Elsevier was the result of a careful review process. ISN Global Education Chair David Harris, says: “We anticipate that Kidney International’s premier position amongst journals focused on the development and consequences of kidney disease will be strengthened through this new association, benefitting our authors, editors, reviewers, and ultimately our readership and members.”

This change in publisher will provide ISN with more resources to further expand on its mission of advancing nephrology care worldwide. “It will allow ISN to dedicate more resources to expanding its presence and its ability in advancing equitable and ethical kidney care through tailored education, research and advocacy in every region of the world,” says ISN President Adeera Levin.

Main changes

ISN members will receive an augmented and improved version of KI, KI Supplements, and, starting in early 2016, a new open access journal called Kidney International Reports (KI Reports). KI Reports is as an online journal publishing a broad range of articles encompassing clinical and translation research that will be freely accessible to ISN members, which will considerably expand the range of articles published by ISN journals. ISN members who want to publish in the open access KI will be able to do so at a reduced rate.

Effective with the January 2016 issue of Kidney International, the journal includes a new section titled Nephrology Digest, which presents summaries of and comments on recently published basic science and clinical investigations of interest to the journal’s global readership. This replaces access to Nature Reviews Nephrology, which as of January, ISN members no longer receive as part of their membership but are able to subscribe separately to at a reduced rate.

Additionally, ISN members have the option to subscribe at a special reduced rate to Seminars in Nephrology, which publishes scholarly review articles on subjects of current importance in the specialty. A 12-month online subscription to Seminars includes an encyclopedic archive of all topical issues from 2001 to the current year.

ISN is also taking the opportunity to streamline its educational offerings across publications, events and online, which will be further integrated to deliver a seamless experience around the Society’s strategic themes.

Membership

ISN Membership - make a difference

ISN connects science and humanitarian efforts. Through education, ISN is reaching out to global medical communities, giving them the knowledge and support to reduce the impact of kidney disease worldwide. Membership to ISN supports these activities and provides member specific benefits including exclusive eligibility for ISN capacity building programs, online and print subscription to Kidney International, online training and education, and reduced registration fees to ISN events. Membership is now free for trainees.

Not yet a member? Visit: www.theisn.org/join

Update your membership and profile

To ensure you receive all your benefits, please keep your profile up to date and renew your membership in a timely manner. Access or update your profile at: www.theisn.org/memberlogin
Kidney disease and children

World Kidney Day 2016 sets out to make us aware of how much adult kidney disease is actually initiated in childhood.

This year’s World Kidney Day (WKD) campaign emphasizes the importance of following kidney function and blood pressure in children and babies.

Chronic kidney disease (CKD) in children is caused by congenital abnormalities and inherited disorders. Premature babies or small-for-date newborns have a relatively increased risk for developing CKD later in life. Those with a high-risk birth weight and early childhood history of the disease should be watched closely to help detect early signs and provide effective treatment.

In regions where antenatal fetal ultrasounds are routine, many children with urologic abnormalities are identified before birth, permitting an early intervention. However, in much of the world, children with structural abnormalities are not identified until much later, when symptoms develop.

Many children with acute kidney injury (AKI) will develop sequelae that lead to hypertension and CKD later in childhood or adult life. Childhood deaths from a long list of communicable diseases inextricably involve the kidneys. Those who succumb to cholera and infectious diarrhea often die due to the shocking development of AKI.

“Successful therapy is feasible for advanced CKD in childhood; there is evidence that children fare better than adults, if they receive kidney replacement therapy including dialysis and transplantation, while only a minority of children may require this ultimate intervention,” explain ISN leaders Philip Li and Guillermo Garcia Garcia who are leading the campaign.

Databases such as the North American Pediatric Renal Trials and Collaborative Studies (NAPRTCS), the U.S. Renal Data System (USRDS) and the ERA-EDTA registry include information on pediatric end stage renal disease (ESRD) and CKD. Studies such as the ItalKid and Chronic Kidney Disease in Children, the Global Burden of Disease Study 2013, as well as registries that now exist in many countries provide important information but more is required.

More clinical registries that inform about the disease’s natural course will identify children likely to benefit from novel therapeutic approaches. Apart from disease-specific databases, there is also a need for treatment-specific registries. These are particularly relevant in areas where clinical trials are difficult to perform due to small patient numbers and a lack of industry interest, as well as for therapies in need of global development or improvement.

More children dying in the developing world

Death from kidney disease is higher in developing nations, and national and regional disparities in care and outcome must be addressed. Further, access to care is variable, depending on the region, the country and its infrastructure. By focusing on kidney

Disparities in data and gaps in care worldwide

Worldwide epidemiological data on the spectrum of CKD and AKI in children is currently limited, though increasing in scope. CKD prevalence in childhood is rare and has been variously reported at 15-74.7 per million children. This figure is influenced by regional and cultural factors, as well as the methodology used to generate data.
Guillermo Garcia Garcia

This is the 11th World Kidney Day, a joint initiative from ISN and the International Federation of Kidney Foundations (IFKF).

For further information about World Kidney Day visit: www.worldkidneyday.org

The ISN has initiated the Saving Young Lives Project, which aims to prevent AKI by treating infection promptly and/or delivering appropriate fluid and electrolyte therapy.

“This ongoing project in Sub-Saharan Africa and South East Asia, in which four kidney organizations participate (IPNA, ISN, ISPD and SKCF), focuses on establishing and maintaining centers to care for AKI patients and provide acute peritoneal dialysis. It links with the ISN’s Oby25 initiative, which calls on members to ensure by 2025 that nobody dies from preventable AKI unnecessarily,” says Philip Li.

Because there are disparities in access to care, effort is needed so that those children with kidney disease, wherever they live, may be treated effectively, irrespective of their geographic or economic circumstances,” explains Guillermo Garcia Garcia.

He adds: “Our hope is that World Kidney Day will inform the general public, policy makers and caregivers about the needs and possibilities surrounding kidney disease in childhood.”
CME in Palestine

Conference in Palestine sparks further kidney transplants in the region

ISN-sponsored Pan-Palestine Nephrology and Kidney Transplant Conference helped to share knowledge and led to more kidney transplants in the region.

Dr. Benjamin Thomson, from Queen’s University Division of Nephrology, Kingston General Hospital in Canada, believes the meeting will be “the start of many long-term relationships that will lead to new friendships and projects, advancing education in all areas of health care, especially for patients with kidney disease. Furthermore, the ongoing partnership with ISN will improve the delivery of clinical care across Palestine.”

Thomson adds: “the conference means that more meetings and educational commitments and connections are crucial to continue to alleviate the multiple challenges faced by the resilient and determined Palestinian physicians.”

Dr. Thomson was joined by a team of specialists including Dr. Middleton, Dr. Said and Dr. Hammad, who presented talks on renal pathology, kidney transplantation, chronic kidney disease, vasculitis, and peritoneal dialysis. The talks were supported by important contributions from Dr. Howida Shawki (Liverpool University), and Dr. Nabil Sultan and Dr. Peter Blake (Western Ontario University, London, Canada). The audience included medical students, residents, nurses, and specialist physicians.

This successful meeting was made possible thanks to a growing ISN-TTS Sister Renal Center partnership between the Royal Liverpool University Hospital, UK and the Al Shifa Hospital Gaza, Palestine. In January 2013, the collaboration led to the first kidney transplant operation and a further 22 kidney transplants in the region.
CME in Fiji

ISN CME takes AKI and CKD awareness to the South Pacific

A first ISN CME course took place in Fiji’s capital Suva, uniting the country’s medical community to talk about better kidney health.

This meeting was made possible thanks to a developing ISN Sister Renal Center partnership with Australia. Dr. Amrish Krishnan (Fiji) and Dr. Angus Ritchie (Australia) worked together to set up the course. Dr. Krishnan is the only formally trained nephrologist in the country.

The two-day course covered the policies and processes surrounding Chronic Kidney Disease (CKD) awareness, screening, and management as well as specific nephrology topics including approaches to Acute Kidney Injury (AKI). The country’s Health Minister, Hon Jone Usamate, addressing the audience on the first day, gave his commitment to further recognize CKD as part of its non-communicable disease (NCD) strategy.

A recent STEPS survey identified 30% of Fiji’s adult population as diabetic. The incidence of stage 5 CKD was recently estimated to be the highest in the world, at around 680/million. Facilities for treating early stage kidney disease remain limited. Significant efforts need to be put into weight control, NCD prevention and downstream treatment. This symposium provided a significant stimulus for this, on the back of considerable prior efforts.

Fiji has significant financial constraints and an under-developed healthcare system. It does have its own medical school, which has 40% of its enrolment from neighboring countries. Hemodialysis (HD) is available on a user pays basis only.

There are currently 107 dialysis patients but long-term survival is negatively impacted by financial constraints. Living donor transplants are performed in India and the government does provide some assistance with this. However, no data on transplant outcomes is available. There is concern that transplant loss is high once finances run low.

Peritoneal dialysis is not available either. Recently, AKI cases are treated in intensive care by acute HD. It is hoped that acute peritoneal treatment for AKI will be explored following the symposium.

The ISN Continuing Medical Education Program is part of the ISN Programs. Applications for ISN support should be received 6 to 3 months prior to the start of the meeting.

For further information about this initiative, visit: www.theisn.org/cme
A must for science writing

With support from Fondazione della Comunità Bergamasca, Fluorseals SPA and ISN, the Mario Negri Institute has run the Scientific Writing Academy (SWA) since 2012.

The workshop helps physicians and researchers from a range of backgrounds and specializations fine-tune their writing skills. Achieving and maintaining high standards in science writing is crucial to advancing research as much as sharing, testing and comparing new ideas and discoveries.

“We want to equip researchers with the tools to publish high quality papers in top international journals, an indispensable aspect of working in research,” says ISN Past President Giuseppe Remuzzi, who heads the Italian institute.

This time, a group of ten physicians and researchers gathered at Villa Camozzi in northern Italy, with Professor David Warnock from the University of Alabama, to learn how to write better by taking apart and rewriting an existing paper. Prof Warnock explains: “There was high interest and enthusiasm, which set the tone for the week.”

Participants Sidy Seck and Sreejith Parameswaran both believe they “left the academy inspired and motivated to write,” but also to do more basic research and launch projects in their own countries. For Sreejith Parameswaran, this would include “initiating studies focusing on Acute Kidney Injury (AKI), and highlighting important regional issues.” They also mentioned collaborating with their new international connections on projects that would compare the incidence and treatment of AKI in their respective regions.

Monica Cortinovis, who works at Mario Negri, underlined how useful it can be to hear from colleagues who come from different backgrounds and bring new perspectives to the paper. Kanishka Sharma, also of the institute, added that it is important to “present a long and complicated problem by dividing it into simpler pieces that are then seamlessly put together for the reader to understand.”

Participants now also believe they are able to use programs like EndNote better, which Sharma believes makes the writing process “smoother and less time consuming.” They have explored how to write cover letters, and are in a better position to write reviews and evaluate the work of others.

At the end of this one-week course, participants left better equipped to plan and outline papers in an organized, systematic way, and to incorporate their colleagues’ suggestions and observations. To come full circle, they will now pass this on to their colleagues around the world, in the hope that they, in turn, will communicate their findings even more effectively, continuing to move science forward, one paper at a time.
The ISN Clinical Research Program Committee is pleased to announce the results of the ISN Clinical Research Program’s second round of applications in 2015.

These grants help implement research projects to detect and manage non-communicable chronic diseases such as Chronic Kidney Disease (CKD), hypertension, diabetes and cardiovascular disease in low-to-middle income countries, involving local nephrologists, health workers and authorities.

After evaluating the 27 applications that were received, ISN is happy to fund four* of them.

- **Epidemiology of Acute Kidney Injury (AKI) at Intensive Care Units (ICUS) in Alexandria Teaching Hospitals**
  Dr. Samar Abd ElHafeez (Egypt)

- **Validation of eGFR in South Africans**
  Dr. June Fabian (South Africa)

- **AKI Epidemiology in South East Asia**
  Dr. Nattachai Srisawat (Thailand)

- **Study on the long term renal outcome of pediatric patients admitted in pediatric intensive care unit and post cardiac surgery**
  Dr. Sidharth Sethi (India)

* The successful application entitled “AKI Epidemiology in South East Asia,” Dr. Nattachai Srisawat (Thailand) and organized in the Asia Pacific region is co-funded by the Asian Pacific Society of Nephrology (APSN).

For more information about the ISN Clinical Research Program, visit: [www.theisn.org/cr](http://www.theisn.org/cr)
Dialysis in Africa

First dialysis course in Senegal hosts the Saving Young Lives project.

In December 2015, the Senegalese Society of Nephrology held its first course on dialysis in West Africa. More than 300 delegates attended this highly successful conference.

The course tackled peritoneal and hemodialysis and hosted side events for allied health professionals. Nephrology is developing fast in Senegal, where the CHU Le Dantec has become an important training center, hosting a number of fellows from neighboring regions. Knowledge and capacity is disseminated across the country. Senegal’s authorities have also just passed a transplant law, which will soon enable transplantation there.

One conference session was entirely devoted to the Saving Young Lives (SYL) project. Representatives from Ghana, Cameroon, Benin, Ivory Coast and Nigeria presented the challenges and opportunities of setting up a program for treating acute kidney injury (AKI) in Western Africa.

Various representatives from IPNA, ISPD and ISN were also present and emphasized the importance of developing peritoneal dialysis (PD) in Africa in the context of the 0by25 initiative.

At present, SYL has helped develop acute PD programs in eight centers where dialysis was previously unavailable. They are currently working to establish treatment in three other sites.

Between January 2013 and September 2015, 175 children and adults received dialysis in these centers. The project was cautious in reporting successful outcomes, restricting this to patients who left the hospital with fully recovered renal function. This occurred in 33% of cases, reflecting 58 young lives saved.

The initiative continues to face many challenges including the high costs of transporting consumables in a sustainable way. In many cases, the only solution is to use locally made supplies and improvising catheters.

A last issue is the Government’s lack of support for acute treatments, which limits the access to care for most of the citizens. The SYL project representatives remain very committed and will work towards solving various issues and looking at how the project could be expanded further in the future.
In Jamaica, there are only nine adult and two pediatric nephrologists. To help more patients, the Caribbean Institute of Nephrology, through the Department of Medicine at the University of the West Indies in Jamaica, has established outreach clinics to help rural patients. The focus is on recognizing kidney disease early and slowing progression to end stage renal disease.

The Caribbean Institute of Nephrology conducts screening programs and forums to educate the public. The Annual International Conference on Nephrology and Hypertension also brings together healthcare professionals from the Caribbean and the world, where ISN has sponsored speakers to attend. The Institute was instrumental in getting funding to start a dialysis unit in the central and southern part of the island, where there was no public unit. Some consultative assistance was given to other islands including Cayman, British Virgin, and Tobago.

In Jamaica, there is a predominance of hemodialysis treatment with a small number of patients on peritoneal dialysis. Home peritoneal dialysis (PD) is encouraged. More patients could be on PD if there was a more certain supply of consumables (fluids and lines). There are public dialysis units in Antigua and Barbuda, Anguilla, Barbados, St. Lucia, Cayman Islands, British Virgin Islands, Bahamas, Turks and Caicos. There are private units also in some of these areas. However, there is no transplantation and PD is non-existent or minimal.

Kidney transplants are carried out in Trinidad and Tobago, where peritoneal dialysis is also available. However, they are carried out sporadically in Jamaica. We hope to develop a sister transplant program since there is already an ISN Sister Program with the University of Michigan. This did not involve transplants.

The Caribbean Institute of Nephrology, through the University of the West Indies, has started a clinical training program in nephrology, with five nephrologists graduating since 2010. Assistance was given here through the ISN Sister Program with the University of Michigan. Dr. Davlin Dewar from Guyana trained in PD and transplantation in Australia in 2015 through the ISN Fellowship Program. So did ISN Fellow Kyaw Hoe who trained in PD in Mexico in 2014. ISN has also assisted two pediatric fellows from Jamaica to pursue nephrology training in Canada.

By developing a Caribbean Renal Registry, hypertension and diabetes have been highlighted as the leading causes of chronic kidney disease. More resources are now needed to engage regular data collection and personnel to enter the information.”

**Contribute your story and write to:** jheldorf@theisn.org, with the subject “ISN Voices”
ISN Affiliated & Collective Societies

Since our last edition, we have been actively involved with many of our Affiliated & Collective Societies.

Last November, during ASN Kidney Week, we organized our regular Affiliated Society meeting to gather all representatives so they could learn more about ISN and strengthen partnerships or create valuable training opportunities for nephrologists.

Celebrating collective membership

It is now over 10 years ago since the ISN Collective Membership was first launched. This type of membership is open to ISN Affiliated Societies. To be eligible for the special annual rate they must sign up at least 75% of their total membership. These members are entitled to all benefits of a regular individual membership.

So far, ISN Collective Member Societies include the Australian and New Zealand Society of Nephrology, Canadian Society of Nephrology, Dutch Federation of Nephrology, Hong Kong Society of Nephrology, Iranian Society of Nephrology, Israeli Society of Nephrology and Hypertension, Peruvian Society of Nephrology, Philippine Society of Nephrology, South African Renal Society, Spanish Society of Nephrology and Swiss Society of Nephrology.

Philippine Society of Nephrology strengthens its ties with ISN

We are delighted to announce that the Philippine Society of Nephrology has become a Collective Member Society, which will enhance and further develop the unique cooperation and partnership between our two societies ultimately benefiting patients suffering from kidney diseases.

Gina Nazareth, President of the Philippine Society of Nephrology says: “This collaboration means a lot to middle income countries like ours. Rest assured that we are one with you in advancing equitable and ethical access to kidney care.”

Flash news

Congratulations to the national nephrology societies of Jordan and Moldova who became ISN Affiliated Societies in December 2015. Also, the Israeli Society of Nephrology has signed up 20 fellows.

Visit: www.theisn.org/about-ison/partners-and-affiliates/affiliated-societies

ISN In-training membership has also increased from 476 in 2011 to over 1100 in 2015. More about free membership for nephrologists in-training, visit: www.theisn.org/join
The metabolome and microbiome connection

Kumar Sharma shares his views on the theme of the ISN Forefronts symposium - the interaction of the metabolome and microbiome and its link to kidney disease.

San Diego is the location of the first of two* ISN Forefronts Symposia in 2016. The city is the bed of much fundamental knowledge on metabolites that has led to many breakthroughs in understanding the topic.

“Alterations in the metabolism and gut microbiome may have very big impacts on the development of kidney disease,” explains Kumar Sharma, Director of the Institute of Metabolomic Medicine at the Center for Renal Translational Medicine University of California, USA.

“Clearly diabetic kidney disease, which is the number one cause of ESRD in many parts of the world, is linked to metabolic effects. However, only recently have we discovered some of the underpinnings of how profoundly metabolic changes dictate the progression of many types of renal disease,” he adds.

In addition to the traditional evaluation of genomics and proteins, the comprehensive study of metabolites and lipid molecules has resulted in a new way of thinking about diabetic kidney disease, and has had an impact on diagnosis and new therapeutics.

The gut microbiome is also being increasingly recognized to play a major role in many disease states. Recent studies have now linked specific alterations in the gut microbiome to disease-regulating metabolites. There are likely other roles of the gut microbiome and the metabolome that can affect epigenetics, cytokines, the immune system and even hemodynamic effects related to kidney disease.

Kumar believes the format of ISN Forefront meetings is “ideal to bring forward top notch scientific topics and leading investigators to be introduced to nephrology challenges. Forefronts will facilitate new and established nephrology investigators to meet and network with the leaders in the field.”

About the program, he adds: “I am particularly looking forward to the new areas of technology and systems biology approaches that will link different datasets from metabolomics and microbiome to clinical parameters. By identifying novel links, a new biology will emerge that has not been considered before.”

There is much more to look forward to including talks on metabolic flux, which will explain unique contributions to understand metabolic changes from bacteria to mammalian cells. Other topics will be new techniques in imaging mass spec, lipid biology and links of metabolism to cancer and cardiovascular disease.

Stay tuned for registration and abstract application deadlines in early 2016: www.isnforefronts.org/sandiego

*The other being Vienna, December 9-11 2016, on “Regulatory RNAs and the Kidney”
ISN

upcoming events

ISN events connect global medical communities, giving them the knowledge and support to reduce the impact of kidney disease worldwide.

ISN Forefronts 2016 – heading to Vienna, Austria

Mark your calendar for the ISN Forefronts Symposium taking place in Vienna, Austria from December 9 to 11, 2016. It is the second of two meetings of this kind taking place in 2016. This edition will focus on the theme of regulatory RNAs and the kidney.

The program will include experts in the fields and welcome nephrologists and professionals from related fields. An opportunity not to be missed as this event will surely involve much active debate.

In recent years, ISN Forefront Symposia have covered many hot topics such as systems biology, epigenetics, stems cells and regenerative medicine. These events have brought together scientists from many different disciplines to inform, and promote the exploration of new and innovative areas of kidney-related research, and encourage new collaborations.

Check out ISN Education webinars
As well as ISN events, you can also catch the latest ISN Education webinars, visit: www.theisn.org/education

ISN Nexus 2016
Translational immunology in kidney disease and new therapies for renal immunopathology
April 14-17, 2016, Berlin, Germany
www.isnnexus.org/berlin

ISN Forefronts Symposium 2016
The Metabolome and Microbiome in Kidney Disease
September 23-25, 2016, San Diego, California
www.isnforefronts.org/sandiego

ISN Forefronts Symposium 2016
Regulatory RNAs and the Kidney
December 9-11, 2016, Vienna, Austria
www.isnforefronts.org/vienna

ISN World Congress of Nephrology 2017
Sustainability and Diversity
April 21-25, 2017, Mexico City, Mexico
www.wcn2017.org

For the full list of ISN events visit www.theisn.org/events
ISN NEXUS SYMPOSIUM 2016
TRANSLATIONAL IMMUNOLOGY IN KIDNEY DISEASE
APRIL 14-17 2016
BERLIN GERMANY

Mark your calendar!

www.isnnexus.org/berlin