

Chinese American Society of Nephrology

NEWSLETTER

美洲華人腎臟學會

PRESIDENT'S MESSAGE



As the new president of CASN, I wish all CASN members a successful 2014 and a happy horse year. Under the leadership of Professor Dong Zheng, the CASN has grown extensively. We have had very successful annual meetings. Outstanding young investigators and trainees have been selected and they will be future stars in the field of nephrology. We have developed close relationship with sister societies. The members of CASN were invited to give lectures at different conferences each year. I like to take this opportunity to express my sincere appreciations for a fabulous job that Dong has done for CASN.

In the next two years, I like to further enhance research exchanges with our sister societies. We will not only continue to maintain our close relationship with the Chinese Society of Nephrology but will also develop more relationship with other societies of Nephrology including Hong Kong, Taiwan, Singapore and others. We will continue to have scientific exchanges but also open our discussions on the current clinical practice guidelines. We need to provide more opportunities for young nephrologists to present at national and international meetings. We need to guide them for their carrier development and help them to identify academic jobs. I believe our society can achieve much more but I need your support to accomplish all these tasks. One of the important supports from you is to send your membership fee and help for fund raising.

I like to announce that we are lucky to recruit Dr. Gong Rujun as a new board member. Dr. Gong is an Associate professor of Medicine at Brown University and is an expert in podocyte biology and glomerular disease. He will also serve as our new treasurer for the CASN. I would like to thank Li-Li Xiao who has been served as the treasurer for last several years and has made significant contributions to the society. She stepped down from the board because of her new and important responsibilities at Harvard Medical School.

New Year brings us both luckiness and challenges and I hope we will have more luckiness in 2014.

John Cijiang He, MD, PhD
Icahn School of Medicine at Mount Sinai

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News and Announcements

Congratulations to Dr. John Cijiang He for his election to the President of the CASN!

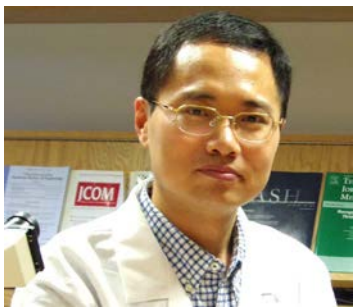
John Cijiang He, MD, PhD
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Professor of Pharmacology and Systems Therapeutics
Chief, Division of Nephrology, Mount Sinai Hospital
Icahn School of Medicine at Mount Sinai
New York, NY

Congratulations to Dr. Rujun Gong for his election to the Treasurer of the CASN!

Rujun Gong, MD, PhD
Associate Professor of Medicine
Division of Kidney Disease and Hypertension
Brown University
Providence, RI

Congratulations to Dr. Chunsun Dai of Nanjing University for his CASN Young Investigator Award and Dr. Ming Ma of Yale University for his CASN Outstanding Trainee Award!

Dr. Rujun Gong, MD, PhD Treasurer of the CASN

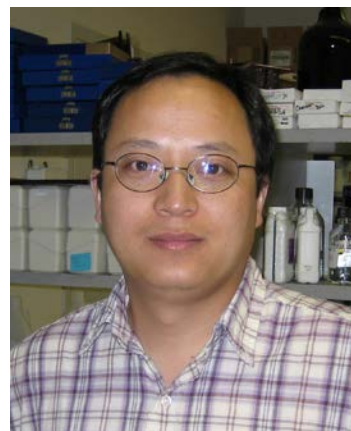


Dr. Rujun Gong is currently an Associate Professor of Medicine in the Division of Kidney Disease and Hypertension at Brown Medical School and Rhode Island Hospital. He earned his MD and PhD degree from Nanjing University in Nanjing, China, under the mentorship of Professor Zhi-

Hong Liu and Professor Lei-Shi Li. He completed the post-doctoral training at Brown Medical School. The overarching goal of Dr. Gong's research is to bring clinical questions to bench research and then translate bench research findings into clinical care of human kidney disease. His recent and ongoing research centers on the regulatory roles of glycogen synthase kinase 3b in the pathogenesis of glomerular disease, renal fibrogenesis and inflammation. His other research interests include epistasis in common kidney diseases; immunopathogenesis of lupus nephritis; and mechanisms of acute kidney injury and repair. He has published over 50 articles in peer-reviewed journals and authored book chapters. His research program has been amply funded by a variety of extramural sources, including industry, private foundations and the NIH. He is an active member of many committees including study sections at the NIH and the AAAS. He was honored the Young Investigator's Award by the CASN in 2011.

Dr. Gong is actively involved in the service, specifically the funding activities, for the CASN. CASN is fortunate to have him serve as the Treasurer for the society.

Dr. Chunsun Dai, 2013 CASN Young Investigator Awardee



Dr. Chunsun Dai is a graduate of Nanjing University School of Medicine. He obtained his MD, Ph.D degree in 2000. He joined Dr. Youhua Liu's laboratory at the Department of Pathology in University of Pittsburgh School of Medicine in

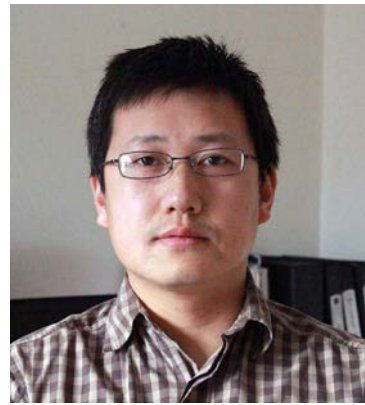
November of 2000 as a postdoctoral fellow. He was promoted to the rank of Research Assistant Professor in 2006. In 2010, he was recruited to Nanjing Medical University in China, where he was appointed as Jiangsu Province Specially Appointed Professor.

Dr. Dai's research focuses on dissecting the cellular and molecular mechanisms of kidney injury and disease. As an investigator in the University of Pittsburgh, he systematically investigated the role and mechanisms of the integrin-linked kinase (ILK), HGF receptor (c-met) and beta-catenin in podocyte biology and dysfunction. His work on the podocyte-specific knockout of the integrin-linked kinase (ILK) is both elegant and significant by showing the interaction of nephrin and ILK, indicating for the first time that the slit diaphragm and integrin signaling are coupled in podocytes. He also generated mouse models with podocyte-specific knockout of HGF receptor c-met and beta-catenin. His work on Wnt/beta-catenin signaling in podocyte injury provides novel insights into the pathogenesis of proteinuria in many common forms of glomerular diseases such as diabetic nephropathy. After he was recruited back to China, he focuses his research interest on mTOR signaling in kidney diseases. His work elucidates the pro-fibrotic role of Rheb in chronic kidney disease. He also demonstrates that Rictor/mTORC2 signaling activation is protective against cisplatin-induced tubular cell death in AKI. He has published more than 40 papers in peer-reviewed journals including JCI, JASN and KI. His research is supported by the National Science Foundation of China and the National 973 program project grant in China.

Dr. Ming Ma 2013 CASN Outstanding Trainee Awardee

Since the completion of his doctoral studies at the Institute of Molecular and Cell Biology in Singapore in 2007, Dr. Ming Ma has been further trained as a post-doctoral associate in Volume XVIII, No.1, January 2014

<http://casn-online.org/>



Dr. Stefan Somlo's laboratory at Yale University. Dr. Ma focuses on the role of cilia in autosomal dominant polycystic kidney disease (ADPKD). ADPKD is caused by mutations to the polycystin genes PKD1 and PKD2. These membrane-spanning proteins localize to solitary organelles that protrude from the apical surface of epithelial cells called primary cilia. It is believed that polycystins sense mechanical or chemical stimuli from the urine and control lumen diameter of kidney tubules. Either loss of the polycystins in ADPKD or complete removal of cilia leads to kidney cyst formation. Dr. Somlo and colleagues previously showed that kidney cyst formation due to the loss of cilia is much slower than that of the loss of polycystins. This observation is intriguing, since one might have expected the cystic burden of cilia mutants to be similar to the cystic burden of polycystin mutants. To better understand this observation, Dr. Somlo, Dr. Ma, and colleagues created a genetic mouse model of combined loss of cilia and loss of polycystins. Surprisingly, loss of cilia in the context of polycystin knockout suppressed cyst growth and markedly reduced cystic burden in ADPKD. These data demonstrated the existence of a novel pathway, defined by polycystin-dependent inhibition and cilia-dependent activation that promotes rapid cyst growth. Identifying the signaling proteins in the pathway could yield novel targets for the treatment of ADPKD. Based on his contributions to the field of PKD, Dr. Ma was honored as an Outstanding Trainee in the CASN 2013 annual meeting.

Department of Nephrology, Kaohsiung Medical University, Kaohsiung, Taiwan

**“The Leader of Promoting Paradigm Shift –
from Dialysis to Integrated Chronic
Kidney Disease Care in Taiwan”**



Founded in 1985, as the pioneer to implementing Hemodialysis (HD) and Peritoneal Dialysis (PD) in Southern Taiwan, Department of Nephrology at Kaohsiung Medical University Hospital (KMUH) staffed by quite qualified and dedicated professionals has dominated the developments of Chronic Kidney Disease (CKD) prevention and educational programs in Taiwan since the past decade. Due to the prevalence and incidence of CKD have increased worldwide in recent years and continued to escalate at an alarming rate, the consistently increasing demand for renal care is as a result. Therefore, our two main goals were, to lower the incidence rate of End-Stage Renal Disease (ESRD) of Taiwan, as well as to develop standard protocols of running a CKD prevention center not only for domestic but also for foreign medical institutions. After ten years' continuous efforts and with prominent results, we have been awarded “the first degree of CKD care institute” by government. To highlight our contributions from three major perspectives:

Increasing CKD Care Awareness

The Department of Renal Care of KMU was established in 2002 under the leadership of Prof. Hung-Chun Chen, MD, PhD., the Incumbent President of Taiwan Society of Nephrology (TSN) and the Counselor of Asian Pacific Society of Nephrology (APSN).



This was the first and the only institute to provide advanced on-the-job training courses by means of researching, teaching, practice



and service capabilities for renal care personnel. All of the graduates devoted themselves to promote the concepts of CKD care and kidney health around the country.

In addition to clinical practice and talent training, the characteristics of our CKD care included performing the related researches vigorously, helping to setup guidelines of CKD care, urine-screening thousands of people to learn CKD epidemiology, educating and encouraging medical groups of general practice to take part in CKD care programs through hundreds of speeches and onsite visits, and organizing World Kidney Day (WKD) island-widely by cooperating with TSN and the health administration.

Education and Exchange

We held *The 3rd AFCKDI (Asian Forum of CKD initiative)* in 2009, which we introduced our CKD education experiences to the experts from all over the world at the first time.



Since then, our team has been frequently invited to deliver speeches and share our knowledge for CKD care abroad. In 2012 and in 2013, we also organized *The 5th ISHD (International Society for Hemodialysis) Annual Meeting* and *The 6th ISPD-APCM (International Society for Peritoneal Dialysis, Asia-Pacific Chapter Meeting)*.




Over 1000 professionals attended each one of these congresses. Thus, we had ample experiences in planning for and setting up international

conference including setting forth a practical agenda, making logistical arrangements and designing instructive and enjoyable programs that would enrich all in attendance.



We appreciated experience sharing internationally. Nephrologists could benefit immeasurably from having interchange with renal specialists from around the world and this would certainly stimulate research in this important field.

On the other hand, launching the CKD care program by Bureau of National Health Insurance (BNHI), this demonstrated a positive result that year by year there was a downward trend in the incidence of ESRD, also showed a promisingly successful achievement in Taiwan. Moreover, the International Society of Nephrology (ISN) recognized this valuable experience and took Taiwan as an example to lobby the WHO to enlist renal disease as one of the major non-communicable diseases for prevention.



AWARENESS OF KIDNEY DISEASE LOW DESPITE AFFECTING 500 MILLION PEOPLE WORLDWIDE AND GLOBAL COSTS SURPASSING \$1 TRILLION THIS DECADE

Therefore, governments should request that kidney disease be included in the WHO's global strategy for Non-Communicable Diseases.

Two Case Studies Underscore the Power of Simple Strategies to Improve Outcomes

Case Study 1: Taiwan

In 2005, Taiwan had the highest incidence of end stage kidney disease in the world. Over a 3-year period that incidence was slashed by 10% through a multifaceted plan that included a nationwide CKD detection and prevention program, a policy for prohibiting the popular use of Chinese herbs known to contribute to kidney damage, and the introduction of multidisciplinary care for people with CKD.

We expected to take our future to a higher level and reach our goal of becoming the Center of Excellence (COE) in CKD care and research in Asia.

ICKD (CKD Cloud Care) Initiative

We designed a platform combined with a website (www.ickd.org.tw) and a mobile application (App), to CKD patients as a self-care tool by utilizing the latest techniques.



It was implemented with three approaches: medical services, digital learning, and Information and communications technology (ICT), to reinforce the effectiveness of national CKD case management. Within iCKD, there were two target populations: CKD patients (or their family, caregivers or high-potential groups) & renal-specialized nurses who were in charge of educating patients.



To improve the quality of CKD care for patients, we provide a solid interaction, instant feedback and personalized service. For healthcare providers, we utilize e-learning platform to systemically deliver

the updated knowledge to medical institutions or those primary care facilities to add value on CKD treatment in a collaborative fashion.



Table 1: Business Scope in 2013

Team members	16 Nephrologists, 48 Dialysis nurses, 5 CKD-educational nurses, (dietitians, pharmacists, IT engineers, social workers)
Beds	110 (both for OPD dialysis and In-patient)
Patient Numbers	HD: 250 PD: 90 CKD: 1500 (on record)
OPD	6500 patient/month
Renal Function Exam.	300 patient/month (ultra-sound & biopsy)



Meeting Announcements

Nephrology Update West Lake Forum
Hangzhou, China



For more information, please visit:
<http://www.westlakeforum.net/list.aspx?pid=17>

Acknowledgements

We thank the following sponsors for their generous support of the educational activities of CASN.

