

## **This Month's Highlights**

### **UP FRONT MATTERS**

#### **Editorials**

- 2037 **New Ways of Finding New Genes for Old Diseases**

Richard N. Sandford

• See related article by Besse et al. (pp. 2091–2102).

- 2039 **Another Tool in the Fight Against Phosphate Toxicity: Where Will It Fit and What Does It Tell Us about Phosphate Homeostasis?**

Eleanor Lederer

• See related article by Thomas et al. (pp. 2128–2139).

- 2040 **Fistula Interventions: Less Is More**

Charmaine E. Lok

• See related article by Lee et al. (pp. 2209–2218).

- 2042 **Tracking HLA Antibody Changes among Kidney Waitlist Candidates: One Protocol May Not Fit All**

Annette M. Jackson and Miriam Manook

• See related article by Togninalli et al. (pp. 2262–2274).

#### **Obituary**

- 2045 **In Remembrance of Thomas F. Ferris, MD, Former ASN President (1987–1988)**

Thomas Hostetter and Karl A. Nath

#### **Perspective**

- 2047 **New Trends in Regenerative Medicine: Reprogramming and Reconditioning**

Michael S. Goligorsky

#### **Reviews**

- 2052 **Intradialytic Cerebral Hypoperfusion as Mechanism for Cognitive Impairment in Patients on Hemodialysis**

Dawn F. Wolfgram

- 2060 **Iron Chelation as a Potential Therapeutic Strategy for AKI Prevention**

Shreyak Sharma and David E. Leaf

### **BASIC RESEARCH**

- 2073 **Integrin-Linked Kinase Deficiency in Collecting Duct Principal Cell Promotes Necroptosis of Principal Cell and Contributes to Kidney Inflammation and Fibrosis**

Ming Huang, Shuai Zhu, Huihui Huang, Jinzhao He, Kenji Tsuji, William W. Jin, Dongping Xie, Onju Ham, Diane E. Capen, Weining Lu, Teodor G. Păunescu, Baoxue Yang, and Hua A. Jenny Lu

- 2091 ★ **ALG9 Mutation Carriers Develop Kidney and Liver Cysts**

Whitney Besse, Alex R. Chang, Jonathan Z. Luo, William J. Triffo, Bryn S. Moore, Ashima Gulati, Dustin N. Hartzel, Shrikant Mane, Regeneron Genetics Center, Vicente E. Torres, Stefan Somlo, and Tooraj Mirshahi

• See related editorial by Sandford (pp. 2037–2039).

- 2103 **Cell-Autonomous Hedgehog Signaling Is Not Required for Cyst Formation in Autosomal Dominant Polycystic Kidney Disease**

Ming Ma, Emilie Legué, Xin Tian, Stefan Somlo, and Karel F. Liem Jr.

- 2113 **Synergistic Genetic Interactions between *Pkhd1* and *Pkd1* Result in an ARPKD-Like Phenotype in Murine Models**

Rory J. Olson, Katharina Hopp, Harrison Wells, Jessica M. Smith, Jessica Furtado, Megan M. Constans, Diana L. Escobar, Aron M. Geurts, Vicente E. Torres, and Peter C. Harris

- 2128 ★ **Pharmacological Npt2a Inhibition Causes Phosphaturia and Reduces Plasma Phosphate in Mice with Normal and Reduced Kidney Function**

Linto Thomas, Jianxiang Xue, Sathish Kumar Murali, Robert A. Fenton, Jessica A. Dominguez Rieg, and Timo Rieg

• See related editorial by Lederer (pp. 2039–2040).

**2140** **Tolerogenic Dendritic Cells Attenuate Experimental Autoimmune Antimyeloperoxidase Glomerulonephritis**  
Dragana Odobasic, Virginie Oudin, Kenji Ito, Poh-Yi Gan, A. Richard Kitching, and Stephen R. Holdsworth

**2159** ★ **Single-Cell Transcriptomic Map of the Human and Mouse Bladders**  
Zhenyuan Yu, Jinling Liao, Yang Chen, Chunlin Zou, Haiying Zhang, Jiwen Cheng, Deyun Liu, Tianyu Li, Qingyun Zhang, Jiaping Li, Xiaobo Yang, Yu Ye, Zhiguang Huang, Xinyang Long, Rirong Yang, and Zengnan Mo

**2177** **Protection of Cystinotic Mice by Kidney-Specific Megalin Ablation Supports an Endocytosis-Based Mechanism for Nephropathic Cystinosis Progression**  
Virginie Janssens, Héloïse P. Gaide Chevronnay, Sandrine Marie, Marie-Françoise Vincent, Patrick Van Der Smissen, Nathalie Nevo, Seppo Vainio, Rikke Nielsen, Erik I. Christensen, François Jouret, Corinne Antignac, Christophe E. Pierreux, and Pierre J. Courtoy

**2191** **AT1R-AT2R-RXFP1 Functional Crosstalk in Myofibroblasts: Impact on the Therapeutic Targeting of Renal and Cardiac Fibrosis**  
Bryna S. M. Chow, Martina Kocan, Matthew Shen, Yan Wang, Lei Han, Jacqueline Y. Chew, Chao Wang, Sanja Bosnyak, Katrina M. Mirabito-Colafella, Giannie Barsha, Belinda Wigg, Elizabeth K. M. Johnstone, Mohammed A. Hossain, Kevin D. G. Pflieger, Kate M. Denton, Robert E. Widdop, Roger J. Summers, Ross A. D. Bathgate, Tim D. Hewitson, and Chrisan S. Samuel

### CLINICAL EPIDEMIOLOGY

**2209** ★ **Long-Term Outcomes of Arteriovenous Fistulas with Unassisted versus Assisted Maturation: A Retrospective National Hemodialysis Cohort Study**  
Timmy Lee, Joyce Zhang Qian, Yi Zhang, Mae Thamer, and Michael Allon  
• See related editorial by Lok (pp. 2040–2042).

**2219** **Influence of Mortality on Estimating the Risk of Kidney Failure in People with Stage 4 CKD**  
Pietro Ravani, Marta Fiocco, Ping Liu, Robert R. Quinn, Brenda Hemmelgarn, Matthew James, Ngan Lam, Braden Manns, Matthew J. Oliver, Giovanni F.M. Strippoli, and Marcello Tonelli

### CLINICAL RESEARCH

**2229** **Effect of Canagliflozin on Renal and Cardiovascular Outcomes across Different Levels of Albuminuria: Data from the CANVAS Program**  
Brendon L. Neuen, Toshiaki Ohkuma, Bruce Neal, David R. Matthews, Dick de Zeeuw, Kenneth W. Mahaffey, Greg Fulcher, Qiang Li, Meg Jardine, Richard Oh, Hiddo L. Heerspink, and Vlado Perkovic

**2243** **Piperacillin/Tazobactam and Antibiotic-Associated Acute Kidney Injury in Critically Ill Children**  
Emily L. Joyce, Sandra L. Kane-Gill, Priyanka Priyanka, Dana Y. Fuhrman, and John A. Kellum

**2252** ★ **Serious Illness Treatment Preferences for Older Adults with Advanced CKD**  
Nicolas Awad Baddour, Edward D. Siew, Cassianne Robinson-Cohen, Huzaifah Salat, Olivia J. Mason, Thomas G. Stewart, Mohana Karlekar, Maie H. El-Sourady, Loren Lipworth, and Khaled Abdel-Kader

**2262** ★ **Pretransplant Kinetics of Anti-HLA Antibodies in Patients on the Waiting List for Kidney Transplantation**  
Matteo Togninalli, Daisuke Yoneoka, Antonios G.A. Kolios, Karsten Borgwardt, and Jakob Nilsson  
• See related editorial by Jackson and Manook (pp. 2042–2044).

### LETTER TO THE EDITOR

**2275** **Fecal Immunochemical Screening for Advanced Colorectal Neoplasia in Patients with CKD: Accurate or Not?**  
Michael G. Collins, Erin L. Symonds, Peter A. Bampton, and P. Toby Coates

**2276** **Authors' Reply**  
Germaine Wong, Richard L. Hope, Kirsten Howard, Jeremy R. Chapman, Antoni Castells, Simon D. Roger, Michael J. Bourke, Petra Macaskill, Robin Turner, Gabrielle Williams, Wai H. Lim, Charmaine E. Lok, Fritz Diekman, Nicholas Cross, Shaundee Sen, Richard D.M. Allen, Steven J. Chadban, Carol A. Pollock, Allison Tong, Armando Teixeira-Pinto, Jean Y.H. Yang, Narelle Williams, Eric Au, Anh Kieu, Laura James, and Jonathan C. Craig