

## This Month's Highlights

## UP FRONT MATTERS

### Editorials

**1367 Tell-Tale Signs of Perturbed Podocytes**

Kumar Sharma

- See related article by Burger et al. (pp. 1401–1407).

**1369 Tick Tock: Time to Recognize the Kidney Clock**

Michelle L. Gumz

- See related article by Tokonami et al. (pp. 1430–1439).

**1371 BP Targets in Renal Transplant Recipients: Too High or Too Low?**

Hallvard Holdaas and Alan G. Jardine

- See related article by Carpenter et al. (pp. 1554–1562).

**1373 B Cells and Kidney Transplantation: Beyond Antibodies**

Anita Mehrotra and Peter S. Heeger

- See related article by Cherukuri et al. (pp. 1575–1585).

### Brief Reviews

**1375 Trafficking to the Apical and Basolateral Membranes in Polarized Epithelial Cells**

Emily H. Stoops and Michael J. Caplan

**1387 Beyond Tissue Injury—Damage-Associated Molecular Patterns, Toll-Like Receptors, and Inflammasomes Also Drive Regeneration and Fibrosis**

Hans-Joachim Anders and Liliana Schaefer

## BRIEF COMMUNICATIONS

**1401 Urinary Podocyte Microparticles Identify Prealbuminuric Diabetic Glomerular Injury**

Dylan Burger, Jean-Francois Thibodeau, Chet E. Holterman, Kevin D. Burns, Rhian M. Touyz, and Christopher R.J. Kennedy

- See related editorial by Sharma (pp. 1367–1369).

**1408 Phenotypic Expansion of DGKE-Associated Diseases**

Rik Westland, Monica Bodria, Alba Carrea, Sneha Lata, Francesco Scolari, Veronique Fremeaux-Bacchi, Vivette D. D'Agati, Richard P. Lifton, Ali G. Gharavi, Gian Marco Ghiggeri, and Simone Sanna-Cherchi

## BASIC RESEARCH

**1415 Role of Podocyte B7-1 in Diabetic Nephropathy**

Paolo Fiorina, Andrea Vergani, Roberto Bassi, Monika A. Niewczas, Mehmet M. Altintas, Marcus G. Pezzolesi, Francesca D'Addio, Melissa Chin, Sara Tezza, Moufida Ben Nasr, Deborah Mattinzoli, Masami Ikehata, Domenico Corradi, Valerie Schumacher, Lisa Buwall, Chih-Chuan Yu, Jer-Ming Chang, Stefano La Rosa, Giovanna Finzi, Anna Solini, Flavio Vincenti, Maria Pia Rastaldi, Jochen Reiser, Andrzej S. Krolewski, Peter H. Mundel, and Mohamed H. Sayegh

**1430 Local Renal Circadian Clocks Control Fluid–Electrolyte Homeostasis and BP**

Natsuko Tokonami, David Mordasini, Sylvain Pradervand, Gabriel Centeno, Céline Jouffe, Marc Maillard, Olivier Bonny, Frédéric Gachon, R. Ariel Gomez, Maria Luisa S. Sequeira-Lopez, and Dmitri Firsov

- See related editorial by Gumz (pp. 1369–1371).

**1440 MicroRNA-17~92 Is Required for Nephrogenesis and Renal Function**

April K. Marrone, Donna B. Stolz, Sheldon I. Bastacky, Dennis Kostka, Andrew J. Bodnar, and Jacqueline Ho

**1453 Colon-Specific Deletion of Epithelial Sodium Channel Causes Sodium Loss and Aldosterone Resistance**

Sumedha Malsure, Qing Wang, Roch-Philippe Charles, Chloe Sergi, Romain Perrier, Birgitte Mønster Christensen, Marc Maillard, Bernard C. Rossier, and Edith Hummler

**1465 Structure of the Kidney Slit Diaphragm Adapter Protein CD2-Associated Protein as Determined with Electron Microscopy**

Brian D. Adair, Mehmet M. Altintas, Clemens C. Möller, M. Amin Arnaout, and Jochen Reiser

**1474 ★Epac-Rap Signaling Reduces Oxidative Stress in the Tubular Epithelium**

Geurt Stokman, Yu Qin, Tijmen H. Booij, Sreenivasa Ramaiahgari, Marie Lacombe, M. Emmy M. Dolman, Kim M.A. van Dorenmalen, Gwendoline J.D. Teske, Sandrine Florquin, Frank Schwede, Bob van de Water, Robbert J. Kok, and Leo S. Price

**1486 ★Galectin-1 Upregulates CXCR4 to Promote Tumor Progression and Poor Outcome in Kidney Cancer**

Chang-Shuo Huang, Shye-Jye Tang, Ling-Yen Chung, Cheng-Ping Yu, Jar-Yi Ho, Tai-Lung Cha, Chii-Cheng Hsieh, Hsiao-Hsien Wang, Guang-Huan Sun, and Kuang-Hui Sun

**1496 Severe Renal Mass Reduction Impairs Recovery and Promotes Fibrosis after AKI**

Aaron J. Polichnowski, Rongpei Lan, Hui Geng, Karen A. Griffin, Manjeri A. Venkatachalam, and Anil K. Bidani

**1509 Phosphoproteomic Analysis Reveals Regulatory Mechanisms at the Kidney Filtration Barrier**

Markus M. Rinschen, Xiongwu Wu, Tim König, Trairak Pisitkun, Henning Hagmann, Caroline Pahmeyer, Tobias Lamkemeyer, Priyanka Kohli, Nicole Schnell, Bernhard Schermer, Stuart Dryer, Bernard R. Brooks, Pedro Beltrao, Marcus Krueger, Paul T. Brinkkoetter, and Thomas Benzinger

**1523 ★Angiotensin II Dose-Dependently Stimulates Human Renal Proximal Tubule Transport by the Nitric Oxide/Guanosine 3',5'-Cyclic Monophosphate Pathway**

Ayumi Shirai, Osamu Yamazaki, Shoko Horita, Motonobu Nakamura, Nobuhiko Satoh, Hideomi Yamada, Masashi Suzuki, Akihiko Kudo, Hayato Kawakami, Franz Hofmann, Akira Nishiyama, Haruki Kume, Yutaka Enomoto, Yukio Homma, and George Seki

**CLINICAL EPIDEMIOLOGY**

**1533 ★Prevalence of CKD and Its Relationship to eGFR-Related Genetic Loci and Clinical Risk Factors in the SardiNIA Study Cohort**

Antonello Pani, Jennifer Bragg-Gresham, Marco Masala, Doloretta Piras, Alice Atzeni, Maria G. Pilia,

Liana Ferrelì, Lenuta Balaci, Nicolò Curreli, Alessandro Delitala, Francesco Loi, Gonçalo R. Abecasis, David Schlessinger, and Francesco Cucca

**1545 ★Association of Urinary Injury Biomarkers with Mortality and Cardiovascular Events**

Mark J. Sarnak, Ronit Katz, Anne Newman, Tamara Harris, Carmen A. Peralta, Prasad Devarajan, Michael R. Bennett, Linda Fried, Joachim H. Ix, Suzanne Satterfield, Eleanor M. Simonsick, Chirag R. Parikh, and Michael G. Shlipak, for the Health ABC Study

**1554 BP, Cardiovascular Disease, and Death in the Folic Acid for Vascular Outcome Reduction in Transplantation Trial**

Myra A. Carpenter, Alin John, Matthew R. Weir, Stephen R. Smith, Lawrence Hunsicker, Bertram L. Kasiske, John W. Kusek, Andrew Bostom, Anastasia Ivanova, Andrew S. Levey, Scott Solomon, Todd Pesavento, and Daniel E. Weiner

• See related editorial by Holdaas and Jardine (pp.1371–1373).

**1564 ★Patient-Reported and Actionable Safety Events in CKD**

Jennifer S. Ginsberg, Min Zhan, Clarissa J. Diamantidis, Corinne Woods, Jingjing Chen, and Jeffrey C. Fink

**CLINICAL RESEARCH**

**1575 Immunologic Human Renal Allograft Injury Associates with an Altered IL-10/TNF- $\alpha$  Expression Ratio in Regulatory B Cells**

Aravind Cherukuri, David M. Rothstein, Brendan Clark, Clive R. Carter, Adam Davison, Maria Hernandez-Fuentes, Eric Hewitt, Alan D. Salama, and Richard J. Baker

• See related editorial by Mehrotra and Heeger (pp.1373–1374).

**1586 Urinary Cell mRNA Profiles and Differential Diagnosis of Acute Kidney Graft Dysfunction**

Marie Maignon, Ruchuang Ding, Darshana M. Dadhania, Franco B. Mueller, Choli Hartono, Catherine Snopkowski, Carol Li, John R. Lee, Daniel Sjoberg, Surya V. Seshan, Vijay K. Sharma, Hua Yang, Bakr Nour, Andrew J. Vickers, Manikkam Suthanthiran, and Thangamani Muthukumar

**1599 Longitudinal Changes of Cardiac Structure and Function in CKD (CASCADE Study)**

Qi-Zhe Cai, Xiu-Zhang Lu, Ye Lu, and Angela Yee-Moon Wang