

This Month's Highlights

UP FRONT MATTERS

Editorials

- 1 **Against TREATing All Patients Alike: Lessons from an FDA Advisory Committee Meeting**
Wolfgang C. Winkelmayr
- 2 **Risks and Benefits of Sweet Pee**
Florian Lang
• See related articles by Vallon et al. (pp. 104–112) and Ly et al. (pp. 113–123).
- 5 **Klotho: An Elixir of Youth for the Vasculature?**
Rukshana Shroff and Catherine M. Shanahan
• See related article by Hu et al. (pp. 124–136).
- 7 **Targeting Complement C5 in Atypical Hemolytic Uremic Syndrome**
David J. Salant
• See related article by Goicoechea de Jorge et al. (pp. 137–145).
- 9 **Is Cystatin C the Answer to Detecting Progression in CKD?**
Paul E. de Jong and Ron T. Gansevoort
• See related article by Peralta et al. (pp. 147–155).
- 11 **Navigating the Challenges of Fibrosis Assessment: Land in Sight?**
Agnes B. Fogo and Charles E. Alpers
• See related article by Farris et al. (pp. 176–186).

Brief Reviews

- 14 **Adenosine Generation and Signaling during Acute Kidney Injury**
Jessica D. Bauerle, Almut Grenz, Jae-Hwan Kim, H. Thomas Lee, and Holger K. Eltzschig
- 21 **Macrophages in Renal Disease**
Yiping Wang and David C.H. Harris

Special Article

- 28 **Acute Kidney Injury in Older Adults**
Sharon Anderson, Basil Eldadah, Jeffrey B. Halter, William R. Hazzard, Jonathan Himmelfarb, Frances McFarland Horne, Paul L. Kimmel, Bruce A. Molitoris, Mahadev Murthy, Ann M. O'Hare, Kenneth E. Schmader, and Kevin P. High

Science in Renal Medicine

- 39 **Telomeres and Telomerase in Renal Health**
Lauren P. Wills and Rick G. Schnellmann

BRIEF COMMUNICATION

- 43 ★ **MCP-1 Contributes to Arteriovenous Fistula Failure**
Julio P. Juncos, Joseph P. Grande, Lu Kang, Allan W. Ackerman, Anthony J. Croatt, Zvonimir S. Katusic, and Karl A. Nath

BASIC RESEARCH

- 49 **Mineralocorticoids Stimulate the Activity and Expression of Renal H⁺,K⁺-ATPases**
Megan M. Greenlee, I. Jeanette Lynch, Michelle L. Gumz, Brian D. Cain, and Charles S. Wingo
- 59 **Calcitonin Has a Vasopressin-like Effect on Aquaporin-2 Trafficking and Urinary Concentration**
Richard Bouley, Hua A.J. Lu, Paula Nunes, Nicolas Da Silva, Margaret McLaughlin, Ying Chen, and Dennis Brown
- 73 **Uncovering Genes and Regulatory Pathways Related to Urinary Albumin Excretion**
Rachael S. Hageman, Magalie S. Leduc, Christina R. Caputo, Shing-Wern Tsaih, Gary A. Churchill, and Ron Korstanje

- 82 **Lack of Renal Dopamine D₅ Receptors Promotes Hypertension**
Laureano Asico, Xiaojie Zhang, Jifu Jiang, David Cabrera, Crisanto S. Escano, David R. Sibley, Xiaoyan Wang, Yu Yang, Roslyn Mannon, John E. Jones, Ines Armando, and Pedro A. Jose
- 90 **Blockade of Wnt/ β -Catenin Signaling by Paricalcitol Ameliorates Proteinuria and Kidney Injury**
Weichun He, Young Sun Kang, Chunsun Dai, and Youhua Liu
- 104 ★ **SGLT2 Mediates Glucose Reabsorption in the Early Proximal Tubule**
Volker Vallon, Kenneth A. Platt, Robyn Cunard, Jana Schroth, Jean Whaley, Scott C. Thomson, Hermann Koepsell, and Timo Rieg
• See related editorial by Lang (pp. 2–5).
- 113 ★ **The Sweet Pee Model for SglT2 Mutation**
Joseph P. Ly, Tuncer Onay, Karen Sison, Gavasker Sivaskandarajah, Venkata Sabbiseti, Lingli Li, Joseph V. Bonventre, Ann Flenniken, Neal Paragas, Jon M. Barasch, S. Lee Adamson, Lucy Osborne, Janet Rossant, Jurgen Schnermann, and Susan E. Quaggin
• See related editorial by Lang (pp. 2–5).
- 124 **Klotho Deficiency Causes Vascular Calcification in Chronic Kidney Disease**
Ming Chang Hu, Mingjun Shi, Jianning Zhang, Henry Quiñones, Carolyn Griffith, Makoto Kuro-o, and Orson W. Moe
• See related editorial by Shroff and Shanahan (pp. 5–7).
- 137 **The Development of Atypical Hemolytic Uremic Syndrome Depends on Complement C5**
Elena Goicoechea de Jorge, Paolo Macor, Danielle Paixão-Cavalcante, Kirsten L. Rose, Franco Tedesco, H. Terence Cook, Marina Botto, and Matthew C. Pickering
• See related editorial by Salant (pp. 7–9).

CLINICAL EPIDEMIOLOGY

- 147 ★ **Cystatin C Identifies Chronic Kidney Disease Patients at Higher Risk for Complications**
Carmen A. Peralta, Ronit Katz, Mark J. Sarnak, Joachim Ix, Linda F. Fried, Ian De Boer, Walter Palmas, David Siscovick, Andrew S. Levey, and Michael G. Shlipak
• See related editorial by de Jong and Gansevoort (pp. 9–11).
- 156 ★ **Preoperative Proteinuria Predicts Adverse Renal Outcomes after Coronary Artery Bypass Grafting**
Tao-Min Huang, Vin-Cent Wu, Guang-Huar Young, Yu-Feng Lin, Chih-Chung Shiao, Pei-Chen Wu, Wen-Yi Li, Hsi-Yu Yu, Fu-Chang Hu, Jou-Wei Lin, Yih-Shang Chen, Yen-Hung Lin, Shoei-Shen Wang, Ron-Bin Hsu, Fan-Chi Chang, Nai-Kuan Chou, Tzong-Shinn Chu, Yu-Chang Yeh, Pi-Ru Tsai, Jenq-Wen Huang, Shuei-Liong Lin, Yung-Ming Chen, Wen-Je Ko, and Kwan-Dun Wu, on behalf of the National Taiwan University Hospital Study Group of Acute Renal Failure

CLINICAL RESEARCH

- 165 **MCP-1 Gene Activation Marks Acute Kidney Injury**
Raj Munshi, Ali Johnson, Edward D. Siew, T. Alp Ikizler, Lorraine B. Ware, Mark M. Wurfel, Jonathan Himmelfarb, and Richard A. Zager
- 176 ★ **Morphometric and Visual Evaluation of Fibrosis in Renal Biopsies**
Alton B. Farris, Catherine D. Adams, Nicole Brousaides, Patricia A. Della Pelle, A. Bernard Collins, Ellie Moradi, R. Neal Smith, Paul C. Grimm, and Robert B. Colvin
• See related editorial by Fogo and Alpers (pp. 11–13).
- 187 **Postinfectious Glomerulonephritis in the Elderly**
Samih H. Nasr, Mary E. Fidler, Anthony M. Valeri, Lynn D. Cornell, Sanjeev Sethi, Amy Zoller, Michael B. Stokes, Glen S. Markowitz, and Vivette D. D'Agati