This Month’s Highlights

UP FRONT MATTERS

Editorials
1 Against TREATing All Patients Alike: Lessons from an FDA Advisory Committee Meeting
   Wolfgang C. Winkelmayer

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. 137–149).

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

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

Red star ★ indicates articles that are features in This Month’s Highlights.
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 Schrot, Jean Whaley, Scott C. Thomson, 
Herrmann 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 Sabbisetti, 
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, Iain 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-Shanq Chen, Yan-Hung Lin, Shoel-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, Shen-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