This Month’s Highlights

ASN News

UP FRONT MATTERS

Editorials

649 A National Course for Renal Fellows: The Origins of Renal Physiology
Mark Zeidel, Joseph Bonventre, John Forrest, and Vikas Sukhatme

650 Integrins and Matrix in the Glomerulus: Old Mysteries and New Insights
Jordan A. Kreidberg
See related article by Borza et al. (pp. 677–684).

651 Are Podocytes Passive or Provocative in Proteinuric Glomerular Pathology?
Peter G. Tipping
See related article by Banas et al. (pp. 704–713).

654 What Does a Serum Sodium Cost?
Richard A. Hirth and Joseph M. Messana
See related article by Shea et al. (pp. 764–770).

Clinical Commentary

656 Atherosclerotic Renal Artery Stenosis: Overtreated but Underrated?
Stephen C. Textor

Brief Review

660 Lessons Learned About Adult Kidney Stem Cells From the Malpighian Tubules of Drosophila
Shree Ram Singh and Steven X. Hou

Special Article

667 GUDMAP: The Genitourinary Developmental Molecular Anatomy Project
Andrew P. McMahon, Bruce J. Aronow, Duncan R. Davidson, Jamie A. Davies, Kevin W. Gaido, Sean Grimmond, James L. Lessard, Melissa H. Little, S. Steven Potter, Elizabeth L. Wilder, and Pumin Zhang, for the GUDMAP project

Science in Renal Medicine

672 PTH-Related Peptide (PTHrP) in Hypercalcemia
Gregory R. Mundy and James R. Edwards

BASIC RESEARCH

677 ★ Human Podocytes Adhere to the KRGDS Motif of the α3α4α5 Collagen IV Network
Corina M. Borza, Dorin-Bogdan Borza, Vadim Pedchenko, Moin A. Saleem, Peter W. Mathieson, Yoshikazu Sado, Heather M. Hudson, Ambra Pozzi, Juan Saus, Dale R. Abrahamson, Roy Zent, and Billy G. Hudson
See related editorial by Kreidberg (pp. 650–651).

685 Bmp in Podocytes Is Essential for Normal Glomerular Capillary Formation
Hiroyuki Ueda, Yoichi Miyazaki, Taiji Matsuaksa, Yasunori Utsunomiya, Tetsuya Kawamura, Tatsuo Hosoya, and Iekuni Ichikawa

695 ★ The Cytokine TWEAK Modulates Renal Tubulointerstitial Inflammation
Ana Belen Sanz, Pilar Justo, Maria Dolores Sanchez-Niño, Luis Miguel Blanco-Colio, Jeffrey A. Winkles, Matthias Kretzler, Aniela Jakubowski, Julia Blanco, Jesús Egido, Marta Ruiz-Ortega, and Alberto Ortiz

Red star ★ indicates articles that are features in This Month’s Highlights.
704 TLR4 Links Podocytes with the Innate Immune System to Mediate Glomerular Injury
Miriam C. Banas, Bernhard Banas, Kelly L. Hudkins, Tomasz A. Wietecha, Masayuki Iyoda, Elisabeth Bock, Peter Hauser, Jeffrey W. Pippin, Stuart J. Shankland, Kelly D. Smith, Benjamin Stoelcker, Gang Liu, Hermann-Josef Gröne, Bernhard K. Krämer, and Charles E. Alpers

* See related editorial by Tipping (pp. 651–653).

714 Association of a Functional Cytochrome P450 4F2 Haplotype with Urinary 20-HETE and Hypertension
Hong Liu, Yanyan Zhao, Dong Nie, Jingpu Shi, Lingyu Fu, Yan Li, Dahai Yu, and Jingyu Lu

722 Lack of A1 Adenosine ReceptorsAugments Diabetic Hyperfiltration and Glomerular Injury
Robert Faulhaber-Walter, Limeng Chen, Mona Oppermann, Soo Mi Kim, Yuning Huang, Noriyuki Hiramatsu, Diane Mizel, Hiroshi Kajiyama, Patricia Zervas, Josephine P. Briggs, Jeffrey B. Kopp, and Jurgen Schnermann

731 Sodium-Dependent Regulation of Renal Amiloride-Sensitive Currents by Apical P2 Receptors
Scott S.P. Wildman, Joanne Marks, Clare M. Turner, Liang Yew-Booth, Claire M. Peppiatt-Wildman, Brian F. King, David G. Shirley, Wen-Hui Wang, and Robert J. Unwin

743 The Putative (Pro)renin Receptor Blocker HRP Fails to Prevent (Pro)renin Signaling
Sandra Feldt, Ulrike Maschke, Ralf Dechend, Friedrich C. Luft, and Dominik N. Muller

749 Caspase-3 Gene Deletion Prolongs Survival in Polycystic Kidney Disease
Yunxia Tao, Iram Zafar, Jun Kim, Robert W. Schrier, and Charles L. Edelstein

757 Rate of Atherosclerotic Plaque Formation Predicts Cardiovascular Events in ESRD
Francesco Antonio Benedetto, Giovanni Tripepi, Francesca Mallamaci, and Carmine Zoccali

764 Medical Costs of Abnormal Serum Sodium Levels
Alisa M. Shea, Bradley G. Hammill, Lesley H. Curtis, Lynda A. Szczech, and Kevin A. Schulman

* See related editorial by Hirth and Messana (pp. 654–655).

771 ACE Gene Polymorphism and Losartan Treatment in Type 2 Diabetic Patients With Nephropathy
Hans-Henrik Parving, Dick de Zeeuw, Mark E. Cooper, Giuseppe Remuzzi, Nancy Liu, Jared Lunceford, Shahnaz Shahnafar, Peggy H. Wong, Paulette A. Lyle, Peter Rossing, and Barry M. Brenner

780 The Use of Magnetic Resonance to Evaluate Tissue Oxygenation in Renal Artery Stenosis

789 Association of Urinary Inflammatory Markers and Renal Decline in Microalbuminuric Type 1 Diabetics
Pawel P. Wolkow, Monika A. Niewczas, Bruce Perkins, Linda H. Ficociello, Boguslaw Lipinski, James H. Warram, and Andrzej S. Krolewski

798 Aortic Stiffness of Kidney Transplant Recipients Correlates with Donor Age
Michel Delahousse, Michel Chaingnon, Laurent Mesnard, Pierre Boutouyrie, Michel E. Safar, Thierry Lebret, Myriam Pastural-Thaunat, Leila Tricot, Anne Kolko-Labadens, Alexandre Karras, and Jean-Philippe Haymann

806 CKD Increases the Risk of Age-Related Macular Degeneration
Gerald Liew, Paul Mitchell, Tien Yin Wong, Sudha K. Iyengar, and Jie Jin Wang

812 Antibody-Mediated Rejection of the Kidney after Simultaneous Pancreas-Kidney Transplantation
Julio Pascual, Milagros D. Samaniego, José R. Torrealba, Jon S. Odorico, Arjang Djamali, Yolanda T. Becker, Barbara Voss, Glen E. Leversion, Stuart J. Knechtle, Hans W. Sollinger, and John D. Pirsch

825 ROBO2 Gene Variants Are Associated with Familial Vesicoureteral Reflux
Aida M. Bertoli-Avellia, Maria Luisa Conte, Francesca Punzo, Bianca M. de Graaf, Giuliana Lama, Angela La Manna, Cesare Polito, Carolina Grassia, Bruno Nobili, Pier Francesco Rambaldi, Ben A. Oostra, and Silvero Perrotta