This Month’s Highlights

UP FRONT MATTERS

Editorials
1439 Fenestrated Glomerular Capillaries Are Unique
Wilhelm Kriz
• See related article by Ichimura et al. (pp. 1463–1471).

1440 Hemoglobin in the Kidney: Breaking with Traditional Dogma
Volker H. Haase
• See related article by Nishi et al. (pp. 1500–1508).

1442 Active Vitamin D and Survival
Myles Wolf
• See related article by Shoben et al. (pp. 1613–1619).

Brief Reviews
1444 Tracking the Toll of Kidney Disease
Anushree C. Shirali and Daniel R. Goldstein

1451 Molecular Determinants of Magnesium Homeostasis: Insights from Human Disease
R. Todd Alexander, Joost G. Hoenderop, and René J. Bindels

1459 The Aggravating Mechanisms of Aldosterone on Kidney Fibrosis
Giuseppe Remuzzi, Dario Cattaneo, and Norberto Perico

Science in Renal Medicine
1491 Maternal Environment Interacts with Modifier Genes to Influence Progression of Nephrotic Syndrome
Julien Ratelade, Tiphaine Aguirre Lavin, Andrea Onetti Muda, Ludivine Morisset, Géraldine Mollet, Olivia Boyer, Deborah S. Chen, Anna Henger, Matthias Kretzler, Norbert Hubner, Clotilde Théry, Marie-Claire Gubler, Xavier Montagutelli, Corinne Antignac, and Ernie L. Esquivel

1500 Hemoglobin Is Expressed by Mesangial Cells and Reduces Oxidant Stress
Hiroshi Nishi, Reiko Inagi, Hideki Kato, Masayuki Tanemoto, Ichiro Kojima, Daisuke Son, Toshiro Fujita, and Masaomi Nangaku
• See related editorial by Haase (pp. 1440–1441).

1509 ★ Vitamin D Receptor Activators Can Protect against Vascular Calcification
Suresh Mathew, Richard J. Lund, Lala R. Chaudhary, Theresa Geurs, and Keith A. Hruska

BASIC RESEARCH
1463 ★ Glomerular Endothelial Cells Form Diaphragms during Development and Pathologic Conditions
Koichiro Ichimura, Radu V. Stan, Hidetake Kurihara, and Tatsuo Sakai
• See related editorial by Kriz (pp. 1439–1440).

1472 High Perfusion Pressure Accelerates Renal Injury in Salt-Sensitive Hypertension
Takefumi Mori, Aaron Polichnowski, Padden Glocka, Mary Kaldunski, Yusuke Ohsaki, Mingyu Liang, and Allen W. Cowley, Jr.

1483 Impaired Immune Responses and Antigen-Specific Memory CD4* T Cells in Hemodialysis Patients
Nicolle Helena Renier Litjens, Martin Huisman, Marinus van den Dorpel, and Michiel Gerardus Henricus Botjes

Red star ★ indicates articles that are features in This Month’s Highlights.
Differential Effects of Rapamycin in Anti-GBM Glomerulonephritis
Kathrin Hochegger, Gerhard L. Jansky, Afschin Soleiman, Anna M. Wolf, Andrea Tagwerker, Christoph Seger, Andrea Griesmacher, Gert Mayer, and Alexander R. Rosenkranz

Mechanism of Urinary Calcium Regulation by Urinary Magnesium and pH
Olivier Bonny, Adam Rubin, Chou-Long Huang, William H. Frawley, Charles Y.C. Pak, and Orson W. Moe

Apoptosis of the Thick Ascending Limb Results in Acute Kidney Injury
Manakan B. Srichai, Chuanming Hao, Linda Davis, Anastasia Golovin, Min Zhao, Gilbert Moeckel, Steve Dunn, Nada Bulus, Raymond C. Harris, Roy Zent, and Matthew D. Breyer

Characterization of the Sodium/Hydrogen Exchanger NHA2
Daniel G. Fuster, Jianning Zhang, Mingjun Shi, I. Alexandru Bobulescu, Stefan Andersson, and Orson W. Moe

Metabolic Control Improves Long-Term Renal Allograft and Patient Survival in Type 1 Diabetes
Christian Morath, Martin Zeier, Bernd Döhler, Jan Schmidt, Peter P. Nawroth, and Gerhard Opelz

Increased Risk of CKD among Type 2 Diabetics with Nonalcoholic Fatty Liver Disease
Giovanni Targher, Michel Chonchol, Lorenzo Bertolini, Stefano Rodella, Luciano Zenari, Giuseppe Lippi, Massimo Franchini, Giacomo Zoppini, and Michele Muggeo

Early Epithelial Phenotypic Changes Predict Graft Fibrosis
Alexandre Hertig, Dany Anglicheau, Jérôme Verine, Nicolas Pallet, Maxime Touzot, Pierre-Yves Ancel, Laurent Mesnard, Nicole Brousse, Edith Baugey, Denis Glotz, Christophe Legendre, Eric Rondeau, and Yi-Chun Xu-Dubois

Pitfalls of Measuring Total Blood Calcium in Patients with CKD
Cédric Gauci, Olivier Moranne, Bruno Fouqueray, Renaud de la Faille, Gérard Maruani, Jean-Philippe Haymann, Christian Jacquot, Jean-Jacques Boiffa, Martin Flamant, Jérôme Rossert, Pablo Urena, Bénédicte Stengel, Jean-Claude Souberbielle, Marc Froissart, and Pascal Houillier, on behalf of the NephroTest Study Group

Ferumoxytol for Treating Iron Deficiency Anemia in CKD

Association of a CYP4A11 Variant and Blood Pressure in Black Men
James V. Gainer, Michael S. Lipkowitz, Chang Yu, Michael R. Waterman, Elliott P. Dawson, Jorge H. Capdevila, Nancy J. Brown, and the AASK Study Group

Association of Oral Calcitriol with Improved Survival in Nondialyzed CKD
Abigail B. Shoben, Kyle D. Rudser, Ian H. de Boer, Bessie Young, and Bryan Kestenbaum
• See related editorial by Wolf (pp. 1442–1443).