

This Month's Highlights

UP FRONT MATTERS

Editorials

- 3499** **Pendrin—A New Target for Diuretic Therapy?**
Carsten A. Wagner

- See related article by Cil et al. (pp. 3706–3714).

- 3502** **Beyond EMT: Epithelial STAT3 as a Central Regulator of Fibrogenesis**
Jeremy S. Duffield

- See related articles by Gomez et al. (pp. 3639–3652); and Bienaimé et al. (pp. 3690–3705).

- 3504** **Preserving Residual Kidney Function in Hemodialysis Patients—Back in the Spotlight**

Angela Yee-Moon Wang

- See related article by Obi et al. (pp. 3758–3768).

- 3508** **Predicting the Functionality and Form of a Dialysis Fistula**

Karl A. Nath and Zvonimir S. Katusic

- See related article by Allon et al. (pp. 3788–3795).

Brief Reviews

- 3511** **Acidosis and Urinary Calcium Excretion: Insights from Genetic Disorders**

R. Todd Alexander, Emmanuelle Cordat, Régine Chambrey, Henrik Dimke, and Dominique Eladari

- 3521** **Coronary Revascularization in Patients with CKD Stage 5D: Pragmatic Considerations**

Gautam R. Shroff and Charles A. Herzog

- 3530** **Variable Cyst Development in Autosomal Dominant Polycystic Kidney Disease: The Biologic Context**

Wouter N. Leonhard, Hester Happe, and Dorien J.M. Peters

BRIEF COMMUNICATIONS

- 3539** ★ **Phospholipase A2 Receptor–Related Membranous Nephropathy and Mannan-Binding Lectin Deficiency**
Stéphane Bally, Hanna Debiec, Denise Ponard, Frédérique Dijoud, John Rendu, Julien Fauré, Pierre Ronco, and Chantal Dumestre-Perard

- 3545** **Endothelin-1 Induces Proteinuria by Heparanase-Mediated Disruption of the Glomerular Glycocalyx**
Marjolein Garsen, Olivia Lenoir, Angélique L.W.M.M. Rops, Henry B. Dijkman, Brigith Willemsen, Toin H. van Kuppevelt, Ton J. Rabelink, Jo H.M. Berden, Pierre-Louis Tharaux, and Johan van der Vlag

- 3552** **A FANCD2/FANCI-Associated Nuclease 1-Knockout Model Develops Karyomegalic Interstitial Nephritis**

Rannar Airik, Markus Schueler, Merlin Airik, Jang Cho, Jonathan D. Porath, Elina Mukherjee, Sunder Sims-Lucas, and Friedhelm Hildebrandt

BASIC RESEARCH

- 3561** **Immune-Regulatory Molecule CD69 Controls Peritoneal Fibrosis**
Georgios Liappas, Guadalupe Tirma González-Mateo, Raquel Sánchez-Díaz, Juan José Lazcano, Sandra Lasarte, Adela Matesanz-Marín, Rafal Zur, Evelina Ferrantelli, Laura García Ramírez, Abelardo Aguilera, Elena Fernández-Ruiz, Robert H.J. Beelen, Rafael Selgas, Francisco Sánchez-Madrid, Pilar Martín, and Manuel López-Cabrera

- 3577** ★ **Anti-CD28 Antibody and Belatacept Exert Differential Effects on Mechanisms of Renal Allograft Rejection**
Simon Ville, Nicolas Poirier, Julien Branchereau, Vianney Charpy, Sabrina Pengam, Véronique Nerrière-Daguin, Stéphanie Le Bas-Bernardet, Flora Coulon, Caroline Mary, Alexis Chenouard, Jeremy Hervouet, David Minault, Steven Nedellec, Karine Renaudin, Bernard Vanhove, and Gilles Blancho

- 3589 Inhibition of Activin Signaling Slows Progression of Polycystic Kidney Disease**
Wouter N. Leonhard, Steven J. Kunnen, Anna J. Plugge, Arja Pasternack, Sebastian B.T. Jianu, Kimberley Veraar, Fatiha el Bouazzaoui, Willem M.H. Hoogaars, Peter ten Dijke, Martijn H. Breuning, Emile De Heer, Olli Ritvos, and Dorien J.M. Peters
- 3600 APOL1-G0 or APOL1-G2 Transgenic Models Develop Preeclampsia but Not Kidney Disease**
Leslie A. Bruggeman, Zhenzhen Wu, Liping Luo, Sethu M. Madhavan, Martha Konieczkowski, Paul E. Drawz, David B. Thomas, Laura Barisoni, John R. Sedor, and John F. O'Toole
- 3611 Renin-Angiotensin-Aldosterone System Inhibition Increases Podocyte Derivation from Cells of Renin Lineage**
Julia Lichtnekert, Natalya V. Kaverina, Diana G. Eng, Kenneth W. Gross, J. Nathan Kutz, Jeffrey W. Pippin, and Stuart J. Shankland
- 3628 ★Deletion of ADP Ribosylation Factor-Like GTPase 13B Leads to Kidney Cysts**
Yuanyuan Li, Xin Tian, Ming Ma, Stephanie Jerman, Shanshan Kong, Stefan Somlo, and Zhaoxia Sun
- 3639 TWEAK-Fn14 Signaling Activates Myofibroblasts to Drive Progression of Fibrotic Kidney Disease**
Ivan G. Gomez, Allie M. Roach, Naoki Nakagawa, Aldo Amatucci, Bryce G. Johnson, Kadeshia Dunn, Mark C. Kelly, Gamze Karaca, Timothy S. Zheng, Suzanne Szak, Claire M. Peppiatt-Wildman, Linda C. Burkly, and Jeremy S. Duffield
• See related editorial by Duffield (pp. 3502–3504).
- 3653 Role of Ragulator in the Regulation of Mechanistic Target of Rapamycin Signaling in Podocytes and Glomerular Function**
Yao Yao, Junying Wang, Sei Yoshida, Shigeyuki Nada, Masato Okada, and Ken Inoki
- 3666 IL-17F Promotes Tissue Injury in Autoimmune Kidney Diseases**
Jan-Hendrik Riedel, Hans-Joachim Paust, Sonja Krohn, Jan-Eric Turner, Malte A. Kluger, Oliver M. Steinmetz, Christian F. Krebs, Rolf A.K. Stahl, and Ulf Panzer
- 3678 Cold Shock Proteins Mediate GN with Mesangioproliferation**
Cheng Zhu, Eva Sauter, Anja Schreiter, Claudia R.C. van Roeyen, Tammo Ostendorf, Jürgen Floege, Florian Gemhardt, Christian P. Hugo, Berend Isermann, Jonathan A. Lindquist, and Peter R. Mertens
- 3690 Stat3 Controls Tubulointerstitial Communication during CKD**
Frank Bienaimé, Mordi Muorah, Lucie Yasmine, Martine Burtin, Clément Nguyen, Willian Baron, Serge Garbay, Amandine Viau, Mélanie Broueilh, Thomas Blanc, Dorien Peters, Valeria Poli, Dany Anglicheau, Gérard Friedlander, Marco Pontoglio, Morgan Gallazzini, and Fabiola Terzi
• See related editorial by Duffield (pp. 3502–3504).
- 3706 Small-Molecule Inhibitors of Pendrin Potentiate the Diuretic Action of Furosemide**
Onur Cil, Peter M. Haggie, Puay-wah Phuan, Joseph-Anthony Tan, and Alan S. Verkman
• See related editorial by Wagner (pp. 3499–3501).
- 3715 Low-Energy Shockwave Therapy Improves Ischemic Kidney Microcirculation**
Xin Zhang, James D. Krier, Carolina Amador Carrascal, James F. Greenleaf, Behzad Ebrahimi, Ahmad F. Hedayat, Stephen C. Textor, Amir Lerman, and Lilach O. Lerman
- 3725 Partitioning-Defective 1a/b Depletion Impairs Glomerular and Proximal Tubule Development**
Oleh Akchurin, Zhongfang Du, Nadira Ramkellawan, Vidhi Dalal, Seung Hyeok Han, James Pullman, Anne Müsch, Katalin Susztak, and Kimberly J. Reidy
- CLINICAL EPIDEMIOLOGY**
- 3739 Long-Term Exposure to Air Pollution and Increased Risk of Membranous Nephropathy in China**
Xin Xu, Guobao Wang, Nan Chen, Tao Lu, Sheng Nie, Gang Xu, Ping Zhang, Yang Luo, Yongping Wang, Xiaobin Wang, Joel Schwartz, Jian Geng, and Fan Fan Hou
- 3748 ★Capillary Rarefaction Associates with Albuminuria: The Maastricht Study**
Remy J.H. Martens, Ronald M.A. Henry, Alfons J.H.M. Houben, Carla J.H. van der Kallen, Abraham A. Kroon, Casper G. Schalkwijk, Miranda T. Schram, Simone J.S. Sep, Nicolaas C. Schaper, Pieter C. Dagnelie, Dennis M.J. Muris, Ed H.B.M. Gronenschild, Frank M. van der Sande, Karel M.L. Leunissen, Jeroen P. Kooman, and Coen D.A. Stehouwer

3758 ★Residual Kidney Function Decline and Mortality in Incident Hemodialysis Patients

Yoshitsugu Obi, Connie M. Rhee, Anna T. Mathew, Gaurang Shah, Elani Streja, Steven M. Brunelli, Csaba P. Kovesdy, Rajnish Mehrotra, and Kamyar Kalantar-Zadeh

- See related editorial by Wang (pp. 3504–3507).

CLINICAL RESEARCH

3769 ★Neither Hematocrit Normalization nor Exercise Training Restores Oxygen Consumption to Normal Levels in Hemodialysis Patients

James Stray-Gundersen, Erin J. Howden, Dora Beth Parsons, and Jeffrey R. Thompson

3780 Metabolic Profiling of Impaired Cognitive Function in Patients Receiving Dialysis

Manjula Kurella Tamura, Glenn M. Chertow, Thomas A. Depner, Allen R. Nissenson, Brigitte Schiller, Ravindra L. Mehta, Sai Liu, and Tammy L. Sirich, on behalf of the FHN Study

3788 Association between Preoperative Vascular Function and Postoperative Arteriovenous Fistula Development

Michael Allon, Tom Greene, Laura M. Dember, Joseph A. Vita, Alfred K. Cheung, Naomi M. Hamburg, Peter B. Imrey, James S. Kaufman, Michelle L. Robbin, Yan-Ting Shiu, Christi M. Terry, Heidi R. Umphrey, and Harold I. Feldman, and the Hemodialysis Fistula Maturation Study Group

- See related editorial by Nath et al. (pp. 3508–3510).