

## REGULAR ARTICLES

### Cell and Transport Physiology

11 $\beta$ -Hydroxysteroid Dehydrogenase, Mineralocorticoid Receptor, Thiazide-Sensitive Na-Cl Cotransporter Expression by Distal Tubules

*Magdalena Bostonjoglo, W. Brian Reeves, Robert F. Reilly, Heino Velázquez, Noreen Robertson, Gerald Litwack, Peter Morsing, Jens Dørup, Sebastian Bachmann, David H. Ellison*

1347

Renal Tubular and Vascular Urea Transporters: Influence of Antidiuretic Hormone on Messenger RNA Expression in Brattleboro Rats

*Dominique Promeneur, Lise Bankir, Ming-Chang Hu, Marie-Marcelle Trinh-Trang-Tan*

1359

### Hormones, Growth Factors, and Cell Signaling

Effects of Prednisolone on Glomerular Signal Transduction Cascades in Experimental Glomerulonephritis

*Masumi Seto, Shokei Kim, Hiroto Yoshifusa, Yutaka Nakamura, Tatsunori Masuda, Akinori Hamaguchi, Shinya Yamanaka, Hiroshi Iwao*

1367

Lovastatin Modulates *in Vivo* and *in Vitro* the Plasminogen Activator/Plasmin System of Rat Proximal Tubular Cells: Role of Geranylgeranylation and Rho Proteins

*Marie Essig, François Vrtovnsnik, Geneviève Nguyen, Jean-Daniel Sraer, Gérard Friedlander*

1377

### Immunology and Pathology

Mechanisms of Progressive Glomerular Injury in Membranous Nephropathy

*Addy Squarer, Kevin V. Lemley, Siva Ambalavanan, Batya Kristal, William M. Deen, Richard Sibley, Linda Anderson, Bryan D. Myers*

1389

Progressive Glomerular Injury in the MWF Rat Is Predicted by Inborn Nephron Deficit

*Annamaria Fassi, Fabio Sangalli, Raffaello Maffi, Francesca Colombi, Ehab I. Mohamed, Barry M. Brenner, Giuseppe Remuzzi, Andrea Remuzzi*

1399

Attenuation of Murine Lupus Nephritis by Mycophenolate Mofetil

*Mieke C. J. Van Bruggen, Birgitte Walgreen, Truus P. M. Rijke, Jo H. M. Berden*

1407

### Mineral Metabolism and Bone Disease

Inhibition of Calbindin D<sub>28K</sub> Expression by Cyclosporin A in Rat Kidney: The Possible Pathogenesis of Cyclosporin A-Induced Hypercalciuria

*Chul Woo Yang, Jin Kim, Young Hee Kim, Jung Ho Cha, So Youn Mim, Young Ok Kim, Young Shin Shin, Yong Soo Kim, Byung Kee Bang*

1416

19-Nor-1- $\alpha$ -25-Dihydroxyvitamin D<sub>2</sub> (Paricalcitol) Safely and Effectively Reduces the Levels of Intact Parathyroid Hormone in Patients on Hemodialysis

*Kevin J. Martin, Esther A. González, Mary Gellens, L. Lee Hamm, Hanna Abboud, Jill Lindberg*

1427

## **Molecular Medicine, Genetics, and Development**

- Comparison of  $\alpha 5(IV)$  Collagen Chain Expression in Skin with Disease Severity in Women with X-Linked Alport Syndrome  
*Koichi Nakanishi, Kazumoto Iijima, Naoto Kuroda, Yuji Inoue, Yoshikazu Sado, Hajime Nakamura, Norishige Yoshikawa* 1433

## **Pathophysiology of Renal Disease**

- Captopril Prevents Nephropathy in HIV-Transgenic Mice  
*J. Eileen Bird, Stephen K. Durham, Mary R. Giancarli, Pete H. Gitlitz, Darshana G. Pandya, Donna M. Dambach, Miklos M. Mozes, Jeffrey B. Kopp* 1441

- Cisplatin Induces *N*-Acetyl Cysteine Suppressible  $F_2$ -Isoprostane Production and Injury in Renal Tubular Epithelial Cells  
*Abdulla Salahudeen, Vandana Poovala, Wilson Parry, Ravi Pande, Vijaya Kanji, Naseem Ansari, Jason Morrow, Jackson Roberts II* 1448

- Osteogenic Protein-1 mRNA Expression Is Selectively Modulated after Acute Ischemic Renal Injury  
*Maria M. Almanzar, Kendall S. Frazier, Philip H. Dube, Ana I. Piqueras, William K. Jones, Marc F. Charette, Ana L. Paredes* 1456

- Heparin-Binding EGF-Like Growth Factor mRNA Is Upregulated in the Peri-Infarct Region of the Remnant Kidney Model: *In Vitro* Evidence Suggests a Regulatory Role in Myofibroblast Transformation  
*Geoffrey Kirkland, Kathy Paizis, Leonard L. Wu, Marina Katerelos, David A. Power* 1464

## **Clinical Nephrology**

- Evidence for Increased Synthesis of Lipoprotein(a) in the Nephrotic Syndrome  
*Monique G. M. De Sain-Van Der Velden, Dirk-Jan Reijngoud, George A. Kaysen, Mireille M. Gadellaa, Hieronymus Voorbij, Frans Stellaard, Hein A. Koomans, Ton J. Rabelink* 1474

- Complex Apolipoprotein B-Containing Lipoprotein Particles Are Associated with a Higher Rate of Progression of Human Chronic Renal Insufficiency  
*Ola Samuelsson, Per-Ola Attman, Carolyn Knight-Gibson, Rutger Larsson, Henrik Mulec, Lars Weiss, Petar Alaupovic* 1482

- Renal Effects of a Urodilatin Infusion in Patients with Liver Cirrhosis, with and without Ascites  
*Jan Carstens, Jacob Greisen, Kaare T. Jensen, Hendrik Vilstrup, Erling B. Pedersen* 1489

## **Dialysis**

- Bicarbonate/Lactate- and Bicarbonate-Buffered Peritoneal Dialysis Fluids Improve *Ex Vivo* Peritoneal Macrophage TNF $\alpha$  Secretion  
*Ruth K. MacKenzie, Clifford J. Holmes, Andrew Moseley, Jean P. Jenkins, John D. Williams, Gerald A. Coles, Dirk Faict, Nicholas Topley* 1499

- Subclavian Vascular Access Stenosis in Dialysis Patients: Natural History and Risk Factors  
*Domingo Hernández, Francisco Díaz, Margarita Rufino, Victor Lorenzo, Tomás Pérez, Aurelio Rodríguez, Eduardo De Bonis, Manuel Losada, José Manuel González-Posada, Armando Torres* 1507

## **Transplantation**

- Pharmacokinetics of Mycophenolic Acid (MPA) and Determinants of MPA Free Fraction in Pediatric and Adult Renal Transplant Recipients  
*Lutz T. Weber, Maria Shipkova, Timo Lamersdorf, Paul D. Niedmann, Manfred Wiesel, Alexander Mandelbaum, Lothar B. Zimmerhackl, Ekkehard Schütz, Otto Mehls, Michael Oellerich, Victor W. Armstrong, Burkhard Tönshoff* 1511

- Mycophenolate Mofetil, Together with Cyclosporin A, Prevents Anti-OKT3 Antibody Response in Kidney Transplant Recipients  
*Nilüfer Broeders, K. Martin Wissing, Alain Crusiaux, Paul Kinnaert, Pierre Vereerstraeten, Daniel Abramowicz* 1521

Interleukin-17 Activates Human Renal Epithelial Cells *in Vitro* and Is Expressed during Renal Allograft Rejection

Cees Van Kooten, Joke G. Boonstra, Marion E. Paape, Francois Fossiez, Jacques Banchereau, Serge Lebecque, Jan A. Bruijn, Johan W. De Fijter, Leendert A. Van Es, Mohamed R. Daha

1526

**DISEASE OF THE MONTH**

Hyperkalemia: A Potential Silent Killer

I. David Weiner, Charles S. Wingo

1535

**MILESTONES IN NEPHROLOGY**

Urea Metabolism in Chronic Renal Failure [Walser M: *J Clin Invest* 53: 1385–1392, 1974 (with comments by Mackenzie Walser and William E. Mitch)]

1544

**ANNOUNCEMENTS**

---

**Cover picture:** Calbindin D<sub>28K</sub> immunostaining in connecting tubules (CNT) and distal convoluted tubules (stars) of control (left panel) and cyclosporin A-treated (right panel) rats. For a full description, see the related article in this issue by Chul Woo Yang *et al.*, pp 1416–1426.

---

**ATTENTION ALL MANUSCRIPT CONTRIBUTORS** The Journal of the American Society of Nephrology will assess excess page charges on articles and brief communications that exceed four pages in length at a charge of \$60.00 per printed page. Invited reviews, editorials, and special features will be exempt.

The Journal of the American Society of Nephrology, ISSN 1046-6673, is the official journal of the American Society of Nephrology and is published 13 times a year, bimonthly in September, by Williams & Wilkins, 351 West Camden St., Baltimore, MD 21201-2436. Periodicals postage paid at Baltimore, MD and at additional mailing offices. Subscription rates: \$279 U.S. (\$344 for delivery to other countries); institutions: \$389 U.S. (\$454 for delivery to other countries); in-training: \$112 U.S. (\$177 for delivery to other countries); single copy: \$32 (\$38 foreign). Subscription prices subject to change. Annual dues include \$75 for journal subscription. To order, call 1-800-638-6423 from anywhere in the U.S. In Maryland, call 1-800-638-4007. The GST number for Canadian subscribers is 123394371. C.P.C. International Publication Mail Number 0953814. Country of origin: USA. POSTMASTER: Send address changes to the Journal of the American Society of Nephrology, 351 West Camden St., Baltimore, MD 21201-2436. The Journal has been indexed by CURRENT CONTENTS/CLINICAL MEDICINE, CURRENT CONTENTS/LIFE SCIENCES, INDEX MEDICUS, BIOSIS, and EXCERPTA MEDICA. Copyright © 1998 by the American Society of Nephrology.