

## REGULAR ARTICLES

### Cell and Structural Biology

#### Megalin Is an Endocytic Receptor for Insulin

*Robert A. Orlando, Katherine Rader, Francois Authier, Hajime Yamazaki, Barry I. Posner, John J. M. Bergeron, Marilyn Gist Farquhar*

1759

#### Characterization of a Kidney Proximal Tubule Cell Line, LLC-PK1, Expressing Endocytotic Active Megalin

*Rikke Nielsen, Henrik Birn, Søren K. Moestrup, Morten Nielsen, Pierre Verroust, Erik Ilsø Christensen*

1767

#### Immunolocalization of Natriuretic Peptide Receptor B in the Rat Kidney

*Marie-Chantal Bonhomme, Kevin L. Grove, Sylvie Caron, Caroline T. Crilley, Gaetan Thibault, Christian F. Deschepper, Raul Garcia*

1777

#### The Actin Cytoskeleton and Integrin Expression in the Recovery of Cell Adhesion after Oxidant Stress to a Proximal Tubule Cell Line (JTC-12)

*Sujata Nigam, Charles E. Weston, Chong H. Liu, Eric E. Simon*

1787

### Hemodynamics, Hypertension, and Vascular Regulation

#### Effects of Smoking on Renal Hemodynamics in Healthy Volunteers and in Patients with Glomerular Disease

*Eberhard Ritz, Urs Benck, Eduard Franek, Christine Keller, Melchior Seyfarth, John Clorius*

1798

### Immunology and Pathology

#### Improved Survival and Amelioration of Nephrotoxic Nephritis in Intercellular Adhesion Molecule-1 Knockout Mice

*Ulf Janssen, Tammo Ostendorf, Sören Gaertner, Frank Eitner, Hans-Jürgen Hedrich, Karel J. M. Assmann, Jürgen Floege*

1805

#### Activated Mesangial Cells Produce Vascular Permeability Factor in Early-Stage Mesangial Proliferative Glomerulonephritis

*Kukiko Noguchi, Norishige Yoshikawa, Seiko Ito-Kariya, Yuji Inoue, Yoshitake Hayashi, Hiroshi Ito, Hajime Nakamura, Kazumoto Iijima*

1815

#### Inhibition of Calcitriol-Induced Monocyte CD14 Expression by Uremic Toxins: Role of Purines

*Griet Glorieux, Chen H. Hsu, Rita de Smet, Annemieke Dhondt, Jacqueline van Kaer, Pascale Vogeleere, Norbert Lameire, Raymond Vanholder*

1826

### Mineral Metabolism and Bone Disease

#### Altered Instantaneous and Calcium-Modulated Oscillatory PTH Secretion Patterns in Patients with Secondary Hyperparathyroidism

*Claus P. Schmitt, Daniela Huber, Otto Mehls, Jörg Maiwald, Günther Stein, Johannes D. Veldhuis, Eberhard Ritz, Franz Schaefer*

1832

- High Phosphate Level Directly Stimulates Parathyroid Hormone Secretion and Synthesis by Human Parathyroid Tissue *In Vitro*  
*Yolanda Almaden, Alexis Hernandez, Vicente Torregrosa, Antonio Canalejo, Luis Sabate, Laureano Fernandez Cruz, Jose M. Campistol, Armando Torres, Mariano Rodriguez* 1845
- Molecular Medicine, Genetics, and Development**
- A Spectrum of Mutations in the Polycystic Kidney Disease-2 (PKD2) Gene from Eight Canadian Kindreds  
*York Pei, Ning He, Kairong Wang, Margareth Kasenda, Andrew D. Paterson, Gabrielle Chan, Yan Liang, Janet Roscoe, Jane Brissenden, Donna Hefferton, Patrick Parfrey, Stefan Somlo, Peter St. George-Hyslop* 1853
- Functional Studies of Twelve Mutant V<sub>2</sub> Vasopressin Receptors Related to Nephrogenic Diabetes Insipidus: Molecular Basis of a Mild Clinical Phenotype  
*Youssef Ala, Denis Morin, Bernard Mouillac, Nancy Sabatier, Rosa Vargas, Nathalie Cotte, Michèle Déchaux, Corinne Antignac, Marie-Françoise Arthus, Michèle Lonergan, Maria S. Turner, Marie-Noëlle Balestre, Gérard Alonso, Marcel Hibert, Claude Barberis, Geoffrey N. Hendy, Daniel G. Bichet, Serge Jard* 1861
- Expression of SET, an Inhibitor of Protein Phosphatase 2A, in Renal Development and Wilms' Tumor  
*Sara G. Carlson, Eudora Eng, Eung-Gook Kim, Elizabeth J. Perlman, Terry D. Copeland, Barbara J. Ballermann* 1873
- Pathophysiology of Renal Disease**
- Differential Effects of Antibodies to Vascular Cell Adhesion Molecule-1 and Distinct Epitopes of the  $\alpha 4$  Integrin in HgCl<sub>2</sub>-Induced Nephritis in Brown Norway Rats  
*Esther Escudero, Marta Nieto, Ana Martín, Ana Molina, Roy R. Lobb, Francisco Sanchez-Madrid, Francisco Mampaso* 1881
- Tissue-Specific Responses of Branched-Chain  $\alpha$ -Ketoacid Dehydrogenase Activity in Metabolic Acidosis  
*S. Russ Price, Xiaonan Wang, James L. Bailey* 1892
- Clinical Nephrology**
- Factors Predictive of the Short- and Long-Term Efficacy of Growth Hormone Treatment in Prepubertal Children with Chronic Renal Failure  
*Dieter Haffner, Elke Wühl, Franz Schaefer, Richard Nissel, Burkhard Tönshoff, Otto Mehls, The German Study Group for Growth Hormone Treatment in Chronic Renal Failure* 1899
- Factors Relating to Urinary Protein Excretion in Children with Autosomal Dominant Polycystic Kidney Disease  
*Cindy Sharp, Ann Johnson, Patricia Gabow* 1908
- Determinants of Renal Outcome in Anti-Myeloperoxidase-Associated Necrotizing Crescentic Glomerulonephritis  
*Casper F. M. Franssen, Coen A. Stegeman, Wia W. Oost-Kort, Cees G. M. Kallenberg, Pieter C. Limburg, Anton Tiebosch, Paul E. De Jong, Jan W. Cohen Tervaert* 1915
- Effect of Single Dose Resin-Cathartic Therapy on Serum Potassium Concentration in Patients with End-Stage Renal Disease  
*Christine Gruy-Kapral, Michael Emmett, Carol A. Santa Ana, Jack L. Porter, John S. Fordtran, Kenneth D. Fine* 1924
- Dialysis**
- Longitudinal Lipid Profiles on CAPD: Their Relationship to Weight Gain, Comorbidity, and Dialysis Factors  
*Jane Little, Louise Phillips, Lesley Russell, Anne Griffiths, Gavin I. Russell, Simon J. Davies* 1931
- Mortality in End-Stage Renal Disease Is Associated with Facility-to-Facility Differences in Adequacy of Hemodialysis  
*William M. McClellan, J. Michael Soucie, W. Dana Flanders* 1940
- Transplantation**
- Chronic Allograft Nephropathy in the Rat Is Improved by Angiotensin II Receptor Blockade But Not by Calcium Channel Antagonism  
*Susana C. Amuchastegui, Nadia Azzollini, Marilena Mister, Angela Pezzotta, Norberto Perico, Giuseppe Remuzzi* 1948

## DISEASE OF THE MONTH

Peritonitis as a Complication of Peritoneal Dialysis

1956

*Beth Piraino*

## MILESTONES IN NEPHROLOGY

Composition of Fluid in Twelve Cysts of a Polycystic Kidney [Gardner KD Jr: *N Engl J Med* 281: 985-988, 1969 (with comments by Kenneth D. Gardner, Jr. and Jared J. Grantham)]

1965

## ANNOUNCEMENTS

---

**Cover picture:** Schematic representation of the V2 receptor with loss of function mutations responsible for X-linked nephrogenic diabetes insipidus indicated with shaded symbols. For a full description, see the related article in this issue by Youssef Ala *et al.*, pp 1965-1970.

---

**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 Lippincott 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 EMBASE/EXCERPTA MEDICA. Copyright © 1998 by the American Society of Nephrology.