

# The American Journal of Pathology

Official Journal of the American Society for Investigative Pathology

September 2007 • Volume 171, Number 3

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**On the Cover:** Schematic diagram representing the steps involved in miRNA processing and function. Alterations in the amounts of miRNAs and their precursors can result in cancer. In tumorigenesis, excessive accumulation of miRNA that normally regulates synthesis of a tumor suppressor may promote cancer by causing under-expression of the tumor suppressor (left panel). Conversely, underexpression of miRNA that normally controls the expression of a proto-oncogene can lead to excess accumulation of that gene product (right panel). (see page 728).

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## Biological Perspectives

- 715 The Role of Complement in Inflammatory Diseases From Behind the Scenes into the Spotlight  
Maciej M. Markiewski and John D. Lambris

## Review

- 728 MicroRNAs in Tumorigenesis: A Primer  
Wenyong Zhang, James E. Dahlberg, and Wayne Tam

## Commentary

- 739 BMP7: A New Bone Metastases Prevention?  
Pierrick G.J. Fourmier and Theresa A. Guise

## Regular Articles

### *Cardiovascular, Pulmonary and Renal Pathology*

- 744 High Glucose-Induced Thioredoxin-Interacting Protein in Renal Proximal Tubule Cells Is Independent of Transforming Growth Factor- $\beta$ 1  
Weier Qi, Xinning Chen, Richard E. Gilbert, Yuan Zhang, Mark Waltham, Maria Schache, Darren J. Kelly, and Carol A. Pollock
- 755 Bone Marrow-Derived CXCR4<sup>+</sup> Cells Mobilized by Macrophage Colony-Stimulating Factor Participate in the Reduction of Infarct Area and Improvement of Cardiac Remodeling after Myocardial Infarction in Mice  
Hajime Morimoto, Masafumi Takahashi, Yuji Shiba, Atsushi Izawa, Hirobiko Ise, Minoru Hongo, Kiyobiko Hatake, Kazuo Motoyoshi, and Uichi Ikeda
- 767 CC Chemokine Receptor 5 and CXC Chemokine Receptor 6 Expression by Lung CD8<sup>+</sup> Cells Correlates with Chronic Obstructive Pulmonary Disease Severity  
Christine M. Freeman, Jeffrey L. Curtis, and Stephen W. Chensue
- 777 A Thrombospondin-1 Antagonist of Transforming Growth Factor- $\beta$  Activation Blocks Cardiomyopathy in Rats with Diabetes and Elevated Angiotensin II  
Souad Belmadani, Juan Bernal, Chih-Chang Wei, Manuel A. Pallero, Louis Dell'Italia, Joanne E. Murphy-Ullrich, and Kathleen H. Berecek
- 790 Pulmonary Hypertension Can Be a Sequela of Prior *Pneumocystis* Pneumonia  
Steve D. Swain, Soo Han, Ann Harmsen, Katie Shampeny, and Allen G. Harmsen
- 800 Protease-Activated Receptor-2 Augments Experimental Crescentic Glomerulonephritis  
Leon Moussa, Jim Apostolopoulos, Piers Davenport, Jorge Tchongue, and Peter G. Tipping
- 809 Aldosterone Induces Elastin Production in Cardiac Fibroblasts through Activation of Insulin-Like Growth Factor-I Receptors in a Mineralocorticoid Receptor-Independent Manner  
Severa Bunda, Peter Liu, Yanting Wang, Kela Liu, and Aleksander Hinek

Continued

- 820 Selective Impairment of Nuclear Factor- $\kappa$ B-Dependent Gene Transcription in Adult Cardiomyocytes: Relevance for the Regulation of the Inflammatory Response in the Heart  
*Jimena Cuenca, Nora Goren, Patricia Prieto, Paloma Martín-Sanz, and Lisardo Boscá*
- Cell Injury, Repair, Aging and Apoptosis*
- 829 Mononuclear Phagocyte-Derived Interleukin-10 Suppresses the Innate Pulmonary Granuloma Cytokine Response in Aged Mice  
*Bo-Chin Chiu, Valerie R. Stolberg, Christine M. Freeman, and Stephen W. Chensue*
- 838  $\gamma\delta$  T Cells Are Necessary for Platelet and Neutrophil Accumulation in Limbal Vessels and Efficient Epithelial Repair after Corneal Abrasion  
*Zhijie Li, Alan R. Burns, Rolando E. Rumbaut, and C. Wayne Smith*
- Epithelial and Mesenchymal Cell Biology*
- 846 Targeted Skin Overexpression of the Mineralocorticoid Receptor in Mice Causes Epidermal Atrophy, Premature Skin Barrier Formation, Eye Abnormalities, and Alopecia  
*Yannis Sainte Marie, Antoine Toulon, Ralf Paus, Eve Maubec, Aicha Cherfa, Maggy Grossin, Vincent Descamps, Maud Clemessy, Jean-Marie Gasc, Michel Peuchmaur, Adam Glick, Nicolette Farman, and Frederic Jaisser*
- 861 Leukocytes Induce Epithelial to Mesenchymal Transition after Unilateral Ureteral Obstruction in Neonatal Mice  
*Bärbel Lange-Sperandio, Agnes Trautmann, Oliver Eickelberg, Aparna Jayachandran, Stephan Oberle, Florian Schmidutz, Barbara Rodenbeck, Meike Hömme, Richard Horuk, and Franz Schaefer*
- Gastrointestinal, Hepatobiliary and Pancreatic Pathology*
- 872 Oncostatin M Gene Therapy Attenuates Liver Damage Induced by Dimethylnitrosamine in Rats  
*Tetsubiro Hamada, Ayuko Sato, Tadamichi Hirano, Takashi Yamamoto, Gakubei Son, Masayuki Onodera, Ikuko Torii, Takashi Nishigami, Minoru Tanaka, Atsushi Miyajima, Shubei Nishiguchi, Jiro Fujimoto, and Tobru Tsujimura*
- 882 *Salmonella* Effector AvrA Regulation of Colonic Epithelial Cell Inflammation by Deubiquitination  
*Zhongde Ye, Elaine O. Petrof, David Boone, Erika C. Claud, and Jun Sun*
- Immunopathology and Infectious Disease*
- 893 Myasthenia Gravis Thymus: Complement Vulnerability of Epithelial and Myoid Cells, Complement Attack on Them, and Correlations with Autoantibody Status  
*Maria I. Leite, Margaret Jones, Philipp Ströbel, Alexander Marx, Ralf Gold, Erik Niks, Jan J.G.M. Verschuuren, Sonia Berrib-Aknin, Francesco Scaravilli, Aurea Canelbas, B. Paul Morgan, Angela Vincent, and Nick Willcox*
- 906 Pemphigus IgG Causes Skin Splitting in the Presence of Both Desmoglein 1 and Desmoglein 3  
*Volker Spindler, Detlev Drenckbahn, Detlef Zillikens, and Jens Waschke*
- 917 Sustained Secretion of Immunoglobulin by Long-Lived Human Tonsil Plasma Cells  
*Jacob M. van Laar, Marc Melchers, Y. K. Onno Teng, Boris van der Zouwen, Rozbeh Mohammadi, Randy Fischer, Leonid Margolis, Wendy Fitzgerald, Jean-Charles Grivel, Ferdinand C. Breedveld, Peter E. Lipsky, and Amrie C. Grammer*
- 928 Neutrophil Elastase Converts Human Immature Dendritic Cells into Transforming Growth Factor- $\beta$ 1-Secreting Cells and Reduces Allostimulatory Ability  
*Paulo César Maffia, Sandra Elizabeth Zittermann, María Lucila Scimone, Nancy Tateosian, Nicolás Amiano, Diego Guerrieri, Viviana Lutzky, Diego Rosso, Horacio Eduardo Romeo, Verónica E. Garcia, Andrew C. Issekutz, and H. Eduardo Chuluyán*
- Musculoskeletal Pathology*
- 938 Activation of Interleukin-1 Signaling Cascades in Normal and Osteoarthritic Articular Cartilage  
*Zhiyong Fan, Stephan Söder, Stephan Oehler, Katrin Fundel, and Thomas Aigner*
- 947 RAGE Expression in Rhabdomyosarcoma Cells Results in Myogenic Differentiation and Reduced Proliferation, Migration, Invasiveness, and Tumor Growth  
*Francesca Riuzzi, Guglielmo Sorci, and Rosario Donato*

*Continued*

Neurobiology

- 962 Cholesterol Accumulation Is Associated with Lysosomal Dysfunction and Autophagic Stress in Npc1<sup>-/-</sup> Mouse Brain  
*Guanghong Liao, Yueqin Yao, Jibua Liu, Zhang Yu, Simon Cheung, Ang Xie, Xiaoli Liang, and Xiaoning Bi*
- 976 Early Axonopathy Preceding Neurofibrillary Tangles in Mutant Tau Transgenic Mice  
*Karelle Leroy, Alexis Bretteville, Katharina Schindowski, Emmanuel Gilissen, Michèle Authélet, Robert De Decker, Zebra Yilmaz, Luc Buée, and Jean-Pierre Brion*
- 993 Quantitative Proteomics Identifies Surfactant-Resistant  $\alpha$ -Synuclein in Cerebral Cortex of Parkinsonism-Dementia Complex of Guam but Not Alzheimer's Disease or Progressive Supranuclear Palsy  
*Wan Yang, Randall L. Woltjer, Izabela Sokal, Catherine Pan, Yan Wang, Mary Brodey, Elaine R. Peskind, James B. Leverenz, Jing Zhang, Daniel P. Perl, Douglas R. Galasko, and Thomas J. Montine*

Tumorigenesis and Neoplastic Progression

- 1003 c-Jun NH<sub>2</sub> Terminal Kinase Activation and Decreased Expression of Mitogen-Activated Protein Kinase Phosphatase-1 Play Important Roles in Invasion and Angiogenesis of Urothelial Carcinomas  
*Keiji Shimada, Mitsutoshi Nakamura, Eiwa Isbida, Tomonori Higuchi, Motoyoshi Tanaka, Ichiro Ota, and Noboru Konishi*
- 1013 Delay of Postnatal Maturation Sensitizes the Mouse Prostate to Testosterone-Induced Pronounced Hyperplasia: Protective Role of Estrogen Receptor- $\beta$   
*Saija Savolainen, Tomi Pakarainen, Ilpo Huhtaniemi, Matti Poutanen, and Sari Mäkelä*
- 1023 Notch2 Signaling Induces Apoptosis and Inhibits Human MDA-MB-231 Xenograft Growth  
*Christine F. O'Neill, Sumithra Urs, Christina Cinelli, Alexis Lincoln, Robert J. Nadeau, Ruth León, Jessica Tober, Carla Mouta-Bellum, Robert E. Friesel, and Lucy Liaw*
- 1037 Snail Family Transcription Factors Are Implicated in Thyroid Carcinogenesis  
*Robert G. Hardy, Carolina Vicente-Dueñas, Ines González-Herrero, Catriona Anderson, Teresa Flores, Sharon Hughes, Chris Tselepis, James A. Ross, and Isidro Sánchez-García*
- 1047 BMP7, a Putative Regulator of Epithelial Homeostasis in the Human Prostate, Is a Potent Inhibitor of Prostate Cancer Bone Metastasis *in Vivo*  
*Jeroen T. Buijs, Cyrill A. Rentsch, Geertje van der Horst, Petra G.M. van Overveld, Antoinette Wetterwald, Ruth Schwaninger, Niek V. Henriquez, Peter ten Dijke, Fran Borovecki, Regula Markwalder, George N. Thalmann, Socrates E. Papapoulos, Rob C.M. Pelger, Slobodan Vukicevic, Marco G. Cecchini, Clemens W.G.M. Löwik, and Gabri van der Pluijm*

Vascular Biology, Atherosclerosis and Endothelium Biology

- 1058 Dexamethasone Inhibits Interleukin-1 $\beta$ -Induced Corneal Neovascularization: Role of Nuclear Factor- $\kappa$ B-Activated Stromal Cells in Inflammatory Angiogenesis  
*Sbintaro Nakao, Yasuaki Hata, Muneki Miura, Kousuke Noda, Yusuke N. Kimura, Shubei Kawahara, Takeshi Kita, Toshio Hisatomi, Toru Nakazawa, Yiping Jin, M. Reza Dana, Michibiko Kuwano, Mayumi Ono, Tatsuhiro Isibashi, and Ali Hafezi-Moghadam*
- 1066 Sepsis-Induced Coagulation in the Baboon Lung Is Associated with Decreased Tissue Factor Pathway Inhibitor  
*Haiwang Tang, Lacramioara Ivanciu, Narcis Popescu, Glenn Peer, Erik Hack, Cristina Lupu, Fletcher B. Taylor, Jr, and Florea Lupu*

1078 **Corrections**

1079 **ASIP Journal CME Program in Pathogenesis**

▼ denotes participating articles in this issue