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On the Cover: The *DLK1-MEG3* locus plays a tumor suppressor role in human nonfunctioning pituitary adenomas. Immunostained section of normal pituitary demonstrates the co-localization (yellow) of DLK1 (green) and FSH β (red) proteins in normal pituitary cells; nuclei are stained with DAPI (blue). (See page 2120.)

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Commentaries

1588 Mouse Mammary Tumor Virus in Human Breast Cancer: Red Herring or Smoking Gun?

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1591 Vascularity of Nongynecological Leiomyosarcoma Depends on Colony-Stimulating Factor 1 but Not on Vascular Endothelial Growth Factor

Yoshiaki Kubota and Toshio Suda

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1594 miR-125b Regulates Calcification of Vascular Smooth Muscle Cells

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1601 CD55 Deficiency Protects against Atherosclerosis in ApoE-Deficient Mice via C3a Modulation of Lipid Metabolism

Ruth D. Lewis, Mark J. Perry, Irina A. Guschina, Christopher L. Jackson, B. Paul Morgan, and Timothy R. Hughes

1608 Prevalence of the Alternative Lengthening of Telomeres Telomere Maintenance Mechanism in Human Cancer Subtypes

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1616 Homozygous and Heterozygous p53 Knockout Rats Develop Metastasizing Sarcomas with High Frequency

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1623 Brain Cell Reservoirs of Latent Virus in Presymptomatic HIV-Infected Individuals

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1630 p52 Activation in Monomorphic B-Cell Posttransplant Lymphoproliferative Disorder/Diffuse Large B-Cell Lymphoma without BAFF-R Expression

Alexis Proust, Patricia Rincé, Rita Creidy, Thierry Lazure, Irène Joab, Loïc Garçon, Monique Fabre, Catherine Guettier, and Martine Raphael

Regular Articles

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1638 EGFR Expression Stratifies Oligodendroglioma Behavior

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- 1645 The miR-17-92 MicroRNA Cluster Is Regulated by Multiple Mechanisms in B-Cell Malignancies
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- 1657 Protein Signatures for Classification and Prognosis of Gastric Cancer: A Signaling Pathway-Based Approach
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Cardiovascular, Pulmonary, and Renal Pathology

- 1681 Adverse Host Factors Exacerbate Occult HIV-Associated Nephropathy
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- 1693 Paigen Diet-Fed Apolipoprotein E Knockout Mice Develop Severe Pulmonary Hypertension in an Interleukin-1-Dependent Manner
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- 1706 Epac1-Mediated, High Glucose-Induced Renal Proximal Tubular Cells Hypertrophy via the Akt/p21 Pathway
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- 1719 Angiotensin II Contributes to Podocyte Injury by Increasing TRPC6 Expression via an NFAT-Mediated Positive Feedback Signaling Pathway
Tom Nijenhuis, Alexis J. Sloan, Joost G.J. Hoenderop, Jan Flesche, Harry van Goor, Andreas D. Kistler, Marinka Bakker, Rene J.M. Bindels, Rudolf A. de Boer, Clemens C. Möller, Inge Hamming, Gerjan Navis, Jack F.M. Wetzels, Jo H.M. Berden, Jochen Reiser, Christian Faul, and Johan van der Vlag
- 1733 Matrix Metalloproteinase 3 Is a Mediator of Pulmonary Fibrosis
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- 1746 Transforming Growth Factor- β Regulates the Growth of Valve Interstitial Cells *in Vitro*
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- 1756 Periostin Is Induced in Glomerular Injury and Expressed *de Novo* in Interstitial Renal Fibrosis
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Cell Injury, Repair, Aging, and Apoptosis

- 1768 Temporal Smad7 Transgene Induction in Mouse Epidermis Accelerates Skin Wound Healing
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- 1780 Autacoid 14S,21R-Dihydroxy-Docosahexaenoic Acid Counteracts Diabetic Impairment of Macrophage Prohealing Functions
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- 1792 Defective Myofibroblast Formation from Mesenchymal Stem Cells in the Aging Murine Heart: Rescue by Activation of the AMPK Pathway
Katarzyna A. Cieslik, JoAnn Trial, and Mark L. Entman

Epithelial and Mesenchymal Cell Biology

- 1807 Desiccating Stress Induces CD4⁺ T-Cell-Mediated Sjögren's Syndrome-Like Corneal Epithelial Apoptosis via Activation of the Extrinsic Apoptotic Pathway by Interferon- γ
Xiaobo Zhang, Wei Chen, Cintia S. De Paiva, Eugene A. Volpe, Niral B. Gandhi, William J. Farley, De-Quan Li, Jerry Y. Niederkorn, Michael E. Stern, and Stephen C. Pflugfelder

- 1815 Membrane-Bound Serine Protease Inhibitor HAI-1 Is Required for Maintenance of Intestinal Epithelial Integrity
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Gastrointestinal, Hepatobiliary, and Pancreatic Pathology

- 1827 Twist1 Is Up-Regulated in Gastric Cancer-Associated Fibroblasts with Poor Clinical Outcomes
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- 1839 Kupffer Cells Influence Parenchymal Invasion and Phenotypic Orientation, but Not the Proliferation, of Liver Progenitor Cells in a Murine Model of Liver Injury
Noémi Van Hul, Nicolas Lanthier, Regina Español Suñer, Jorge Abarca Quinones, Nico van Rooijen, and Isabelle Leclercq
- 1851 Aquaporin-1 Promotes Angiogenesis, Fibrosis, and Portal Hypertension Through Mechanisms Dependent on Osmotically Sensitive MicroRNAs
Robert C. Huebert, Kumaravelu Jagavelu, Helen I. Hendrickson, Meher M. Vasdev, Juan P. Arab, Patrick L. Splinter, Christy E. Trussoni, Nicholas F. LaRusso, and Vijay H. Shah

Immunopathology and Infectious Diseases

- 1861 Distinct Developmental Requirements for Isolated Lymphoid Follicle Formation in the Small and Large Intestine: RANKL Is Essential Only in the Small Intestine
Kathryn A. Knoop, Betsy R. Butler, Nachiket Kumar, Rodney D. Newberry, and Ifor R. Williams
- 1872 A Detrimental Role for Invariant Natural Killer T Cells in the Pathogenesis of Experimental Dengue Virus Infection
Joelle Renneson, Rodrigo Guabiraba, Isabelle Maillet, Rafael E. Marques, Stoyan Ivanov, Josette Fontaine, Christophe Paget, Valérie Quesniaux, Christelle Faveeuw, Bernhard Ryffel, Mauro M. Teixeira, and François Trottein
- 1884 JNK1, but Not JNK2, Is Required in Two Mechanistically Distinct Models of Inflammatory Arthritis
Katja Denninger, Susanne Rasmussen, Jeppe Madura Larsen, Catrine Ørskov, Steen Seier Poulsen, Poul Sørensen, Jan Pravsgaard Christensen, Harald Illges, Niels Ødum, and Tord Labuda
- 1894 Mast Cell Function and Death in *Trypanosoma cruzi* Infection
Marcelo Meuser-Batista, José Raimundo Corrêa, Vinícius Frias Carvalho, Constança Felícia De Paoli de Carvalho Brito, Otacilio da Cruz Moreira, Marcos Meuser Batista, Maurílio José Soares, Francisco Alves Farias Filho, Patrícia Machado R. e Silva, Joseli Lannes-Vieira, Robson Coutinho Silva, and Andrea Henriques-Pons
- 1905 The Extent of Desmoglein 3 Depletion in Pemphigus Vulgaris Is Dependent on Ca²⁺-Induced Differentiation: A Role in Suprabasal Epidermal Skin Splitting?
Volker Spindler, Alexander Endlich, Eva Hartlieb, Franziska Vielmuth, Enno Schmidt, and Jens Waschke
- 1917 Interferon- γ Influences the Composition of Leukocytic Infiltrates in Murine Lyme Carditis
Gregory J. Sabino, Sonya J. Hwang, Shane C. McAllister, Patricio Mena, and Martha B. Furie
- 1929 Increased Expression of Peripheral Blood Leukocyte Genes Implicate CD14⁺ Tissue Macrophages in Cellular Intestine Allograft Rejection
Chethan Asbokkumar, Mylarappa Ningappa, Sarangarajan Ranganathan, Brandon W. Higgs, Qing Sun, Lori Schmitt, Sara Snyder, Jennifer Dobberstein, Maria Branca, Ronald Jaffe, Adriana Zeevi, Robert Squires, Feras Alissa, Benjamin Schneider, Kyle Soltys, Geoffrey Bond, Kareem Abu-Elmagd, Abbinav Humar, George Mazariegos, Hakon Hakonarson, and Rakesh Sindhi
- 1939 CNS Hypoxia Is More Pronounced in Murine Cerebral than Noncerebral Malaria and Is Reversed by Erythropoietin
Casper Hempel, Valery Combes, Nicholas Henry Hunt, Jørgen Anders Lindholm Kurtzbals, and Georges Emile Raymond Grau

Matrix Pathobiology

- 1951 Identification and Characterization of Cartilage Oligomeric Matrix Protein as a Novel Pathogenic Factor in Keloids
Sbigeki Inui, Fumie Shono, Takeshi Nakajima, Ko Hosokawa, and Satoshi Itami

- 1961 Prostate Cancer Increases Hyaluronan in Surrounding Nonmalignant Stroma, and This Response Is Associated with Tumor Growth and an Unfavorable Outcome
Andreas Josefsson, Hani Adamo, Peter Hammarsten, Torvald Granfors, Pär Stattin, Lars Egevad, Anna Engström Laurent, Pernilla Wikström, and Anders Bergh

Molecular Pathogenesis of Genetic and Inherited Diseases

- 1969 A Novel Type of Macrothrombocytopenia Associated with a Defect in α 2,3-Sialylation
Claire Jones, Jonas Denecke, Ronald Sträter, Torsten Stölting, Yvonne Schunicht, Dagmar Zeuschner, Judith Klumperman, Dirk J. Lefeber, Oliver Spelten, Alexander Zarbock, Sörge Kelm, Karen Strenge, Stuart M. Haslam, Kerstin Lübn, Dorothea Stabl, Luca Gentile, Thomas Schreiter, Philip Hilgard, Annette G. Beck-Sickinger, Thorsten Marquardt, and Martin K. Wild
- 1978 Amyloidogenicity and Clinical Phenotype Associated with Five Novel Mutations in Apolipoprotein A-I
Dorota Rowczenio, Ahmet Dogan, Jason D. Theis, Julie A. Vrana, Helen J. Lachmann, Ashutosh D. Wechalekar, Janet A. Gilbertson, Toby Hunt, Simon D.J. Gibbs, Prayman T. Sattianayagam, Jenny H. Pinney, Philip N. Hawkins, and Julian D. Gillmore
- 1988 Modeling Oculopharyngeal Muscular Dystrophy in Myotube Cultures Reveals Reduced Accumulation of Soluble Mutant PABPN1 Protein
Vered Raz, Samantha Routledge, Andrea Venema, Hellen Buijze, Erik van der Wal, SeyedYahya Anvar, Kirsten R. Straasbeijm, Rinse Klooster, Michael Antoniou, and Silvère M. van der Maarel

Neurobiology

- 2001 Dendritic Degeneration, Neurovascular Defects, and Inflammation Precede Neuronal Loss in a Mouse Model for Tau-Mediated Neurodegeneration
Tomasz Jaworski, Benoit Lechat, David Demedts, Lies Gielis, Herman Devijver, Peter Borghgraef, Hans Duimel, Fons Verheyen, Sebastian Kügler, and Fred Van Leuven
- 2016 Interleukin-34 Selectively Enhances the Neuroprotective Effects of Microglia to Attenuate Oligomeric Amyloid- β Neurotoxicity
Tetsuya Mizuno, Yukiko Doi, Hiroyuki Mizoguchi, Shijie Jin, Mariko Noda, Yoshifumi Sonobe, Hideyuki Takeuchi, and Akio Suzumura
- 2028 Stimulation of Adult Oligodendrogenesis by Myelin-Specific T Cells
Helle Hvilsted Nielsen, Henrik Toft-Hansen, Kate Lykke Lambertsen, Trevor Owens, and Bente Finsen
- 2042 A3 Adenosine Receptor Agonist Reduces Brain Ischemic Injury and Inhibits Inflammatory Cell Migration in Rats
In-Young Choi, Jae-Chul Lee, Chung Ju, Sunyoung Hwang, Geum-Sil Cho, Hyuk Woo Lee, Won Jun Choi, Lak Shin Jeong, and Won-Ki Kim
- 2053 Ablation of TNF-RI/RII Expression in Alzheimer's Disease Mice Leads to an Unexpected Enhancement of Pathology: Implications for Chronic Pan-TNF- α Suppressive Therapeutic Strategies in the Brain
Sara L. Montgomery, Michael A. Mastrangelo, Diala Habib, Wade C. Narrow, Sara A. Knowlden, Terry W. Wright, and William J. Bowers
- 2071 Tau Accumulation Causes Mitochondrial Distribution Deficits in Neurons in a Mouse Model of Tauopathy and in Human Alzheimer's Disease Brain
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Tumorigenesis and Neoplastic Progression

- 2083 A Mouse Mammary Tumor Virus *env*-Like Exogenous Sequence Is Strictly Related to Progression of Human Sporadic Breast Carcinoma
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- 2091 Polo-Box Domain Inhibitor Poloxin Activates the Spindle Assembly Checkpoint and Inhibits Tumor Growth *in Vivo*
Juping Yuan, Mourad Sanhaji, Andrea Krämer, Wolfgang Reindl, Matthias Hofmann, Nina-Naomi Kreis, Brigitte Zimmer, Thorsten Berg, and Klaus Strebhardt

- 2100 CSF1 Expression in Nongynecological Leiomyosarcoma Is Associated with Increased Tumor Angiogenesis
Inigo Espinosa, Badreddin Edris, Cheng-Han Lee, Hong Wei Cheng, C. Blake Gilks, Yuzhuo Wang, Kelli D. Montgomery, Sushama Varma, Rui Li, Robert J. Marinelli, Robert B. West, Torsten Nielsen, Andrew H. Beck, and Matt van de Rijn
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- 2108 Phosphatase and Tensin Homolog on Chromosome 10 Is Phosphorylated in Primary Effusion Lymphoma and Kaposi's Sarcoma
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- 2120 Silencing of the Imprinted *DLK1-MEG3* Locus in Human Clinically Nonfunctioning Pituitary Adenomas
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- 2131 Signal Transducer and Activator of Transcription 3 (Stat3C) Promotes Myeloid-Derived Suppressor Cell Expansion and Immune Suppression during Lung Tumorigenesis
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