IN MEMORIAM

Ronald N. Germain

IN THIS ISSUE

5523 Dynamic Foxn1 Expression in TECs See article p. 5678
Fly Phagocytosis Foils Infection See article p. 5696
Micromanaging Endotoxin Tolerance See article p. 5750
Purinergic Promotion of GvHD See article p. 5795

BRIEF REVIEWS

5525 The Complement System and Antibody-Mediated Transplant Rejection
Erik Stites, Moglie Le Quintrec, and Joshua M. Thurman

CUTTING EDGE

5533 Cutting Edge: Nanogel-Based Delivery of an Inhibitor of CaMK4 to CD4+ T Cells Suppresses Experimental Autoimmune Encephalomyelitis and Lupus-like Disease in Mice
Kotaro Osomo, Tomohiro Koga, Matayuki Mizui, Nobuya Yobida, Christiina Kriegel, Sean Bickerton, Tarek M. Fahmy, and George C. Tsokos

ANTIGEN RECOGNITION AND RESPONSES

5539 Aryl Hydrocarbon Receptor Protects Lungs from Cockroach Allergen–Induced Inflammation by Modulating Mesenchymal Stem Cells
Ting Xu, Yufeng Zhou, Lipeng Qiu, Danh C. Do, Yilin Zhao, Zhuang Cui, Heng Wang, Xiaopeng Liu, Arjun Saradna, Xu Cao, Mei Wan, and Peisong Gao

AUTOIMMUNITY

5551 FLI1 Levels Impact CXCR3 Expression and Renal Infiltration of T Cells and Renal Glycosphingolipid Metabolism in the MRL/lpr Lupus Mouse Strain

5561 Estrogen Receptor \(\alpha\) Deficiency Modulates TLR Ligand–Mediated PDC-TREM Expression in Plasmacytoid Dendritic Cells in Lupus-Prone Mice
Jennifer L. Scott, Melissa A. Cunningham, Osama S. Naga, Jena R. Wirth, Jackie G. Eudaly, and Gary S. Gilkeon

5572 γδ T Cell–Dependent Regulatory T Cells Prevent the Development of Autoimmune Keratitis
Yafei Huang, Zhifang Yang, Chunjian Huang, Jessica McGowan, Tamara Casper, Deming Sun, Willi K. Born, and Rebecca L. O'Brien

CLINICAL AND HUMAN IMMUNOLOGY

5582 Structural and Functional Changes of the Invariant NKT Clonal Repertoire in Early Rheumatoid Arthritis
Salah Mansour, Anna S. Tocheva, Joseph P. Sanderson, Lyndsey M. Goulston, Lina Serhal, Camille Parsons, Mark H. Edwards, Christopher H. Woelk, Paul T. Elkington, Tim Elliott, Cyrus Cooper, Christopher J. Edwards, and Stephan D. Gadola

5592 The Bacterial Enzyme IdeS Cleaves the IgG-Type of B Cell Receptor (BCR), Abolishes BCR-Mediated Cell Signaling, and Inhibits Memory B Cell Activation
Sofia Järnum, Robert Bockermann, Anna Runström, Lena Winstedt, and Christian Kjellman

5602 Critical Role and Therapeutic Control of the Lectin Pathway of Complement Activation in an Abortion-Prone Mouse Mating
Marie Petitbarat, Paolo Durigutto, Paolo Macor, Roberta Bulla, Alesandro Pahlmioli, Anna Bernardi, Maria Grazia De Simoni, Nathalie Lede, Gerard Chauvat, and Francesco Tedesco

5608 DNA-PKcs Is Involved in Ig Class Switch Recombination in Human B Cells
Andrea Björkman, Likun Du, Kerstin Felgentreff, Cornelis Rosner, Rashida Parkaj Kamdar, Georgia Kokaraki, Yoshitaka Matsumoto, E. Graham Davies, Mirjam van der Burg, Luigi D. Notarangelo, Lennart Hammarström, and Qiang Pan-Hammarström

5616 Synovial Regulatory T Cells Occupy a Discrete TCR Niche in Human Arthritis and Require Local Signals To Stabilize FOXP3 Protein Expression
David Bending, Eirini Giannakopoulou, Hannah Lom, and Lucy R. Wedderburn

IMMUNE REGULATION

5625 Reversible Reprogramming of Circulating Memory T Follicular Helper Cell Function during Chronic HIV Infection
Rafael Cubas, Julien van Grevenynghe, Saintedym Wills, Lela Kardava, Brian H. Santich, Clarisa M. Buckner, Robb Muir, Virginie Tardif, Carmen Nichols, Francesco Procopio, Zhong He, Talibah Metcalf, Khader Ghneim, Michela Locci, Petronella Anusta, Jean-Pierre Routy, Lydie Trautmann, Yuxing Li, Adrian B. McDermott, Rick A. Koup, Constantinos Petrovas, Steven A. Migueles, Mark Connors, Georgia D. Tzamaras, Susan Muir, Shane Croffy, and Elias K. Haddad

5637 FOXO3–NF-κB RelA Protein Complexes Reduce Proinflammatory Cell Signaling and Function
Matthew G. Thompson, Michelle Larson, Amy Vidrine, Kelly Barrios, Flor Navarro, Kaitlyn Meyers, Patricia Simms, Kushal Pratapati, Lennox Chitsike, Lance M. Hellman, Brian M. Baker, and Stephanie K. Watkins

5648 Calcium-Modulating Cyclophilin Ligand Is Essential for the Survival of Activated T Cells and for Adaptive Immunity
Shao-Li Chan, Lonn D. Lindquist, Michael J. Hansen, Megan A. Girtman, Larry R. Peate, and Richard J. Bram

5657 Characterization of Amphioxus IFN Regulatory Factor Family Reveals an Archaic Signaling Framework for Innate Immune Response
Shaochun Yuan, Tingting Zheng, Peiyi Li, Rirong Yang, Jie Ruan, Shengfeng Huang, Zhenxin Wu, and Anlong Xu
**IMMUNE SYSTEM DEVELOPMENT**

5667 MicroRNA-15b/16 Enhances the Induction of Regulatory T Cells by Regulating the Expression of Rictor and mTOR
Yogesh Singh, Oliver A. Garden, Florian Lang, and Bradley S. Cobb

5678 Foxn1 Protein Expression in the Developing, Aging, and Regenerating Thymus
Immanuel Rode, Vera C. Martins, Günter Kübler, Nicole Maltry, Claudia Tesmer, and Hans-Reimer Rodewald

**INFECTION DISEASE AND HOST RESPONSE**

5688 *Haemophilus influenzae* Type f Hijacks Vitronectin Using Protein H To Resist Host Innate Immunity and Adhere to Pulmonary Epithelial Cells
Tamim Al-Jubair, Oindrilla Mukherjee, Sharon Oosterhuis, Birendra Singh, Yu-Ching Su, Christophe Fleury, Anna M. Blom, Susanna Tornroth-Horsefield, and Kristian Riesbeck

5696 Protection of Insects against Viral Infection by Apoptosis-Dependent Phagocytosis
Firzan Nainu, Yumiko Tanaka, Akiko Shiratsuchi, and Yoshinobu Nakanishi

5707 *IL-17A*–Producing γδ T Cells Suppress Early Control of Parasite Growth by Monocytes in the Liver

**INNATE IMMUNITY AND INFLAMMATION**

5718 Intracellular ATP Decrease Mediates NLRP3 Inflammasome Activation upon Nigericin and Crystal Stimulation
Johji Nomura, Alexander So, Mizuho Tamura, and Nathalie Busso

5725 Identification of a Novel Splice Variant Isoform of TREM-1 in Human Neutrophil Granules
Sankar Barua, Kathy Keck, Michelle Vrenios, Marshall R. Pope, Merideth Pearl, Kevin Doerschug, and Julia Kleney-Tait

5732 DDX19A Senses Viral RNA and Mediates NLRP3-Dependent Inflammasome Activation
Jianguan Li, Liang Hu, Yuanyuan Liu, Li Huang, Yang Mu, Xuehui Cai, and Changjiang Weng

5750 Coordinated Regulation of miR-155 and miR-146a Genes during Induction of Endotoxin Tolerance in Macrophages
Christina Dosaki, Sotirios C. Kampranis, Aristides G. Eliopoulos, Charalamplos Spilianakis, and Christos Tzianabos

5762 Role of Sortilin in Models of Autoimmune Neuroinflammation
Eva Reuter, Juliane Weber, Magdalena Paterka, Robert Ploen, Tilman Breiederhoff, Jack van Horsen, Thomas E. Willnow, Volker Siffrin, and Friauke Zipp

**MOLECULAR AND STRUCTURAL IMMUNOLOGY**

5770 Tetraspanin CD37 Regulates β2 Integrin–Mediated Adhesion and Migration in Neutrophils
Janet L. Wee, Keith E. Schulze, Eleanor L. Jones, Louisa Yeung, Qiang Cheng, Candida F. Pereira, Adam Costin, Georg Ramon, Annemiek B. van Sprriel, Michael J. Hickey, and Mark D. Wright

5780 Mechanism of Activation-Induced Downregulation of Mitofusin 2 in Human Peripheral Blood T Cells
Asish Dasguppa, Kuang-Hueih Chen, Rachel B. Munk, Carl Y. Sasaki, Jessica Curtis, Dan L. Longo, and Paritosh Ghosh

**MUCOSAL IMMUNOLOGY**

5787 IRAK1 Drives Intestinal Inflammation by Promoting the Generation of Effector Th Cells with Optimal Gut-Homing Capacity
Alexander F. Heiseke, Benjamin H. Jeuk, Anamarija Markota, Tobias Straub, Hans-Anton Lehr, Wolfgang Reindl, and Anne B. King
A Novel Function for P2Y2 in Myeloid Recipient–Derived Cells during Graft-versus-Host Disease
Verena Klämbt, Sebastian A. Wohlfeil, Lukas Schwab, Jan Hülsdünker, Korcan Ayata, Petya Apostolova, Annette Schmitt-Graeff, Heide Dierbach, Gabriele Prinz, Marie Folio, Marco Prinz, Marco Idzko, and Robert Zeiser

Compensatory Regulatory Networks between CD8 T, B, and Myeloid Cells in Organ Transplantation Tolerance
Séverine Bézie, Elodie Picarda, Jason Ossart, Bernard Martinet, Ignacio Anegon, and Carole Guillonneau

Tumor-Related CD4 T Cell Help Augments CD134 Plus CD137 Dual Costimulation Tumor Therapy
Payal Mittal, Marie-Clare St. Rose, Xi Wang, Joseph M. Ryan, Jeffery S. Wauer, Anthony T. Vella, and Adam J. Adler

Enhanced Detection of Antigen-Specific CD4+ T Cells Using Altered Peptide Flanking Residue Peptide–MHC Class II Multimers
Christopher J. Holland, Garry Dolton, Martin Scurr, Kristin Ladell, Andrea J. Schauenburg, Kelly Miners, Florian Madura, Andrew K. Sewell, David A. Price, David K. Cole, and Andrew J. Godkin

Correction: Langerhans Cells Suppress CD49a+ NK Cell–Mediated Skin Inflammation
Felix Scholz, Shruti Naik, Fayyaz S. Sutterwala, and Daniel H. Kaplan

Correction: The TNF-Family Ligand TL1A and Its Receptor DR3 Promote T Cell–Mediated Allergic Immunopathology by Enhancing Differentiation and Pathogenicity of IL-9–Producing T Cells

Correction: PD-1 Upregulated on Regulatory T Cells during Chronic Virus Infection Enhances the Suppression of CD8+ T Cell Immune Response via the Interaction with PD-L1 Expressed on CD8+ T Cells
Hyo Jin Park, Joon Seok Park, Yun Hee Jeong, Jimin Son, Young Ho Ban, Byoung-Hee Lee, Lieping Chen, Jun Chang, Doo Hyun Chung, Inhak Choi, and Sang-Jun Ha

Correction: Decreased T Follicular Regulatory Cell/T Follicular Helper Cell (T_{FHI}) in Simian Immunodeficiency Virus–Infected Rhesus Macaques May Contribute to Accumulation of T_{FHI} in Chronic Infection

AUTHOR INDEX

AD HOC REVIEWERS

AUTHOR INDEX TO VOLUME 195