497 IN THIS ISSUE

LETTERS TO THE EDITOR

499 Comment on “Inflammasome Activation of IL-18 Results in Endothelial Progenitor Cell Dysfunction in Systemic Lupus Erythematosus”
Zhenhua Duan, Yujing Zhang, Zhen Zeng, and Faming Pan

499 Response to Comment on “Inflammasome Activation of IL-18 Results in Endothelial Progenitor Cell Dysfunction in Systemic Lupus Erythematosus”
Mariana J. Kaplan and J. Michelle Kahlenberg

500 Comment on “Expression of Helios in Peripherally Induced Foxp3+ Regulatory T Cells”
Eyad Elkord

500 Response to Comment on “Expression of Helios in Peripherally Induced Foxp3+ Regulatory T Cells”
Rachel A. Gottschalk, Emily Cose, and James P. Allison

501 Comment on “Class B Scavenger Receptor Types I and II and CD36 Targeting Improves Sepsis Survival and Acute Outcomes in Mice”
Ling Guo, Zhong Zheng, Junting Ai, Bin Huang, and Xiang-Ao Li

502 Response to Comment on “Class B Scavenger Receptor Types I and II and CD36 Targeting Improves Sepsis Survival and Acute Outcomes in Mice”
Asada Leelahavanichkul, Alexander V. Bocharov, Roger Kurlander, Irina N. Baranova, Tatyana G. Vishnyakova, Ana C. P. Souza, Xuzhen Hu, Kent Doi, Boris Vaisman, Marcelo Amar, Denis Sviridov, Zhigang Chen, Alan T. Remaley, Gyorgy Csako, Amy P. Patterson, Peter S. T. Yuen, Robert A. Star, and Thomas L. Eggeman

BRIEF REVIEWS

503 B Cell Tolerance and Positive Selection in Lupus
Dan Eilat and Matthias Wahl

CUTTING EDGE

511 Cutting Edge: Mast Cells Critically Augment Myeloid-Derived Suppressor Cell Activity

516 Cutting Edge: Impaired MHC Class I Expression in Mice Deficient for Nlrc5/Class I Transactivator
Amlan Biswas, Torsten B. Meisner, Taro Kawai, and Koichi S. Kobayashi

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

521 Recruitment of Memory B Cells to Lymph Nodes Remote from the Site of Immunization Requires an Inflammatory Stimulus
Gautam N. Shenoy, Priyadarshini Chatterjee, Sheetal Kau, Snigdha Mukherjee, Deepak K. Rathore, Vineeta Bal, Satyajit Rath, and Anna George

529 The Efficiency of Human Cytomegalovirus pp65495–503 CD8+ T Cell Epitope Generation Is Determined by the Balanced Activities of Cytosolic and Endoplasmic Reticulum-Resident Peptidases
Sabrina Urban, Kathrin Textoris-Taube, Barbara Reitmann, Katharina Janek, Tanja Dannenberg, Frédéric Elbein, Christin Seifert, Fang Zhao, Jan H. Keiser, Anne Haleniou, Petra Henklein, Julia Paschke, Sandrine Cadel, Helga Bernhard, Ferry Osendorp, Thierry Foulon, Dirk Schadendorf, Annette Paschen, and Ulrike Seifert

539 Identification, Cloning, and Functional Characterization of the IL-1 Receptor Antagonist in the Chicken Reveal Important Differences between the Chicken and Mammals
Mark S. Gibson, Mark Fift, Steve Bird, Nigel Salmon, and Pete Kaiser

551 Activation of Invariant NKT Cells in Early Phase of Experimental Autoimmune Encephalomyelitis Results in Differentiation of Ly6CNegative Inflammatory Monocyte to M2 Macrophages and Improved Outcome
Laura Denney, Wai Ling Kok, Suzanne L. Cole, Sharon Sanderson, Andrew J. McMichael, and Ling-Pei Ho

558 Radiotherapy Promotes Tumor-Specific Effector CD8+ T Cells via Dendritic Cell Activation
Anurag Gupta, Hans Christian Probst, Van Vuong, Alexandre Landshammer, Sabine Muth, Hideo Yagita, Reto Schwendener, Martin Pruschr, Alexander Knuth, and Marius van den Broek

567 The Indispensable Role of CCR5 for In Vivo Suppressor Function of Tumor-Derived CD103+ Effector/Memory Regulatory T Cells
Li-Yuan Chang, Yang-Chang Lin, Chiao-Wen Kang, Chen-Yu Hsu, Yu-Yi Chu, Ching-Tai Huang, Yuan-Ji Day, Tie-Ching Chen, Chau-Ting Yeh, and Chun-Yen Lin

575 Differential Idiotype Utilization for the In Vivo Type 14 Capsular Polysaccharide-Specific Ig Responses to Intact Streptococcus pneumoniae versus a Pneumococcal Conjugate Vaccine
Jesus Colino, Leah Duke, Swadhinna Arjunaraja, Quanyi Chen, Leyu Liu, Alexander H. Lucas, and Clifford M. Snapper

587 Toso, a Functional IgM Receptor, Is Regulated by IL-2 in T and NK Cells
Youuake Murakami, Sriram Narayanan, Su Su, Richard Childs, Konrad Krzewski, Francisco Borrega, Jennifer Week, and John E. Coligan

598 Human Antitumor CD8+ T Cells Producing Th1 Polycytokines Show Superior Antigen Sensitivity and Tumor Recognition
Susanne Wilde, Daniel Sommermeyer, Matthias Leisegang, Bernhard Frankenberger, Barbara Mosetter, Wolfgang Uckert, and Dolores J. Schendel

606 Transactivation of Inducible Nitric Oxide Synthase Gene by Kruppel-like Factor 6 Regulates Apoptosis during Influenza A Virus Infection
Victoria Mgbenema, Jesus A. Segovia, Te-Hung Chang, Su-Yu Tsai, Garry T. Cole, Chiung-Yu Hung, and Santanu Bose

616 Innate Instruction of CD4+ T Cell Immunity in Respiratory Bacterial Infection
Gerhard Trunk and Annette Oxenius

629 Structural Characterization and Inhibitory Profile of Formyl Peptide Receptor 2 Selective Peptides Descending from a PIP2-Binding Domain of Gelsolin
Huamei Forsman, Emil Andréasson, Jennie Karlsson, Francois Boulay, Marie-Josêphe Rabiet, and Claes Dahlgren
Changes in Functional but Not Structural Avidity during Differentiation of CD8⁺ Effector Cells In Vivo after Virus Infection
Samuel Amoah, Rama D. Yammani, Jason M. Grayson, and Martha A. Alexander-Miller

A Computational Model for Early Events in B Cell Antigen Receptor Signaling: Analysis of the Roles of Lyn and Fyn
Dipak Barua, William S. Hlavacek, and Tomasz Lipniacki

Autocrine IFN-γ Promotes Naive CD8 T Cell Differentiation and Synergizes with IFN-α To Stimulate Strong Function
Julie M. Curtsinger, Pujya Agarwal, Debra C. Lins, and Matthew F. Mescher

The T Cell Response to IL-10 Alters Cellular Dynamics and Paradoxically Promotes Central Nervous System Autoimmunity
Xin Liu, Rajshrekhbar Ali, Meredith Steeves, Phuong Nguyen, Peter Vogel, and Terrence L. Geiger

Analysis of T Cell Responses to the Major Allergens from German Cockroach: Epitope Specificity and Relationship to IgE Production
Carla Oseroff, John Sidney, Victoria Tripple, Howard Grey, Robert Wood, David H. Broide, Jason Greenbaum, Ravi Kolla, Bjoern Peters, Anna Ponéas, and Alessandro Sette

EWI-2 Association with α-Actinin Regulates T Cell Immune Synapses and HIV Viral Infection
Mónica Gordin-Alonso, Mónica Sala-Valdés, Vera Rocha-Peregini, Daniel Pérez-Hernández, Soraya López-Martín, Angeles Uría, Susana Álvarez, Tatiana V. Kolesnikova, Jesús Vázquez, Francisco Sánchez-Madrid, and Maríá Yaínez-Mó

Breakdown in Repression of IFN-γ mRNA Leads to Accumulation of Self-Reactive Effector CD8⁺ T Cells

Autoreactive Preplasma Cells Break Tolerance in the Absence of Regulation by Dendritic Cells and Macrophages

Polar Opposites: Erk Direction of CD4 T Cell Subsets
Chiung-Fang Chang, Warren N. D’Souza, Irene L. Ch’ien, Gilles Pages, Jacques Pouyssegur, and Stephen M. Hedrick

Transient Low-Dose Methotrexate Induces Tolerance to Murine Anti-Thymocyte Globulin and Together They Promote Long-Term Allograft Survival
Alexandra Joseph, Kathleen Neff, Julie Richard, Lan Gao, Dinesh Bangari, Marguerite Joly, Kerry Culm-Merdek, Richard Garman, John Williams, Susan Richards, and Melanie Ruzek

Biochemical and Biologic Characterization of Exosomes and Microvesicles as Facilitators of HIV-1 Infection in Macrophages
Irena Kadiu, Prabagaran Narayanasamy, Prasanta K. Dash, Wei Zhang, and Howard E. Gendelman

Tim-3 Pathway Controls Regulatory and Effector T Cell Balance during Hepatitis C Virus Infection

Increased Frequency of Suppressive Regulatory T Cells and T Cell-Mediated Antigen Loss Results in Murine Melanoma Recurrence
Shaun M. Jensen, Christopher G. Twitty, Levi D. Maston, Paul A. Antony, May Lim, Hong-Ming Hu, Ulf Petrausch, Nicholas P. Restifo, and Bernard A. Fox

Exosomes Isolated from Mycobacteria-Infected Mice or Cultured Macrophages Can Recruit and Activate Immune Cells In Vitro and In Vivo
Prachi P. Singh, Victoria L. Smith, Petro C. Karakouis, and Jeffery S. Schorey
CD2AP/SHIP1 Complex Positively Regulates Plasmacytoid Dendritic Cell Receptor Signaling by Inhibiting the E3 Ubiquitin Ligase Cbl
Musheng Bao, Shino Hanabuchi, Valeria Facchinetti, Qiumei Du, Laura Bover, Joel Plumas, Laurence Chaperot, Wei Cao, Jun Qin, Shao-Cong Sun, and Yong-Jun Liu

Murine Lupus Susceptibility Locus Sle1c2 Mediates CD4+ T Cell Activation and Maps to Estrogen-Related Receptor γ
Daniel J. Perry, Yiming Yin, Tiffany Telarico, Henry V. Baker, Igor Dozmorov, Andras Perl, and Laurence Morel

Ethynlenecarbodiimide-Fixed Donor Splenocyte Infusions Differentially Target Direct and Indirect Pathways of Allorecognition for Induction of Transplant Tolerance
Taba Kheradmand, Shusen Wang, Jane Bryant, James J. Tasch, Nadine Lerret, Kathryn L. Pothoven, Joetta L. Houihan, Stephen D. Miller, Zheng J. Zhang, and Xunrong Luo

MOLECULAR AND STRUCTURAL IMMUNOLOGY

IFN-γ Elicits Macrophage Autophagy via the p38 MAPK Signaling Pathway
Takeshi Matsuzawa, Bae-Hoon Kim, Awinash R. Shenoy, Shigeki Kamitani, Masami Miyake, and John D. MacMicking

Abnormal Histone Methylation Is Responsible for Increased Vascular Endothelial Growth Factor 165α Secretion from Airway Smooth Muscle Cells in Asthma
Rachel L. Clifford, Alison E. John, Christopher E. Brightling, and Alan J. Knox

Twist1 Regulates Ifng Expression in Th1 Cells by Interfering with Runx3 Function
Duy Pham, Joshua W. Vincentz, Anthony B. Firluli, and Mark H. Kaplan

HOST DEFENSE

Identification of Protective B Cell Antigens of Legionella pneumophila
Stefan S. Weber, Nicole Joller, Anna Barbara Küntzel, Roman Spörr, Vincent S. Tchang, Elke Scandella, Christoph Rüüli, Burkhard Ludewig, Hubert Hilbi, and Annette Oxenius

In Vivo V1γ-Targeted Microbial Superantigen Induced Global Shifts in the B Cell Repertoire
Caroline Gronwall, Sergei L. Kosakovsky Pond, Jason A. Young, and Gregg J. Silverman

A Role for the NF-κB Pathway in Cell Protection from Complement-Dependent Cytotoxicity
Dana Ganetz, Michal Lusthaus, and Zvi Fishelson

Ablation of Leptin Receptor-Mediated ERK Activation Impairs Host Defense against Gram-Negative Pneumonia
Peter Mancuso, Martin G. Myers, Jr., Deepti Goel, Carlos H. Serezani, Edmund O’Brien, Jared Goldberg, David M. Aronoff, and Marc Peters-Golden

Innate IFN-γ Is Essential for Programmed Death Ligand-1–Mediated T Cell Stimulation following Listeria monocytogenes Infection
Jared H. Rowe, James M. Ertelt, and Sing Sing Way

HIV-1 Infection of Human Intestinal Lamina Propria Proplacidal T Cells In Vitro Is Enhanced by Exposure to Commensal Escherichia coli
Stephanie M. Dillon, Jennifer A. Manuzak, Amanda K. Leone, Eric J. Lee, Lisa M. Rogers, Martin D. McCarter, and Cara C. Wilson

NK1.1+ Cells and IL-22 Regulate Vaccine-Induced Protective Immunity against Challenge with Mycobacterium tuberculosis
Rohan Dhiman, Sivakumar Periasamy, Peter F. Barnes, Ankita Garg Jaiswal, Padmaja Paidipally, Amanda B. Barnes, Amy Tsvinnereim, and Ramakrishna Vankayalapati

Macrophage Dectin-1 Expression Is Controlled by Leukotriene B4 via a GM-CSF/PU.1 Axis
C. Henrique Serezani, Steve Kane, Latima Collins, Mariana Morato-Marques, John J. Osterholzer, and Marc Peters-Golden

Platelets Present Antigen in the Context of MHC Class I
Lesley M. Chapman, Angela A. Aggrey, David J. Field, Kalyan Srivastava, Sara Ture, Katsuyuki Yui, David J. Topham, William M. Baldwin, III, and Craig N. Morrell
Leishmania donovani Exploits Host Deubiquitinating Enzyme A20, a Negative Regulator of TLR Signaling, To Subvert Host Immune Response
Supriya Srivastav, Susanta Kar, Ajit G. Chande, Robin Mukhopadhyaya, and Pijush K. Das

Phenotypic and Functional Characterization of NK Cells in Human Immune Response against the Dimorphic Fungus Paracoccidioides brasiliensis
Larissa N. A. Longhi, Rosiane M. da Silva, Márcia C. Fornazin, Maria C. Spago, Rômulo T. D. de Oliveira, Alexandre E. Nowill, Maria H. S. L. Blotta, and Ronei L. Mamoni

INFLAMMATION

Distinct Macrophage Subpopulations Characterize Acute Infection and Chronic Inflammatory Lung Disease
Mubing Duan, Watchu C. Li, Ross Vlahos, Mhairi J. Maxwell, Gary P. Anderson, and Margaret L. Hibbs

Expression, Regulation, and Function of Atypical Chemerin Receptor CCRL2 on Endothelial Cells
Justin Monnier, Susanna L. Chenn, Edward O’Hara, Kexin Huang, Hua Tu, Eugene C. Butcher, and Brian A. Zabel

IFN-γ-Producing CD4+ T Cells Promote Experimental Cerebral Malaria by Modulating CD8+ T Cell Accumulation within the Brain
Ana Villegas-Mendez, Rachel Greig, Tonab N. Shaw, J. Brian de Souza, Emily Guyer Findley, Jason S. Stumhofer, Julius C. R. Hofalla, Daniel G. Blount, Christopher A. Hunter, Eleanor M. Riley, and Kevin N. Cooper

Defective Macrophage Migration in Gαi2- but Not Gαi3-Deficient Mice

Cross-Species Transcriptional Network Analysis Defines Shared Inflammatory Responses in Murine and Human Lupus Nephritis
Celine C. Berthier, Ramalingam Bethunaickan, Tania Gonzalez-Rivera, Viji Nair, Meera Ramanujam, Wei-jia Zhang, Erwin P. Battinger, Stephan Segerer, Maja Lindenmeyer, Clemens D. Cohen, Anne Davidson, and Matthias Kretzler

Gemfibrozil, a Lipid-Lowering Drug, Upregulates IL-1 Receptor Antagonist in Mouse Cortical Neurons: Implications for Neuronal Self-Defense
Grant T. Corbett, Avik Roy, and Kalipada Pahan

Molecular Mechanisms Responsible for the Selective and Low-Grade Induction of Proinflammatory Mediators in Murine Macrophages by Lipopolysaccharide
Urmila Maitra, Hui Deng, Trevor Glaros, Bianca Baker, Daniel G. S. Capelluto, Zihai Li, and Liwu Li

TGF-β Mediates Proinflammatory Seminal Fluid Signaling in Human Cervical Epithelial Cells
David J. Sharkey, Anne M. Macpherson, Kelton P. Tremellen, David G. Mottershead, Robert B. Gilchrist, and Sarah A. Robertson

Specialized Proresolving Mediators Enhance Human B Cell Differentiation to Antibody-Secreting Cells
Sesquile Ramon, Fei Gao, Charles N. Serhan, and Richard P. Phipps

Exogenous Administration of 15d-PGJ2–Loaded Nanocapsules Inhibits Bone Resorption in a Mouse Periodontitis Model
Marcelo H. Napimoga, Carlos A. T. da Silva, Vanessa Carregaro, Thais S. Farnesi-de-Assunção, Poliana M. Duarte, Nathalie F. S. de Melo, and Leonardo F. Fraceto

CLINICAL IMMUNOLOGY

TNFR-Associated Factor 2 Deficiency in B Lymphocytes Predisposes to Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma in Mice
Gema Pérez-Chacón, David Llobet, Constanza Pardo, José Pindado, Youngwon Choi, John C. Reed, and Juan M. Zapata

Retinoic Acid Attenuates Rheumatoid Inflammation in Mice
Seung-Ki Kwok, Mi-Kyung Park, Mi-La Cho, Hye-Jwa Oh, Eun-Mi Park, Dong-Gun Lee, Jennifer Lee, Ho-Youn Kim, and Sung-Hwan Park