This information is current as of July 28, 2017.

192 (1)

_The Journal of Immunology_

This information is current as of July 28, 2017.

**Subscription**  Information about subscribing to *The Journal of Immunology* is online at:  [http://jimmunol.org/subscription](http://jimmunol.org/subscription)

**Permissions**  Submit copyright permission requests at:  [http://www.aai.org/About/Publications/JI/copyright.html](http://www.aai.org/About/Publications/JI/copyright.html)

**Email Alerts**  Receive free email-alerts when new articles cite this article. Sign up at:  [http://jimmunol.org/alerts](http://jimmunol.org/alerts)
IN THIS ISSUE

1 Etoposide Topples Autoimmune T Cells  See article p. 73
The Other Side of TGF-β  See article p. 103
TRAF5 Keeps TABs on TLR Signaling  See article p. 145
Heterozygous Harm to Hematopoiesis  See article p. 160
Challenging the Canonical CD8+ Antitumor Response  See article p. 224
Influenza Gives Pentraxin the Slip  See article p. 271

PILLARS OF IMMUNOLOGY

3 A Methods Paper That Led to Much More
Derry Roopenian

G. D. Snell

BRIEF REVIEWS

27 Infection-Induced Changes in Hematopoiesis
Arielle Glatman Zaretsky, Julie B. Engiles, and Christopher A. Hunter

CUTTING EDGE

35 Cutting Edge: Expression of FcγRIIB Tempers Memory CD8 T Cell Function In Vivo
Gabriel R. Starbeck-Miller, Vladimir P. Badovinac, Daniel L. Barber, and John T. Harty

ALLERGY AND OTHER HYPERSENSITIVITIES

41 Munc18-2 and Syntaxin 3 Control Distinct Essential Steps in Mast Cell Degranulation
Cristiana Brochetta, Ryo Suzuki, Francesca Vita, Maria Rosa Soranzo, Julien Claver, Lydia Celia Madjene, Tarik Attout, Joana Vitte, Nadine Varin-Blank, Giuliano Zabucchi, Juan Rivera, and Ulrich Blank

On the cover: CD4 T cells (red) targeting amyloid-β (Aβ) plaques (blue) in the brain of a mouse model of Alzheimer’s disease. Aβ-reactive Th1 CD4 T cells were injected into the lateral ventricle of the brain and are shown within the brain parenchyma colocalized with MHCII-expressing cells (green) at sites of Aβ plaques. Fisher, Y., I. Strominger, S. Biton, A. Nemirovsky, R. Baron, and A. Monsonego. 2014. Th1 polarization of T cells injected into the cerebrospinal fluid induces brain immunosurveillance.  J. Immunol. 192: 92–102.
ANTIGEN RECOGNITION AND RESPONSES

52 Cognate Peptide–MHC Complexes Are Expressed as Tightly Apposed Nanoclusters in Virus-Infected Cells To Allow TCR Crosslinking
Maria Ferez, Mario Castro, Balbino Alarcon, and Hisse M. van Santen

AUTOIMMUNITY

59 Therapeutic Efficacy of Suppressing the JAK/STAT Pathway in Multiple Models of Experimental Autoimmune Encephalomyelitis
Yudong Liu, Andrew T. Holdbrook, Patrizia De Sarno, Amber L. Rouse, Lora L. Yanagisawa, Braden C. McFarland, Laurie E. Harrington, Chander Raman, Steffanie Sabbaj, Ety N. Benveniste, and Hongwei Qin

73 Eliminating Encephalitogenic T Cells without Undermining Protective Immunity

CLINICAL AND HUMAN IMMUNOLOGY

84 Etoposide Selectively Ablates Activated T Cells To Control the Immunoregulatory Disorder Hemophagocytic Lymphohistiocytosis

92 Th1 Polarization of T Cells Injected into the Cerebrospinal Fluid Induces Brain Immunosurveillance
Yair Fisher, Itai Strominger, Sbha Biton, Anna Nemirovsky, Rona Baron, and Alon Mononego

IMMUNE REGULATION

103 TGF-β Promotes Immune Responses in the Presence of Mesenchymal Stem Cells
Chunliang Xu, Pengfei Yu, Xiaoyan Han, Liming Du, Jianhe Gan, Ying Wang, and Yufang Shi

110 Calcium Signaling via Orai1 Is Essential for Induction of the Nuclear Orphan Receptor Pathway To Drive Th17 Differentiation
Kyun-Do Kim, Sonal Srikanth, Yossan-Van Tan, Ma-Khin Yee, Marcus Jew, Robert Dammouseau, Michael E. Jung, Saki Shimizu, Dong Sung An, Bernard Ribalet, James A. Waischer, and Youang Gwack

123 Qualitatively Different T Cell Phenotypic Responses to IL-2 versus IL-15 Are Unified by Identical Dependences on Receptor Signal Strength and Duration
Abhinav Arneja, Hannah Johnson, Laura Gabrovsek, Douglas A. Lauffenburger, and Forest M. White

136 Leptin Metabolically Licenses T Cells for Activation To Link Nutrition and Immunity
Donte C. Saucillo, Valerie A. Gerriets, John Sheng, Jeffrey C. Rathmell, and Nancie J. MacIver

145 TRAF5 Negatively Regulates TLR Signaling in B Lymphocytes
Claire M. Buchta and Gail A. Bishop

IMMUNE SYSTEM DEVELOPMENT

160 Cell-Intrinsic In Vivo Requirement for the E47–p21 Pathway in Long-Term Hematopoietic Stem Cells
Patricia M. Santos, Ying Ding, and Lisa Borghesi

169 A Novel T Cell Subset with Trans-Rearranged Vγ-Cβ TCRs Shows Vβ Expression Is Dispensable for Lineage Choice and MHC Restriction
Steven Bowen, Peter Sun, Ferenc Livak, Susan Sharrow, and Richard J. Hodes

178 The Transcription Factor E74-like Factor 4 Suppresses Differentiation of Proliferating CD4+ T Cells to the Th17 Lineage
Ping-Hsien Lee, Monica Puppi, Kimberly S. Schlun, Li-Yuan Yu-Lee, Chen Dong, and H. Daniel Lacorazza
IMMUNOGENETICS

189 Polymorphisms in the CD1d Promoter That Regulate CD1d Gene Expression Are Associated with Impaired NKT Cell Development
Zachary D. Borg, Patrick J. Benoit, Graham W. J. Lilley, Idil Aktan, Alan Chant, Victoria L. DeVault, Mercedes Rincon, and Jonathan E. Boyson

IMMUNOTHERAPY AND VACCINES

200 Inflammation and TCR Signal Strength Determine the Breadth of the T Cell Response in a Bim-Dependent Manner
Dietmar Zehn, Sarah Roepke, Kristin Weakly, Michael J. Bevan, and Martin Prlic

206 Immunotherapy with TCR-Redirected T Cells: Comparison of TCR-Transduced and TCR-Engineered Hematopoietic Stem Cell–Derived T Cells
Lilian Stärck, Katja Popp, Hanspeter Pircher, and Wolfgang Uckert

214 Immunization with a Recombinant Bacillus Calmette–Guérin Strain Confers Protective Th1 Immunity against the Human Metapneumovirus
Christian E. Palavecino, Pablo F. Céspedes, Roberto S. Gómez, Alexis M. Kalerigis, and Susan M. Bueno

224 CD8+ T Cell–Independent Tumor Regression Induced by Fc-OX40L and Therapeutic Vaccination in a Mouse Model of Glioma
Katherine A. Murphy, Jami R. Erickson, Charles S. Johnson, Charles E. Seiler, Jessica Bedli, Peisheng Hu, G. Elizabeth Pluher, Alan L. Epstein, and John R. Ohlfest

INFECTIOUS DISEASE AND HOST RESPONSE

234 The Pore-Forming Toxin Listeriolysin O Is Degraded by Neutrophil Metalloproteinase-8 and Fails To Mediate Listeria monocytogenes Intracellular Survival in Neutrophils
Eusondia Arnett, Stephen Vadia, Colleen C. Nacker, Steve Oghumu, Abhay R. Satoskar, Kenneth R. McLeish, Silvia M. Uriarte, and Stephanie Seveau

245 Neutralization of Plasmodium falciparum Merozoites by Antibodies against PfRH5

259 Altered IFN-γ–Mediated Immunity and Transcriptional Expression Patterns in N-Ethyl-N-Nitrosourea–Induced STAT4 Mutants Confer Susceptibility to Acute Typhoid-like Disease
Megan M. Eva, Kyoko E. Yuki, Shauna M. Dauphinee, Jeremy A. Schwartzentruber, Michal Pyzik, Marilène Paquet, Mark Lathrop, Jacek Majewski, Silvia M. Vidal, and Danielle Malo

271 A Single Amino Acid Substitution in the Hemagglutinin of H3N2 Subtype Influenza A Viruses Is Associated with Resistance to the Long Pentraxin PTX3 and Enhanced Virulence in Mice
Emma R. Job, Barbara Bottazzi, Kirsty R. Short, Yi-Mo Deng, Alberto Mantovani, Andrew G. Brooks, and Patrick C. Reading

282 MyD88 Signaling Regulates Both Host Defense and Immunopathogenesis during Pneumocystis Infection
Sheila N. Bello-Irizarry, Jing Wang, Carl J. Johnston, Francis Giliotti, and Terry W. Wright

293 Targeting CD137 Enhances Vaccine-Elicited Anti–Respiratory Syncytial Virus CD8+ T Cell Responses in Aged Mice
Sujin Lee, Robert S. Mittler, and Martin L. Moore

300 The Role of NOD2 in Murine and Human Melioidosis

308 Anti-HIV Antibody–Dependent Activation of NK Cells Impairs NKp46 Expression
Matthew S. Parsons, Chi-Chang Tang, Senthujan Jegankanda, Robert J. Center, Andrew G. Brooks, Ivan Stratov, and Stephen J. Kent
Helicobacter pylori Cytotoxin-Associated Gene A Impairs Human Dendritic Cell Maturation and Function through IL-10–Mediated Activation of STAT3
Romy Kaebisch, Raquel Mejias-Luque, Christian Prinz, and Markus Gerhard

INNATE IMMUNITY AND INFLAMMATION

β2 Integrin–Mediated Crawling on Endothelial ICAM-1 and ICAM-2 Is a Prerequisite for Transcellular Neutrophil Diapedesis across the Inflamed Blood–Brain Barrier
Roser Gorina, Ruth Lyck, Dietmar Vestweber, and Britta Engelhardt

Thrombin-Induced CCAAT/Enhancer-Binding Protein β Activation and IL-8/CXCL8 Expression via MEKK1, ERK, and p90 Ribosomal S6 Kinase 1 in Lung Epithelial Cells
Chien-Huang Lin, Po-Ling Nai, Mao-Ying Bien, Chung-Chi Yu, and Bing-Chang Chen

IL-6–Mediated Induction of Matrix Metalloproteinase-9 Is Modulated by JAK-Dependent IL-10 Expression in Macrophages
Poonam Kothari, Roberto Pestana, Rim Mesraoua, Rim Elchaki, K. M. Faisal Khan, Andrew J. Dannenberg, and Domenick J. Falcone

The p53 Transcription Factor Modulates Microglia Behavior through MicroRNA-Dependent Regulation of c-Maf
Wei Su, Stephanie Hopkins, Nicole K. Neuer, Bryce Sopher, Aurelio Silverstroni, Simon Ammanuel, Suman Jayadev, Thomas Möller, Jonathan Weinstein, and Gwenn A. Garden

Lidocaine Reduces Neutrophil Recruitment by Abolishing Chemokine-Induced Arrest and Transendothelial Migration in Septic Patients
Christian Berger, Jan Rossaint, Hugo Van Aken, Martin Westphal, Klaus Hahnenkamp, and Alexander Zarbock

Soluble gC1qR Is an Autocrine Signal That Induces B1R Expression on Endothelial Cells
Berhane Gheddawi, Yang Ji, Alisa Valentino, Lina Pednekar, Mahalakshmi Ramadass, David Habiel, Richard R. Kew, Kinga H. Hosszu, Dennis K. Galanakij, Uday Kishore, and Ellinor I. B. Peerschke

The p53 Transcription Factor Modulates Microglia Behavior through MicroRNA-Dependent Regulation of c-Maf
Wei Su, Stephanie Hopkins, Nicole K. Neuer, Bryce Sopher, Aurelio Silverstroni, Simon Ammanuel, Suman Jayadev, Thomas Möller, Jonathan Weinstein, and Gwenn A. Garden

Lidocaine Reduces Neutrophil Recruitment by Abolishing Chemokine-Induced Arrest and Transendothelial Migration in Septic Patients
Christian Berger, Jan Rossaint, Hugo Van Aken, Martin Westphal, Klaus Hahnenkamp, and Alexander Zarbock

Soluble gC1qR Is an Autocrine Signal That Induces B1R Expression on Endothelial Cells
Berhane Gheddawi, Yang Ji, Alisa Valentino, Lina Pednekar, Mahalakshmi Ramadass, David Habiel, Richard R. Kew, Kinga H. Hosszu, Dennis K. Galanakij, Uday Kishore, and Ellinor I. B. Peerschke

Slit2–Robo4 Pathway Modulates Lipopolysaccharide-Induced Endothelial Inflammation and Its Expression Is Dysregulated during Endotoxemia
Helong Zhao, Appakkudal R. Anand, and Ramesh K. Ganju

Akt2 Deficiency Protects from Acute Lung Injury via Alternative Macrophage Activation and miR-146a Induction in Mice
Eleni Vergadi, Katerina Vaporidi, Emmanuel E. Theodorakis, Christina Dzaki, Eleni Lagoudaki, Eleftheria Ieronymaki, Vassilia I. Alexaki, Mike Helms, Eumorfia Kondili, Birte Soennichsen, Efstratios N. Statopoulos, Andrew N. Margioris, Dimitrios Georgopoulos, and Christos Tsatsanis

A Circadian Clock Gene, Rev-erba, Modulates the Inflammatory Function of Macrophages through the Negative Regulation of Ccl2 Expression
Shogo Sato, Takuwa Sakurai, Junetumi Ogasawara, Motoko Takahashi, Tetuya Izawa, Katsuhiko Inaiuzumi, Naoyuki Taniguchi, Hideki Ohno, and Takako Kizaki

The Response of Secondary Genes to Lipopolysaccharides in Macrophages Depends on Histone Deacetylase and Phosphorylation of C/EBPβ
Neus Serrat, Carlos Sebastian, Selma Pereira-Lopes, Lorena Valverde-Estrella, Jorge Lloberas, and Antonio Celada

Identification of a Unique Hybrid Macrophage-Polarization State following Recovery from Lipopolysaccharide Tolerance
Christine O’Carroll, Ailis Fagan, Fergus Shanahan, and Ruaidhrí J. Carmody

Platelet-Secreted MicroRNA-223 Promotes Endothelial Cell Apoptosis Induced by Advanced Glycation End Products via Targeting the Insulin-like Growth Factor 1 Receptor
Yi Pan, Hongwei Liang, Huan Liu, Donghai Li, Xi Chen, Limin Li, Chen-Yu Zhang, and Ke Zou

“Activated” STAT Proteins: A Paradoxical Consequence of Inhibited JAK-STAT Signaling in Cytomegalovirus-Infected Cells
Mirko Trilling, Vu Thuy Khuong Le, Jasin Rashidi-Alavijeh, Benjamin Katschinski, Jürgen Scheller, Stefan Rose-John, Gabriela Elena Andreescu, Stipan Jonjić, Valeria Poli, Klaus Pfeffer, and Hartmut Hengel