181 (10)

This information is current as of April 20, 2017.

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

Permissions Submit copyright permission requests at:
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
6677 IN THIS ISSUE

BRIEF REVIEWS

6679 Mechanisms of Immunity in Hydatid Disease: Implications for Vaccine Development
Wenbao Zhang, Allen G. Ross, and Donald P. McManus

CUTTING EDGE

6687 Cutting Edge: Experimentally Induced Immune Activation in Natural Hosts of Simian Immunodeficiency Virus Induces Significant Increases in Viral Replication and CD4+ T Cell Depletion
Ivona Pandrea, Thaisdra Gafuin, Jason M. Brenchley, Rajeev Gautam, Christopher Monjure, Aarti Gautam, Clint Coleman, Andrew A. Lackner, Ray M. Ribero, Daniel C. Douek, and Cristian Apetrei

6692 Cutting Edge: Eosinophils Do Not Contribute to Respiratory Syncytial Virus Vaccine-Enhanced Disease
Elaine M. Castilow, Kevin L. Legge, and Steven M. Varga

6697 Cutting Edge: Helminth Infection Induces IgE in the Absence of μ- or δ-Chain Expression
Georgia Perona-Wright, Kazja Mohrs, Justin Taylor, Colby Zaph, David Artis, Edward J. Pearce, and Markus Mohrs

6702 Cutting Edge: FimH Adhesin of Type 1 Fimbriae Is a Novel TLR4 Ligand
Karen L. Moiseman, M. Firoz Mian, Nicole M. Lauzon, Carlton L. Gyles, Brian Lichty, Randy Mackenzie, Navkiran Gill, and Ali A. Ashkar

6707 Cutting Edge: Programmed Death-1/Programmed Death Ligand 1 Interaction Regulates the Induction and Maintenance of Invariant NKT Cell Anergy
Woo-Sung Chang, Ji-Yeon Kim, Yeon-Jeong Kim, Yun-Sun Kim, Jung-Mi Lee, Miyuki Azuma, Hideo Yagita, and Chang-Yuil Kang

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

6711 Interaction of Monocytes with NK Cells upon Toll-Like Receptor-Induced Expression of the NKG2D Ligand MICA
Mercedes Kloss, Patrice Decker, Katrin M. Baliz, Tina Baessler, Gundram Jung, Hans-Georg Rammensee, Alexander Steinle, Matthias Krusch, and Helmut R. Salih

On the cover: Cutaneous lesions in MRL-Fas\textsuperscript{−/−} mice (5 mo of age) resemble the verrucoid variant of human discoid lupus, characterized by interface vacuolar changes with apoptotic keratinocytes, acanthosis with hyperkeratosis/hypergranulosis and follicular plugging, and a superficial and deep lymphohistiocytic infiltrate with associated scarring alopecia (refer to Fig. 1 on page 7369; H&E, ×40). Menke, J., M.-Y. Hsu, K. T. Byrne, J. A. Lucas, W. A. Rabacal, B. P. Croker, X.-H. Zong, E. R. Stanley, and V. R. Kelley. 2008. Sunlight triggers cutaneous lupus through a CSF-1-dependent mechanism in MRL-Fas\textsuperscript{−/−} mice. J. Immunol. 181: 7367–7379.
TLR Ligands in the Local Treatment of Established Intracerebral Murine Gliomas
Oliver M. Grauer, Johan W. Molling, Erik Bennink, Liza W. J. Toonen, Roger P. M. Sutmuller, Stefan Nierkens, and Gosse J. Adema

Lipopolysaccharide-Induced Expression of NAD(P)H:Quinone Oxidoreductase 1 and Heme Oxygenase-1 Protects against Excessive Inflammatory Responses in Human Monocytes
Stuart A. Rushworth, David J. MacEwan, and Maria A. O’Connell

The Common γ-Chain Cytokines IL-2, IL-7, IL-15, and IL-21 Induce the Expression of Programmed Death-1 and Its Ligands
Audrey L. Kinter, Emily J. Godbout, Jonathan P. McNally, Irini Sereti, Gregg A. Roby, Marie A. O’Shea, and Anthony S. Fauci

Aging Impairs IFN Regulatory Factor 7 Up-Regulation in Plasmacytoid Dendritic Cells during TLR9 Activation
Heather W. Stout-Delgado, Xin Yang, Wendy E. Walker, Bethany M. Tesar, and Daniel R. Goldstein

Reversible Blockade of Thymic Output: An Inherent Part of TLR Ligand-Mediated Immune Response
Thomas Démoulins, Ali Abdallah, Nadia Kettaf, Marie-Laurence Baron, Casimiro Gerarduzzi, Dominique Gauchat, Sophie Gratton, and Rafick-Pierre Sékaly

The Common γ-Chain Cytokines IL-2, IL-7, IL-15, and IL-21 Induce the Expression of Programmed Death-1 and Its Ligands
Audrey L. Kinter, Emily J. Godbout, Jonathan P. McNally, Irini Sereti, Gregg A. Roby, Marie A. O’Shea, and Anthony S. Fauci

Adaptable TCR Avidity Thresholds for Negative Selection
Milica Stojašković, Laura I. Saltazar-Fontana, Zohreh Tatari-Calderone, Vladimir P. Badovinac, Fabio R. Santori, Damian Kovalovský, Derek Sant’Angelo, John T. Harty, and Stanisław Vukmanović

Regulatory Roles for NKT Cell Ligands in Environmentally Induced Autoimmunity
Jaya Vas, Jochen Mattner, Stewart Richardson, Rachel Ndonye, John P. Gaughan, Amy Howell, and Marc Monestier

Enhanced Early Expansion and Maturation of Semi-Invariant NK T Cells Inhibited Autoimmune Pathogenesis in Congenic Nonobese Diabetic Mice
Aito Ueno, Jian-xiong Wang, Lu Cheng, Jin S. Im, Yan Shi, Steven A. Porcelli, and Yang Yang

IFN-β Production by TLR4-Stimulated Innate Immune Cells Is Negatively Regulated by GSK3-β
Huizhi Wang, Carlos A. Garcia, Kunal Rehani, Caglar Çekic, Pascale Alard, Denis F. Kinane, Thomas Mitchell, and Michael Martin

Ion Channels Modulating Mouse Dendritic Cell Functions
Nicole Matzner, Irina M. Zemtsova, Nguyen Thi Xuan, Michael Duszenko, Ekaterina Shumilina, and Florian Lang

Caspase-6 Regulates B Cell Activation and Differentiation into Plasma Cells
Chie Watanabe, Geraldine L. Shu, Timothy S. Zheng, Richard A. Flavell, and Edward A. Clark

The Host Environment Regulates the Function of CD8+ Graft-versus-Host-Reactive Effector Cells
Ronjon Chakraverty, Barry Flatter, Farnaz Fallah-Arvani, Hyon-Sok Eom, Terry Means, Giovanna Andreola, Sebastian Schwarte, Jennifer Buchli, Pete Cotter, Guiling Zhao, and Megan Sykes

Experimental Antibody Therapy of Liver Metastases Reveals Functional Redundancy between FcγRI and FcγRII
Marielle A. Otten, Gerben J. van der Bij, Sjef J. Verbeek, Falk Nimmerjahn, Jeffrey V. Ravetch, Robert H. J. Beelen, Jan G. J. van de Winkel, and Marjolein van Egmund

IL-21 Stimulates Human Myeloma Cell Growth through an Autocrine IGF-1 Loop
Emmanuelle Ménoret, Sophie Maïga, Géraldine Descamps, Catherine Pellat-Decuypere, Caroline Fraslon, Melania Cappellano, Philippe Moreau, Régis Bataille, and Martine Amiot

MHC Variant Peptide-Mediated Anergy of Encephalitogenic T Cells Requires SHP-1
Heather A. Wasserman, Carrie D. Beal, Yan Zhang, Ning Jiang, Cheng Zhu, and Brian D. Evans

Polyisyalic Acid, a Glycan with Highly Restricted Expression, Is Found on Human and Murine Leukocytes and Modulates Immune Responses
Tetraspanins Regulate ADAM10-Mediated Cleavage of TNF-α and Epidermal Growth Factor
Cécile Arduise, Toufik Abache, Lei Li, Martine Billard, Aurélie Chabanon, Andreas Ludwig, Philippe Mauduit, Claude Boucheix, Eric Rubinstein, and François Le Naour

Thymocyte-Dendritic Cell Interactions near Sources of CCR7 Ligands in the Thymic Cortex
Ena Ladi, Tanja A. Schwicker, Tatjana Chabanova, Ying Chen, Paul Herzmark, Xinye Yin, Holly Aaron, Shiao Wei Chan, Martin Lipp, Badrinath Royam, and Ellen A. Robey

MOLECULAR AND STRUCTURAL IMMUNOLOGY
A Novel C1q Family Member of Amphioxus Was Revealed to Have a Partial Function of Vertebrate C1q Molecule
Yanhong Yu, Huiqing Huang, Yan Wang, Yingcai Yu, Shaochun Yuan, Shengfeng Huang, Minming Pan, Kaixia Feng, and Anlong Xu

CD45 Down-Regulates Lck-Mediated CD44 Signaling and Modulates Actin Rearrangement in T Cells

Hyaluronan Induces Cell Death in Activated T Cells through CD44
Brian Ruffell and Pauline Johnson

Negative Regulation of TCR Signaling by Linker for Activation of X Cells via Phosphotyrosine-Dependent and -Independent Mechanisms
Michael J. Shapiro, Chau T. Nguyen, Haig Aghajanian, Weiguo Zhang, and Virginia Smith Shapiro

Processing of an Antigenic Sequence from IgG Constant Domains for Presentation by MHC Class II
Morten Flohakk, Ingunn B. Rasmussen, Elin Lunde, Terje Frigstad, Gøril Berntzen, Terje E. Michaelsen, Bjarne Bogen, and Inger Sandlie

IMMUNOGENETICS
NK2G2-RAE-1 Receptor-Ligand Variation Does Not Account for the NK Cell Defect in Nonobese Diabetic Mice
Lisa M. Matier, Sarah K. Howlett, Kara M. Rainbow, Jan Clark, Joanna M. M. Howson, John A. Todd, and Linda S. Wicker

HOST DEFENSE
Induction of TRAIL- and TNF-α-Dependent Apoptosis in Human Monocyte-Derived Dendritic Cells by Microfilariae of Brugia malayi
Roshanak Tolouei Semnani, Priyanka Goel Venugopal, Lily Mahapatra, Jason A. Skinner, Francoise Meylan, Daniel Chien, David W. Dorward, Damien Chausabel, Richard M. Siegel, and Thomas B. Nutman

Respiratory Epithelial Cells Convert Inactive Vitamin D to Its Active Form: Potential Effects on Host Defense
Sif Hansdottir, Martha M. Monick, Sara L. Hinde, Nina Lovan, Dwight C. Look, and Gary W. Hunninghake

Aspergillus Conidia Activate the Complement by the Mannan-Binding Lectin C2 Bypass Mechanism
Chantal Dumestre-Pérard, Bertrand Lamy, Delphine Aldebert, Catherine Lemaire-Vieille, Renée Grillot, Jean-Paul Brion, Jean Gagnon, and Jean-Yves Cesbron

Histoplasma capsulatum Cyclophilin A Mediates Attachment to Dendritic Cell VLA-5
Francisco J. Gomez, Robyn Pilcher-Roberts, Aminah Alborzi, and Simon L. Newman

IL-15 Links TLR2/1-Induced Macrophage Differentiation to the Vitamin D-Dependent Antimicrobial Pathway
Stephan R. Krutzik, Martin Hewison, Philip T. Liu, Juan Antonio Robles, Steffen Stenger, John S. Adams, and Robert L. Modlin

A Novel Role for Neutrophils As Critical Activators of NK Cells
Roman Sperri, Nicole Joller, Hubert Hilbi, and Annette Oxenius

TNF-α Is a Positive Regulatory Factor for Human Vγ2Vδ2 T Cells
Haishan Li, Kun Luo, and C. David Pauza
Species-Specific Interaction of *Streptococcus pneumoniae* with Human Complement Factor H
Ling Lu, Zhuo Ma, T. Sakari Jokiranta, Adeline R. Whitney, Frank R. DeLeo, and Jing-Ren Zhang

Role of Human CD36 in Bacterial Recognition, Phagocytosis, and Pathogen-Induced JNK-Mediated Signaling
Irina N. Baranova, Roger Kurlander, Alexander V. Bocharov, Tatjana G. Vishnyakova, Zhigang Chen, Alan T. Remaley, Gyorgy Csako, Amy P. Patterson, and Thomas L. Eggerman

NOD2-Deficient Mice Have Impaired Resistance to *Mycobacterium tuberculosis* Infection through Defective Innate and Adaptive Immunity
Maziar Divangahi, Serge Mostowy, François Coulombe, Robert Kozak, Loïc Guillot, Frédéric Veyrier, Koichi S. Kobayashi, Richard A. Flavell, Philippe Gros, and Marcel A. Behr

The ESX-5 Secretion System of *Mycobacterium marinum* Modulates the Macrophage Response
Abdallah M. Abdallah, Nigel D. L. Savage, Maaike van Zon, Louis Wilson, Christina M. J. E. Vandenburgue-Grands, Nicole N. van der Wel, Tom H. M. Ottenhoff, and Wilbert Bitter

**INFLAMMATION**

TLR/MyD88 and Liver X Receptor α Signaling Pathways Reciprocally Control *Chlamydia pneumoniae*-Induced Acceleration of Atherosclerosis

*Chlamydia pneumoniae*-Induced Foam Cell Formation Requires MyD88-Dependent and -Independent Signaling and Is Reciprocally Modulated by Liver X Receptor Activation
Shuang Chen, Rosalinda Sorrentino, Kenichi Shimada, Yongtae Bulut, Terence M. Doherty, Timothy R. Crother, and Moshe Ardi

Macrophage Antigen Complex-1 Mediates Reactive Microglia and Progressive Dopaminergic Neurodegeneration in the MPTP Model of Parkinson’s Disease
Xiaoming Hu, Dan Zhang, Hao Pang, W. Michael Caudle, Yachen Li, Huiming Gao, Yuxin Liu, Li Qian, Belinda Wilson, Donato A. Di Monte, Syed F. Ali, Jing Zhang, Michelle L. Block, and Jau-Shyong Hong

Phenotype Switching by Inflammation-Inducing Polarized Th17 Cells, but Not by Th1 Cells
Guangku Shi, Catherine A. Cox, Barbara P. Vistica, Cuyan Tan, Eric F. Waurousek, and Igal Gery

IL-10 and TGF-β Redundantly Protect against Severe Liver Injury and Mortality during Acute Schistosomiasis
De’Brook R. Herbert, Tatjana Orekov, Charles Perkins, and Fred D. Finkelman

CD4+CD25+ Foxp3+ Regulatory T Cells Protect against T Cell-Mediated Fulminant Hepatitis in a TGF-β-Dependent Manner in Mice
Hua-Xing Wei, Ya-Hui Chuang, Bofeng Li, Haiming Wei, Rui Sun, Yuki Moritoki, M. Eric Gershwin, Zhe-Xiong Lian, and Zhigang Tian

Dendritic Cells Genetically Engineered to Express IL-10 Induce Long-Lasting Antigen-Specific Tolerance in Experimental Asthma

Mechanisms of Oncostatin M-Induced Pulmonary Inflammation and Fibrosis
Afsaneh Mozaffarian, Avery W. Brewer, Esther S. Trueblood, Irina G. Luzina, Nevins W. Todd, Sergei P. Atamaz, and Heather A. Arnett

Fibrillar Amyloid-β Peptides Activate Microglia via TLR2: Implications for Alzheimer’s Disease
Malabendu Jana, Carlos A. Palencia, and Kalipada Pahan

TGF-β1 Attenuates Mediator Release and De Novo Kit Expression by Human Skin Mast Cells through a Smad-Dependent Pathway
Wei Zhao, Gregorio Gomez, Shao-Hua Yu, John J. Ryan, and Lawrence B. Schwartz
Prostaglandin E\textsubscript{2} Inhibits Eosinophil Trafficking through E-Prostanoid 2 Receptors  
Eva M. Sturm, Petra Schraut, Rufina Schulgoi, Viktoria Konya, Gunter J. Sturm, Irmgard Th. Lippe, Bernhard A. Peskar, and Akos Heinemann

NF-κB-Driven STAT2 and CCL2 Expression in Astrocytes in Response to Brain Injury  
Reza Khorooshi, Alicia A. Babcock, and Trevor Owens

Pleural Mesothelial Cells Express Both BLT2 and PPAR\textsubscript{\alpha} and Mount an Integrated Response to Pleural Leukotriene B\textsubscript{4}  
Elisabetta Pace, Maria Ferraro, Christopher H. Mody, Mario R. Melis, Valeria Scafidi, Anna Bonanno, Mirella Profita, Antonio Giarratano, and Mark Gjomarkaj

The Effect of the JNK Inhibitor, JIP Peptide, on Human T Lymphocyte Proliferation and Cytokine Production  
Michelle Melino, Charles S. Hii, Shaun R. McColl, and Antonio Ferrante

A New Mechanism for Inhalational Priming: IL-4 Bypasses Innate Immune Signals  
Anna M. Dittrich, Hui-Chen Chen, Lan Xu, Patricia Ranney, Sean Connolly, Timur O. Yarovinsky, and H. Kim Bottomly

Dual Regulatory Roles of Phosphatidylinositol 3-Kinase in IFN Signaling  
Surinder Kaur, Antonella Sassano, Ajith M. Joseph, Beata Majchrzak-Kita, Elizabeth A. Eklund, Amit Verma, Saska M. Brachmann, Eleanor N. Fish, and Leonidas C. Platanias

Active Caspase-1-Mediated Secretion of Retinoic Acid Inducible Gene-I  
Min-Jung Kim and Joo-Yeon Yoo

Induction of Scavenger Receptor Class B Type I Is Critical for Simvastatin Enhancement of High-Density Lipoprotein-Induced Anti-Inflammatory Actions in Endothelial Cells  
Takahiro Kimura, Chihiro Mogi, Hideaki Tomura, Atushi Kusuhara, Doon-Soon Im, Koichi Sato, Hitoshi Kurose, Masami Murakami, and Fusuki Okaizima

Oncostatin M-Induced and Constitutive Activation of the JAK2/STAT5/CIS Pathway Suppresses CCL1, but Not CCL7 and CCL8, Chemokine Expression  
Christoph Hintzen, Claude Haan, Jan P. Tuckermann, Peter C. Heinrich, and Heike M. Hermanns

CLINICAL IMMUNOLOGY

The Effector T Cells of Diabetic Subjects Are Resistant to Regulation via CD4\textsuperscript{+}FOXP3\textsuperscript{+} Regulatory T Cells  
Anya Schneider, Mary Rieck, Srinath Sanda, Catherine Pihoker, Carla Greenbaum, and Jane H. Buckner

Measles Virus Infection in Adults Induces Production of IL-10 and Is Associated with Increased CD4\textsuperscript{+}CD25\textsuperscript{+} Regulatory T Cells  
Xue-luan Yu, Yu-ming Cheng, Bi-zheng Shi, Fang-xing Qian, Feng-bin Wang, Xi-nian Liu, Hai-ying Yang, Qing-nian Xu, Tang-kai Qi, Li-jun Zha, Zheng-hong Yuan, and Reena Ghildyal

Sunlight Triggers Cutaneous Lupus through a CSF-1-Dependent Mechanism in MRL-Faslpr Mice  

Breaking of CD8\textsuperscript{+} T Cell Tolerance through In Vivo Ligation of CD40 Results in Inhibition of Chronic Graft-versus-Host Disease and Complete Donor Cell Engraftment  
Juyang Kim, Keunhee Park, Hyun J. Kim, Jiyoung Kim, Hyun-A Kim, Daehye Jung, Hye J. Kim, Hye-Joong Choi, Suk-Yong Choi, Kwang W. Seo, Hong R. Cho, and Byunguk Kwon

Intestinal Macrophage/Epithelial Cell-Derived CCL11/Eotaxin-1 Mediates Eosinophil Recruitment and Function in Pediatric Ulcerative Colitis  
Telomerase-Based Pharmacologic Enhancement of Antiviral Function of Human CD8⁺ T Lymphocytes
Steven Russell Faunce, Beth D. Jamieson, Allison C. Chin, Ronald T. Mitsuyasu, Stan T. Parish, Hwee L. Ng,
Christina M. Ramirez Kitchen, Otto O. Yang, Calvin B. Harley, and Rita B. Effros

Multiple Glycines in TCR α-Chains Determine Clonally Diverse Nature of Human T Cell Memory to
Influenza A Virus
Yuri N. Naumov, Elena N. Naumova, Maryam B. Yassai, Kalyani Kota, Raymond M. Welsh, and Liisa K. Selin

Low Expression of the IL-23/Th17 Pathway in Atopic Dermatitis Compared to Psoriasis
Emma Guttman-Yassky, Michelle A. Lowes, Judilyn Fuentes-Duculan, Lisa C. Zaba, Irma Cardinale, Kristine E. Nograles,
Artemis Khatcherian, Inna Novitskaya, John A. Carucci, Reuven Bergman, and James G. Krueger

CORRECTIONS

AUTHOR INDEX