191 (9)

J Immunol 2013; 191:4469-4888; ;
http://www.jimmunol.org/content/191/9

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

**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
IN THIS ISSUE

4469 Minding the GAP in Asthma See article p. 4514
Tumor Regression Sans Side Effects? See article p. 4589
TNF-α Fazes Circadian Gene Timing See article p. 4656
TLR4 Takes on Toxins See article p. 4748
Tolling Toxoplasma See article p. 4818

LETTERS TO THE EDITOR

4471 Comment on “Multiplex B Cell Characterization in Blood, Lymph Nodes, and Tumors from Patients with Malignancies”
Alexander Shimabukuro-Vornhagen, Hans Anton Schlöfer, Dirk Ludger Stippel, Sebastian Theurich, and Michael von Bergwelt-Baildon

4471 Response to Comment on “Multiplex B Cell Characterization in Blood, Lymph Nodes, and Tumors from Patients with Malignancies”
Per Marits, Ali A. Zirakzadeh, Amir Sherif, and Ola Winqvist

PILLARS OF IMMUNOLOGY

4473 Pattern Recognition Theory and the Launch of Modern Innate Immunity
Ruslan Medzhitov

Charles A. Janeway, Jr.

BRIEF REVIEWS

4489 Taming the Beast within: Regulation of Innate Lymphoid Cell Homeostasis and Function
Wei Xu and James P. Di Santo

Cutting Edge: CD1a Tetramers and Dextramers Identify Human Lipopeptide–Specific T Cells Ex Vivo

Anne G. Kasmar, Ilidiko Van Rhijn, Kelly G. Magalhaes, David C. Young, Tan-Yun Cheng, Marie T. Turner, Andre Schiefner, Ravi C. Kalathur, Ian A. Wilson, Mugdha Bhati, Stephanie Gras, Richard W. Birkindshaw, Li L. Tan, Jamie Rosjohan, John Shires, Søren Jakobsen, John D. Altman, and D. Branch Moody

Allergy and Other Hypersensitivities

Genotype-Dependent Effects of TGF-β1 on Mast Cell Function: Targeting the Stat5 Pathway

Josephine Fernando, Travis W. Faber, Nicholas A. Pullen, Yves T. Falanga, Elizabeth Moturiayo Kolawole, Carole A. Oskeritzian, Brian O. Barnstein, Geetha Bandara, Geqiang Li, Lawrence B. Schwartz, Sarah Spiegel, David B. Straus, Daniel H. Conrad, Kevin D. Bunting, and John R. Ryan

Abr, a Negative Regulator of Rac, Attenuates Cockroach Allergen–Induced Asthma in a Mouse Model

Dapeng Gong, Fei Fei, Min Lim, Min Yu, John Groffen, and Nora H. Heisterkamp

Antigen Recognition and Responses

AID-Expressing Germinal Center B Cells Cluster Normally within Lymph Node Follicles in the Absence of FDC-M1+ CD35+ Follicular Dendritic Cells but Dissipate Prematurely

Bryant Boulianne, Michael X. Le, Leisle A. Ward, Lingjin Meng, Dania Haddad, Conglei Li, Alberto Martin, and Jennifer L. Gommerman

Autoimmunity

Neutrophils Amplify Autoimmune Central Nervous System Infiltrates by Maturing Local APCs

Karin Steinbach, Melanie Piedaventi, Simone Bauer, Johannes T. Neumann, and Manuel A. Fries

Selective Inhibition of BTK Prevents Murine Lupus and Antibody-Mediated Glomerulonephritis


Syndecan-1, a Cell Surface Proteoglycan, Negatively Regulates Initial Leukocyte Recruitment to the Brain across the Choroid Plexus in Murine Experimental Autoimmune Encephalomyelitis

Xueli Zhang, Chuan Wu, Jian Song, Martin Gütte, and Lydia Sorokin

TIM-4 Has Dual Function in the Induction and Effector Phases of Murine Arthritis

Yoshiyuki Abe, Fumitaka Kamachi, Toshio Kawamoto, Fumihiko Makino, Jun Ito, Yuko Kojima, Alaa El Din Hussein Mustapha, Yoshihiko Usui, Hideo Kagita, Yoshihiro Takasaki, Ko Okumura, and Hisaya Akiba

 Interruption of the OX40–OX40 Ligand Pathway in LDL Receptor–Deficient Mice Causes Regression of Atherosclerosis

Amanda C. Foks, Gigi H. M. van Puijvelde, Ilze Bot, Mariette N. D. ter Borg, Kim L. L. Habets, Jason L. Johnson, Hideo Kagita, Theo J. C. van Berkel, and Johan Kuiper

IL-21 Is a Double-Edged Sword in the Systemic Lupus Erythematosus–like Disease of BXSB. Yaa Mice

Caroline G. McPhee, Jason A. Bubier, Thomas J. Sproule, Giljun Park, Martin P. Steinbuck, William H. Schott, Gregory J. Christianson, Herbert C. Morse, III, and Derry C. Roopenian

Clinical and Human Immunology

Preclinical In Vivo Modeling of Cytokine Release Syndrome Induced by ErbB-Retargeted Human T Cells: Identifying a Window of Therapeutic Opportunity?

Sjoekje J. van der Stegen, David M. Davies, Scott Wilkie, Julia Foster, Jane K. Soobawski, Jerome Burnet, Lynsey M. Whilding, Roseanna M. Petrovic, Sadaf Ghaem-Maghami, Stephen Mather, Jean-Pierre Jeannon, Ana C. Parente-Pereira, and John Maher

A Monovalent Anti-Human CD28 Domain Antibody Antagonist: Preclinical Efficacy and Safety

Human CD4^+CD3^- Innate-Like T Cells Provide a Source of TNF and Lymphotixin-αβ and Are Elevated in Rheumatoid Arthritis
Vasilios Bekiaris, John R. Sedj, Maura Rosetti, Roberto Spreafico, Shilpi Sharma, Antje Rhode-Kurnow, Brian C. Ware, Nini Huang, Matthew G. Macauley, Paula S. Norris, Salvatore Albani, and Carl F. Ware

**IMMUNE REGULATION**

Human Memory Helios^- FOXP3'- Regulatory T Cells (Tregs) Encompass Induced Tregs That Express Aiolos and Respond to IL-1β by Downregulating Their Suppressor Functions
Caroline Raffin, Pascale Pignon, Clotilde Celse, Emilie Debien, Danila Valmori, and Maha Ayyoub

Estrogen Signaling through the G Protein-Coupled Estrogen Receptor Regulates Granulocyte Activation in Fish
Isabel Cabas, M. Carmen Rodenas, Emilia Abellán, José Meseguer, Victoriano Mulero, and Alfonso Garcia-Ayala

Inhibition of NF-κB by Opioids in T Cells
Christine Börner and Jürgen Kraus

Increased Mammalian Target of Rapamycin Complex 2 Signaling Promotes Age-Related Decline in CD4 T Cell Signaling and Function
Eric Perkey, Diane Fingar, Richard A. Miller, and Gonzalo G. Garcia

Suprachiasmatic Astrocytes Modulate the Circadian Clock in Response to TNF-α
José M. Dubart, María Juliana Leone, Natalia Paladino, Jennifer A. Evans, Oscar Castanon-Cervantes, Alec J. Davidson, and Diego A. Golombek

**IMMUNE SYSTEM DEVELOPMENT**

Identification of a Tissue-Specific, C/EBPβ-Dependent Pathway of Differentiation for Murine Peritoneal Macrophages
Derek W. Cain, Emily G. O’Koren, Matthew J. Kan, Mandy Wombol, Gregory D. Sempowski, Kristen Hopper, Michael D. Gunn, and Garnett Kelsoe

Eb1 and c-Myb Repress Rag Transcription Downstream of Stat5 during Early B Cell Development
Greg A. Timblin and Mark S. Schlissel

The Host Environment Is Responsible for Aging-Related Functional NK Cell Deficiency
Bo-Chin Chiu, Brian E. Martin, Valerie R. Stolberg, and Stephen W. Chensue

**INFECTIOUS DISEASE AND HOST RESPONSE**

The Transcription Factor T-bet Regulates Parasitemia and Promotes Pathogenesis during Plasmodium berghei ANKA Murine Malaria
Miranda S. Oakley, Bikash R. Sahu, Leda Latsprech-Cole, Nehal R. Solanki, Victoria Majam, Phuong Thao Pham, Rajdeep Banerjee, Yukiko Kozakai, Steven C. Derrick, Sanjai Kumar, and Sheldon L. Morris

Multiparametric Analysis of Host Response to Murine Cytomegalovirus in MHC Class I–Disparate Mice Reveals Primacy of D^β^-Licensed Ly49G_2^+ NK Cells in Viral Control

Selective Ablation of Lung Epithelial IKK2 Impairs Pulmonary Th17 Responses and Delays the Clearance of Pneumocystis
Nelissa Perez-Nazario, Javier Rangel-Moreno, Michael A. O’Reilly, Manolis Paparakis, Francis Gigliotti, and Terry W. Wright

Acute Plasmodium chabaudi Infection Dampens Humoral Responses to a Secondary T-Dependent Antigen but Enhances Responses to a Secondary T-Independent Antigen
Joel R. Wilmore, Alexander C. Mau, Julie S. Lefebvre, Laura Haynes, and Rosemary Rochford

The MyD88 Pathway in Plasmacytoid and CD4^+ Dendritic Cells Primarily Triggers Type I IFN Production against Measles Virus in a Mouse Infection Model
Hiromi Takaki, Makoto Takeda, Maino Tabara, Masashi Shingai, Hiroyuki Oshiumi, Misako Matsumoto, and Tsukasa Seya
Identification of TLR4 as the Receptor That Recognizes Shiga Toxins in Human Neutrophils
Maurizio Brigotti, Domenica Carnicelli, Valentina Arfilli, Nicola Tamassia, Francesca Bossetti, Elena Fabbrri, Pier Luigi Tazzari, Francesca Ricci, Pasquale Paolo Fagliaro, Enzo Spisni, and Marco A. Casatella

TLR2-Induced IL-10 Production Impairs Neutrophil Recruitment to Infected Tissues during Neonatal Bacterial Sepsis
Elva B. Andrade, Joana Alves, Pedro Madureira, Liliana Oliveira, Adília Ribeiro, Anabela Cordeiro-da-Silva, Margarida Correia-Neves, Patrick Trieu-Cuot, and Paula Ferreira

INNATE IMMUNITY AND INFLAMMATION

Chimeric Anti-CD14 IgG2/4 Hybrid Antibodies for Therapeutic Intervention in Pig and Human Models of Inflammation
Corinna Lau, Kristin S. Gunnarsen, Lene S. Høydahl, Jan Terje Andersen, Goril Bernsen, Anne Pharø, Julie K. Lindstad, Judith K. Ludviksen, Ole-Lars Brekke, Andreas Barratt-Due, Erik Waage Nielsen, Christopher R. Stokes, Terje Espevik, Inger Sandlie, and Tom Eirik Molleis

Large Spectrum of HLA-C Recognition by Killer Ig-like Receptor (KIR)2DL2 and KIR2DL3 and Restricted C1 Specificity of KIR2DS2: Dominant Impact of KIR2DL2/KIR2DS2 on KIR2D NK Cell Repertoire Formation
Gaelle David, Zakia Djaooud, Catherine Willem, Nolenn Legrand, Pauline Retman, Katia Gagne, Anne Cesbron, and Christelle Resièr

Proapoptotic Chemotherapeutic Drugs Induce Noncanonical Processing and Release of IL-1β via Caspase-8 in Dendritic Cells
Christina Antonopoulos, Caroline El Sanadi, William J. Kaiser, Edward S. Mocarski, and George R. Dubyak

α3/4 Fucosyltransferase 3–Dependent Synthesis of Sialyl Lewis A on CD44 Variant Containing Exon 6 Mediates Polymorphonuclear Leukocyte Detachment from Intestinal Epithelium during Transepithelial Migration
Jennifer C. Brazil, Renpeng Liu, Ronen Sumangin, Keli N. Kolegraff, Asma Nusrat, Richard D. Cummings, Charles A. Parkos, and Nancy A. Louis

Cooperation of TLR12 and TLR11 in the IRF8-Dependent IL-12 Response to Toxoplasma gondii Profilin
Megan Raetz, Alexey Kibardin, Carolyn R. Sturge, Reed Pifer, Haiying Li, Ezra Burstein, Keiko Ozato, Sergey Larin, and Felix Yarovinsky

Neuraminidase Reprograms Lung Tissue and Potentiates Lipopolysaccharide-Induced Acute Lung Injury in Mice
Chiguang Feng, Lei Zhang, Chinh Nguyen, Stefanie N. Vogel, Simeon E. Goldblum, William C. Blackwelder, and Alan S. Cross

IL-1 Induces Proinflammatory Leukocyte Infiltration and Regulates Fibroblast Phenotype in the Infarcted Myocardium
Amit Saxena, Wei Chen, Ya Su, Vikrant Rai, Olisambu U. Uche, Na Li, and Nikolaos G. Frangogiannis

Enhanced Atherosclerosis in TIPE2-Deficient Mice Is Associated with Increased Macrophage Responses to Oxidized Low-Density Lipoprotein
Yunwei Lou, Suxia Liu, Cheng Zhang, Guizhong Zhang, Jinging Li, Mei Ni, Guipeng An, Mei Dong, Xiaoling Liu, Faliang Zhu, Wenqian Zhang, Fei Gao, Youhai H. Chen, and Yun Zhang

Characterization of Human Afferent Lymph Dendritic Cells from Seroma Fluids
Barbara Morandi, Irene Bonacorsì, Mario Mesiti, Romana Conte, Paolo Carrega, Gregorio Costa, Raffaella Iemmo, Stefania Martini, Soldano Ferrone, Claudia Cantoni, Maria Cristina Mingari, Lorenzo Moretta, and Guido Ferlazzo

MUCOSAL IMMUNOLOGY

Evidence for a Functional Thymic Stromal Lymphopoietin Signaling Axis in Fibrotic Lung Disease
Arnab Datta, Robert Alexander, Michał G. Sulikowski, Andrew G. Nicholson, Toby M. Maher, Chris J. Scotton, and Rachel C. Chambers
Characterization of Distinct Immunophenotypes across Pediatric Brain Tumor Types
Andrea M. Griesinger, Diane K. Birks, Andrew M. Donson, Vladimir Amani, Lindsey M. Hoffman, Allen Waziri, Michael Wang, Michael H. Handler, and Nicholas K. Foreman