This information is current as of April 14, 2017.
2689 IN THIS ISSUE

PILLARS OF IMMUNOLOGY

2691 T Cell Costimulation Blockade and Organ Transplantation: A Change of Philosophy for Transplant Immunologists?
Daniel R. Goldstein

Christian P. Larsen, Eric T. Elwood, Diane Z. Alexander, Shannon C. Ritchie, Rose Hendrix, Carol Tucker-Burden, Hong Rae Cho, Alejandro Aruffo, Diane Hollenbaugh, Peter S. Linsley, Kevin J. Winn, and Thomas C. Pearson

BRIEF REVIEWS

2699 Functional Characteristics of the High Affinity IgG Receptor, FcγRI
Cees E. van der Poel, Robbert M. Spaapen, Jan G. J. van de Winkel, and Jeanette H. W. Leusen

CUTTING EDGE

2705 Cutting Edge: Persistently Open Chromatin at Effector Gene Loci in Resting Memory CD8+ T Cells Independent of Transcriptional Status
Valerie P. Zednik, Jonathan B. Johnnidis, E. John Wherry, and Shelley L. Berger

2710 Cutting Edge: Tubulin α Functions as an Adaptor in NFAT–Importin β Interaction
Kazuhiro Ishiguro, Takafumi Ando, Osamu Maeda, Osamu Watanabe, and Hideki Goto

2714 Cutting Edge: Cyclic Polypeptide and Aminoglycoside Antibiotics Trigger IL-1β Secretion by Activating the NLRP3 Inflammasome
Ramanjaneyulu Allam, Murthy Narayana Darisipudi, Khader Valli Rupanagudi, Julia Lichtnekert, Jurg Tschopp, and Hans-Joachim Anders

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

2719 Basophils Are the Major Producers of IL-4 during Primary Helminth Infection
Nicholas van Panhuys, Melanie Prout, Elizabeth Forbes, Booki Min, William E. Paul, and Graham Le Gros


The Journal of Immunology (ISSN 0022-1767) is published twice each month by The American Association of Immunologists, Inc., 9650 Rockville Pike, Bethesda, MD 20814-3994, Phone: 301-634-7197, Fax: 301-634-7829. Subscription terms: New subscriptions and renewals begin January 1 and expire one year later (see http://www.jimmunol.org/subscriptions for prices and details). A special rate is available to members of The American Association of Immunologists, Inc. (see http://www.aai.org/membership). The American Association of Immunologists, Inc., is not responsible for undeliverable issues. Replacement issues can be obtained, if available, at the regular price of single issues (see http://www.jimmunol.org/pdf/single_issue_purchase.pdf). Reprints of individual articles are available only from authors. Periodicals postage paid at Bethesda, MD 20814-3994, and at additional mailing offices. Country of origin U.S.A. Printed on acid-free recyclable paper. Postmaster: Send address changes 60 days in advance to The Journal of Immunology, Subscription Department, 9650 Rockville Pike, Bethesda, MD 20814-3994. Copyright © 2011 by The American Association of Immunologists, Inc.
Intrinsic IL-21 Signaling Is Critical for CD8 T Cell Survival and Memory Formation in Response to Vaccinia Viral Infection  
Patricia Novy, Xiaopei Huang, Warren J. Leonard, and Yiping Yang

Host APCs Augment In Vivo Expansion of Donor Natural Regulatory T Cells via B7H1/B7.1 in Allogeneic Recipients  
Tangbeng Yi, Xiaofan Li, Sheng Yao, Lin Wang, Yuhong Chen, Dongchang Zhao, Heather F. Johnston, James S. Young, Hongjun Liu, Ivan Todorov, Stephen J. Forman, Lieping Chen, and Defu Zeng

Anaphylaxis and Mortality Induced by Treatment of Mice with Anti–VLA-4 Antibody and Pertussis Toxin  
Niannian Ji, Nagarjun Rao, Neal M. Guentzel, Bernard P. Arulanandam, and Thomas G. Forsthuber

2842 Lung Effector Memory and Activated CD4+ T Cells Display Enhanced Proliferation in Surfactant Protein A-Deficient Mice during Allergen-Mediated Inflammation  
Amy M. Pastva, Sambuddho Mukherjee, Charles Giamberardino, Bethany Hsia, Bernice Lo, Gregory D. Sempowski, and Jo Rae Wright

Fascin1 Promotes Cell Migration of Mature Dendritic Cells  
Yoshihiko Yamakita, Fumio Matsumura, Michael W. Lipscomb, Po-chien Chou, Guy Werlen, Janis K. Burkhardt, and Shigeko Yamashiro
Human Serum Amyloid P Functions as a Negative Regulator of the Innate and Adaptive Immune Responses to DNA Vaccines
Yue Wang, Yingjun Guo, Xiaohui Wang, Jinfeng Huang, Jingli Shang, and Shuhan Sun

The Critical Role of IL-1 Receptor-Associated Kinase 4-Mediated NF-κB Activation in Modified Low-Density Lipoprotein-Induced Inflammatory Gene Expression and Atherosclerosis
Tae Whan Kim, Maria Fekbraho, Peggy Robinet, Brandon DuGar, Diane Greene, Anna Cerny, Eiche Latz, Raymond Gilmour, Kirk Staschke, Guy Chisolm, Paul L. Fox, Paul E. DiCorleto, Jonathan D. Smith, and Xiaoxia Li

Identification of Semaphorin 4B as a Negative Regulator of Basophil-Mediated Immune Responses
Yukinobu Nakagawa, Hyota Takamatu, Tatsuoda Okuno, Sujin Kang, Satoshi Nojima, Tetsuya Kimura, Tatsuki R. Kataoka, Masahito Ikawa, Toshihiko Toyofuku, Ichiro Katayama, and Atsushi Kumanogoh

Memory CD4 T Cells That Express CXCR5 Provide Accelerated Help to B Cells
Megan K. L. MacLeod, Alexandria David, Amy S. McKee, Frances Crawford, John W. Kappler, and Philippa Marrack

Dysregulation of TIM-3–Galectin-9 Pathway in the Cystic Fibrosis Airways
Isabel Vega-Carrascal, Emer P. Reeves, Toshiro Niki, Tomohiro Arikawa, Paul McNally, Shane J. O’Neill, Mitsuomi Hirashima, and Noel G. McElvaney

Activated Invariant NKT Cells Regulate Osteoclast Development and Function

Genetic Labeling Reveals Altered Turnover and Stability of Innate Lymphocytes in Latent Mouse Cytomegalovirus Infection
Andreas Busche, Susanne Schmitz, Henrik Feige, Scott H. Robbins, Thierry Walzer, Charles A. Stewart, Reinhold Förster, Martin Messerle, and Immo Prinz

Role of Two Adaptor Molecules SLP-76 and LAT in the PI3K Signaling Pathway in Activated T Cells
Eun Kyung Shim, Seung Hee Jung, and Jong Ran Lee

Computational and Experimental Analysis Reveals a Requirement for Eosinophil-Derived IL-13 for the Development of Allergic Airway Responses in C57BL/6 Mice
Elizabeth R. Walsh, Juilee Thakar, Kindra Stokes, Fei Huang, Reka Albert, and Avery August

Conformational Melding Permits a Conserved Binding Geometry in TCR Recognition of Foreign and Self Molecular Mimics
Oleg Y. Borbulevych, Kurt H. Piepenbrink, and Brian M. Baker

Ubiquitylation of an Internalized Killer Cell Ig-Like Receptor by Triad3A Disrupts Sustained NF-κB Signaling
S. M. Shahjahan Miah, Amanda K. Purdy, Nicholas B. Rodin, Alexander W. MacFarlane, IV, Jennifer Obinsky, Diana A. Alvarez-Arias, and Kerry S. Campbell

Naive T Cell Repertoire Skewing in HLA-A2 Individuals by a Specialized Rearrangement Mechanism Results in Public Memory Clonotypes
Maryam Yassai, Dmitry Bosenko, Melissa Unruh, Gregory Zacharias, Erica Reed, Wendy Demos, Andrea Ferrante, and Jack Gorski

Class IA Phosphoinositide 3-Kinase β and δ Regulate Neutrophil Oxidase Activation in Response to Aspergillus fumigatus Hyphae

HLA Class I Allelic Sequence and Conformation Regulate Leukocyte Ig-Like Receptor Binding
β<sub>2</sub> Integrin Induces TCRζ–Syk–Phospholipase C-γ Phosphorylation and Paxillin-Dependent Granule Polarization in Human NK Cells
Michael E. March and Eric O. Long

The Dual Functions of IL-1 Receptor-Associated Kinase 2 in TLR9-Mediated IFN and Proinflammatory Cytokine Production
Youzhong Wan, Tae Whan Kim, Minjia Yu, Hao Zhou, Michifumi Yamashita, Zizhen Kang, Weiguo Yin, Jian-an Wang, James Thomas, Guan C. Sen, George R. Stark, and Xiaoxia Li

GCN5 Regulates the Superoxide-Generating System in Leukocytes Via Controlling gp91-phox Gene Expression
Hidehiko Kikuchi, Futoshi Kuribayashi, Naomi Kii, Yasunari Takami, and Tatsuo Nakayama

TANK-Binding Kinase 1 Attenuates PTAP-Dependent Retroviral Budding through Targeting Endosomal Sorting Complex Required for Transport-I
Qi Da, Xuanming Yang, Youli Xu, Guangxia Gao, Genhong Cheng, and Hong Tang

Molecular Characterization of Caveolin-1 in Pigs Infected with Haemophilus parasuis
Xiang-Dong Liu, Hong-Bo Chen, Qin Tong, Xin-Yan Li, Meng-Jin Zhu, Zhen-Fang Wu, Rui Zhou, and Shu-Hong Zhao

Transcriptomes of the B and T Lineages Compared by Multiplatform Microarray Profiling
Michio W. Painter, Scott Davis, Richard R. Hardy, Diane Mathis, Christophe Benoist, and The Immunological Genome Project Consortium

A Common Haplotype of the TNF Receptor 2 Gene Modulates Endotoxin Tolerance
Benjamin P. Fairfax, Emma E. Davenport, Seiko Makino, Adrian V. S. Hill, Fredrik O. Vannberg, and Julian C. Knight

Distinct Different Contributions of the Alternative and Classical Complement Activation Pathway for the Innate Host Response during Sepsis
Katja Dahlke, Christiane D. Wrann, Oliver Sommerfeld, Maik Södfedorf, Peter Recknagel, Svea Sache, Sebastian W. Winter, Andreas Klos, Gregory L. Stahl, Yuanyuan Xu Ma, Ralf A. Claus, Konrad Reinhart, Michael Bauer, and Niels C. Riedemann

5-Lipoxygenase–Deficient Mice Infected with Borrelia burgdorferi Develop Persistent Arthritis
Victoria A. Blaho, Yan Zhang, Jennifer M. Hughes-Hanks, and Charles R. Brown

Recognition of Cytoplasmic RNA Results in Cathepsin-Dependent Inflammasome Activation and Apoptosis in Human Macrophages
Johanna Rintahaka, Niina Lietzen, Tiina Öhman, Tuula A. Nyman, and Sampsa Matikainen

Cross-Talk between Programmed Death-1 and Suppressor of Cytokine Signaling-1 in Inhibition of IL-12 Production by Monocytes/Macrophages in Hepatitis C Virus Infection
Ying Zhang, Cheng J. Ma, Lei Ni, Chun L. Zhang, Xiao Y. Wu, Uday Kumaraguru, Chuan F. Li, Jonathan P. Moorman, and Zhi Q. Yao

Conventional Dendritic Cells Mount a Type I IFN Response against Candida spp. Requiring Novel Phagosomal TLR7-Mediated IFN-β Signaling

A Novel Human IgA Monoclonal Antibody Protects against Tuberculosis
Sacharitcha Balu, Rajko Reljic, Melanie J. Lewis, Richard J. Pleass, Richard McIntosh, Cees van Kooten, Marjolein van Egmond, Stephen Challacombe, Jenny M. Woof, and Juraj Ivanyi

Immune Evasion of Moraxella catarrhalis Involves Ubiquitous Surface Protein A-Dependent C3d Binding
Teresa Hallström, Therése Nordström, Thuan Tong Tan, Taras Manolov, John D. Lambri, David E. Isenman, Peter F. Zipfel, Anna M. Blom, and Kristian Riesbeck

Nonhematopoietic Cells Are Key Players in Innate Control of Bacterial Airway Infection
Salomé LeibundGut-Landmann, Kerstin Weidner, Hubert Hilbi, and Annette Oxenius
Type III IFNs in Pteropid Bats: Differential Expression Patterns Provide Evidence for Distinct Roles in Antiviral Immunity
Peng Zhou, Chris Cowled, Shawn Todd, Gary Crameri, Elena R. Virtue, Glenn A. Marsh, Reuben Klein, Zhengli Shi, Lin-Fa Wang, and Michelle L. Baker

HIV Replication in CD4+ T Lymphocytes in the Presence and Absence of Follicular Dendritic Cells: Inhibition of Replication Mediated by α1-Antitrypsin through Altered IkBα Ubiquitination
Xueyuan Zhou, Leland Shapiro, Gilbert Fellingham, Barry M. Willardson, and Gregory F. Burton

Individual Genetic Variations Directly Effect Polarization of Cytokine Responses to Superantigens Associated with Streptococcal Sepsis: Implications for Customized Patient Care
Mohammed M. Nooh, Suba Nookala, Rita Kansal, and Malak Koth

INFLAMMATION

Mucosal Allergic Sensitization to Cockroach Allergens Is Dependent on Proteinase Activity and Proteinase-Activated Receptor-2 Activation

NF-κB– and AP-1–Mediated DNA Looping Regulates Osteopontin Transcription in Endotoxin-Stimulated Murine Macrophages
Wei Zhao, Lijuan Wang, Meng Zhang, Peng Wang, Lei Zhang, Chao Yuan, Jianni Qi, Yu Qiao, Paul C. Kuo, and Chengiang Gao

Innate Immune Function of the Adherens Junction Protein p120-Catenin in Endothelial Response to Endotoxin
Yan-lei Wang, Arrar B. Malik, Yu Sun, Sanyuan Hu, Albert B. Reynolds, Richard D. Minshall, and Guochang Hu

The Endocannabinoid 2-Arachidonoyl-Glycerol Activates Human Neutrophils: Critical Role of Its Hydrolysis and De Novo Leukotriene B4 Biosynthesis
François Chouinard, Julie S. Lafebre, Pauline Navarro, Line Bouchard, Claudine Ferland, Mélanie Lalancette-Hébert, David Marsolais, Michel Laviolette, and Nicolas Flamand

IL-17A and TNF-α Exert Synergistic Effects on Expression of CXCL5 by Alveolar Type II Cells In Vivo and In Vitro
Yubong Liu, Junjie Mei, Linda Gonzales, Guang Yang, Ning Dai, Ping Wang, Peggy Zhang, Michael Favara, Kenneth C. Malcolm, Susan Guttentag, and G. Scott Worthen

CX3CR1+ Lung Mononuclear Phagocytes Spatially Confined to the Interstitium Produce TNF-α and IL-6 and Promote Cigarette Smoke-Induced Emphysema
Zeyu Xiong, Adriana S. Leme, Prabir Ray, Steven D. Shapiro, and Janet S. Lee

Human TMEM30a Promotes Uptake of Antitumor and Bioactive Choline Phospholipids into Mammalian Cells
Rui Chen, Erin Brady, and Thomas M. McIntyre

IL-6 Trans-Signaling System in Intra-Amniotic Inflammation, Preterm Birth, and Preterm Premature Rupture of the Membranes
Sarah Y. Lee, Irina A. Buhimschi, Antonette T. Dukay, Unzila A. Ali, Guomao Zhao, Sonya S. Abdel-Raizq, Mert O. Bahtiyar, Stephen F. Thung, Edmund F. Funai, and Catalin S. Buhimschi

TLR2 Hypersensitivity of Astrocytes as Functional Consequence of Previous Inflammatory Episodes
Anja Henn, Susanne Kirner, and Marcel Leist

Septic Shock Is Associated with Receptor for Advanced Glycation End Products Ligation of LPS
Yasuhiro Yamamoto, At Harashima, Hidehito Saito, Koichi Tsumeyama, Seiichi Munetue, So Motoyoshi, Dong Han, Takuwo Watanabe, Masahide Asoo, Shin Takasawa, Hiroshi Okamoto, Satoshi Shimura, Tadahiro Karasawa, Hideto Yonekura, and Hiroshi Yamamoto
Chikungunya Virus Envelope-Specific Human Monoclonal Antibodies with Broad Neutralization Potency
Lucile Warter, Chia Yin Lee, Rekha Thiagarajan, Marc Grandadam, Serge Lebecque, Raymond T. P. Lin,
Sebastien Bertin-Maghit, Lisa F. P. Ng, Jean-Pierre Abastado, Philippe Després, Cheng-I Wang, and Alessandra Nardin

TCR Mimic Monoclonal Antibodies Induce Apoptosis of Tumor Cells via Immune Effector-Independent Mechanisms
Bhavna Verma, Rinki Jain, Shannon Caseltine, Aaron Rennels, Raktima Bhattacharya, Maciej M. Markiewski, Amit Rawat,
Francisca Neethling, Ulrich Bickel, and Jon A. Weidanz

AUTHOR INDEX