This information is current as of April 18, 2017.
IN THIS ISSUE

BRIEF REVIEWS

7143 The Epigenetic Face of Systemic Lupus Erythematous
Esteban Ballestar, Manel Esteller, and Bruce C. Richardson

CUTTING EDGE

7149 Cutting Edge: Allogeneic CD4⁺CD25⁺Foxp3⁺ T Regulatory Cells Suppress Autoimmunity while Establishing Transplantation Tolerance
Dennis Adeegbe, Allison L. Bayer, Robert B. Levy, and Thomas R. Malek

7154 Cutting Edge: High-Mobility Group Box 1 Preconditioning Protects against Liver Ischemia-Reperfusion Injury
Kunihiko Izuishi, Allan Tsung, Geetha Jayabal, Nathan D. Critchlow, Jianhua Li, Kevin J. Tracey, Richard A. Demarco, Michael T. Lotze, Mitchell P. Fink, David A. Geller, and Timothy R. Billiar

7159 Cutting Edge: Impaired Transitional B Cell Production and Selection in the Nonobese Diabetic Mouse
William J. Quinn III, Negin Noorchashm, Jenni E. Crowley, Amy J. Reed, Hooman Noorchashm, Ali Naji, and Michael P. Cancro

7165 Cutting Edge: Dominance by an MHC-Independent Inhibitory Receptor Compromises NK Killing of Complex Targets

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

7171 Regulatory T Cells Control Uveoretinitis Induced by Pathogenic Th1 Cells Reacting to a Specific Retinal Neoantigen
Céline Terrada, Sylvain Fison, Yvonne De Kozak, Mohammed Kaddouri, Phuc Lehoang, David Klatzmann, Benoît L. Salomon, and Bahram Bodaghi

7180 Strong TCR Signaling, TLR Ligands, and Cytokine Redundancies Ensure Robust Development of Type 1 Effector T Cells
Chiara Nembrini, Brian Abel, Manfred Kopf, and Benjamin J. Marsland


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. Subscription term: 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). Periodicals postage paid at Bethesda, MD 20814-3998, and at additional mailing offices. Country of origin U.S.A. Printed on acid-free recyclable paper. Postmaster: Send address changes to The Journal of Immunology, Subscription Department, Room L-2407A, 9650 Rockville Pike, Bethesda, MD 20814-3998. Copyright © 2006 by The American Association of Immunologists, Inc.
Biliary Obstruction Selectively Expands and Activates Liver Myeloid Dendritic Cells

In Situ Replication of Immediate Dendritic Cell (DC) Precursors Contributes to Conventional DC Homeostasis in Lymphoid Tissue
Jun Diao, Erin Winter, Claude Cantin, Wenhao Chen, Luueling Xu, David Kelvin, James Phillips, and Mark S. Cattral

Transgenic Galectin-1 Induces Maturation of Dendritic Cells That Elicit Contrasting Responses in Naive and Activated T Cells

Suppression of Complement Regulatory Proteins (CRPs) Exacerbates Experimental Autoimmune Anterior Uveitis (EAAU)
Purushottam Jha, Jeong-Hyeon Sohn, Qin Xu, Yali Wang, Henry J. Kaplan, Puran S. Bora, and Nalini S. Bora

A Postmigrational Switch among Skin-Derived Dendritic Cells to a Macrophage-Like Phenotype Is Predetermined by the Intracutaneous Cytokine Balance
Tanja D. de Gruijl, Claudia C. Sombroek, Sivéad M. Longbeed, Dinja Oosterhoff, Jan Buter, Alfons J. M. van den Eertwegh, Rik J. Schepers, and Herbert M. Pinedo

Regulation of Microtubule Formation in Activated Mast Cells by Complexes of γ-Tubulin with Fyn and Syk Kinases
Vadym Sulimenko, Eduarda Dráberová, Tetyana Sulimenko, Libor Mačírek, Věra Richterová, Petr Dráber, and Pavel Dráber

Functional Implication of Cellular Prion Protein in Antigen-Driven Interactions between T Cells and Dendritic Cells
Clara Ballerini, Pauline Gourdain, Véronique Bachy, Nicolas Blanchard, Etienne Levavasseur, Sylvie Grégoire, Pascaline Fontes, Pierre Aucouturier, Claire Hivroz, and Claude Carnaud

Tyk2 Negatively Regulates Adaptive Th1 Immunity by Mediating IL-10 Signaling and Promoting IFN-γ-Dependent IL-10 Reactivation
Michael H. Shaw, Gordon J. Freeman, Mark F. Scott, Barbara A. Fox, David J. Bzik, Yasmine Belkaid, and George S. Yap

CARMA1 Is Critical for the Development of Allergic Airway Inflammation in a Murine Model of Asthma
Benjamin D. Medoff, Brian Seed, Ryan Jackobek, Jennifer Zora, Yi Yang, Andrew D. Luster, and Ramnik Xavier

IL-1β Breaks Tolerance through Expansion of CD25+ Effector T Cells
Brendan J. O’Sullivan, Helen E. Thomas, Saparna Pai, Pere Santamaria, Yoichiro Iwakura, Raymond J. Steptoe, Thomas W. H. Kay, and Ranjeny Thomas

IL-2 Is Required for the Activation of Memory CD8+ T Cells via Antigen Cross-Presentation
Nathalie E. Blachère, Heather K. Morris, Deborah Braun, Hélène Saklani, James P. Di Santo, Robert B. Darnell, and Matthew L. Albert

Oxygen Radicals Induce Poly(ADP-Ribose) Polymerase-Dependent Cell Death in Cytotoxic Lymphocytes
Fredrik B. Thorén, Ana I. Romero, and Kristoffer Hellstrand

Quantifying and Imaging NY-ESO-1/LAGE-1-Derived Epitopes on Tumor Cells Using High Affinity T Cell Receptors
Marco A. Purbhoo, Deborah H. Sutton, Joanna E. Brewer, Rebecca E. Mullings, Maxine E. Hill, Tara M. Mahon, Julia Karbach, Elke Jüger, Brian J. Cameron, Nikolai Lissin, Paresh Vyas, Ji-Li Chen, Vincenzo Cerundolo, and Bent K. Jakobsen

Antiangiogenic and Antitumor Activities of IL-27
Motomu Shimizu, Mariko Shimamura, Toshiyuki Ouwaki, Masayuki Asakawa, Koji Fujita, Motohige Kudo, Yoichiro Iwakura, Yasutaka Takeda, Andrew D. Luster, Junichiro Mizuguchi, and Takeyuki Yoshimoto
Chronic Immune Therapy Induces a Progressive Increase in Intratumoral T Suppressor Activity and a Concurrent Loss of Tumor-Specific CD8⁺ T Effectors in her-2/neu Transgenic Mice Bearing Advanced Spontaneous Tumors

Raji E. Nair, Mehmet O. Kilinc, Stacy A. Jones, and Nejat K. Egilmez

Efficient Immunization and Cross-Primming by Vaccine Adjuvants Containing TLR3 or TLR9 Agonists Complexed to Cationic Liposomes

Karen Zaks, Michael Jordan, Amanda Guth, Karen Sellins, Ross Kedl, Angelo Izzo, Catharine Bosio, and Steven Dow

TCR-Dependent Cell Response Is Modulated by the Timing of CD43 Engagement

Nora A. Fierro, Gustavo Pedraza-Alva, and Yvonne Rosenstein

BTNL2, a Butyrophilin-Like Molecule That Functions to Inhibit T Cell Activation

Thang Nguyen, Xikui K. Liu, Yongliang Zhang, and Chen Dong

The Cyclic AMP-Epac1-Rap1 Pathway Is Dissociated from Regulation of Effector Functions in Monocytes but Acquires Immunoregulatory Function in Mature Macrophages

Tone Bryn, Milada Mahic, Jorrit M. Eversink, Frank Schwede, Einar Martin Aandahl, and Kjetil Taskén

Estrogen Induces Thymic Atrophy by Eliminating Early Thymic Progenitors and Inhibiting Proliferation of β-Selected Thymocytes

Allison L. Zoller and Gilbert J. Kersh

CD4⁺ T Cells Can Protect APC from CTL-Mediated Elimination

Scott N. Mueller, Cl aerialen M. Jones, Angui T. Stock, Mark Suter, William R. Heath, and Francis R. Carbone

A Membrane Form of TNF-α Presented by Exosomes Delays T Cell Activation-Induced Cell Death

Huang-Ge Zhang, Cunren Liu, Kaishun Su, Shaohua Yu, Liming Zhang, Shuangqin Zhang, Jianhua Wang, Xu Cao, William Grizzle, and Robert P. Kimberly

Opposing Effects of ICOS on Graft-versus-Host Disease Mediated by CD4 and CD8 T Cells

Xue-Zhong Yu, Yaming Liang, Roza I. Nurieva, Fei Guo, Claudio Anasetti, and Chen Dong

Signals from a Self-Antigen Induce Positive Selection in Early B Cell Ontogeny But Are Tolerogenic in Adults

Helen Ferry, Tianya L. Crockford, Janson C. H. Leung, and Richard J. Cornell

The CC Chemokine MCP-1 Stimulates Surface Expression of CX3CR1 and Enhances the Adhesion of Monocytes to Fractalkine/CX3CL1 via p38 MAPK

Simone R. Green, Ki Hoon Han, Yiming Chen, Felicidad Almanza, Israel F. Charo, Yury I. Miller, and Oswald Quehenberger

The Sialyltransferase ST3Gal-I Is Not Required for Regulation of CD8-Class I MHC Binding during T Cell Development

Charly Kao, Michelle M. Sandau, Mark A. Daniels, and Stephen C. Jameson

Diesel Exhaust Particle-Exposed Human Bronchial Epithelial Cells Induce Dendritic Cell Maturation

Bertram Bleck, Doris B. Tse, Ilona Jaspers, Maria A. Curotto de Lafaille, and Joan Reibman

T Cell-Independent, TLR-Induced IL-12p70 Production in Primary Human Monocytes

Isabelle Bekeredjian-Ding, Susanne Ilona Roth, Stefanie Gilles, Thomas Giese, Andrea Ablaser, Veit Hornung, Stefan Endres, and Gunther Hartmann

Molecular and Structural Immunology

The Complementarity Determining Region 2 of BV8S2 (Vβ8.2) Contributes to Antigen Recognition by Rat Invariant NKT Cell TCR

Elvira Dy, Olga Naidenko, Sachiko Miyake, Takashi Yamamura, Ingolf Berberich, Susanna Cardell, Mitchell Kronenberg, and Thomas Herrmann

IL-4 Receptor α Is an Important Modulator of IL-4 and IL-13 Receptor Binding: Implications for the Development of Therapeutic Targets

Allison-Lynn Andrews, John W. Holloway, Stephen T. Holgate, and Donna E. Davies
Differential Activation of IFN Regulatory Factor (IRF)-3 and IRF-5 Transcription Factors during Viral Infection
Tsu-Fan Cheng, Sabrina Braztnek, Osamu Ando, Sarah Van Scoy, K. Prasanna Kumar, and Nancy C. Reich

The HIV-Neutralizing Monoclonal Antibody 4E10 Recognizes N-Terminal Sequences on the Native Antigen
Christine Hager-Braun, Hermann Katinger, and Kenneth B. Tomer

The Double Lysine Motif of Tapasin Is a Retrieval Signal for Retention of Unstable MHC Class I Molecules in the Endoplasmic Reticulum
Kajsa M. Paulison, Marc Jevon, James W. Wang, Suling Li, and Ping Wang

Alteration of the FcγRIIa Dimer Interface Affects Receptor Signaling but Not Ligand Binding
Maree S. Powell, Nadine C. Barnes, Tesia M. Bradford, Ian F. Muirgrave, Bruce D. Wines, John C. Gambier, and P. Mark Hogarth

Level of Expression of IL-13Ra2 Impacts Receptor Distribution and IL-13 Signaling
Michael O. Daines, Yasuhiro Tabata, Bradley A. Walker, Weiguo Chen, Manoj R. Warrier, Saiwata Basu, and Gurjit K. Khurana Hershey

Protein Kinase C (PKC)α and PKCθ Are the Major PKC Isotypes Involved in TCR Down-Regulation
Marina von Essen, Martin W. Nielsen, Charlotte M. Bonefeld, Lasse Boding, Jeppe M. Larsen, Michael Leitges, Gottfried Baier, Niels Ødum, and Carsten Geisler

Molecular and Genetic Basis for Strain-Dependent NK1.1 Alloreactivity of Mouse NK Cells
James R. Carlyle, Aruz Mesi, Belina Ljutic, Simon Belanger, Lee-Hwa Tai, Etienne Rouselle, Angela D. Troke, Marie-France Proteau, and Andrew P. Makrigiannis

PanR1, a Dominant Negative Missense Allele of the Gene Encoding TNF-α (Tnf), Does Not Impair Lymphoid Development
Sophie Rutschmann, Kasper Hoebe, Jonathan Zalevsky, Xin Du, Navjiwan Mann, Basil I. Dahiya, Paul Steed, and Bruce Beutler

Peyer’s Patches Are Required for the Induction of Rapid Th1 Responses in the Gut and Mesenteric Lymph Nodes during an Enteric Infection
Sue-fen Kwa, Peter Beverley, and Adrian L. Smith

Group B Streptococcus Induces Macrophage Apoptosis by Calpain Activation
Katia Fettucciari, Ilaria Fetriconi, Roberta Mannucci, Ildo Nicoletti, Andrea Bartoli, Stefano Coaccioli, and Pierfrancesco Marconi

Bacillus anthracis Toxins Inhibit Human Neutrophil NADPH Oxidase Activity
Matthew A. Crawford, Caroline V. Aylott, Raymond W. Bourdeau, and Gary M. Bokoch

Functional Significance of Factor H Binding to Neisseria meningitidis
Muriel C. Schneider, Rachel M. Exley, Hannah Chan, Ian Feavers, Yu-Hoi Kang, Robert B. Sim, and Christoph M. Tang

A Novel Functional T Cell Hybridoma Recognizes Macrophage Cell Death Induced by Bacteria: A Possible Role for Innate Lymphocytes in Bacterial Infection
Koichi Kubota

TLR9 Is Required for the Gut-Associated Lymphoid Tissue Response following Oral Infection of Toxoplasma gondii
Laurie A. Minns, Laurence C. Menard, David M. Foureau, Sylvie Darche, Catherine Ronet, Daniel W. Mielcarz, Dominique Buzoni-Gatel, and Lloyd H. Kasper
C-Reactive Protein Increases Cytokine Responses to *Streptococcus pneumoniae* through Interactions with Fcγ Receptors

Carolyn Mold and Terry W. Du Clos

Local Amplification of Glucocorticoids by 11β-Hydroxysteroid Dehydrogenase Type 1 Promotes Macrophage Phagocytosis of Apoptotic Leukocytes


Regulation of Complement Activation by C-Reactive Protein: Targeting of the Inhibitory Activity of C4b-Binding Protein

Andreas P. Sjöberg, Leendert A. Trouw, Fabian D. G. McGrath, C. Erik Hack, and Anna M. Blom

Class II Phosphatidylinositide 3-Kinases, rather than p110α, Regulate Formyl-Methionyl-Leucyl-Phenylalanine-Stimulated Chemotaxis and Superoxide Production in Differentiated Neutrophil-Like PLB-985 Cells

Iuline Boulven, Sylvain Levasseur, Sébastien Marois, Gaëlle Paré, Emmanuelle Rollet-Labelle, and Paul H. Naccache

TLR2- and TLR4-Mediated Signals Determine Attenuation or Augmentation of Inflammation by Acute Alcohol in Monocytes

Shilpa Oak, Pranoti Mandrekar, Donna Catalano, Karen Kodys, and Gyorgyi Szabo

The Envelope Protein of a Human Endogenous Retrovirus-W Family Activates Innate Immunity through CD14/TLR4 and Promotes Th1-Like Responses

Alexandre Rolland, Evelyne Jovin-Marche, Christophe Viret, Mathias Faure, Hervé Perron, and Patrice N. Marche

TLR2 Transmodulates Monocyte Adhesion and Transmigration via Rac1- and PI3K-Mediated Inside-Out Signaling in Response to *Porphyromonas gingivalis* Fimbriae

Evlambia Harokopakis, Mohamad H. Albzreh, Michael H. Martin, and George Hajishengallis

Lovastatin Enhances Clearance of Apoptotic Cells (Efferocytosis) with Implications for Chronic Obstructive Pulmonary Disease

Konosuke Morimoto, William J. Janssen, Michael B. Esler, Kathleen A. McPhillips, Valeria M. Borges, Russell P. Bowler, Yi-Qun Xiao, Jennifer A. Kench, Peter M. Henson, and R. William Vandivier

Regional Differences in Blood-Brain Barrier Permeability Changes and Inflammation in the Apathogenic Clearance of Virus from the Central Nervous System

Timothy W. Phares, Rhonda B. Kean, Tatiana Mikheeva, and D. Craig Hooper

**CLINICAL IMMUNOLOGY**

CXC Chemokine Ligand 13 Plays a Role in Experimental Autoimmune Encephalomyelitis

Ludmila V. Bagaeva, Praveen Rao, James M. Powers, and Benjamin M. Segal

Antitumor Activity of IFN-α in Murine Tumor Models

Atsuko Sato, Mamitaro Ohtsuki, Megumi Hata, Eiji Kobayashi, and Takashi Murakami

Timely DNA Vaccine Combined with Systemic IL-12 Prevents Parotid Carcinomas before a Dominant-Negative p53 Makes Their Growth Independent of HER-2/neu Expression

Tania Pannellini, Michela Spadaro, Emma Di Carlo, Elena Ambrosio, Manuela Iezzi, Augusto Amici, Pier Luigi Lollini, Guido Forni, Federica Cavallo, and Piero Musiani

Differential Binding of Cross- Reactive Anti-DNA Antibodies to Mesangial Cells: The Role of α-Actinin

Zeguo Zhao, Bisram Deocharan, Philipp E. Scherer, Laurie J. Ozelius, and Chaim Putterman

CD4 T Cells Play Major Effector Role and CD8 T Cells Initiating Role in Spontaneous Autoimmune Myocarditis of HLA-DQ8 Transgenic IAb Knockout Nonobese Diabetic Mice

Sarah L. Hayward, Norma Bautista-Lopez, Kanimasa Suzuki, Alexey Atrazhev, Peter Dickie, and John F. Elliott

Modulation by IL-2 of CD70 and CD27 Expression on CD8+ T Cells: Importance for the Therapeutic Effectiveness of Cell Transfer Immunotherapy

Jianping Huang, Keith W. Kerstann, Mogan Ahmadzadeh, Yong F. Li, Mona El-Gamil, Steven A. Rosenberg, and Paul F. Robbins
NK Cells and γδ⁺ T Cells Are Phenotypically and Functionally Defective due to Preferential Apoptosis in Patients with Atopic Dermatitis

Michie Katsuta, Yukio Takigawa, Momoko Kimishima, Miyuki Inaoka, Ryo Takahashi, and Tetsuo Shiohara

Leptin Receptor Expression and Signaling in Lymphocytes: Kinetics During Lymphocyte Activation, Role in Lymphocyte Survival, and Response to High Fat Diet in Mice

Elizabeth Papathanassoglou, Karim El-Haschimi, Xian Chang Li, Giuseppe Matarese, Terry Strom, and Christos Mantzoros

Peripheral Blood Neutrophil Activation Patterns Are Associated with Pulmonary Inflammatory Responses to Lipopolysaccharide in Humans

Edward Abraham, Jerry A. Nick, Tania Azam, Soo Hyun Kim, Jean-Paul Mira, Daiva Svetkauskaite, Qianbin He, Marty Zamora, James Murphy, Jong Sung Park, Katherine Overdier, and Charles A. Dinarello

Bone Marrow Mesenchymal Stem Cells Suppress Lymphocyte Proliferation In Vitro but Fail to Prevent Graft-versus-Host Disease in Mice

Muriel Sudres, Françoise Norol, Aurélie Trenado, Sylvie Grégoire, Frédéric Charlotte, Béatrice Levacher, Jean-Jacques Lataillade, Philippe Bourin, Xavier Holy, Jean-Paul Vernant, David Klatzmann, and José L. Cohen

IL-23 Is Increased in Dendritic Cells in Multiple Sclerosis and Down-Regulation of IL-23 by Antisense Oligos Increases Dendritic Cell IL-10 Production

Adi Vaknin-Dembinsky, Konstantin Balashov, and Howard L. Weiner

Molecular Characterization of the Anti-Idiotypic Immune Response of a Relapse-Free Neuroblastoma Patient following Antibody Therapy: A Possible Vaccine against Tumors of Neuroectodermal Origin?

Martina M. Utenreuther-Fischer, Jörg A. Krüger, and Peter Fischer

Corrections

Author Index

Author Index to Volume 176

Subject Index to Volume 176

AAI Membership Application

AAI Trainee Membership Application