This information is current as of July 26, 2017.
IN THIS ISSUE

2935  FcγRIIB: Master Modulatory Molecule  See article p. 3021

2936  CD8+ T Cells in the CNS Spotlight  See article p. 3029

2937  Mobilizing against Graft-versus-Host Disease  See article p. 3180

2938  BCR-Based Bird B Cell Selection  See articles p. 3207 and 3218

2939  A PIX-ture of Thymocyte Motility  See article p. 3228

2940  CCR4’s Dual Personality  See article p. 3419

PILLARS OF IMMUNOLOGY

2937  Close Bonding: The First Report of TGF-β and T Cells
Ming O. Li

John H. Kehrl, Lalage M. Wakefield, Anita B. Roberts, Sonia Jakowlew, Melchor Alvarez-Mon, Rik Derynck, Michael B. Sporn, and Anthony S. Fauci

BRIEF REVIEWS

2953  Modulation of T Cell and Innate Immune Responses by Retinoic Acid
Mathilde Raverdeau and Kingston H. G. Mills

CUTTING EDGE

2961  Cutting Edge: Resident Memory CD8 T Cells Occupy Frontline Niches in Secondary Lymphoid Organs
Jason M. Schenkel, Kathryn A. Fraser, and David Masopust

2965  Cutting Edge: Control of Mycobacterium tuberculosis Infection by a Subset of Lung Parenchyma–Homing CD4 T Cells
Shunsuke Sakai, Keith D. Kauffman, Jason M. Schenkel, Cortez C. McBerry, Katrin D. Mayer-Barber, David Masopust, and Daniel L. Barber

Cutting Edge: Committed Th1 CD4+ T Cell Differentiation Blocks Pregnancy-Induced Foxp3 Expression with Antigen-Specific Fetal Loss
Lijun Xin, James M. Ertelt, Jared H. Rowe, Tony T. Jiang, Jeremy M. Kinder, Vandana Chaturvedi, Shokrollah Elahi, and Sing Sing Way

ALLERGY AND OTHER HYPERSENSITIVITIES

IL-1β–Dependent Activation of Dendritic Epidermal T Cells in Contact Hypersensitivity
Morten M. Nielsen, Paola Losato, Amanda S. MacLeod, Deborah A. Witherden, Lone Skov, Beatrice Dyring-Andersen, Sally Dabelsteen, Andri Wøttemann, Niels Ødum, Wendy L. Havran, Carsten Geisler, and Charlotte M. Bonefeld

Oxypurinol Directly and Immediately Activates the Drug-Specific T Cells via the Preferential Use of HLA-B*58:01
James Yun, Maria J. Marcaida, Klara K. Eriksson, Heidi Jamin, Stefano Fontana, Werner J. Pichler, and Daniel Yerly

AUTOIMMUNITY

Siglec-G Deficiency Leads to More Severe Collagen-Induced Arthritis and Earlier Onset of Lupus-like Symptoms in MRL/lpr Mice
Susanne Bökkes, Anne Urbat, Christoph Daniel, Kerstin Amann, Kenneth G. C. Smith, Marion Estè, and Lars Nitschke

Interaction of Mesenchymal Stem Cells with Fibroblast-like Synoviocytes via Cadherin-11 Promotes Angiogenesis by Enhanced Secretion of Placental Growth Factor
Su-Jung Park, Ki-Jo Kim, Wan-Uk Kim, and Chul-Soo Cho

Long-Term B Cell Depletion in Murine Lupus Eliminates Autoantibody-Secreting Cells and Is Associated with Alterations in the Kidney Plasma Cell Niche
Wensheng Wang, Javier Rangel-Moreno, Teresa Owen, Jennifer Barnard, Sarah Nevarez, H. Travis Ichikawa, and Jennifer H. Anolik

Inhibitory Fcγ Receptor Is Required for the Maintenance of Tolerance through Distinct Mechanisms
Fubin Li, Patrick Smith, and Jeffrey V. Ravetch

Relapsing–Remitting Central Nervous System Autoimmunity Mediated by GFAP-Specific CD8+ T Cells
Katsuhito Sasaki, Angela Bean, Shivane Shab, Elizabeth Schuten, Priya G. Huseby, Bjorn Peters, Zu T. Shen, Vijay Vanguri, Denny Liggitt, and Eric S. Huseby

The Degree of CD4+ T Cell Autoreactivity Determines Cellular Pathways Underlying Inflammatory Arthritis
Olivia A. Perng, Malinda Aitken, Andrew L. Rankin, Victoria Garcia, Elizabeth Kropf, Ian Erikson, David S. Garlick, and Andrew J. Caton

Noncoding RNAs and LRRFIP1 Regulate TNF Expression
Lihua Shi, Li Song, Michael Fitzgerald, Kelly Maurer, Asen Bagashev, and Kathleen E. Sullivan

Targeting S1P1 Receptor Protects against Murine Immunological Hepatic Injury through Myeloid-Derived Suppressor Cells
Guangwei Liu, Yujing Bi, Ruoning Wang, Hui Yang, Yan Zhang, Xiao Wang, Huanrong Liu, Yun Lu, Zhengguo Zhang, Wanna Chen, Yuwei Chu, and Ruifu Yang

In Vivo Detection of Peripherin-Specific Autoreactive B Cells during Type 1 Diabetes Pathogenesis
Nahir Garabatos, Raimon Alvarez, Jorge Carrascal, Cristina Izquierdo, Harold D. Chapman, Maximiliano Presa, Conchi Mora, David V. Serreze, Juan Verdaguer, and Thomas Stratmann

CLINICAL AND HUMAN IMMUNOLOGY

Tissue Distribution and Dependence of Responsiveness of Human Antigen-Specific Memory B Cells
Claudia Giesecke, Daniela Fröhlich, Karin Reiter, Henrik E. Mehl, Ina Wirries, Rainer Kubly, Monica Killig, Timor Glatzer, Katharina Stössel, Carsten Perka, Peter E. Lipsky, and Thomas Dörner
Enhancement of T Cell Responses as a Result of Synergy between Lower Doses of Radiation and T Cell Stimulation
Lisa K. Spary, Saly Al-Taei, Josephine Salimu, Alexander D. Cook, Anna Ager, H. Angharad Watson, Aled Clayton, John Staffurth, Malcolm D. Mason, and Ziuzsanna Tabi

Epidermal Th22 and Tc17 Cells Form a Localized Disease Memory in Clinically Healed Psoriasis
Stanley Cheuk, Maria Wikén, Lennart Blomqvist, Susanne Nylen, Toomas Talme, Mona Ståble, and Liv Eidsmo

**IMMUNE REGULATION**

IkβB is a Key Regulator of B Cell Expansion by Providing Negative Feedback on cRel and RelA in a Stimulus-Specific Manner
Bryce N. Alves, Rachel Tsui, Jonathan Almaden, Maxim N. Shokhirev, Jeremy Davis-Turak, Jessica Fujimoto, Harry Birnbaum, Julia Pomomarenko, and Alexander Hoffmann

Tim-3 Directly Enhances CD8 T Cell Responses to Acute Listeria monocytogenes Infection
Jacob V. Gorman, Gabriel Starbeck-Miller, Nhat-Long L. Pham, Geri L. Traver, Paul B. Rothman, John T. Hardy, and John D. Colgan

Identification of Two Forms of TNF Tolerance in Human Monocytes: Differential Inhibition of NF-κB/AP-1– and PP1-Associated Signaling
Johannes Günter, Nico Vogt, Katharina Hampel, Rolf Bikker, Sharon Page, Benjamin Müller, Judith Kandemir, Michael Kracht, Oliver Diätrich-Breiholz, René Huber, and Korbinian Brand

Protective Immunity and Defects in the Neonatal and Elderly Immune Response to Sepsis

B Cells in T Follicular Helper Cell Development and Function: Separable Roles in Delivery of ICOS Ligand and Antigen
Jason S. Weinstein, Sarah A. Bertino, Saity G. Hernandez, Amanda C. Poholek, Taylor B. Teplitzky, Heba N. Nowyhed, and Joe Craft

Modification of T Cell Responses by Stem Cell Mobilization Requires Direct Signaling of the T Cell by G-CSF and IL-10
Kelli P. A. MacDonald, Laetitia Le Texier, Ping Zhang, Helen Morris, Rachel D. Kuns, Katie E. Lineburg, Lucie Leveque, Alistair L. Don, Kate A. Markey, Slavica Vuckovic, Frederik O. Bogger, Glen M. Boyle, Bruce R. Blazar, and Geoffrey R. Hill

Regulator of Fatty Acid Metabolism, Acetyl Coenzyme A Carboxylase 1, Controls T Cell Immunity
JangEun Lee, Matthew C. Walsh, Kyle L. Hoehn, David E. James, E. John Wherry, and Yongwon Choi

Transcription Factor IRF4 Regulates Germinal Center Cell Formation through a B Cell–Intrinsic Mechanism

**IMMUNE SYSTEM DEVELOPMENT**

Negative Selection of Self-Reactive Chicken B Cells Requires B Cell Receptor Signaling and Is Independent of the Bursal Microenvironment
Dariush Davani, Zeev Pancer, Hilde Cheronatre, and Michael J. H. Ratcliffe

Ligation of Surface Ig by Gut-Derived Antigen Positively Selects Chicken Bursal and Peripheral B Cells
Dariush Davani, Zeev Pancer, and Michael J. H. Ratcliffe

αPIX RhoGEF Supports Positive Selection by Restraining Migration and Promoting Arrest of Thymocytes
Mark Korthals, Kerstin Schilling, Peter Reichards, Dejan Mamula, Thomas Schlüter, Michael Steiner, Kristina Längnäs, Ulrich Thomas, Eckart Gundelfinger, Richard T. Premont, Kerry Tedford, and Klaus-Dieter Fischer
IMMUNOGENETICS

3239 Genomic Sequence Analysis of the MHC Class I G/F Segment in Common Marmoset (Callithrix jacchus) Azumi Kono, Markku Brameier, Christian Roos, Shingo Suzuki, Assuko Shigenari, Yoshie Kametani, Kazutaka Kitaura, Takaji Matsuotani, Ryutou Suzuki, Hidetoshi Inoko, Lutz Walter, and Takashi Shiina

IMMUNOTHERAPY AND VACCINES

3247 Protective CD4 T Cells Targeting Cryptic Epitopes of Mycobacterium tuberculosis Resist Infection-Driven Terminal Differentiation Joshua S. Woodworth, Claus Sindbjerg Aagaard, Paul R. Hansen, Joseph P. Cassidy, Else Marie Agger, and Peter Andersen

3259 Inflammasome-Dependent and -Independent IL-18 Production Mediates Immunity to the ISCOMATRIX Adjuvant Nicholas S. Wilson, Peter Duewell, Becky Yang, Yun Li, Scot Marsters, Sandra Koerig, Eicke Latz, Eugene Maraskovsky, Adriana Baz Morelli, Max Schonur, and Avi Ashkenazi

3269 Enhanced Antibody Responses to an HIV-1 Membrane-Proximal External Region Antigen in Mice Reconstituted with Cultured Lymphocytes T. Matt Holl, Guang Yang, Masayuki Kuraoka, Laurent Verkocy, S. Munir Alam, M. Anthony Moody, Barton F. Haynes, and Garrett Kelsoe

INFECTION DISEASE AND HOST RESPONSE

3280 Antigen-Conjugated Human IgE Induces Antigen-Specific T Cell Tolerance in a Humanized Mouse Model Gunther Baravalle, Alexandra M. Greer, Taylor N. LaFlam, and Jeoung-Sook Shin

INFECTIOUS DISEASE AND HOST RESPONSE

3289 Intrahepatic Innate Lymphoid Cells Secrete IL-17A and IL-17F That Are Crucial for T Cell Priming in Viral Infection Zuliang Jie, Yuejin Liang, Lifei Hou, Chen Dong, Yoichiro Iwakura, Lynn Soong, Yingzi Cong, and Jiaren Sun

3301 Influenza Infection Suppresses NADPH Oxidase–Dependent Phagocytic Bacterial Clearance and Enhances Susceptibility to Secondary Methicillin-Resistant Staphylococcus aureus Infection Keer Sun and Dennis W. Metzger

3308 Enhanced Innate Antiviral Gene Expression, IFN-α, and Cytolytic Responses Are Predictive of Mucosal Immune Recovery during Simian Immunodeficiency Virus Infection David Verhoeven, Michael D. George, William Hu, Angeline T. Dang, Zeljka Smit-McBride, Elizabeth Reay, Monica Macal, Anne Fenton, Sumathi Sankaran-Walters, and Satya Dandekar

INNATE IMMUNITY AND INFLAMMATION

3319 Aspergillus and Fusarium Corneal Infections Are Regulated by Th17 Cells and IL-17–Producing Neutrophils Patricia R. Taylor, Sixto M. Leal, Jr., Yan Sun, and Eric Pearlman

3328 Role of Mouse and Human Autophagy Proteins in IFN-γ–Induced Cell-Autonomous Responses against Toxoplasma gondii Jun Ohshima, Youngae Lee, Miua Sasai, Tatsuya Saitoh, Ji Su Ma, Naganori Kamiyama, Yoshiharu Matsuura, Sub Pavn-Ghill, Mikako Hayashi, Shigeyuki Ebisu, Kyoshi Takeda, Shizuou Akira, and Masahiro Yamamoto

3336 Dissecting the Role of Retinoic Acid Receptor Isoforms in the CD8 Response to Infection Yanxia Guo, Yu-Chi Lee, Chrysothemis Brown, Weijun Zhang, Edward Usherwood, and Randolph J. Noelle

3345 Nerve Growth Factor Downregulates Inflammatory Response in Human Monocytes through TrkA Giusi Prencipe, Gaetana Minnone, Raffaele Strippoli, Loredana De Pasquale, Stefania Petrini, Ivan Caiello, Luigi Manni, Fabrizio De Benedetti, and Luisa Bracci-Laudiero

3355 The Epidermal Growth Factor Receptor Is a Regulator of Epidermal Complement Component Expression and Complement Activation Anai H. A. Abu-Humaidan, Nageshwar Ananthoju, Tirthankar Mohanty, Andreas Sonesson, Per Alberius, Artur Schmidichen, Peter Garred, and Ole E. Sorensen
The Requirement of CD8⁺ T Cells To Initiate and Augment Acute Cardiac Inflammatory Response to High Blood Pressure
Fefei Ma, Jin Feng, Chao Zhang, Yulin Li, Guanming Qi, Huibua Li, Yuzhang Wu, Yangxin Fu, Yang Zhao, Hairong Chen, Jie Du, and Hong Tang

Central Role of Conventional Dendritic Cells in Regulation of Bone Marrow Release and Survival of Neutrophils
Jingjing Jiao, Ana-Cristina Dragomir, Peri Kocabayoglu, Adeb H. Rahman, Andrew Chow, Daigo Hashimoto, Marylene Leboeuf, Thomas Kraus, Thomas Moran, Gonzalo Carrasco-Avino, Scott L. Friedman, Miriam Merad, and Costica Aloman

PIKfyve, a Class III Lipid Kinase, Is Required for TLR-Induced Type I IFN Production via Modulation of ATF3
Xinming Cai, Yongyao Xu, You-Me Kim, Joseph Loureiro, and Qian Huang

The RhoA Guanine Nucleotide Exchange Factor, LARG, Mediates ICAM-1–Dependent Mechanotransduction in Endothelial Cells To Stimulate Transendothelial Migration

Tissue-Specific Microvascular Endothelial Cells Show Distinct Capacity To Activate NK Cells: Implications for the Pathophysiology of Granulomatosis with Polyangiitis
Sara Tognarelli, Julie Gayet, Marion Lambert, Stéphanie Dupuy, Alexandre Karras, Pascal Cohen, Loïc Guillemin, Mathilde de Menthon, and Sophie Caillat-Zucman

NOD2 Regulates CXCR3-Dependent CD8⁺ T Cell Accumulation in Intestinal Tissues with Acute Injury
Xingxin Wu, Amit Lahiri, G. Kenneth Haines, III, Richard A. Flavell, and Clara Abraham

Molecular and Structural Immunology

Distinct Conformations of the Chemokine Receptor CCR4 with Implications for Its Targeting in Allergy
Jonathan M. Viney, David P. Andrew, Rhian M. Phillips, Andrea Meiser, Pallavi Patel, Melissa Lennartz-Walker, David J. Cousins, Nicholas P. Barton, David A. Hall, and James E. Pease

Molecular Basis of a Dominant T Cell Response to an HIV Reverse Transcriptase 8-mer Epitope Presented by the Protective Allele HLA-B*51:01
Chihiro Motozono, Nozomi Kuse, Xiaoming Sun, Pierre J. Rizkallah, Anna Fuller, Shinichi Oka, David K. Cole, Andrew K. Sewell, and Masafumi Takiguchi

Transplantation

Dendritic Cell–MHC Class II and Itk Regulate Functional Development of Regulatory Innate Memory CD4⁺ T Cells in Bone Marrow Transplantation
Weishan Huang, Qian Qi, Jianfang Hu, Fei Huang, Terri M. Laufer, and Avery August

Xenograft Tolerance and Immune Function of Human T Cells Developing in Pig Thymus Xenografts
Hannes Kalscheuer, Takashi Onoe, Alexander Dahmani, Hao-Wei Li, Markus Holzl, Kazuhiko Yamada, and Megan Sykes

Author Index