This information is current as of April 9, 2017.
IN THIS ISSUE

PILLARS OF IMMUNOLOGY

1127 Plugging the Leaky Pre-B Cell Receptor
Mary Ellen Conley and Peter D. Burrows

Daisuke Kitamura, Akira Kudo, Stefan Schaal, Werner Müller, Fritz Melchers, and Klaus Rajewsky

CUTTING EDGE

1139 Cutting Edge: Bortezomib-Treated Tumors Sensitized to NK Cell Apoptosis Paradoxically Acquire
Resistance to Antigen-Specific T Cells
Andreas Lundqvist, Su Su, Sheila Rao, and Richard Childs

1143 Cutting Edge: Basophils Are Transiently Recruited into the Draining Lymph Nodes during Helminth
Infection via IL-3, but Infection-Induced Th2 Immunity Can Develop without Basophil Lymph Node
Recruitment or IL-3
Sohee Kim, Melanie Prout, Hayley Ramsawh, Angel F. Lopez, Graham LeGros, and Booki Min

1148 Cutting Edge: Nucleotide-Binding Oligomerization Domain 1-Dependent Responses Account for Murine
Resistance against Trypanosoma cruzi Infection
Grace K. Silva, Freedy R. S. Gutierrez, Paulo M. M. Guedes, Catarina V. Horta, Larissa D. Cunha, Tiago W. P. Mineo,
Juliana Santiago-Silva, Koichi S. Kobayashi, Richard A. Flavell, João S. Silva, and Dario S. Zamboni

1153 Cutting Edge: HLA-DM–Mediated Peptide Exchange Functions Normally on MHC Class II–Peptide
Complexes That Have Been Weakened by Elimination of a Conserved Hydrogen Bond
Andrea Ferrante and Jack Gorski

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

1159 Human Plasmacytoid Dendritic Cells Support Th17 Cell Effector Function in Response to TLR7 Ligation
Chun-Feng Yu, Wen-Ming Peng, Johannes Oldenburg, Jochen Hoch, Thomas Bieber, Andreas Limmer, Gunther Hartmann,
Winfried Barchet, Anna Maria Eis-Hubinger, and Natalija Novak

On the cover: Localizing influenza A virus glycoproteins in the secretory pathway of infected cells using antibodies specific
for all forms of neuraminidase (green) and trimedized hemagglutinin (red). Dolan, B. P., L. Li, K. Takeda, J. R. Bennink, and
J. W. Yewdell. 2010. Defective ribosomal products are the major source of antigenic peptides endogenously generated from
1168 Cell Type-Specific Recognition of Human Metapneumoviruses (HMPVs) by Retinoic Acid-Inducible Gene I (RIG-I) and TLR7 and Viral Interference of RIG-I Ligand Recognition by HMPV-B1 Phosphoprotein
Nadege Goutagny, Zhaozhao Jiang, Jane Tian, Peggy Parroche, Jeanne Schickli, Brian G. Monks, Nancy Ulbrantd, Hong Ji, Peter A. Kiener, Anthony J. Coyle, and Katherine A. Fitzgerald

1180 SHP-1 Deficient Mast Cells Are Hyperresponsive to Stimulation and Critical in Initiating Allergic Inflammation in the Lung
Li Zhang, Sun Young Oh, Xiaoxing Wu, Min Hee Oh, Fan Wu, John T. Schroeder, Clifford M. Takemoto, Tao Zheng, and Zhou Zhu

1191 Constitutive Activation of Wnt Signaling Favors Generation of Memory CD8 T Cells
Dong-Mei Zhao, Shuyang Yu, Xinyuan Zhou, Jodie S. Haring, Werner Held, Vladimir P. Badovinac, John T. Harry, and Hai-Hui Xue

1200 Lactic Acid and Acidification Inhibit TNF Secretion and Glycolysis of Human Monocytes
Katrin Dietl, Kathrin Renner, Katja Dettmer, Birgit Timischl, Karin Eberhart, Christoph Dorn, Claus Hellerbrand, Michael Kastenberger, Leoni A. Kunz-Schughart, Peter J. Oefner, Reinhard Andresen, Eva Gottfried, and Marina P. Kreutz

1210 A Recombinant Bispecific Single-Chain Fragment Variable Specific for HLA Class II and FcαRI (CD89) Recruits Polymorphonuclear Neutrophils for Efficient Lysis of Malignant B Lymphoid Cells
Yvonne Guettinger, Karin Barbin, Matthias Peipp, Jaeg Brueckle, Michael Dechant, Heike Horner, Doreen Thierschmidt, Thomas Valerius, Roland Repp, Georg H. Fey, and Bernhard Stockmeyer

1218 Commensal Microbiota and CD8⁺ T Cells Shape the Formation of Invariant NKT Cells
Bo Wei, Gerhard Wingender, Daisuke Fujiwara, Diana YuHui Chen, Michael McPherson, Sarah Brewer, James Borneman, Mitchell Kronenberg, and Jonathan Braun

1227 B Cells Delay Neutrophil Migration toward the Site of Stimulus: Tardiness Critical for Effective Bacillus Calmette-Guérin Vaccination against Tuberculosis Infection in Mice
Tatiana K. Kondratieva, Elvira I. Rubakova, Irina A. Linge, Vladimir V. Evtufer, Konstantin B. Majorov, and Alexander S. Apt

1235 Early Recycling Compartment Trafficking of CD1a Is Essential for Its Intersection and Presentation of Lipid Antigens
Manuela Cernadas, Marco Cavallari, Gerald Watts, Lucia Mori, Gennaro De Libero, and Michael B. Brenner

1242 Invariant NKT Cells in Hyperplastic Skin Induce a Local Immune Suppressive Environment by IFN-γ Production

1251 Progenitor Cell Origin Plays a Role in Fate Choices of Mature B Cells
Valentina Fossati, Ritu Kumar, and Hans-Willem Snoeck

1261 Recruitment and Differentiation of Conventional Dendritic Cell Precursors in Tumors
Jun Dao, Jun Zhao, Erin Winter, and Mark S. Cattral

1268 Development of Promyelocytic Zinc Finger and ThPOK-Expressing Innate γδ T Cells Is Controlled by Strength of TCR Signaling and Id3
Eric S. Alonzo, Rachel A. Gottschalk, Joy Das, Takeki Egawa, Robin M. Hobbs, Pier Paolo Pandolfi, Pablo Pereira, Kim E. Nichols, Gary A. Koretzky, Martha S. Jordan, and Derek B. Sant’Angelo

1280 TLR4-Mediated Podosome Loss Discriminates Gram-Negative from Gram-Positive Bacteria in Their Capacity to Induce Dendritic Cell Migration and Maturation
Suzanne F. G. van Helden, Koen van den Dries, Maachteld M. Oud, Reinier A. P. Raymakers, Mihai G. Netea, Frank N. van Leeuwen, and Carl G. Figdor

1292 Loss of CD34 Leads To Exacerbated Autoimmune Arthritis through Increased Vascular Permeability
Marie-Renée Blanchet, Matthew Gold, Steven Malby, Jami Bennett, Björn Petri, Paul Kubes, David M. Lee, and Kelly M. McNagny
1300 Human Embryonic Stem Cells Suppress T Cell Responses via Arginase I-Dependent Mechanism
Nurit Yachimovich-Cohen, Sharona Even-Ram, Yoel Shufaro, Jacob Rachmilewitz, and Benjamin Reubinoff

1309 Phylogenetic and Functional Analysis Identifies Ets-1 as a Novel Regulator of the Th2 Cytokine Gene Locus
Jannine M. Strempel, Roland Grenningloh, I-Cheng Ho, and Donata Vercelli

1317 T Cell–Dendritic Cell Interaction Dynamics during the Induction of Respiratory Tolerance and Immunity
Nadja Baković, Tim Werbs, Ana Davalos-Mislitz, and Reinbold Förster

1328 Formation of a Mast Cell Synapse: FceRI Membrane Dynamics upon Binding Mobile or Immobilized
Ligands on Surfaces
Amanda Carroll-Portillo, Kathrin Spendier, Janet Pfeiffer, Gary Griffiths, Haitao Li, Keith A. Lidke, Janet M. Oliver,
Diane S. Lidke, James L. Thomas, Bridget S. Wilson, and Jerilyn A. Timlin

1339 Broad Volume Distributions Indicate Nonsynchronized Growth and Suggest Sudden Collapses of Germinal
Center B Cell Populations
Nicole Wittenbrink, Tom S. Weber, Anke Klein, Armin A. Weiser, Werner Zuschratter, Michael Sibila,
Johannes Schuchhardt, and Michal Or-Guil

1348 Autoimmune Disease in Lyn-Deficient Mice Is Dependent on an Inflammatory Environment Established by
IL-6
Evelyn Tsiantikos, Sarah A. Oracki, Cathy Quilici, Gary P. Anderson, David M. Tarlinton, and Margaret L. Hibbs

MOLECULAR AND STRUCTURAL IMMUNOLOGY
1361 Structural Basis for the Blockage of IL-2 Signaling by Therapeutic Antibody Basiliximab
Jiamu Du, Hui Yang, Dapeng Zhang, Jianchuan Wang, Huaiyu Guo, Baozhen Peng, Yajun Guo, and Jianping Ding

1369 TCRβ Feedback Signals Inhibit the Coupling of Recombinationally Accessible Vβ14 Segments with DJβ
Complexes
Katherine S. Yang-Iott, Andrea C. Carpenter, Marta A. W. Rosh, Natalie Steinel, Brenna L. Brady, Konrad Hochedlinger,
Rudolf Jaenisch, and Craig H. Bassing

IMMUNOGENETICS
1379 A Small, Variable, and Irregular Killer Cell Ig-Like Receptor Locus Accompanies the Absence of MHC-C
and MHC-G in Gibbons
Laurent Abi-Rached, Heiner Kuhl, Christian Roos, Boudewijn ten Hallers, Baoli Zhu, Lucia Carbone, Pieter J. de Jong,
Alan R. Mootnick, Florian Knaust, Richard Reinhardt, Peter Parham, and Lutz Walter

HOST DEFENSE
1392 IL-10 Induction by Bordetella parapertussis Limits a Protective IFN-γ Response
Daniel N. Wolfe, Alexia T. Karanikas, Sara E. Hester, Mary J. Kennett, and Eric T. Harvill

1401 IL-15 Prevents Apoptosis, Reverses Innate and Adaptive Immune Dysfunction, and Improves Survival in Sepsis
Shigeki Isoe, Jacqueline Unsinger, Christopher G. Davis, Jared T. Muenzer, Thomas A. Ferguson, Katherine Chang,
Dale F. Osborne, Andrew T. Clark, Craig M. Coopersmith, Jonathan E. McDunn, and Richard S. Hotchkiss

1410 Critical Role of IL-1 Receptor-Associated Kinase-M in Regulating Chemokine-Dependent Deleterious
Inflammation in Murine Influenza Pneumonia
Masafumi Seki, Shigeru Kohno, Michael W. Neustad, Xiaying Zeng, Urvashi Bhan, Nicholas W. Lukacs,
Steven L. Kunkel, and Theodore J. Standiford

1419 Defective Ribosomal Products Are the Major Source of Antigenic Peptides Endogenously Generated from
Influenza A Virus Neuraminidase
Brian P. Dolan, Lily Li, Kazuyu Takeda, Jack R. Bennink, and Jonathan W. Yewdell

1425 LL-37 Promotes Rapid Sensing of CpG Oligodeoxynucleotides by B Lymphocytes and Plasmacytoid
Dendritic Cells
Plinio Hurtado and Chen Au Peh
1436 Mycolactone Suppresses T Cell Responsiveness by Altering Both Early Signaling and Posttranslational Events
Sheerazed Boulkroun, Laure Guenin-Macé, Maria-Isabel Thouliouze, Marc Monot, Anaïs Mercks, Gordon Langsley, Georges Bismuth, Vincenzo Di Bartolo, and Caroline Demangel

1445 Critical Protective Role for MCP-1 in Pneumonic Burkholderia mallei Infection
Andrew Goodyear, Abby Jones, Ryan Troyer, Helle Bielefeldt-Ohmann, and Steven Dow

1455 TLR2-Dependent Inflammatory Response to Porphyromonas gingivalis Is MyD88 Independent, whereas MyD88 Is Required To Clear Infection
Elia Burns, Tal Eliyahu, Satoshi Uematsu, Shizu Akira, and Gabriel Nussbaum

INFLAMMATION

1463 Regulation of FcεRI Expression during Murine Basophil Maturation: The Interplay between IgE, Cell Division, and FcεRI Synthetic Rate
Asifa K. Zaidi and Donald W. MacGlashan

1475 Inhibitory Role of Sphingosine 1-Phosphate Receptor 2 in Macrophage Recruitment during Inflammation
Jason Michaud, Dong-Soon Im, and Timothy Hla

1484 IL-17 Regulates CXCL1 mRNA Stability via an AUUUA/Tristetraprolin-Independent Sequence
Shyamnaree Datta, Michael Novotny, Paul G. Pavicic, Jr., Cheryang Zhao, Tomasz Herjan, Justin Hartuper, and Thomas Hamilton

1492 The Alarmin Cytokine, High Mobility Group Box 1, Is Produced by Viable Cardiomyocytes and Mediates the Lipopolysaccharide-Induced Myocardial Dysfunction via a TLR4/Phosphatidylinositol 3-Kinase γ Pathway
Hu Xu, Zhaoliang Su, Jun Wu, Min Yang, Josef M. Penninger, Claudio M. Martin, Peter R. Kiewyts, and Tao Rai

1499 Roles of Sema4D–Plexin-B1 Interactions in the Central Nervous System for Pathogenesis of Experimental Autoimmune Encephalomyelitis
Tatsuada Okuno, Yuji Nakatsuji, Masayuki Moriya, Hyota Takamatsu, Satoshi Nogima, Noriko Takagahara, Toshihiko Toyofuki, Yukinobu Nakagawa, Sujin Kang, Roland H. Friedel, Saburo Sakoda, Hitoshi Kikutani, and Atushi Kumanogob

1507 Diabetes-Induced Oxidative Stress Is Mediated by Ca2+–Independent Phospholipase A2 in Neutrophils
Srinivas Ayilavarapu, Alpdogan Kantarci, Gabrielle Fredman, Oya Turkoglu, Kazuhiro Omori, Hongbeng Liu, Tomoyuki Iwata, Motohiko Yagi, Hatice Hasturk, and Thomas E. Van Dyke

1516 A New Strategy for the Identification of Novel Molecules with Targeted Proresolution of Inflammation Properties
Roberta A. Navarro-Xavier, Justine Newson, Vera Lucia Flor Silveira, Stuart N. Farrow, Derek W. Gilroy, and Jonas Bystrom

1526 IL-33 Induces IL-13–Dependent Cutaneous Fibrosis
Andrew L. Rankin, John B. Mumm, Erin Murphy, Scott Turner, Ni Yu, Terrill K. McClanahan, Patricia A. Bourne, Robert H. Pierce, Rob Kastelein, and Stefan Pflanz

1536 Stromal Interaction Molecules 1 and 2 Are Key Regulators of Autoreactive T Cell Activation in Murine Autoimmune Central Nervous System Inflammation
Michael K. Schubmann, David Stegner, Alejandro Berna-Erro, Stefan Bittner, Attila Braun, Christoph Kleinschmitz, Guido Stoll, Heinz Wiendl, Seen G. Meuth, and Bernhard Nieswandt

1543 Essential Roles of IL-6 Trans-Signaling in Colonic Epithelial Cells, Induced by the IL-6/Soluble–IL-6 Receptor Derived from Lamina Propria Macrophages, on the Development of Colitis-Associated Premalignant Cancer in a Murine Model
Satoshi Matsumoto, Taeko Hara, Keiichi Mitsuayama, Mayuko Yamamoto, Osamu Tsuruta, Michio Sata, Jürgen Scheller, Stefan Rose-John, Sho-ichi Kado, and Toshihiko Takada

1552 IFN-γ Regulates the Requirement for IL-17 in Proteoglycan-Induced Arthritis
Paul D. Doodes, Yanxia Cao, Keith M. Hamel, Yumei Wang, Rachel L. Rodeghero, Katalin Mikecz, Tibor T. Glant, Yoichiro Iwakura, and Alison Finnegan
Mammalian Clock Gene Cryptochrome Regulates Arthritis via Proinflammatory Cytokine TNF-α
Akira Hashimoto, Takashi Yamane, Ken Tsumiyama, Kohsuke Yohida, Kaichiro Komai, Hiroyuki Yamada, Fumiyoshi Yamazaki, Masao Doi, Hitoshi Okamura, and Shunichi Shiozawa

Regulation of Lentivirus Neurovirulence by Lipopolysaccharide Conditioning: Suppression of CXCL10 in the Brain by IL-10
Ferdinand Maingat, Serena Viappiani, Yu Zhu, Pornpun Vivithanaporn, Kristofer K. Elleetad, Janet Holden, Claudia Silva, and Christopher Power

Matrix Metalloproteinase-8 Inactivates Macrophage Inflammatory Protein-1α To Reduce Acute Lung Inflammation and Injury in Mice
Pablo A. Quintero, Martin D. Knolle, Luisa F. Cala, Yuehong Zhuang, and Caroline A. Owen

CLINICAL IMMUNOLOGY

Promoting Immune Responses by LIGHT in the Face of Abundant Regulatory T Cell Inhibition
Yugang Wang, Mingzhao Zhu, Ping Yu, and Yang-Xin Fu

T Cells Are Required for the Production of Blister-Inducing Autoantibodies in Experimental Epidermolysis Bullosa Acquisita
Ana Gabriela Sitaru, Alina Searsar, Sidonia Mihai, Mircea T. Chiriac, Detlef Zillich, Per Hultman, Werner Solbach, and Casian Sitaru

Peripheral Blood CCR4*CCR6* and CXCR3*CCR6 CD4+ T Cells Are Highly Permissive to HIV-1 Infection
Annie Goselin, Patricia Monteiro, Nicolas Chomont, Felipe Diaz-Grieffo, Elias A. Said, Simone Fonseca, Vanessa Wacleche, Mohamed El-Far, Mohamed-Rachid Boulasel, Jean-Pierre Routy, Rafick-Pierre Sekaly, and Petronela Ancuta

A Single TCRα-Chain with Dominant Peptide Recognition in the Allorestricited HER2/neu-Specific T Cell Repertoire
Xiaoling Liang, Luise U. Weigand, Ingrid G. Schuster, Elfriede Eppinger, Judith C. van der Griend, Andrea Schub, Matthias Leisegang, Daniel Sommermeyer, Florian Anderl, Yanyan Han, Joachim Ellwart, Andreas Maasmann, Dirk H. Busch, Wolfgang Uckert, Christian Peschel, and Angela M. Krackhardt

Tumor Microenvironments Direct the Recruitment and Expansion of Human Th17 Cells
Xinming Su, Jian Ye, Eddy C. Hsueh, Yanping Zhang, Daniel F. Hojfi, and Guangyong Peng

IL-8 Dictates Glycosaminoglycan Binding and Stability of IL-18 in Cystic Fibrosis
Emer P. Reeves, Michael Williamson, Barry Byrne, David A. Bergin, Stephen G. J. Smith, Peter Greally, Richard O’Kennedy, Shane J. O’Neill, and Noel G. McElvaney

CORRECTIONS

Correction: Interplay between Chromatin Remodeling and Epigenetic Changes during Lineage-Specific Commitment to Granzyme B Expression
Torsten Juelich, Elissa Sutcliffe, Alice Denton, Yuig He, Peter C. Doherty, Christopher Parish, Steven J. Turner, David Tremethick, and Sudha Rao

Correction: IL-4Rα, a New Member that Associates with Syk Kinase: Implication in IL-4-Induced Human Neutrophil Functions
Jamila Ennaciri and Denis Girard

Correction: Siglec-E Is Up-Regulated and Phosphorylated Following Lipopolysaccharide Stimulation in Order to Limit TLR-Driven Cytokine Production

Correction: Mesenchymal Stem Cells Derived from Human Gingiva Are Capable of Immunomodulatory Functions and Ameliorate Inflammation-Related Tissue Destruction in Experimental Colitis
Qunzhou Zhang, Shihong Shi, Yi Liu, Jettee Uyanne, Yufang Shi, Songtao Shi, and Anh D. Le

AUTHOR INDEX