This information is current as of April 14, 2017.
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 Jeannette 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. Zednak, 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 Hidemi 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

2729 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

2739 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, Dongchao Zhao, Heather F. Johnston, James S. Young, Hongjun Liu, Ivan Todorov, Stephen J. Forman, Lieping Chen, and Defu Zeng

2750 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. Aruananandam, and Thomas G. Forsthuber

2757 2B4 Engagement Mediates Rapid LFA-1 and Actin-Dependent NK Cell Adhesion to Tumor Cells as Measured by Single Cell Force Spectroscopy
Sabrina C. Hoffmann, André Cohnen, Thomas Ludwig, and Carsten Watal

2765 Activation Receptor-Induced Tolerance of Mature NK Cells In Vivo Requires Signaling through the Receptor and Is Reversible
Fred D. Bolanos and Sandeep K. Tripathy

2772 IFN-α Directly Promotes Programmed Cell Death-1 Transcription and Limits the Duration of T Cell-Mediated Immunity
Seigo Terawaki, Shunsuke Chikuma, Shiro Shibayama, Tamon Hayashi, Takao Yoshida, Taku Okazaki, and Tasuku Honjo

2780 Human Cord Blood CD4+CD25hi Regulatory T Cells Suppress Prenatally Acquired T Cell Responses to Plasmodium falciparum Antigens
Maria S. Mackroth, Indu Malhotra, Peter Mungai, Davy Koch, Eric Muchiri, and Christopher L. King

2792 Induction and Maintenance of IL-4 Expression Are Regulated Differently by the 3’ Enhancer in CD4 T Cells
M. Hanief Sofi, Yu Qiao, K. Mark Ansel, Masato Kubo, and Cheong-Hee Chang

2800 CXCR4 Expression on Activated B Cells Is Downregulated by CD63 and IL-21
Nobuya Yoshida, Daiiuke Kitayama, Masafumi Arima, Akemi Sakamoto, Ayako Inamine, Haruko Watanabe-Takano, Masahiko Hatano, Takao Koike, and Takeshi Tokuhisa

2809 Regulatory T Cells Require Mammalian Target of Rapamycin Signaling To Maintain Both Homeostasis and Allotarget-Directed Proliferation in Lymphocyte-Replete Mice
Ying Wang, Geoffrey Camirand, Yan Lin, Monica Froicu, Songyan Deng, Warren D. Shlomchik, Fadi G. Lakkis, and David M. Rothstein

2819 Intrinsic Requirement for the Vitamin D Receptor in the Development of CD8αα-Expressing T Cells
Danny Bruce and Margherita T. Cantorna

2826 Deletion of Tristetraprolin Caused Spontaneous Reactive Granulopoiesis by a Non–Cell-Autonomous Mechanism Without Disturbing Long-Term Hematopoietic Stem Cell Quiescence
Ian M. Kaplan, Sebastien Morisot, Diane Heiser, Wen-Chih Cheng, Min Jung Kim, and Curt I. Civin

2835 Stromal Cell Networks Regulate Thymocyte Migration and Dendritic Cell Behavior in the Thymus
Stephanie L. Sanos, Jonathan Nowak, Matthieu Fallet, and Marc Bajenoff

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

2850 Fascin1 Promotes Cell Migration of Mature Dendritic Cells
Yoshifuko 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 Febbraio, Peggy Robinet, Brandon DuGar, Diane Greene, Anna Cerny, Eiche Latz, Raymond Gilmour, Kirk Staszke, 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 Takamatsu, Tatsuada Okuno, Sujin Kang, Satoshi Nojima, Tenaya Kimura, Tatsuki R. Kataoka, Masahito Ikawa, Toshihiko Toyofuku, Ichiro Katayama, and Atsushi Kumanogoh

Memory CD4 T Cells That Express CXCXR5 Provide Accelerated Help to B Cells
Megan K. L. MacLeod, Alexandra 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 Nikki, Tomohiro Arisawa, 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 Fleige, Scott H. Robbins, Thierry Walzer, Charles A. Stewart, Reinhold Förster, Martin Meserle, 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

Molecular and Structural Immunology

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
2998 β2 Integrin Induces TCRζ–Syk–Phospholipase C-γ Phosphorylation and Paxillin-Dependent Granule Polarization in Human NK Cells
Michael E. March and Eric O. Long

3006 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, Gaes C. Sen, George R. Stark, and Xiaoxia Li

3015 GCN5 Regulates the Superoxide-Generating System in Leukocytes Via Controlling gp91-phox Gene Expression
Hidehiko Kikuchi, Futoshi Kuribayashi, Naomi Kiwaki, Yasunari Takami, and Tatsuo Nakayama

3023 TANK-Binding Kinase 1 Attenuates PTAP-Dependent Retroviral Budding through Targeting Endosomal Sorting Complex Required for Transport-I
Qi Da, Xiaoning Yang, Youli Xu, Guangxia Gao, Genhong Cheng, and Hong Tang

IMMUNOGENETICS

3031 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

3047 Transcriptomes of the B and T Lineages Compared by Multiplatform Microarray Profiling
Mishio W. Painter, Scott Davis, Richard R. Hardy, Diane Mathis, Christophe Benoist, and The Immunological Genome Project Consortium

3058 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

HOST DEFENSE

3066 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 Sofdorf, Peter Recknagel, Svea Sachse, Sebastian W. Winter, Andreas Klo, Gregory L. Stahl, Yuanyuan Xu Ma, Ralf A. Claus, Konrad Reinhart, Michael Bauer, and Niels C. Riedemann

3076 5-Lipoxygenase–Deficient Mice Infected with Borrelia burgdorferi Develop Persistent Arthritis
Victoria A. Blaho, Yan Zhang, Jennifer M. Hughes-Hanks, and Charles R. Brown

3085 Recognition of Cytoplasmic RNA Results in Cathepsin-Dependent Inflammasome Activation and Apoptosis in Human Macrophages
Johanna Rintahaka, Niina Liettzen, Tiina Öhman, Tuula A. Nyman, and Sampa Matikainen

3093 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

3104 Conventional Dendritic Cells Mount a Type I IFN Response against Candida spp. Requiring Novel Phagosomal TLR7-Mediated IFN-β Signaling

3113 A Novel Human IgA Monoclonal Antibody Protects against Tuberculosis
Sucharitha Basu, Rajko Reljic, Melanie J. Lewis, Richard J. Pless, Richard McIntosh, Cees van Kooten, Marjolein van Egmond, Stephen Challacombe, Jenny M. Woof, and Juraj Ivanyi

3120 Immune Evasion of Moraxella catarrhalis Involves Ubiquitous Surface Protein A-Dependent C3d Binding
Teresa Hallstrom, Therese Nordstrom, Thuan Tong Tan, Taras Manolov, John D. Lambris, David E. Isenman, Peter F. Zipfel, Anna M. Blom, and Kristian Riesbeck

3130 Nonhematopoietic Cells Are Key Players in Innate Control of Bacterial Airway Infection
Salome LeibundGut-Landmann, Kerstin Weidner, Hubert Hilbi, and Annette Oxenius
3138  Type III IFNs in Pteropid Bats: Differential Expression Patterns Provide Evidence for Distinct Roles in Antiviral Immunity

3148  HIV Replication in CD4+ T Lymphocytes in the Presence and Absence of Follicular Dendritic Cells: Inhibition of Replication Mediated by α-1-Antitrypsin through Altered IkBα Ubiquitination
Xueyuan Zhou, Leland Shapiro, Gilbert Fellingham, Barry M. Willardson, and Gregory F. Burton

3156  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

3164  Mucosal Allergic Sensitization to Cockroach Allergens Is Dependent on Proteinase Activity and Proteinase- Activated Receptor-2 Activation

3173  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 Chengjiang Gao

3180  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

3188  The Endocannabinoid 2-Arachidonoyl-Glycerol Activates Human Neutrophils: Critical Role of Its Hydrolysis and De Novo Leukotriene B4 Biosynthesis
François Chouinard, Judie S. Lefebvre, Pauline Navarro, Line Bouchard, Claudine Ferland, Mélanie Lalancette-Hébert, David Marsolais, Michel Laviolette, and Nicolas Flamand

3197  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

3206  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. Lene, Prabir Ray, Steven D. Shapiro, and Janet S. Lee

3215  Human TMEM30a Promotes Uptake of Antitumor and Bioactive Choline Phospholipids into Mammalian Cells
Rui Chen, Erin Brady, and Thomas M. McIntyre

3226  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. Dulay, Unzila A. Ali, Guomao Zhao, Sonya S. Abdel-Razeq, Mert O. Bahtiyar, Stephen F. Thung, Edmund F. Funai, and Catalin S. Buhimschi

3237  TLR2 Hypersensitivity of Astrocytes as Functional Consequence of Previous Inflammatory Episodes
Anja Henn, Susanne Kirner, and Marcel Leist

3248  Septic Shock Is Associated with Receptor for Advanced Glycation End Products Ligation of LPS
Yasuhiro Yamamoto, At Harashima, Hidehito Saito, Koichi Tsuneyama, Seiichi Munseue, So Motoyoshi, Dong Han, Takuo Watanabe, Masahide Aso, Shin Takasawa, Hiroshi Okamoto, Satoji Shimura, Tadahiro Karasawa, Hidet Tonoekura, and Hiroshi Yamamoto
3258  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

3265  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

3277  AUTHOR INDEX