This information is current as of October 21, 2017.
IN THIS ISSUE
1 Zippers Hold Neutrophils Together See article p. 80
TIGIT Tightens Treg Stability See article p. 145
New Twists in Cytokine Regulation See article p. 217
Seeking Skin T Cells in Their Natural Habitat See article p. 386

LETTERS TO THE EDITOR
3 Comment on “Functional Analysis of a Complement Polymorphism (rs17611) Associated with Rheumatoid Arthritis”
Tobias Messemaker, Rene E. M. Toes, Harald M. M. Mikkers, and Fina Kurreeman
4 Response to Comment on “Functional Analysis of a Complement Polymorphism (rs17611) Associated with Rheumatoid Arthritis”
Joanna L. Giles, Ernest Choy, Carmen van den Berg, B. Paul Morgan, and Claire L. Harris

PILLARS OF IMMUNOLOGY
5 Citrullination: A Specific Target for the Autoimmune Response in Rheumatoid Arthritis
David A. Fox
Gerard A. Schellekens, Ben A. W. de Jong, Frank H. J. van den Hoogen, Leo B. A. van de Putte, and Walther J. van Venrooij

BRIEF REVIEWS
17 Tissue-Resident Memory T Cells and Fixed Immune Surveillance in Nonlymphoid Organs
Francis R. Carbone
23 Immunology of a Transmissible Cancer Spreading among Tasmanian Devils
Gregory M. Woods, Lauren J. Howson, Gabriella K. Brown, Cesar Tovar, Alexandre Kreiss, Lynn M. Corcoran, and A. Bruce Lyons

On the cover: Masson staining indicated a significant increase of collagen deposition around airways in the chronic Ag-induced pulmonary inflammation group, which is the typical characterization of asthma remodeling. Sun, Q., L. Liu, M. Roth, J. Tian, Q. He, B. Zhong, R. Bao, X. Lan, C. Jiang, J. Sun, X. Yang, and S. Lu. 2015. PRMT1 upregulated by epithelial proinflammatory cytokines participates in COX2 expression in fibroblasts and chronic antigen-induced pulmonary inflammation. J. Immunol. 195: 298–306.
CUTTING EDGE

31 Cutting Edge: Codeletion of the Ras GTPase-Activating Proteins (RasGAPs) Neurofibromin 1 and p120 RasGAP in T Cells Results in the Development of T Cell Acute Lymphoblastic Leukemia
Beth A. Lubeck, Philip E. Lapinski, Jennifer A. Oliver, Olga Ksionda, Luis F. Parada, Yuan Zhu, Ivan Maillard, Mark Chiang, Jeroen Roose, and Philip D. King

36 Cutting Edge: Developmental Regulation of IFN-γ Production by Mouse Neutrophil Precursor Cells
Carolyn R. Sturge, Elise Burger, Megan Raetz, Lora V. Hooper, and Felix Yarovinsky

41 Cutting Edge: Caspase-11 Limits the Response of CD8+ T Cells to Low-Abundance and Low-Affinity Antigens
Tessa Bergsbaken and Michael J. Bevan

46 Cutting Edge: Roles for Batf3-Dependent APCs in the Rejection of Minor Histocompatibility Antigen–Mismatched Grafts
Shaikh M. Arif, Michelle K. Nelson, Sophie L. Gibbons, A. Nicole Desch, Ros M. Kedl, Ronald G. Gill, Philippa Marrack, Kenneth M. Murphy, Todd J. Grazia, Peter M. Henson, and Claudia V. Jakubzick

AUTOIMMUNITY

51 Siglec-G Deficiency Leads to Autoimmunity in Aging C57BL/6 Mice
Jennifer Müller, Benjamin Lunz, Ines Schwab, Andreas Aci, Falk Nimmerjahn, Christoph Daniel, and Lar Nitsche

61 Bruton’s Tyrosine Kinase Synergizes with Notch2 To Govern Marginal Zone B Cells in Nonobese Diabetic Mice
James B. Case, Rachel H. Bonami, Lindsey E. Nyhoff, Hannah E. Steinberg, Allison M. Sullivan, and Peggy L. Kendall

71 CD11c-Expressing B Cells Are Located at the T Cell/B Cell Border in Spleen and Are Potent APCs
Anatoly V. Rubtsov, Kira Rubtsova, John W. Kappler, Jordan Jacobelli, Rachel S. Friedman, and Philippa Marrack

CLINICAL AND HUMAN IMMUNOLOGY

80 A Novel In-Frame Deletion in the Leucine Zipper Domain of C/EBPε Leads to Neutrophil-Specific Granule Deficiency
Taizo Wada, Tadayuki Akagi, Masahiro Muraoita, Tomoko Toma, Kenzo Kaji, Kazunaga Agenatsu, H. Phillip Koeffler, Takashi Yokota, and Akihiro Yachie

87 Unexpected Role for Adaptive αβTh17 Cells in Acute Respiratory Distress Syndrome
John T. Li, Andrew C. Melton, George Su, David E. Hamon, Michael LaFemina, James Howard, Xiaohui Fang, Sudarshan Bhat, Kieu-My Huynb, Cecilia M. O’Kane, Rebecca J. Ingram, Roshell R. Muir, Daniel F. McAuley, Michael A. Matthay, and Dean Sheppard

96 Skin Metabolites Define a New Paradigm in the Localization of Skin Tropic Memory T Cells
Michelle L. McCully, Paul J. Collins, Timothy R. Hughes, Christopher P. Thomas, Jaak Billen, Valerie B. O’Donnell, and Bernhard Moser

IMMUNE REGULATION

105 Optimal T Cell Activation and B Cell Antibody Responses In Vivo Require the Interaction between Leukocyte Function–Associated Antigen-1 and Kindlin-3
Vicky Louise Morrison, Lisa M. Uotila, Marc Llort Asens, Terhi Savinko, and Susanna Carola Fagerholm

116 Polymicrobial Sepsis Increases Susceptibility to Chronic Viral Infection and Exacerbates CD8+ T Cell Exhaustion
Stephanie A. Condotta, Shaniya H. Khan, Deepa Rai, Thomas S. Griffith, and Vladimir P. Badovinac

126 Vitamin E γ-Tocotrienol Inhibits Cytokine-Stimulated NF-κB Activation by Induction of Anti-Inflammatory A20 via Stress Adaptive Response Due to Modulation of Sphingolipids
Yun Wang, Na-Young Park, Yumi Jang, Averil Ma, and Qing Jiang

134 Specific Contributions of CSF-1 and GM-CSF to the Dynamics of the Mononuclear Phagocyte System
Cynthia Louis, Andrew D. Cook, Derek Lacey, Andrew J. Fleetwood, Ros Vlahos, Gary P. Anderson, and John A. Hamilton
Divergent Phenotypes of Human Regulatory T Cells Expressing the Receptors TIGIT and CD226
Christopher A. Fuhrman, Wen-I Yeh, Howard R. Seay, Priya Satkumar Lakshmi, Gaurav Chopra, Lin Zhang, Daniel J. Perry, Stephanie A. McClymont, Mahesh Yadav, Maria-Cecilia Lopez, Henry V. Baker, Ying Zhang, Yizheng Li, Maryann Whitely, David von Schack, Mark A. Atkinson, Jeffrey A. Bluestone, and Todd M. Brusko

IMMUNE SYSTEM DEVELOPMENT
Lymphoid Gene Upregulation on Circulating Progenitors Participates in Their T-Lineage Commitment

IMMUNOTHERAPY AND VACCINES
Photosensitizer and Light Pave the Way for Cytosolic Targeting and Generation of Cytosolic CD8 T Cells Using PLGA Vaccine Particles
Cristina Bruno, Ying Waekerle-Men, Monika Häkerud, Thomas M. Kündig, Bruno Gander, and Pål Johansen

INFECTIOUS DISEASE AND HOST RESPONSE
Glucocorticoid-Augmented Efferocytosis Inhibits Pulmonary Pneumococcal Clearance in Mice by Reducing Alveolar Macrophage Bactericidal Function
Valerie R. Stolberg, Alexandra L. McCubbrey, Christine M. Freeman, Jeanette P. Brown, Sean W. Crudgington, Sophina H. Taitano, Bridget L. Sexton, Peter Mancuso, and Jeffrey L. Curtis

INNATE IMMUNITY AND INFLAMMATION
Different STAT Transcription Complexes Drive Early and Delayed Responses to Type I IFNs

Twist1 and Twist2 Contribute to Cytokine Downregulation following Chronic NOD2 Stimulation of Human Macrophages through the Coordinated Regulation of Transcriptional Repressors and Activators
Shasha Zheng, Matija Hedl, and Clara Abraham

Novel Human Cytomegalovirus Viral Chemokines, vCXCL-1s, Display Functional Selectivity for Neutrophil Signaling and Function
Jinho Heo, Pranay Dogra, Tom J. Mai, Elisabeth A. Pitt, Petra de Kruijf, Martine J. Smit, and Tim E. Sparer

A Novel Small-Molecule Inhibitor Targeting the IL-6 Receptor β Subunit, Glycoprotein 130
Soon-Sun Hong, Jung Ho Choi, Sung Yoon Lee, Yeon-Hwa Park, Kyung-Yeon Park, Joo Young Lee, Ju Young Kim, Veerasamy Gajalapati, Jae-Il Goo, Sarbjeet Singh, Kyung Lee, Young-Kook Kim, So Hee Im, Sung-Hoon Ahn, Stefan Rose-John, Tae-Hwe Heo, and Yongseok Choi

The Tec Kinase–Regulated Phosphoproteome Reveals a Mechanism for the Regulation of Inhibitory Signals in Murine Macrophages

Reconstituted High-Density Lipoprotein Attenuates Cholesterol Crystal–Induced Inflammatory Responses by Reducing Complement Activation
Dominant Suppression of Inflammation via Targeted Mutation of the mRNA Destabilizing Protein Tristetraprolin
Ewan A. Ross, Tim Smallie, Qize Ding, John D. O’Neil, Helen E. Cunliffe, Tina Tang, Dalyla R. Rosner, Iva Klevernic, Nicholas A. Morrice, Claudia Monaco, Adam F. Cunningham, Christopher D. Buckley, Jereny Saklatvala, Jonathan L. Dean, and Andrew R. Clark

Dual-Specificity Phosphatase 1 and Tristetraprolin Cooperate To Regulate Macrophage Responses to Lipopolysaccharide
Tim Smallie, Ewan A. Ross, Alaina J. Ammit, Helen E. Cunliffe, Tina Tang, Dalyla R. Rosner, Michael L. Ridley, Christopher D. Buckley, Jereny Saklatvala, Jonathan L. Dean, and Andrew R. Clark

Bipartite Nuclear Localization Signal Controls Nuclear Import and DNA-Binding Activity of IFN Regulatory Factor 3
Mingzhu Zhu, Ting Fang, Shun Li, Kun Meng, and Dejin Guo

PRMT1 Upregulated by Epithelial Proinflammatory Cytokines Participates in COX2 Expression in Fibroblasts and Chronic Antigen-Induced Pulmonary Inflammation
Qingzhu Sun, Li Liu, Michael Roth, Jia Tian, Qirui He, Bo Zhong, Ruanjuan Bao, Xi Lan, Conghan Jiang, Jian Sun, Xudong Yang, and Shemin Lu

Structural Analysis of Der p 1–Antibody Complexes and Comparison with Complexes of Proteins or Peptides with Monoclonal Antibodies
Tomasz Osinski, Anna Pomécs, Karolina A. Majorek, Jill Gleener, Lesa R. Offermann, Lisa D. Vailes, Martin D. Chapman, Wladek Minor, and Maksymilian Chruszcz

Treatment with Recombinant Trichinella spiralis Cathepsin B–like Protein Ameliorates Intestinal Ischemia/Reperfusion Injury in Mice by Promoting a Switch from M1 to M2 Macrophages
Wei-Feng Liu, Shi-Hong Wen, Jian-Hua Zhan, Yun-Sheng Li, Jian-Tong Shen, Wen-Jing Yang, Xing-Wang Zhou, and Ke-Xuan Liu

Immunization with HSV-2 gB-CCL19 Fusion Constructs Protects Mice against Lethal Vaginal Challenge
Yan Yan, Kai Hu, Xu Deng, Xinmeng Guan, Sukun Luo, Lina Tong, Tao Du, Ming Fu, Mudan Zhang, Yalan Liu, and Qinxue Hu

Repression of Mammalian Target of Rapamycin Complex 1 Inhibits Intestinal Regeneration in Acute Inflammatory Bowel Disease Models
Yuting Guan, Long Zhang, Xia Li, Xinlan Zhang, Shijie Liu, Na Gao, Liang Li, Ganglong Gao, Gaigai Wei, Zhaohua Chen, Yansen Zheng, Xueyun Ma, Stefan Siwko, Jin-Lian Chen, Mingqiao Liu, and Dali Li

Donor Requirements for Regulatory T Cell Suppression of Murine Graft-versus-Host Disease
Antonio Pierini, Lucrezia Colonna, Maite Alvarez, Dominik Schneidawind, Hidetatsu Nishikii, Jeanette Baker, Yuqiong Pan, Mareike Florek, Byung-Su Kim, and Robert S. Negrin

Quantitative TCR:pMHC Dissociation Rate Assessment by NTAmers Reveals Antimelanoma T Cell Repertoires Enriched for High Functional Competence
Philippe O. Gannon, Sébastien Wieckowski, Petra Baumgaertner, Michéel Hebeisen, Mathilde Allard, Daniel E. Speiser, and Nathalie Rufer

Dendritic Cell–Based Vaccines that Utilize Myeloid Rather than Plasmacytoid Cells Offer a Superior Survival Advantage in Malignant Glioma
Mahua Dey, Alan L. Chang, Jason Miska, Derek A. Wainwright, Atique U. Ahmed, Irina V. Balyasnikova, Peter Pytel, Yu Han, Alex Tobias, Lingjiao Zhang, Jian Qiao, and Maciej S. Lesniak
NOVEL IMMUNOLOGICAL METHODS

377 Reduced Fluorescence versus Forward Scatter Time-of-Flight and Increased Peak versus Integral Fluorescence Ratios Indicate Receptor Clustering in Flow Cytometry
Barbara G. Fünrohr, Merle Stein, Benjamin Rhodes, Prabhjot S. Chana, Georg Schett, Timothy J. Vyse, Martin Herrmann, and Dirk Mielenz

386 Fine-Needle Aspiration Biopsy of the Lymph Node: A Novel Tool for the Monitoring of Immune Responses after Skin Antigen Delivery
Danijela Tatovic, Philippa Young, Efrat Kochba, Yotam Levin, F. Susan Wong, and Colin M. Dayan

CORRECTIONS

393 Correction: Retina-Specific T Regulatory Cells Bring About Resolution and Maintain Remission of Autoimmune Uveitis
Phyllis B. Silver, Reiko Horai, Jun Chen, Yingyos Jittayasothorn, Chi-Chao Chan, Rafael Villasmil, Muge R. Kesen, and Rachel R. Caspi

394 AUTHOR INDEX

396 INFORMATION FOR AUTHORS