1227 IN THIS ISSUE

PILLARS OF IMMUNOLOGY

1229 The Origin of the “One Cell-One Antibody” Rule
Christophe Viret and Werner Gurr

G. J. V. Nossal and Joshua Lederberg

CUTTING EDGE

1233 Cutting Edge: Histamine Receptor H4 Activation Positively Regulates In Vivo IL-4 and IFN-γ Production by Invariant NKT Cells
Marina C. Leite-de-Moraes, Séverine Diem, Marie-Laure Michel, Hiroshi Ohtsu, Robin L. Thurmond, Elke Schneider, and Michel Dy

1237 Cutting Edge: An IL-17F-Cre^{EYFP} Reporter Mouse Allows Fate Mapping of Th17 Cells
Andrew L. Croxford, Florian C. Kurschus, and Ari Waisman

1242 Cutting Edge: Permissive MHC Class II Allele Changes the Pattern of Antitumor Immune Response Resulting in Failure of Tumor Rejection
Elena N. Klyushnenkova, Diana V. Koulavskaya, Carla A. Berard, and Richard B. Alexander

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

1247 Autoimmunity in Dry Eye Is Due to Resistance of Th17 to Treg Suppression
Sunil K. Chauhan, Jaafar El Annan, Tatiana Ecoiffier, Sunali Goyal, Qiang Zhang, Daniel R. Saban, and Reza Dana

1253 ISCOMATRIX Adjuvant Induces Efficient Cross-Presentation of Tumor Antigen by Dendritic Cells via Rapid Cytosolic Antigen Delivery and Processing via Tripeptidyl Peptidase II

1260 Targeting Antigen to MHC Class II Molecules Promotes Efficient Cross-Presentation and Enhances Immunotherapy
Nina Dickgreber, Patrizia Stoitzner, Yan Bai, Kylie M. Price, Kathryn J. Farrand, Kristy Manning, Catherine E. Angel, P. Rod Dunbar, Franca Ronchese, John D. Fraser, B. Thomas Bäckström, and Ian F. Hermans

1270 Chemokine-Enhanced Chemotaxis of Lymphangioleiomyomatosis Cells with Mutations in the Tumor Suppressor TSC2 Gene
Gustavo Pacheco-Rodriguez, Fumiyuki Kumaki, Wendy K. Steagall, Yi Zhang, Yoshishko Ikeda, Jing-Ping Lin, Eric M. Billings, and Joel Moss

1278 A New Triggering Receptor Expressed on Myeloid Cells (Trem) Family Member, Trem-Like 4, Binds to Dead Cells and Is a DNAX Activation Protein 12-Linked Marker for Subsets of Mouse Macrophages and Dendritic Cells
Hiroaki Hemmi, Juliana Idoyaga, Koji Suda, Nao Suda, Kathleen Kennedy, Masaki Noda, Alan Aderem, and Ralph M. Steinman

1287 CXC Chemokine Ligand 12 Promotes CCR7-Dependent Naive T Cell Trafficking to Lymph Nodes and Peyer’s Patches
Zhongbin Bai, Haruko Hayasaka, Masayoshi Kobayashi, Wenzhe Li, Zijin Guo, Myoungho Hong, Akihiro Kondo, Byung-il Choi, Yoichiro Iwakura, and Masayuki Miyasaka

1296 Differentiated Human Alveolar Type II Cells Secretes Antiviral IL-29 (IFN-α1) in Response to Influenza A Infection
Jieren Wang, Rebecca Oberley-Deegan, Shuanglin Wang, Mrinalini Nikrad, C. Joel Funk, Kevan L. Hartshorn, and Robert J. Mason

1305 Scrapie Pathogenesis: The Role of Complement C1q in Scrapie Agent Uptake by Conventional Dendritic Cells
Adriana Flores-Langarica, Yasmine Sebti, Daniel A. Mitchell, Robert B. Sim, and Gordon G. MacPherson

1314 Memory Alloreactive B Cells and Alloantibodies Prevent Anti-CD154-Mediated Allograft Acceptance
Audrea M. Burns, Lianli Ma, Yijin Li, Dengqing Yin, JiKun Shen, Jing Xu, and Anita S. Chong

1325 MicroRNA-513 Regulates B7-H1 Translation and Is Involved in IFN-γ-Induced B7-H1 Expression in Cholangiocytes
Ai-Yu Gong, Rui Zhou, Guoku Hu, Xiaqing Li, Patrick L. Splinter, Steven P. O’Hara, Nicholas F. LaRusso, Garrett A. Soukup, Haidong Dong, and Xian-Ming Chen

1334 Protein Tyrosine Phosphatases Regulate Asthma Development in a Murine Asthma Model
Philippe Pouliot, Pierre Camateros, Danuta Radzioch, Bart N. Lambrecht, and Martin Olivier

1341 Affinity-Based Selection of Regulatory T Cells Occurs Independent of Agonist-Mediated Induction of Foxp3 Expression
Lance M. Relland, Manoj K. Mishra, Dipica Haribhai, Brandon Edwards, Jennifer Ziegelbauer, and Calvin B. Williams

1351 IL-12 Enhances CTL Synapse Formation and Induces Self-Reactivity
Mary A. Markiewicz, Erica L. Wise, Zachary S. Buchwald, Elizabeth E. Cheney, Ted H. Hansen, Anish Suri, Saso Cemerski, Paul M. Allen, and Andrey S. Shaw

1362 The Epigenetic Profile of Ig Genes Is Dynamically Regulated during B Cell Differentiation and Is Modulated by Pre-B Cell Receptor Signaling
Cheng-Ran Xu and Ann J. Feeney

1370 The Adaptor Molecule Signaling Lymphocytic Activation Molecule-Associated Protein (SAP) Regulates IFN-γ and IL-4 Production in Vα14 Transgenic NKT Cells via Effects on GATA-3 and T-bet Expression
Osman Cen, Aki Ueda, Laura Guzman, Jimmy Jain, Hamid Bassiri, Kim E. Nichols, and Paul L. Stein

1379 Tim-1 Signaling Substances for Conventional Signal 1 and Requires Costimulation to Induce T Cell Proliferation
Christophe Marias, Nicolas Degauque, Savithri Balasubramanian, James Kenny, Rosemarie H. DeKruyff, Dale T. Umetsu, Vijay Kuchroo, Xin Xiao Zheng, and Terry B. Strom
1386 TLR9-Dependent Activation of Dendritic Cells by DNA from Leishmania major Favors Th1 Cell Development and the Resolution of Lesions
Faihaa Hkima Abou Fakher, Nicolas Rachinel, Martine Klimczak, Jacques Louis, and Noëlle Doyen

1397 Macrophages Activated by C-Reactive Protein through FcγRI Transfer Suppression of Immune Thrombocytopenia
Kristopher D. Marjon, Lorraine L. Marnell, Carolyn Mold, and Terry W. Du Clos

1404 Potential Contribution of IL-7 to Allergen-Induced Eosinophilic Airway Inflammation in Asthma
Elizabeth A. B. Kelly, Cynthia J. Koziol-White, Kathryn J. Clay, Lin Ying Liu, Mary Ellen Bates, Paul J. Bertics, and Nizar N. Jarjour

1411 Placental Cytokine Expression Covaries with Maternal Asthma Severity and Fetal Sex
Naomi M. Scott, Nicolette A. Hodyl, Vanessa E. Murphy, Annette Oui-Kounah, Hayley Wypier, Deborah M. Hodgson, Roger Smith, and Vicki L. Clifton

1421 B7RP-1 Blockade Ameliorates Autoimmunity through Regulation of Follicular Helper T Cells
Yi-Ling Hu, Daniela P. Metz, James Chung, Gerald Siu, and Ming Zhang

1429 Endogenously Produced IL-4 Nonredundantly Stimulates CD8+ T Cell Proliferation
Suzanne C. Morris, Stephanie M. Heidorn, De’Broski R. Herbert, Charles Perkins, David A. Hildeman, Marat V. Khodoun, and Fred D. Finkelstein

1439 Increased IL-15 Production Is Associated with Higher Susceptibility of Memory CD4 T Cells to Simian Immunodeficiency Virus during Acute Infection
Matthew D. Eberly, Mahmuta Kader, Wail Hauan, Kenneth A. Rogers, Jianzhong Zhou, Yvonne M. Mueller, Mary J. Mattapallil, Michael PIatton, Jr., Jeffrey D. Lifson, Peter D. Kasikii, Mario Roederer, Francois Villinger, and Joseph J. Mattapallil

1449 Heat Shock Protein 70, Released from Heat-Stressed Tumor Cells, Initiates Antitumor Immunity by Inducing Tumor Cell Chemokine Production and Activating Dendritic Cells via TLR4 Pathway
Tao-yong Chen, Jun Guo, Chaofeng Han, Mingjin Yang, and Xuetao Cao

1459 Distinct and Overlapping Patterns of Cytokine Regulation of Thymic and Bone Marrow-Derived NK Cell Development
Min Cheng, Hojjatollah Nozad Charoudeh, Petter Brodin, Yanjuan Tang, Tadepally Lakshmikanth, Petter Höglund, Sten Eirik W. Jacobsen, and Ewa Sitnicka

1469 Human Circulating CD4+CD25highFoxp3+ Regulatory T Cells Kill Autologous CD8+ but Not CD4+ Responder Cells by Fas-Mediated Apoptosis
Laura Strauss, Christoph Bergmann, and Theresa L. Whiteside

1479 OX40-Enhanced Tumor Rejection and Effector T Cell Differentiation Decreases with Age
Carl E. Ruby and Andrew D. Weinberg

MOLECULAR AND STRUCTURAL IMMUNOLOGY

1490 T Cell Leukemia/Lymphoma 1 and Galectin-1 Regulate Survival/Cell Death Pathways in Human Naive and IgM+ Memory B Cells through Altering Balances in Bcl-2 Family Proteins
Siamak Jabbarzadeh Tabrizi, Hiroaki Niire, Mariko Masui, Goichi Yoshimoto, Tadahiro Iino, Yoshikane Kikushige, Takahiro Wakasaki, Eishi Baba, Shinji Shimoda, Toshihiro Miyamoto, Toshiro Hara, and Koichi Akashi

1500 Methylation Status of CpG Islands Flanking a cAMP Response Element Motif on the Protein Phosphatase 2Aco Promoter Determines CREB Binding and Activity
Katsue Sunahori, Yuang-Taung Juang, and George C. Tsokos

1509 B and T Lymphocyte Attenuator Regulates B Cell Receptor Signaling by Targeting Syk and BLNK
Andrew C. Vendel, Jill Calemine-Fenaux, Anita Israel-Tomasevic, Vandana Chauhan, David Arnott, and Dan L. Eaton

1518 Complement Inhibitor C4b-Binding Protein Interacts Directly with Small Glycoproteins of the Extracellular Matrix
Kaisa E. Happonen, Andreas P. Sjöberg, Matthias Mürgelin, Dick Heinegård, and Anna M. Blom
IMMUNOGENETICS

1526 A Comparative Study of HLA Binding Affinity and Ligand Diversity: Implications for Generating Immunodominant CD8⁺ T Cell Responses
Xiangyu Rao, Ana Isabel C. A. Fontaine Costa, Debbie van Baarle, and Can Kesir

A Novel Activating Chicken IgY FcR Is Related to Leukocyte Receptor Complex (LRC) Genes but Is Located on a Chromosomal Region Distinct from the LRC and FcR Gene Clusters
Birgit C. Vierliboeck, Ramona Schmitt, Matthias A. Hanzazaruk, Richard P. M. A. Crooijmans, Martien A. M. Groenen, and Thomas W. Göbel

Soluble IL-2RA Levels in Multiple Sclerosis Subjects and the Effect of Soluble IL-2RA on Immune Responses
Lisa M. Maier, David E. Anderson, Christopher A. Severson, Clare Baecher-Allan, Brian Healy, David V. Liu, K. Dane Wittrup, Philip L. De Jager, and David A. Hafler

HOST DEFENSE

1548 Cytomegalovirus-Infected Human Endothelial Cells Can Stimulate Allogeneic CD4⁺ Memory T Cells by Releasing Antigenic Exosomes
Jason D. Walker, Cheryl L. Maier, and Jordan S. Pober

Surfactant Protein A Enhances Production of Secretory Leukoprotease Inhibitor and Protects It from Cleavage by Matrix Metalloproteases
Ravishanar A. Ramadas, Lizhen Wu, and Ann Marie LeVine

1568 Acute Alcohol Intoxication Inhibits the Lineage- c-kit⁺ Sca-1⁺ Cell Response to Escherichia coli Bacteremia
Ping Zhang, David A. Welsh, Robert W. Siggins II, Gregory J. Bagby, Caroline E. Raasch, Kyle I. Happel, and Steve Nelson

1577 Eosinophil Deficiency Compromises Parasite Survival in Chronic Nematode Infection
Valeria Fabre, Daniel P. Beiting, Susan K. Bliss, Nebiat G. Gebreselassie, Lucille F. Gagliardo, Nancy A. Lee, James J. Lee, and Judith A. Appleton

1584 Is Porphyromonas gingivalis Cell Invasion Required for Atherogenesis? Pharmacotherapeutic Implications
Salomon Amar, Shou-chieh Wu, and Monika Madan

1593 A Signaling Polypeptide Derived from an Innate Immune Adaptor Molecule Can Be Harnessed as a New Class of Vaccine Adjuvant
Kouji Kobiyama, Fumihiko Takeshita, Ken J. Ishii, Shobhe Koymam, Taiki Aoshi, Shizuo Akira, Asako Sakai-Sawano, Atsuhi Miyawski, Yoko Yamanaka, Koichi Suzuki, and Kenji Okuda

1602 Novel Chlamydia muridarum T Cell Antigens Induce Protective Immunity against Lung and Genital Tract Infection in Murine Models
Hong Yu, Xiaozhou Jiang, Caixia Shen, Karuna P. Karunakaran, and Robert C. Brunham

1609 β-Defensin-2 Promotes Resistance against Infection with P. aeruginosa
Minhao Wu, Sharon A. McClellan, Ronald P. Barrett, and Linda D. Hazlett

INFLAMMATION

1617 The Adaptor Protein CIKS/Act1 Is Essential for IL-25-Mediated Allergic Airway Inflammation
Estefania Claudio, Søren Ulrik Sønder, Sun Saret, Gabrielle Carvalho, Thirumalai R. Ramalingan, Thomas A. Wynn, Alain Chariot, Antonio Garcia-Pergaedia, Antonio Leonard, Andrea Paun, Amy Chen, Nina Y. Ren, Hongshan Wang, and Ulrich Siebenlist

1631 The Critical Role of Epithelial-Derived Act1 in IL-17- and IL-25-Mediated Pulmonary Inflammation
Shadi Swaidani, Katarzyna Bulek, Zizhen Kang, Caiini Liu, Yi Lu, Weiguo Yin, Mark Aronica, and Xianxia Li

1641 TSLP Conditions the Lung Immune Environment for the Generation of Pathogenic Innate and Antigen-Specific Adaptive Immune Responses
Mark B. Headley, Baohua Zhou, Weihui X. Shih, Theingi Aye, Michael R. Comeau, and Steven F. Ziegler
Myeloid-Specific Expression of Api6/ALM/Spex Induces Systemic Inflammation and Adenocarcinoma in the Lung
Peng Qu, Hong Du, Yuan Li, and Cong Yan

IL-17 Signaling for mRNA Stabilization Does Not Require TNF Receptor-Associated Factor 6
Justin Hartupee, Caining Liu, Michael Novotny, Dongxu Sun, Xiaoxia Li, and Thomas A. Hamilton

CLINICAL IMMUNOLOGY

Dendritic Cell-Based Therapeutic Vaccination against Myeloma: Vaccine Formulation Determines Efficacy against Light Chain Myeloma
Sharon Cohen, Joseph Haimovich, and Nurit Hollander

Novel Autoantibodies against the Activated Coagulation Factor IX (FIXa) in the Antiphospholipid Syndrome That Interpose the FIXa Regulation by Antithrombin
Yao-Hua Yang, Daniel Chien, Meihang Wu, John Fitzgerald, Jennifer M. Groisman, Bevra H. Hahn, Kwan-Ki Huang, and Pojen F. Chen

Unique Phenotypes of C1s Deficiency and Abnormality Caused by Two Compound Heterozygosities in a Japanese Family
Katsuaki Abe, Yuichi Endo, Naomi Nakazawa, Kazuko Kanno, Mitsuo Okubo, Tadashi Hoshino, and Trize Fugita

Phenotypic and Functional Analysis of CD4+CD25+Foxp3+ T Cells in Patients with Systemic Lupus Erythematosus
Michael Bonelli, Anastasia Savitskaya, Carl-Walter Steiner, Eva Rath, Josef S. Smolen, and Clemens Scheinecker

Oxidative Stress Mediates a Reduced Expression of the Activating Receptor NKG2D in NK Cells from End-Stage Renal Disease Patients
Marie-Noëlle Peraldi, Jeannig Berrou, Nicolas Dulphy, Alexandre Sidorovsky, Philippe Haas, Nicolas Boisiel, Fabien Metivier, Christine Randoux, Nilofar Kosari, Alain Guérin, Sylvie Geoffroy, Guy Delavaud, Viviana Marin-Esteban, Denis Glotz, Dominique Charron, and Antoine Toubert

Gene Expression Patterns Induced by HPV-16 L1 Virus-Like Particles in Leukocytes from Vaccine Recipients
Alfonso J. García-Pinzón, Allan Hildesheim, Lori Dodd, Troy J. Kemp, Jun Yang, Brandie Fullmer, Clayton Harro, Dougai R. Louy, Richard A. Lempicki, and Ligia A. Pinto

Nicotinic Attenuation of Central Nervous System Inflammation and Autoimmunity
Fu-Dong Shi, Wen-Hua Piao, Yah-Ping Kuo, Denise I. Campagnolo, Timothy L. Vollmer, and Ronald J. Lukas

A Single Helper T Cell Clone Is Sufficient to Commit Polyclonal Naive B Cells to Produce Pathogenic IgG in Experimental Pemphigus Vulgaris
Hayato Takahashi, Masatataku Kawanis, and Masayuki Amagai

Disruption of CCR5-Dependent Homing of Regulatory T Cells Inhibits Tumor Growth in a Murine Model of Pancreatic Cancer
Marcus C. B. Tan, Peter S. Goedegebuure, Brian A. Bels, Brian Flaherty, Narendra Sankpal, William E. Gillanders, Timothy J. Eberlein, Chyi-Song Hsieh, and David C. Linehan

Anti-Endothelial Antibodies Interfere in Apoptotic Cell Clearance and Promote Thrombosis in Patients with Antiphospholipid Syndrome
Audrey Graham, Isobel Ford, Rona Morrison, Robert N. Barker, Mike Greaves, and Lars-Peter Erwig

A Novel Antiangiogenic Effect for Telomerase-Specific Virotherapy through Host Immune System
Yoshinori Hieda, Toru Kojima, Shinji Kuroda, Yoshikatsu Endo, Ryo Sakai, Masayoshi Hioki, Hiroyuki Kishimoto, Futoshi Uno, Shunsuke Kagawa, Yuichi Watanabe, Yuuri Hashimoto, Yasuo Urata, Noriaki Tanaka, and Toshiyoshi Fujisawa

LETTER OF RETRACTION

Retraction: Intracellular Calcium Waves Accompany Neutrophil Polarization, Formylmethionylleucylphenylalanine Stimulation, and Phagocytosis: A High Speed Microscopy Study
Andrei L. Kindzelskii and Howard R. Petty

CORRECTIONS

AUTHOR INDEX