IN MEMORIAM
3783 Byron H. Waksman, M.D. (AAI ’50) 1919–2012

3785 IN THIS ISSUE

LETTERS TO THE EDITOR
3787 Comment on “Human Antitumor CD8+ T Cells Producing Th1 Polycytokines Show Superior Antigen Sensitivity and Tumor Recognition”
Antonio C. Ortiz and Jonghoon Kang

3787 Response to Comment on “Human Antitumor CD8+ T Cells Producing Th1 Polycytokines Show Superior Antigen Sensitivity and Tumor Recognition”
Dolores J. Schendel, Suanne Wilde, Matthias Leisegang, and Wolfgang Uckert

TRANSLATING IMMUNOLOGY
3789 IFN-α in the Treatment of Melanoma
Ahmad A. Tarhini, Helen Gogas, and John M. Kirkwood

CUTTING EDGE
3795 Cutting Edge: miR-223 and EBV miR-BART15 Regulate the NLRP3 Inflammasome and IL-1β Production

3800 Cutting Edge: NADPH Oxidase Modulates MHC Class II Antigen Presentation by B Cells
Victoria L. Crotzer, Juan D. Matute, Andrés A. Arias, Heng Zhao, Lawrence A. Quilliam, Mary C. Dinaner, and Janice S. Blum

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION
3805 Prevention of Virus-Induced Type 1 Diabetes with Antibiotic Therapy
Naoko Hara, Aimon K. Akkanani, Diana Ir, Charles E. Robertson, Brandie D. Wagner, Daniel N. Frank, and Danny Zipris
3815 Kruppel-like Factor 2 Modulates CCR5 Expression and Susceptibility to HIV-1 Infection
Max W. Richardson, Julie Jadhowsky, Chuka A. Didigu, Robert W. Doms, and James L. Riley

3822 Inhibitors of DNA Binding Proteins Restrict T Cell Potential by Repressing Notch1 Expression in Flt3-Negative Common Lymphoid Progenitors
Ana Pereira de Sousa, Claire Berthault, Alessandra Granato, Sheila Dias, Cyrille Ramond, Barbara L. Kee, Ana Cumano, and Paula Vieira

3831 The Thymic Niche Does Not Limit Development of the Naturally Diverse Population of Mouse Regulatory T Lymphocytes
Paola Romagnoli, James Dooley, Genevieve Enault, Rita Vicente, Bernard Malissen, Adrian Liston, and Joost P. M. van Meerwijk

3838 Increased Memory Differentiation Is Associated with Decreased Polyfunctionality for HIV but Not for Cytomegalovirus-Specific CD8+ T Cells
Catherine Rieu, Florette Turenhout, Melisa-Rose Abrahams, Koleka Mlisana, Michael K. P. Liu, Nilu Goonetilleke, Richard Koup, Mario Roederer, Salim Abdool Karim, Guy de Bruijn, Carolyn Williamson, Clive M. Gray, Wendy A. Burgers, and the CAPRISA 002 Study Team

3848 Hepatic Stellate Cells Undermine the Allostimulatory Function of Liver Myeloid Dendritic Cells via STAT3-Dependent Induction of IDO
Tina L. Sumpter, Aril Dangi, Benjamin M. Matta, Chao Huang, Donna B. Stolz, Yoram Vodovoz, Angus W. Thomson, and Chandrashekar R. Gandhi

3859 Receptor Cross-Talk Spatially Restricts p-ERK during TLR4 Stimulation of Autoreactive B Cells

3869 CD11c+ Cells Are Required for Antigen-Induced Increase of Mast Cells in the Lung
Joakim S. Dahlen, Ricardo Feinstein, Yue Cui, Birgitta Heyman, and Jenny Hallgren

3878 Dendritic Cell-Specific Disruption of TGF-β Receptor II Leads to Altered Regulatory T Cell Phenotype and Spontaneous Multiorgan Autoimmunity
Rajalakshmi Ramalingam, Claire B. Larmonier, Robert D. Thurston, Monica T. Midura-Kiela, Song Guo Zheng, Fayez K. Ghishan, and Pawel R. Kiela

3894 MicroRNAs Control the Maintenance of Thymic Epithelia and Their Competence for T Lineage Commitment and Thymocyte Selection

3905 Role of Macrophage Migration Inhibitory Factor in the Regulatory T Cell Response of Tumor-Bearing Mice
Susanna Choi, Hang-Rae Kim, Lin Leng, Insoo Kang, William L. Jorgensen, Chul-Soo Cho, Richard Bucala, and Wan-Uk Kim

3914 Autotaxin through Lysophosphatidic Acid Stimulates Polarization, Motility, and Transendothelial Migration of Naive T Cells
Yafeng Zhang, Yi-Chun Maria Chen, Matthew F. Krummel, and Steven D. Rosen

3925 IL-10–Producing Regulatory B Cells in the Pathogenesis of Chronic Hepatitis B Virus Infection

3936 Cell-Intrinsic Abrogation of TGF-β Signaling Delays but Does Not Prevent Dysfunction of Self/Tumor-Specific CD8 T Cells in a Murine Model of Autochthonous Prostate Cancer
Molecular and Structural Immunology

3947 Foxp3 Expression Is Required for the Induction of Therapeutic Tissue Tolerance
Frederico S. Regateiro, Ye Chen, Adrian R. Kendall, Robert Hilbrands, Elizabeth Adams, Stephen P. Cobbold, Jianbo Ma, Kristian G. Andersen, Alexander G. Betz, Mindy Zhang, Shruti Madhiwalla, Bruce Roberts, Herman Waldmann, Kathleen F. Nolan, and Duncan Howie

3957 Mannan-Binding Lectin-Associated Serine Protease (MASP)-1 Is Crucial for Lectin Pathway Activation in Human Serum, whereas neither MASP-1 nor MASP-3 Is Required for Alternative Pathway Function
Søren E. Degn, Lisbeth Jensen, Annette G. Hansen, Duygu Duman, Mustafa Tekin, Jens C. Jensensius, and Steffen Thiel

3970 Target DNA Sequence Directly Regulates the Frequency of Activation-Induced Deaminase-Dependent Mutations
Zhangguo Chen, Sawannee S. Viboolsittiseri, Brian P. O’Connor, and Jing H. Wang

3983 HLA-DM Constrains Epitope Selection in the Human CD4 T Cell Response to Vaccinia Virus by Favoring the Presentation of Peptides with Longer HLA-DM–Mediated Half-Lives
Liuang Yin, J. Mauricio Calvo-Calle, Omar Dominguez-Amorocho, and Lawrence J. Stern

3995 Extensive Diversification of IgD-, IgY-, and Truncated IgY(ΔFc)-Encoding Genes in the Red-Eared Turtle (Trachemys scripta elegans)
Lingxiao Li, Tao Wang, Yi Sun, Gang Cheng, Hui Yang, Zhiguo Wei, Ping Wang, Xiaoxiang Hu, Liming Ren, Qiongyong Meng, Ran Zhang, Ying Guo, Lennart Hammarström, Ning Li, and Yaofeng Zhao

IMMUNOGENETICS

4005 The Importance of the Erk Pathway in the Development of Linker for Activation of T Cells-Mediated Autoimmunity
Deirdre M. Fuller, Minghua Zhu, Surapong Koonparu, Mariana I. Nelson, and Weiguo Zhang

HOST DEFENSE

4014 Chronic Beryllium Disease, HLA-DPB1, and the DP Peptide Binding Groove
Lori J. Silveira, Erin C. McCanslies, Tasha E. Fingerlin, Michael V. Van Dyke, Margaret M. Mroz, Matthew Strand, Andrew P. Fontenot, Natalie Bowerman, Dana M. Dabelea, Christine R. Schuler, Ainsley Weston, and Lisa A. Maier

4024 Scavenger Receptor in Fish Is a Lipopolysaccharide Recognition Molecule Involved in Negative Regulation of NF-κB Activation by Competing with TNF Receptor-Associated Factor 2 Recruitment into the TNF-α Signaling Pathway
Zhen Meng, Xiao-yu Zhang, Jian Guo, Li-xin Xiang, and Jian-zhong Shao

4040 Staphylococcus aureus Induces Type I IFN Signaling in Dendritic Cells Via TLR9
Dane Parker and Alice Prince

4047 Genetic Ablation of Arginase 1 in Macrophages and Neutrophils Enhances Clearance of an Arthritogenic Alphavirus

4060 Protective Immunity against Pulmonary Cryptococcosis Is Associated with STAT1-Mediated Classical Macrophage Activation
Sarah E. Hardison, Gina Herrera, Mattie L. Young, Camaron R. Hole, Karen L. Wozniak, and Floyd L. Wormley, Jr.

4069 Abelson Tyrosine Kinase Controls Phagosomal Acidification Required for Killing of Mycobacterium tuberculosis in Human Macrophages
Heiko Bruns, Frank Stegelmann, Mario Fabri, Konstanze Döhner, Ger van Zandbergen, Manfred Wagner, Mhairi Skinner, Robert L. Modlin, and Steffen Stenger

4079 Blockade of IL-10 Signaling during Bacillus Calmette-Guérin Vaccination Enhances and Sustains Th1, Th17, and Innate Lymphoid IFN-γ and IL-17 Responses and Increases Protection to Mycobacterium tuberculosis Infection
Jonathan M. Pitt, Evangelos Stavropoulos, Paul S. Redford, Amy M. Beebe, Gregory J. Bancroft, Douglas B. Young, and Anne O’Garra
INFLAMMATION

4104 CD31 Exhibits Multiple Roles in Regulating T Lymphocyte Trafficking In Vivo
Liang Ma, Kenneth C. P. Cheung, Madhav Kishore, Susan Nourshargh, Claudio Mauro, and Federica M. Marelli-Berg

4112 ATP Induces Protein Arginine Deiminase 2-Dependent Citrullination in Mast Cells through the P2X7 Purinergic Receptor
Sanja Arandjelovic, Katherine R. McKenney, Sunamita S. Leming, and Kerri A. Mowen

4123 SB1578, a Novel Inhibitor of JAK2, FLT3, and c-Fms for the Treatment of Rheumatoid Arthritis
Babita Madan, Kee Chuang Goh, Stefan Hart, Anthony D. William, Ramesh Jayaraman, Kantharaj Ethirajulu, Brian W. Dymock, and Jeanette M. Wood

4135 Control of Allergen-Induced Inflammation and Hyperresponsiveness by the Metalloproteinase ADAMTS-12
Geneviève Paulissen, Mehdi El Hour, Natacha Rocks, Maud M. Guéders, Fabrice Bureau, Jean-Michel Foidart, Carlos Lopez-Otin, Agnès Noel, and Didier D. Cataldo

4144 Autophagy Regulates IL-23 Secretion and Innate T Cell Responses through Effects on IL-1 Secretion
Celia Peral de Castro, Sarah A. Jones, Clióna Ni Cheallaigh, Claire A. Hearnden, Laura Williams, Jan Winter, Ed C. Lavelle, Kingston H. G. Mills, and James Harris

4154 Regulation of Inflammatory Response by 3-Methyladenine Involves the Coordinative Actions on Akt and Glycogen Synthase Kinase 3β Rather than Autophagy
Yi-Chieh Lin, Hsuan-Cheng Kuo, Jang-Shiun Wang, and Wan-Wan Lin

4165 B7x in the Periphery Abrogates Pancreas-Specific Damage Mediated by Self-reactive CD8 T Cells
Jun Sik Lee, Lisa Scandianuzi, Anjana Ray, Joyce Wei, Kimberly A. Hofmeyer, Yael M. Abadi, P’ng Loke, Juan Lin, Jianda Yuan, David V. Serreze, James P. Allison, and Xingxing Zang

4175 NLRP3 Inflammasome Activity Is Negatively Controlled by miR-223
Franz Bauernfeind, Anna Rieger, Frank A. Schildberg, Percy A. Knolle, Jonathan L. Schmid-Burgk, and Veit Hornung

CLINICAL IMMUNOLOGY

4182 Immunoproteasome Subunit LMP7 Deficiency and Inhibition Suppresses Th1 and Th17 but Enhances Regulatory T Cell Differentiation
Khalid W. Kalim, Michael Basler, Christopher J. Kirk, and Marcus Groettrup

CORRECTIONS

4194 Correction: Structural and Functional Characterization of a Novel Nonglycosidic Type I NKT Agonist with Immunomodulatory Properties

AUTHOR INDEX