LETTERS TO THE EDITOR

4533 Comment on “Highly Pathogenic Influenza Virus Infection of the Thymus Interferes with T Lymphocyte Development”
Nirmal Singh Panesar

BRIEF REVIEWS

4535 Physiologic Control of the Functional Status of Foxp3+ Regulatory T Cells
Andrew L. Mellor and David H. Munn

CUTTING EDGE

4541 Cutting Edge: Ku70 Is a Novel Cytosolic DNA Sensor That Induces Type III Rather Than Type I IFN
Xing Zhang, Terrence W. Brann, Ming Zhou, Jun Yang, Raphael M. Oguariri, Kristy B. Lidie, Hiromi Inamichi, Da-Wei Huang, Richard A. Lempicki, Michael W. Baseler, Timothy D. Vrenstra, Howard A. Young, H. Clifford Lane, and Tomozumi Inamichi

4546 Cutting Edge: Generation of Colitogenic Th17 CD4 T Cells Is Enhanced by IL-17+ γδ T Cells
Jeong-su Do, Anabelle Vesperas, Chen Dong, William M. Baldwin, III, and Booki Min

4551 Cutting Edge: De Novo Induction of Functional Foxp3+ Regulatory CD4 T Cells in Response to Tissue-Restricted Self Antigen
Lucas J. Thompson, Andrea C. Valladao, and Steven F. Ziegler

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

4557 Functional Plasticity of Antigen-Specific Regulatory T Cells in Context of Tumor
Caroline Addey, Matthew White, Lang Dou, David Cor, Julian Dyson, and Jian-Guo Chai

4565 Conventional Dendritic Cells Are Required for the Activation of Helper-Dependent CD8 T Cell Responses to a Model Antigen After Cutaneous Vaccination with Lentiviral Vectors
Hugh D. Goold, David Escors, Thomas J. Conlan, Ronjon Chakraverty, and Clare L. Bennett
4573 Requirements for Eomesodermin and Promyelocytic Leukemia Zinc Finger in the Development of Innate-Like CD8⁺ T Cells
Scott M. Gordon, Shannon A. Carty, Jiyeon S. Kim, Tao Zou, Jennifer Smith-Garvin, Eric S. Alonzo, Ethan Haimm, Derek B. Sant'Angelo, Gary A. Koretzky, Steven L. Reiner, and Martha S. Jordan

4579 Gads Regulates the Expansion Phase of CD8⁺ T Cell-Mediated Immunity
Elizabeth Yan Zhang, Brooks L. Parker, and Thomas M. Yankee

4590 Human NK Cells Proliferate and Die In Vivo More Rapidly than T Cells in Healthy Young and Elderly Adults
Charles T. Lutz, Anush Karapetyan, Ahmad Al-Attar, Brent J. Shelton, Kimberly J. Holt, Jason H. Tucker, and Steven R. Preznel

4599 Dendritic Cells and CD28 Costimulation Are Required To Sustain Virus-Specific CD8⁺ T Cell Responses during the Effector Phase In Vivo
Douglas V. Dolfi, Priyanka A. Duttagupta, Alina C. Boesteanu, Yvonne M. Mueller, Caspian H. O lsai, Annie B. Borowski, and Peter D. Katsikis

4609 High TCR Stimuli Prevent Induced Regulatory T Cell Differentiation in a NF-κB–Dependent Manner
Luciana L. Molinero, Michelle L. Miller, César Evaristo, and María-Luisa Alegre

4618 Memory CCR6⁺CD4⁺ T Cells Are Preferential Targets for Productive HIV Type 1 Infection Regardless of Their Expression of Integrin β7
Patricia Monteiro, Annie Gouelin, Vanessa Sue Wadche, Mohamed El-Far, Elias A. Said, Hasan Kared, Nathalie Grandvaux, Mohamed-Rachid Boulouel, Jean-Pierre Routy, and Petronela Ancuta

4631 Impaired Basophil Induction Leads to an Age-Dependent Innate Defect in Type 2 Immunity during Helminth Infection in Mice

4640 Anergic Responses Characterize a Large Fraction of Human Autoreactive Naive B Cells Expressing Low Levels of Surface IgM
Tam D. Quach, Nataly Manjarrez-Orduno, Diana G. Adlowiza, Lin Silver, Hongmei Yang, Chungwen Wei, Eric C. B. Milner, and Inaki Sanz

4649 NFIL3 Is a Regulator of IL-12 p40 in Macrophages and Mucosal Immunity

4656 Liver X Receptors Inhibit Macrophage Proliferation through Downregulation of Cyclins D1 and B1 and Cyclin-Dependent Kinases 2 and 4
Mónica Pascual-García, José M. Carbó, Theresa León, Jonathan Matalonga, Ruud Out, Theo Van Berkel, María-Rosa Sarrias, Francisco Lozano, Antonio Celada, and Annabel F. Valledor

4668 Differential Requirements for Th1 and Th17 Responses to a Systemic Self-Antigen
Shoshana D. Katzman, Eugenio Gallo, Katrina K. Hoyer, and Abul K. Abbas

4674 The Neonatal FcR-Mediated Presentation of Immune-Complexed Antigen Is Associated with Endosomal and Phagosomal pH and Antigen Stability in Macrophages and Dendritic Cells
Xindong Liu, Li Liu, Ziyan Yang, Senthilkumar Palaniyandi, Rongyu Zeng, Lian-Yong Gao, David M. Moser, Derry C. Roopenian, and Xiaoping Zhu

4687 α-Galactosylceramide–Induced Airway Eosinophilia Is Mediated through the Activation of NKT Cells
Ya-Hui Chuang, Tzu-Chun Wang, Hsiao-Yu Jen, Alice L. Yu, and Bor-Luen Chiang

4693 IFN-α Mediates the Development of Autoimmunity both by Direct Tissue Toxicity and through Immune Cell Recruitment Mechanisms
Nagako Akeno, Eric P. Smith, Mihela Stefan, Amanda K. Huber, Wei jia Zhang, Mehdi Kedda ch, and Yaron Tomer
4707 The TLR7 Ligand 9-Benzyl-2-Butoxy-8-Hydroxy Adenine Inhibits IL-17 Response by Eliciting IL-10 and IL-10–Inducing Cytokines
Alessandra Vultaggio, Francesca Nencini, Sara Pratei, Laura Maggi, Antonio Guarna, Francesco Annunziato, Sergio Romagnani, Paola Parronchi, and Enrico Maggi

4716 Both miR-17-5p and miR-20a Alleviate Suppressive Potential of Myeloid-Derived Suppressor Cells by Modulating STAT3 Expression
Miaomiao Zhang, Qiaofei Liu, Siping Mi, Xue Liang, Zhiqian Zhang, Xiaomin Su, Jinyi Liu, Yingying Chen, Mengmeng Wang, Yanf Zhang, Fenhua Guo, Zhijun Zhang, and Rongcun Yang

4725 Filarial Infection Suppresses Malaria-Specific Multifunctional Th1 and Th17 Responses in Malaria and Filarial Coinfections

4734 Impairment of Regulatory Capacity of CD4+CD25+ Regulatory T Cells Mediated by Dendritic Cell Polarization and Hyperthyroidism in Graves’ Disease
Chaoming Mao, Shu Wang, Yichuan Xiao, Jingwei Xu, Qian Jiang, Min Jin, Xiaohua Jiang, Hua Guo, Guang Ning, and Yanyun Zhang

4744 Endogenous MHC-Related Protein 1 Is Transiently Expressed on the Plasma Membrane in a Conformation That Activates Mucosal-Associated Invariant T Cells
Wei-Jen Chua, Sojung Kim, Nancy Myers, Showxiong Huang, Lawrence Yu, Daveed H. Fremont, Michael S. Diamond, and Ted H. Hanani

MOLECULAR AND STRUCTURAL IMMUNOLOGY
4751 Suppressor of Cytokine Signaling 1 Regulates Embryonic Myelopoiesis Independently of Its Effects on T Cell Development
Lynda A. O'Sullivan, Suzita M. Noor, Monique C. Trengove, Rowena S. Lewis, Clifford Liang, Naomi S. Sprigg, Sandra E. Nicholson, and Alister C. Ward

4762 Dual Oxidase 1 Induced by Th2 Cytokines Promotes STAT6 Phosphorylation via Oxidative Inactivation of Protein Tyrosine Phosphatase 1B in Human Epidermal Keratinocytes
Satoshi Hirakawa, Rumiko Saito, Hiroshi Ohara, Ryuei Okuyama, and Setsuya Aiba

4771 Cardiolipin Binds to CD1d and Stimulates CD1d-Restricted γδ T Cells in the Normal Murine Repertoire
Mélanie Dieudé, Harald Striegl, Aaron J. Tyniak, Jing Wang, Samuel M. Behar, Ciriaco A. Piccirillo, Jerrold S. Levine, Dirk M. Zajonc, and Joyce Rauch

Histone Deacetylase 7 Regulates Cell Survival and TCR Signaling in CD4/CD8 Double-Positive Thymocytes
Herbert G. Kasler, Bryan D. Young, Denis Mottet, Hyung W. Lim, Amy M. Collins, Eric N. Olson, and Eric Verdin

4794 Mechanism of Endosomal TLR Inhibition by Antimalarial Drugs and Imidazoquinolines
Alenka Kužnik, Mojca Benčič, Urban Švejger, Matjaž Jeras, Blaž Rozman, and Roman Jerala

4805 Hematopoietic Lineage Cell-Specific Protein 1 Functions in Concert with the Wiskott–Aldrich Syndrome Protein To Promote Podosome Array Organization and Chemotaxis in Dendritic Cells
Deborah A. Klos Dehring, Fiona Clarke, Brendan G. Ricart, Yanping Huang, Timothy S. Gomez, Edward K. Williamson, Daniel A. Hammer, Daniel D. Billadeau, Yair Argon, and Janis K. Burkhardt

4819 Targeting TLR4 Signaling by TLR4 Toll/IL-1 Receptor Domain-Derived Decoy Peptides: Identification of the TLR4 Toll/IL-1 Receptor Domain Dimerization Interface
Vladimir Y. Toshchakov, Henryk Szmacinski, Leah A. Couture, Joseph R. Lakowicz, and Stefanie N. Vogel

4828 A Serine Proteinase Homologue, SPH-3, Plays a Central Role in Insect Immunity
Gabriella Felföldi, Ioannis Eleftherianos, Richard H. ffrench-Constant, and István Venekei
IMMUNOGENETICS

CD5 Promotes IL-10 Production in Chronic Lymphocytic Leukemia B Cells through STAT3 and NFAT2 Activation
Soizic Garaud, Abden Morva, Sébastien Lemoine, Sophie Hillion, Anne Bordron, Jacques-Olivier Pers, Christian Berthou, Rizgar A. Mageed, Yves Renaudineau, and Pierre Youinou

HOST DEFENSE

CCL17 Controls Mast Cells for the Defense against Filarial Larval Entry
Sabine Specht, Jutta K. Frank, Judith Alferink, Bettina Dubben, Laura E. Layland, Gaelle Denece, Odile Bain, Irmgard Förster, Carsten J. Kirschning, Coralie Martin, and Achim Hoerauf

Rapid and Transient Activation of γδ T Cells to IFN-γ Production, NK Cell-Like Killing, and Antigen Processing during Acute Virus Infection
Felix N. Toka, Mary A. Kenney, and William T. Golde

IL-2 Contributes to Maintaining a Balance between CD4+Foxp3+ Regulatory T Cells and Effector CD4+ T Cells Required for Immune Control of Blood-Stage Malaria Infection
Floriana Berretta, Jessica St-Pierre, Ciriaco A. Piccirillo, and Mary M. Stevenson

Nucleotide-Binding Oligomerization Domain 1 Mediates Recognition of Clostridium difficile and Induces Neutrophil Recruitment and Protection against the Pathogen
Mizubo Hasegawa, Takashi Yamazaki, Nobuhiko Kamada, Kazuki Tawaratsumida, Yun-Gi Kim, Gabriel Niñez, and Naohiro Inohara

Novel Blocking Human IgG Directed against the Pentapeptide Repeat Motifs of Neisseria meningitidis Lip/H.8 and Laz Lipoproteins
Tathagat Dutta Ray, Lisa A. Lewis, Sunita Gulati, Peter A. Rice, and Sanjay Ram

Decreased Leukocyte Accumulation and Delayed Bordetella pertussis Clearance in IL-6−/− Mice
Xuqing Zhang, Tania Giel, Laura L. Goodfield, Sarah J. Muse, and Eric T. Harvill

INFLAMMATION

Evidence for an Anti-Inflammatory Loop Centered on Polymorphonuclear Leukocyte Formyl Peptide Receptor 2/Lipoxin A4 Receptor and Operative in the Inflamed Microvasculature
Vincenzo Brancaleone, Jesmond Dalli, Stefania Bena, Roderick J. Flower, Giuseppe Cirino, and Mauro Perretti

Macrophage Migration Inhibitory Factor and CD74 Regulate Macrophage Chemotactic Responses via MAPK and Rho GTPase
Huapeng Fan, Pam Hall, Leilani L. Santos, Julia L. Gregory, Gunter Fingerle-Rowson, Richard Bucala, Eric F. Morand, and Michael J. Hickey

Mal Mediates TLR-Induced Activation of CREB and Expression of IL-10

Evidence That the Lipid Phosphatase SHIP-1 Regulates T Lymphocyte Morphology and Motility

Phospholipase C-β3 Is a Key Modulator of IL-8 Expression in Cystic Fibrosis Bronchial Epithelial Cells
Valentino Bezzarri, Pio d’Adamo, Alessandro Rimesi, Carmen Lanzara, Sergio Crovella, Elena Nicolisi, Anna Tamanini, Emmanouil Athanasiaki, Maela Tebin, Giulia Biasolfi, Mitchell L. Drumm, Michael R. Knowles, Paolo Pinton, Paolo Gasparini, Giorgio Bertoni, and Giulio Cabrini

Periostin Regulates Goblet Cell Metaplasia in a Model of Allergic Airway Inflammation

Natural IgM Is Required for Suppression of Inflammatory Arthritis by Apoptotic Cells
Clare A. Notley, Mark A. Brown, Graham P. Wright, and Michael R. Ehrenstein
Inhibition of Microglial Phagocytosis Is Sufficient To Prevent Inflammatory Neuronal Death
Jonas J. Neher, Urte Neniskyte, Jing-Wei Zhao, Anna Bal-Price, Aviva M. Tolkovsky, and Guy C. Brown

B Cell and BAFF Dependence of IFN-α–Exaggerated Disease in Systemic Lupus Erythematosus-Prone NZM 2328 Mice
Noam Jacob, Shunhua Guo, Alexis Mathian, Michael N. Kou, Simona Gindea, Chaim Putterman, Chaim O. Jacob, and William Stohl

A Unique Hybrid Renal Mononuclear Phagocyte Activation Phenotype in Murine Systemic Lupus Erythematosus Nephritis
Ramalingam Bethunaickan, Celine C. Berthier, Meera Ramasujam, Ranjit Sahu, Weijia Zhang, Yezou Sun, Erwin P. Bottinger, Lionel Ivashkiv, Matthias Kretzler, and Anne Davidson

Apolipoprotein B Binding Domains: Evidence That They Are Cell-Penetrating Peptides That Efficiently Deliver Antigenic Peptide for Cross-Presentation of Cytotoxic T Cells
Norihisa Sakamoto and Amy S. Rosenberg

Correction: IL-2–Controlled Expression of Multiple T Cell Trafficking Genes and Th2 Cytokines in the Regulatory T Cell-Deficient Scurfy Mice: Implication to Multiorgan Inflammation and Control of Skin and Lung Inflammation
Rahul Sharma, Poonam R. Sharma, Young-Chul Kim, Norbert Leitinger, Jae K. Lee, Shu Man Fu, and Shyr-Te Ju

AUTHOR INDEX