

## PRESIDENTIAL ADDRESS

- 1589 Immunological Weapons Acquired Early in Life Win Battles with Cancer Late in Life  
*Olivera J. Finn*

## 1593 IN THIS ISSUE

## PILLARS OF IMMUNOLOGY

- 1595 PU.1, a Shared Transcriptional Regulator of Innate and Adaptive Immune Cell Fates  
*Harinder Singh*
- 1597 Pillars Article: The Macrophage and B Cell-Specific Transcription Factor PU.1 Is Related to the *ets* Oncogene. *Cell*, 1990. 61: 113–124.  
*Michael J. Klemisz, Scott R. McKercher, Antonio Celada, Charles Van Beveren, and Richard A. Maki*

## BRIEF REVIEWS

- 1609 Auditing Protein Therapeutics Management by Professional APCs: Toward Prevention of Immune Responses against Therapeutic Proteins  
*Suryasarathi Dasgupta, Jagadeesh Bayry, Sébastien André, Jordan D. Dimitrov, Srinivas V. Kaveri, and Sébastien Lacroix-Desmazet*

## CUTTING EDGE

- 1617 Cutting Edge: Multiple Sclerosis-Like Lesions Induced by Effector CD8 T Cells Recognizing a Sequestered Antigen on Oligodendrocytes  
*Amit Saxena, Jan Bauer, Tanja Scheikl, Jacques Zappulla, Marc Audebert, Sabine Desbois, Ari Waisman, Hans Lassmann, Roland S. Liblau, and Lennart T. Mars*
- 1622 Cutting Edge: The Transmembrane E3 Ligase GRAIL Ubiquitinates the Costimulatory Molecule CD40 Ligand during the Induction of T Cell Anergy  
*Neil B. Lineberry, Leon L. Su, Jack T. Lin, Greg P. Coffey, Christine M. Seroogy, and C. Garrison Fathman*
- 1627 Cutting Edge: Priming of NK Cells by IL-18  
*Julie Chaix, Marlowe S. Tessmer, Kasper Hoebe, Nicolas Fuséri, Bernhard Ryffel, Marc Dalod, Lena Alexopoulou, Bruce Beutler, Laurent Brossay, Eric Vivier, and Thierry Walzer*

On the cover: Hemopexin-null mice are protected from mercury-induced autoimmune disease. The autometallographic silver enhancement shows intense staining of mercury-sulfur nanocrystals in the renal tubules of hemopexin-null mice after treatment with mercuric chloride for 4 weeks. Fagoonee, S., C. Caorsi, M. Giovarelli, M. Stoltenberg, L. Silengo, F. Altruda, G. Camussi, E. Tolosano, B. Bussolati. 2008. Lack of plasma protein hemopexin dampens mercury-induced autoimmune response in mice. *J. Immunol.* 181: 1937–1947.

## CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 1633 Type I IFN-Induced, NKT Cell-Mediated Negative Control of CD8 T Cell Priming by Dendritic Cells  
*Petra Bochtler, Andrea Kröger, Reinhold Schirmbeck, and Jörg Reimann*
- 1644 The Transcription Factor Fli-1 Modulates Marginal Zone and Follicular B Cell Development in Mice  
*Xian K. Zhang, Omar Moussa, Amanda LaRue, Sarah Bradshaw, Ivan Molano, Demetri D. Spyropoulos, Gary S. Gilkeson, and Dennis K. Watson*
- 1655 Allele-Selective Effect of PA28 in MHC Class I Antigen Processing  
*Taketoshi Yamano, Hidetoshi Sugahara, Shusaku Mizukami, Shigeo Murata, Tomoki Chiba, Keiji Tanaka, Katsuyuki Yui, and Heiichiro Udon*
- 1665 HIF-1 $\alpha$  Is Up-Regulated in Activated Mast Cells by a Process That Involves Calcineurin and NFAT  
*Aurelia Walczak-Drzewiecka, Marcin Ratajewski, Waldemar Wagner, and Jaroslaw Dastych*
- 1673 IFN Regulatory Factor-1 Negatively Regulates CD4 $^{+}$ CD25 $^{+}$  Regulatory T Cell Differentiation by Repressing Foxp3 Expression  
*Alessandra Fragale, Lucia Gabriele, Emilia Stellacci, Paola Borghi, Edvige Perrotti, Ramona Ilari, Angela Lanciotti, Anna Lisa Remoli, Massimo Venditti, Filippo Belardelli, and Angela Battistini*
- 1683 Acquisition of Suppressive Function by Activated Human CD4 $^{+}$ CD25 $^{-}$  T Cells Is Associated with the Expression of CTLA-4 Not FoxP3  
*Yong Zheng, Claire N. Manzotti, Fiona Burke, Laure Dussally, Omar Qureshi, Lucy S. K. Walker, and David M. Sansom*
- 1692 Mechanisms Underlying Blockade of Allograft Acceptance by TLR Ligands  
*Paige M. Porrett, Xueli Yuan, David F. LaRosa, Patrick T. Walsh, Jaeseok Yang, Wenda Gao, Peiying Li, Jidong Zhang, Javeed M. Ansari, Wayne W. Hancock, Mohamed H. Sayegh, Maria Koulmanda, Terry B. Strom, and Laurence A. Turka*
- 1700 IFN- $\gamma$  Induces the Erosion of Preexisting CD8 T Cell Memory during Infection with a Heterologous Intracellular Bacterium  
*Renu Dudani, Kaja Murali-Krishna, Lakshmi Krishnan, and Subash Sad*
- 1710 SCART Scavenger Receptors Identify a Novel Subset of Adult  $\gamma\delta$  T Cells  
*Jan Kisielow, Manfred Kopf, and Klaus Karjalainen*
- 1717 Identification of Initiator B Cells, a Novel Subset of Activation-Induced Deaminase-Dependent B-1-Like Cells That Mediate Initiation of Contact Sensitivity  
*Steven M. Kerfoot, Marian Szczepanik, James W. Tung, and Philip W. Askenase*
- 1728 An Endogenous Prostaglandin Enhances Environmental Phthalate-Induced Apoptosis in Bone Marrow B Cells: Activation of Distinct but Overlapping Pathways  
*Stephanie L. Bissonnette, Jessica E. Teague, David H. Sherr, and Jennifer J. Schlezinger*
- 1737 Low- versus High-Baseline Epinephrine Output Shapes Opposite Innate Cytokine Profiles: Presence of Lewis- and Fischer-Like Neurohormonal Immune Phenotypes in Humans?  
*Iilia J. Elenkov, Richard Kvetnansky, Akira Hashiramoto, Vladimir K. Bakalov, Amrey A. Link, Keith Zachman, Marianna Crane, Daniela Jezova, Jozef Rovensky, Mariana A. Dimitrov, Philip W. Gold, Sergio Bonini, Thomas Fleisher, George P. Chrousos, and Ronald L. Wilder*
- 1746 The Agonists of TLR4 and 9 Are Sufficient to Activate Memory B Cells to Differentiate into Plasma Cells In Vitro but Not In Vivo  
*Katharina Richard, Susan K. Pierce, and Wenxia Song*
- 1753 Influence of a Non-NK Complex Region of Chromosome 6 on CD4 $^{+}$  Invariant NK T Cell Homeostasis  
*David Vallois, Marie-Claude Gagnéault, Philip Avner, Ute C. Rogner, Christian Boitard, Kamel Benlagha, André Herbelin, and Françoise Lepault*
- 1760 TCR Antagonism by Peptide Requires High TCR Expression  
*Daniel S. Jones, Peter Reichardt, Mandy L. Ford, Lindsay J. Edwards, and Brian D. Evavold*
- 1767 IL-21-Induced Isotype Switching to IgG and IgA by Human Naive B Cells Is Differentially Regulated by IL-4  
*Danielle T. Avery, Vanessa L. Bryant, Cindy S. Ma, Rene de Waal Malefyt, and Stuart G. Tangye*

- 1780 The E3 Ubiquitin Ligase Ro52 Negatively Regulates IFN- $\beta$  Production Post-Pathogen Recognition by Polyubiquitin-Mediated Degradation of IRF3  
*Rowan Higgs, Joan Ní Gabhann, Nadia Ben Larbi, Eamon P. Breen, Katherine A. Fitzgerald, and Caroline A. Jefferies*
- 1787 Macrophages Pulsed with *Streptococcus pneumoniae* Elicit a T Cell-Dependent Antibody Response upon Transfer into Naive Mice  
*Sam Vasilevsky, Jesus Colino, Roman Puliaev, David H. Canaday, and Clifford M. Snapper*
- 1798 Polyclonal Adaptive Regulatory CD4 Cells That Can Reverse Type I Diabetes Become Oligoclonal Long-Term Protective Memory Cells  
*Elana Godebu, Daphne Summers-Torres, Melissa M. Lin, Bas J. G. Baaten, and Linda M. Bradley*
- 1806 CTLA4 Expression Is an Indicator and Regulator of Steady-State CD4 $^{+}$ FoxP3 $^{+}$  T Cell Homeostasis  
*Anita L. Tang, John R. Teijaro, Modesta N. Njau, Smita S. Chandran, Agnes Azimzadeh, Steven G. Nadler, David M. Rothstein, and Donna L. Farber*
- 1814 Activated CD8 T Cells Redistribute to Antigen-Free Lymph Nodes and Exhibit Effector and Memory Characteristics  
*C. Colin Brinkman, Stacey L. Sheasley-O'Neill, Andrew R. Ferguson, and Victor H. Engelhard*
- 1825 Pemphigus Vulgaris IgG Directly Inhibit Desmoglein 3-Mediated Transinteraction  
*Wolfgang-Moritz Heupel, Detlef Zillikens, Detlev Drenckhahn, and Jens Waschke*
- 1835 Functional Regulatory T Cells Accumulate in Aged Hosts and Promote Chronic Infectious Disease Reactivation  
*Celine S. Lages, Isabelle Suffia, Paula A. Velilla, Bin Huang, Gregg Warshaw, David A. Hildeman, Yasmin Belkaid, and Claire Chougnet*
- 1849 Dual Signaling of MyD88 and TRIF Is Critical for Maximal TLR4-Induced Dendritic Cell Maturation  
*Hua Shen, Bethany M. Tesar, Wendy E. Walker, and Daniel R. Goldstein*
- 1859 Identification of an Evolutionarily Conserved Transcriptional Signature of CD8 Memory Differentiation That Is Shared by T and B Cells  
*W. Nicholas Haining, Benjamin L. Ebert, Aravind Subramanian, E. John Wherry, Quentin Eichbaum, John W. Evans, Raymond Mak, Stephen Rivoli, Jennifer Pretz, Jill Angelosanto, John S. Smutko, Bruce D. Walker, Susan M. Kaech, Rafi Ahmed, Lee M. Nadler, and Todd R. Golub*
- 1869 Endometrial NK Cells Are Special Immature Cells That Await Pregnancy  
*Irit Manaster, Saar Mizrahi, Debra Goldman-Wohl, Hen Y. Sela, Noam Stern-Ginossar, Dikla Lankry, Raizy Gruda, Arye Hurwitz, Yuval Bdolah, Ronit Haimov-Kochman, Simcha Yagel, and Ofer Mandelboim*
- 1877 Expression of Macrophage Migration Inhibitory Factor by Neuroblastoma Leads to the Inhibition of Antitumor T Cell Reactivity In Vivo  
*Qiang Zhou, Xiaocai Yan, Jill Gershon, Rimas J. Orentas, and Bryon D. Johnson*
- 1887 Bilirubin Possesses Powerful Immunomodulatory Activity and Suppresses Experimental Autoimmune Encephalomyelitis  
*Yingru Liu, Ping Li, Jie Lu, Wei Xiong, Joel Oger, Wolfram Tetzlaff, and Max Cynader*
- 1898 Stromal Cells Confer Lymph Node-Specific Properties by Shaping a Unique Microenvironment Influencing Local Immune Responses  
*Manuela Abrendt, Swantje Iris Hammerschmidt, Oliver Pabst, Reinhard Pabst, and Ulrike Bode*
- 1908 Th1, Th2, and Th17 Effector T Cell-Induced Gastritis Differs in Pathological Pattern and in Susceptibility to Suppression by Regulatory T Cells  
*Georg H. Stummvoll, Richard J. DiPaolo, Eva N. Huter, Todd S. Davidson, Deborah Glass, Jerrold M. Ward, and Ethan M. Shevach*
- 1917 IL-2 Receptor  $\beta$ -Chain Signaling Controls Immunosuppressive CD4 $^{+}$  T Cells in the Draining Lymph Nodes and Lung during Allergic Airway Inflammation In Vivo  
*Aysefa Doganci, Roman Karwot, Joachim H. Maxeiner, Petra Scholtes, Edgar Schmitt, Markus F. Neurath, Hans Anton Lehr, I-Cheng Ho, and Susetta Finotto*

- 1927 Modulation of T Cell Activation by Stomatin-Like Protein 2  
*Mark G. Kirchhof, Luan A. Chau, Caitlin D. Lemke, Santosh Vardhana, Peter J. Darlington, Maria E. Márquez, Roy Taylor, Kamilia Rizkalla, Isaac Blanca, Michael L. Dustin, and Joaquín Madrenas*
- 1937 Lack of Plasma Protein Hemopexin Dampens Mercury-Induced Autoimmune Response in Mice  
*Sharmila Fagoonee, Cristiana Caorsi, Mirella Giovarelli, Meredin Stoltenberg, Lorenzo Silengo, Fiorella Altruda, Giovanni Camussi, Emanuela Tolosano, and Benedetta Bussolati*
- 1948 Pancreatitis-Associated Protein 2 Modulates Inflammatory Responses in Macrophages  
*Domenico Viterbo, Martin H. Bluth, Yin-yao Lin, Cathy M. Mueller, Raj Wadgaonkar, and Michael E. Zenilman*

## MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 1959 Mutational Characterization of Pancreatitis-Associated Protein 2 Domains Involved in Mediating Cytokine Secretion in Macrophages and the NF- $\kappa$ B Pathway  
*Domenico Viterbo, Martin H. Bluth, Cathy M. Mueller, and Michael E. Zenilman*
- 1969 ICOS Ligation Recruits the p50 $\alpha$  PI3K Regulatory Subunit to the Immunological Synapse  
*Camille Fos, Audrey Salles, Valérie Lang, Florent Carrette, Stéphane Audebert, Sonia Pastor, Marguerite Ghiootto, Daniel Olive, Georges Bismuth, and Jacques A. Nunès*
- 1978 Amyloid Precursor-Like Protein 2 Increases the Endocytosis, Instability, and Turnover of the H2-K $d$  MHC Class I Molecule  
*Amit Tuli, Mahak Sharma, Mary M. McIlhaney, James E. Talmadge, Naava Naslavsky, Steve Caplan, and Joyce C. Solheim*
- 1988 Identification of Residues in the C $\mu$ 4 Domain of Polymeric IgM Essential for Interaction with *Plasmodium falciparum* Erythrocyte Membrane Protein 1 (PfEMP1)  
*Ashfaq Ghumra, Jean-Philippe Semblat, Richard S. McIntosh, Ahmed Raza, Ingunn B. Rasmussen, Ranveig Braathen, Finn-Eirik Johansen, Inger Sandlie, Patricia K. Mongini, J. Alexandra Rowe, and Richard J. Please*

## IMMUNOGENETICS

- 2001 Tetrameric and Homodimeric Camelid IgGs Originate from the Same IgH Locus  
*Ikbel Achour, Patricia Cavelier, Magali Tichit, Christiane Bouchier, Pierre Lafaye, and François Rougeon*
- 2010 Selection of the Alternative Exon 1 from the *cd5* Gene Down-Regulates Membrane Level of the Protein in B Lymphocytes  
*Soizic Garaud, Christelle Le Dantec, Christian Berthou, Peter M. Lydyard, Pierre Youinou, and Yves Renaudineau*
- 2019 Genetic Analysis of SH2D4A, a Novel Adapter Protein Related to T Cell-Specific Adapter and Adapter Protein in Lymphocytes of Unknown Function, Reveals a Redundant Function in T Cells  
*Philip E. Lapinski, Jennifer A. Oliver, Lynn A. Kamen, Elizabeth D. Hughes, Thomas L. Saunders, and Philip D. King*

## HOST DEFENSE

- 2028 Lipoproteins of *Listeria monocytogenes* Are Critical for Virulence and TLR2-Mediated Immune Activation  
*Silke Machata, Svetlin Tchatalbachev, Walid Mohamed, Lothar Jänsch, Torsten Hain, and Trinad Chakraborty*
- 2036 Deletion of Flagellin's Hypervariable Region Abrogates Antibody-Mediated Neutralization and Systemic Activation of TLR5-Dependent Immunity  
*Clément Nempont, Delphine Cayet, Martin Rumbo, Coralie Bompard, Vincent Villeret, and Jean-Claude Sirard*
- 2044 Protein Kinase D1: A New Component in TLR9 Signaling  
*Jeoung-Eun Park, Young-In Kim, and Ae-Kyung Yi*
- 2056 CREB, ATF, and AP-1 Transcription Factors Regulate IFN- $\gamma$  Secretion by Human T Cells in Response to Mycobacterial Antigen  
*Buka Samten, James C. Townsend, Steven E. Weis, Anindita Bhoumik, Peter Klucar, Homayoun Shams, and Peter F. Barnes*
- 2065 HIV Envelope Binding by Macrophage-Expressed gp340 Promotes HIV-1 Infection  
*Georgetta Cannon, Yanjie Yi, Houping Ni, Earl Stoddard, David A. Scales, Donald I. Van Ryk, Irwin Chaiken, Daniel Malamud, and Drew Weissman*

- 2071 Tyk2-Signaling Plays an Important Role in Host Defense against *Escherichia coli* through IL-23-Induced IL-17 Production by  $\gamma\delta$  T Cells  
*Risa Nakamura, Kensuke Shibata, Hisakata Yamada, Kazuya Shimoda, Keiichi Nakayama, and Yasunobu Yoshikai*
- 2076 IL-10 Helps Control Pathogen Load during High-Level Bacteremia  
*Diana Londoño, Adriana Marques, Ronald L. Hornung, and Diego Cadavid*
- 2084 Drak2 Contributes to West Nile Virus Entry into the Brain and Lethal Encephalitis  
*Shuhui Wang, Thomas Welte, Maureen McGargill, Terrence Town, Jesse Thompson, John F. Anderson, Richard A. Flavell, Erol Fikrig, Stephen M. Hedrick, and Tian Wang*
- 2092 Type I IFNs Enhance Susceptibility to *Chlamydia muridarum* Lung Infection by Enhancing Apoptosis of Local Macrophages  
*Hongyu Qiu, Yijun Fan, Antony George Joyee, Shuhe Wang, Xiaobing Han, Hong Bai, Lei Jiao, Nico Van Rooijen, and Xi Yang*
- 2103 Low Molecular Weight Hyaluronic Acid Increases the Self-Defense of Skin Epithelium by Induction of  $\beta$ -Defensin 2 via TLR2 and TLR4  
*Silvia Gariboldi, Marco Palazzo, Laura Zanobbio, Silvia Selleri, Michele Sommariva, Lucia Sfondrini, Stefano Cavicchini, Andrea Balsari, and Cristiano Rumio*
- 2111 CD8<sup>+</sup> T Lymphocytes Control Murine Cytomegalovirus Replication in the Central Nervous System of Newborn Animals  
*Glenn R. B. Bantug, Djurdjica Cekinovic, Russell Bradford, Thad Koontz, Stipan Jonjic, and William J. Britt*
- 2124 Naive Precursor Frequencies and MHC Binding Rather Than the Degree of Epitope Diversity Shape CD8<sup>+</sup> T Cell Immunodominance  
*Maya F. Kotturi, Iain Scott, Tom Wolfe, Bjoern Peters, John Sidney, Hilde Cheroutre, Matthias G. von Herrath, Michael J. Buchmeier, Howard Grey, and Alessandro Sette*
- 2134 Adenovirus Vector-Induced Innate Inflammatory Mediators, MAPK Signaling, As Well As Adaptive Immune Responses Are Dependent upon Both TLR2 and TLR9 In Vivo  
*Daniel M. Appledorn, Sonika Patial, Aaron McBride, Sarah Godbehere, Nico Van Rooijen, Narayanan Parameswaran, and Andrea Amalfitano*

## INFLAMMATION

- 2145 Points of Control Exerted along the Macrophage-Endothelial Cell-Polymorphonuclear Neutrophil Axis by PECAM-1 in the Innate Immune Response of Acute Colonic Inflammation  
*Naohito Sugimoto, Tao Rui, Min Yang, Sulaiman Bharwani, Osamu Handa, Norimasa Yoshida, Toshikazu Yoshikawa, and Peter R. Kvietyas*
- 2155 In Vivo Interstitial Migration of Primitive Macrophages Mediated by JNK-Matrix Metalloproteinase 13 Signaling in Response to Acute Injury  
*Yong Zhang, Xue-Tao Bai, Kang-Yong Zhu, Yi Jin, Min Deng, Huang-Ying Le, Yan-Fang Fu, Yi Chen, Jiang Zhu, A. Thomas Look, John Kanki, Zhu Chen, Sai-Juan Chen, and Ting Xi Liu*
- 2165 Activated Protein C Up-Regulates IL-10 and Inhibits Tissue Factor in Blood Monocytes  
*Lisa J. Tolts, Suzanne Beaudin, Patricia C. Liaw, and the Canadian Critical Care Translational Biology Group*
- 2174 Oncostatin M Receptor- $\beta$  Signaling Limits Monocytic Cell Recruitment in Acute Inflammation  
*Emily Hams, Chantal S. Colmont, Vincent Dioszeghy, Victoria J. Hammond, Ceri A. Fielding, Anwen S. Williams, Minoru Tanaka, Atsushi Miyajima, Philip R. Taylor, Nicholas Topley, and Simon A. Jones*
- 2181 Activation of Human Alveolar Macrophages via P2 Receptors: Coupling to Intracellular Ca<sup>2+</sup> Increases and Cytokine Secretion  
*Daniel Myrtek, Tobias Müller, Verena Geyer, Natalie Derr, Davide Ferrari, Gernot Zissel, Thorsten Dürk, Stephan Sorichter, Werner Luttmann, Michael Kuepper, Johannes Norgauer, Francesco Di Virgilio, J. Christian Virchow, Jr., and Marco Idzko*
- 2189 IL-6 Regulates Neutrophil Trafficking during Acute Inflammation via STAT3  
*Ceri A. Fielding, Rachel M. McLoughlin, Louise McLeod, Chantal S. Colmont, Meri Najdovska, Dianne Grail, Matthias Ernst, Simon A. Jones, Nicholas Topley, and Brendan J. Jenkins*

- 2196 The PDE4 Inhibitor Rolipram Prevents NF- $\kappa$ B Binding Activity and Proinflammatory Cytokine Release in Human Chorionic Cells  
*Roxane Hervé, Thomas Schmitz, Danièle Evain-Brion, Dominique Cabrol, Marie-Josèphe Leroy, and Céline Méhats*
- 2203 The Epithelial Anion Transporter Pendrin Is Induced by Allergy and Rhinovirus Infection, Regulates Airway Surface Liquid, and Increases Airway Reactivity and Inflammation in an Asthma Model  
*Yasuhiko Nakagami, Silvio Favoreto, Jr., Guohua Zhen, Sung-Woo Park, Louis T. Nguyen, Douglas A. Kuperman, Gregory M. Dolganov, Xiaozhu Huang, Homer A. Boushey, Pedro C. Avila, and David J. Erlé*

## CLINICAL IMMUNOLOGY

- 2211 Excessive Production of IFN- $\gamma$  in Patients with Systemic Lupus Erythematosus and Its Contribution to Induction of B Lymphocyte Stimulator/B Cell-Activating Factor/TNF Ligand Superfamily-13B  
*Masayoshi Harigai, Manabu Kawamoto, Masako Hara, Tetsuo Kubota, Naoyuki Kamatani, and Nobuyuki Miyasaka*
- 2220 Human Anti-Inflammatory Macrophages Induce Foxp3 $^{+}$ GITR $^{+}$ CD25 $^{+}$  Regulatory T Cells, Which Suppress via Membrane-Bound TGF $\beta$ -1  
*Nigel D. L. Savage, Tjitske de Boer, Kimberley V. Walburg, Simone A. Joosten, Krista van Meijgaarden, Annemiek Geluk, and Tom H. M. Ottenhoff*
- 2227 An Unusual CD56 $^{\text{bright}}$ CD16 $^{\text{low}}$  NK Cell Subset Dominates the Early Posttransplant Period following HLA-Matched Hematopoietic Stem Cell Transplantation  
*Nicolas Dulphy, Philippe Haas, Marc Busson, Stéphanie Belhadj, Régis Peffault de Latour, Marie Robin, Maryvonne Carmagnat, Pascale Loiseau, Ryad Tamouza, Catherine Scieux, Claire Rabian, James P. Di Santo, Dominique Charron, Anne Janin, Gérard Socié, and Antoine Toubert*
- 2238 TGF- $\beta$  Promotes Thyroid Epithelial Cell Hyperplasia and Fibrosis in IFN- $\gamma$ -Deficient NOD.H-2h4 Mice  
*Shiguang Yu, Gordon C. Sharp, and Helen Braley-Mullen*
- 2246 Cells That Produce deleterious Autoreactive Antibodies Are Vulnerable to Suicide  
*Haitao Niu, Danny T. M. Leung, Chun Hung Ma, Eric C. Y. Law, Frankie C. H. Tam, and Pak-Leong Lim*
- 2258 Author Index