# TABLE OF CONTENTS

## CUTTING EDGE

1329 β-Chemokine Inhibition of Monocytotropic HIV-1 Infection: Interference with a Postbinding Fusion Step  
*Tamas Oravecz, Marina Pall, and Michael A. Norcross*

1333 CTLA-4 Blockade Enhances Clinical Disease and Cytokine Production During Experimental Allergic Encephalomyelitis  
*Peter J. Perrin, Jairo H. Maldonado, Tiffany A. Davis, Carl H. June, and Michael K. Racke*

1337 Direct Measurement of Anergy of Antigen-Specific T Cells Following Oral Tolerance Induction  
*Nancy Van Houten and Sandra F. Blake*

## CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

1343 Naive Murine Neonatal T Cells Undergo Apoptosis in Response to Primary Stimulation  
*Becky Adkins, Ki Chun, Kara Hamilton, and Mehdi Nassiri*

1350 A Direct Role for IFN-γ in Regulation of Th1 Cell Development  
*Linda M. Bradley, Dyana K. Dalton, and Michael Croft*

1359 Bcl-2 Expression Inhibits Prostaglandin E2-Mediated Apoptosis in B Cell Lymphomas  
*Deborah M. Brown and Richard P. Phipps*

1371 Murine T Lymphocytes Modulate Activity of an ATP-Activated P2X-Type Purinoceptor During Differentiation  
*Thomas M. Chused, Sergey Apasov, and Michail Sitkovsky*

1381 Coordinated Regulation in Human T Cells of Nucleotide-Hydrolyzing Ectoenzymatic Activities, Including CD38 and PC-1: Possible Role in the Recycling of Nicotinamide Adenine Dinucleotide Metabolites  
*Philippe Deterre, Laurent Gelman, Hélène Gary-Gouy, Cécile Arrieumerlou, Valérie Berthelier, Jean-Michel Tièrie, Sandra Kiorza, James Goding, Christian Schmitt, and Georges Bismuth*
1389 Activated B Cells Express CD28/B7-Independent Costimulatory Activity
Linna Ding and Ethan M. Shevach

1397 Reciprocal Regulation of Mucosal Surface IgA+ B Cells by Ig Receptor
Cross-Linking and CD40 Ligand
Rolf O. Ehrhardt, Belinda Gray, Rainer Duchmann, John K. Inman, and Warren Strober

1406 Dendritic Cells Can Present Antigen In Vivo in a Tolerogenic or
Immunogenic Fashion
Fred D. Finkelstein, Andrew Lees, Randi Birnbaum, William C. Gause, and Suzanne C. Morris

1415 Inhibition of Transcription Factor Stat1 Activity in Mononuclear Cell
Cultures and T Cells by the Cyclic AMP Signaling Pathway
Lionel B. Ivashkiv, Erika M. Schmitt, and Aaron Castro

1422 Implantation of IL-2-Containing Osmotic Pump Prolongs the Survival of
Superantigen-Reactive T Cells Expanded in Mice Injected with Bacterial
Superantigen
Kotaro Kuroda, Junji Yagi, Ken’ichi Imanishi, Xiao-Jie Yan, Xiao-Yu Li, Waka Fujimaki, Hidehito Kato, Tohru Miyoshi-Akiyama, Yoshio Kumazawa, Hiroyuki Abe, and Takehiko Uchiyama

1432 Nebulized IFN-γ Inhibits the Development of Secondary Allergic Responses
in Mice
Gideon Lack, Katherine L. Bradley, Eckard Hamelmann, Harald Renz, Joan Loader, Donald Y. M. Leung, Gary Larsen, and Erwin W. Gelfand

1440 CD40 Ligation Results in Protein Kinase C-Independent Activation of ERK
and JNK in Resting Murine Splenic B Cells
Yi-Yang Li, Mekhine Baccam, Steven B. Waters, Jeffrey E. Pessin, Gail A. Bishop, and Gary A. Koretzky

1448 Expression of the CTL-Associated Protein TIA-1 During Murine
Embryogenesis
Bente Lowin, Lars French, Jean-Claude Martinou, and Jürg Tschopp

1455 Signaling Through CD38 Augments B Cell Antigen Receptor (BCR)
Responses and Is Dependent on BCR Expression
Frances E. Lund, Naixuan Yu, Kwang-Myong Kim, Michael Reth, and Maureen C. Howard

1468 Tyrophostin A9 Inhibits Calcium Release-Dependent Phosphorylations and
Calcium Entry Via Calcium Release-Activated Channel in Jurkat T Cells
Rachid Marhaba, Florence Mary, Claudette Pelassy, Alexandru Teodor Stanescu, Claude Aussel, and Jean-Philippe Breittmayer

1474 B Cells Selected for Apoptosis in the Sheep Ileal Peyer's Patch Have
Enhanced Mutational Diversity in the Ig Vλ Light Chain
Tracy A. Maybaum and John D. Reynolds

1485 Physical and Functional Association of Fcμ Receptor on Human Natural
Killer Cells with the ζ- and FcεRI γ-Chains and with src Family Protein
Tyrosine Kinases
Hannah Rabinovich, Mioara Manciulea, Diana Metes, Andrei Sutica, Ronald B. Herberman, Seth J. Corey, and Theresa L. Whiteside
Somatic Mutations in Human Ig Variable Genes Correlate with a Partially Functional CD40-Ligand in the X-Linked Hyper-IgM Syndrome
Diane Razanajaona, Cees van Kooten, Serge Lebecque, Jean-Michel Bridon, Stephen Ho, Sue Smith, Robin Callard, Jacques Banchereau, and Francine Brière

TGF-β1 Promotes In Vitro Development of Dendritic Cells from CD34+ Hemopoietic Progenitors
Herbert Strobl, Elisabeth Riedl, Clemens Scheinecker, Concha Bello-Fernandez, Winfried F. Pickl, Klemens Rappersberger, Otto Majdic, and Walter Knapp

Phorbol Ester and Calcium Ionophore Can Replace TCR Signals That Induce Positive Selection of CD4 T Cells
Yousuke Takahama and Hiromitsu Nakauchi

Inhibition of T Lymphocyte Activation by cAMP Is Associated with Down-Regulation of Two Parallel Mitogen-Activated Protein Kinase Pathways, the Extracellular Signal-Related Kinase and c-Jun N-Terminal Kinase
Ami Tamir, Yosef Granot, and Noah Isakov

Enhanced Generation of NK Cells with Intact Cytotoxic Function in CD45 Exon 6-Deficient Mice
Hisakata Yamada, Kenji Kishihara, Young-Yun Kong, and Kikuo Nomoto

Cytokine-Mediated Communication Between Dendritic Epidermal T Cells and Langerhans Cells: In Vitro Studies Using Cell Lines
Koichi Yokota, Kiyoshi Ariizumi, Toshiyuki Kitajima, Paul R. Bergstresser, Nancy E. Street, and Akira Takashima

The Transcription Factor B Cell-Specific Activator Protein Is Not Involved in the IL-4-Induced Activation of the Human IgE Germline Promoter
Bettina Albrecht, Susanna Peiritsch, Birgit Messner, and Maximilian Woisetschlager

A Third Ig Light Chain Gene Isotype in Xenopus laevis Consists of Six Distinct V, Families and Is Related to Mammalian λ Genes
Robert N. Haire, Tatsuya Ota, Jonathan P. Rust, Ronda T. Litman, Fung Y. Chan, Leonard I. Zon, and Gary W. Litman

The Rat MHC Haplotype RT1f Expresses Two Classical Class I Molecules
Etienne Joly, Louise Leong, W. John Coadwell, Carol Clarkson, and Geoffrey W. Butcher

Stat1α Expression Is Involved in IFN-γ Induction of the Class II Transactivator and Class II MHC Genes
Yi-Ju Lee and Etty N. Benveniste

Comparison of CD45 Extracellular Domain Sequences from Divergent Vertebrate Species Suggests the Conservation of Three Fibronectin Type III Domains
Meinoshin Okumura, R. James Matthews, Bruce Robb, Gary W. Litman, Peer Bork, and Matthew L. Thomas

The Binding Epitopes of Human CD16 (FcγRIII) Monoclonal Antibodies: Implications for Ligand Binding
Anu Tamm and Reinhold E. Schmidt
1582 Characterization of an Ig V, Idiotope That Results in Specific Homophilic Binding and Increased Avidity for Antigen
Xiyun Yan, Stephen V. Evans, Marcin J. Kaminki, Stephen D. Gillies, Ralph A. Reisfeld, Alan N. Houghton, and Paul B. Chapman

HOST DEFENSE

1589 IL-12 Is Both Required and Sufficient for Initiating T Cell Reactivity to a Class I-Restricted Tumor Peptide (P815AB) Following Transfer of P815AB-Pulsed Dendritic Cells
Roberta Bianchi, Ursula Grohmann, Maria Laura Belladonna, Silvia Silla, Francesca Fallarino, Emira Agolfi, Maria Cristina Fioretti, and Paolo Puccetti

1598 Th1-Associated Immune Responses to β-Galactosidase Expressed by a Replication-Defective Herpes Simplex Virus
Jeffery O. Brubaker, Claudette M. Thompson, Lynda A. Morrison, David M. Knipe, George R. Siber, and Robert W. Finberg

1605 Rhinovirus Produces Nonspecific Activation of Lymphocytes Through a Monocyte-Dependent Mechanism
James E. Gern, Rose Vrtis, Elizabeth A. B. Kelly, Elliot C. Dick, and William W. Busse

1613 Escherichia coli and Pseudomonas aeruginosa Induce Expansion of V62 Cells in Adult Peripheral Blood, but of V61 Cells in Cord Blood
Catalina M. Kersten, Robert T. McCluskey, Lenora A. Boyle, and James T. Kurnick

1620 Participation of Lymphocyte Subpopulations in the Pathogenesis of Experimental Murine Cerebral Malaria
Deborah M. Yánez, Dean D. Manning, Avery J. Cooley, William P. Weidanz, and Henri C. van der Heyde

INFLAMMATION

1625 Enhancement of TNF-α Synthesis by Overexpression of Gαζ in a Mast Cell Line
Rudolf A. Baumgartner, Noriyasu Hirasawa, Koichiro Ozawa, Fabian Gusovsky, and Michael A. Beaven

1630 In Vivo Antioxidant Treatment Suppresses Nuclear Factor-κB Activation and Neutrophilic Lung Inflammation
Timothy S. Blackwell, Thomas R. Blackwell, Edsel P. Holden, Brian W. Christman, and John W. Christman

1638 Stress-Induced Changes in Blood Leukocyte Distribution: Role of Adrenal Steroid Hormones
Firdaus S. Dhabhar, Andrew H. Miller, Bruce S. McEwen, and Robert L. Spencer

1645 Anaphylaxis Mediated Through a Humanized High Affinity IgE Receptor
David Dombrowicz, Anna T. Brini, Véronique Flamand, Elizabeth Hicks, John N. Snowwaert, Jean-Pierre Kinet, and Beverly H. Koller

1652 Cytokine Activation Sensitizes Human Monocytic and Endothelial Cells to the Cytotoxic Effects of an Anti-CD40 Immunotoxin
Joseph A. Francisco, Peter A. Kiener, Patricia Moran-Davis, Jeffrey A. Ledbetter, and Clay B. Siegall
Analysis of the Gene That Encodes the Complement Regulatory Protein, Membrane Inhibitor of Reactive Lysis (CD59): Identification of an Alternatively Spliced Exon and Characterization of the Transcriptional Regulatory Regions of the Promoter
Mark H. Holguin, Carol B. Martin, Therese Eggett, and Charles J. Parker

Phospholipase A2 Triggers the First Phase of the Thermal Stress Response and Exhibits Cell-Type Specificity
Donald A. Jurivich, Stephanie Pangas, Lin Qiu, and Joseph F. Welk

Activation of Human Eosinophils by IL-13: Induction of CD69 Surface Antigen, Its Relationship to Messenger RNA Expression, and Promotion of Cellular Viability
Werner Luttmann, Birgit Knoechel, Martin Foerster, Heinrich Matthys, Johann Christian Virchow, Jr., and Claus Kroegel

Phospholipase A2 Triggers the First Phase of the Thermal Stress Response and Exhibits Cell-Type Specificity

Priming of Eosinophil Recruitment In Vivo by LPS Pretreatment
David M. T. Macari, Mauro M. Teixeira, and Paul G. Hellewell

C3a and C5a Are Chemotaxins for Human Mast Cells and Act Through Distinct Receptors via a Pertussis Toxin-Sensitive Signal Transduction Pathway
Gunnar Nilsson, Matilda Johnell, Carl H. Hammer, H. Lee Tiffany, Kenneth Nilsson, Dean D. Metcalfe, Agneta Sieghahn, and Philip M. Murphy

IL-1β Activation in Human Epidermis
Elisabet Nylander-Lundqvist, Ove Bäck, and Torbjörn Egelrud

IL-11 Enhances Survival and Decreases TNF Production After Radiation-Induced Thoracic Injury
Carrie A. Redlich, Xin Gao, Sara Rockwell, Marianne Kelley, and Jack A. Elias

Functional and Structural Characterization of the Eosinophil P-Selectin Ligand
Fiona A. Symon, Michael B. Lawrence, Mairi L. Williamson, Garry M. Walsh, Susan R. Watson, and Andrew J. Wardlaw

Mouse Bone Marrow-Derived Mast Cells and Mast Cell Lines Constitutively Produce B Cell Growth and Differentiation Activities
Christine Tkaczyk, Pierre Frandji, Hany-Goubran Botros, Pascal Poncet, Josette Lapeyre, Roger Peronet, Bernard David, and Salaheddine Mécheri

CD88 Antibodies Specifically Bind to C5aR on Dermal CD117+ and CD14+ Cells and React with a Desmosomal Antigen in Human Skin
Thomas Werfel, Jörg Zwirner, Martin Oppermann, Anja Sieber, Gabriele Begemann, Wolfgang Drommer, Alexander Kapp, and Otto Götte

Identification of Mouse Granulocyte Chemotactic Protein-2 from Fibroblasts and Epithelial Cells: Functional Comparison with Natural KC and Macrophage Inflammatory Protein-2
Anja Wuyts, Annemie Haelens, Paul Proost, Jean-Pierre Lenaerts, René Conings, Ghislain Opdenakker, and Jo Van Damme

Role of Vitamin D3-Binding Protein in Activation of Mouse Macrophages
Nobuto Yamamoto and Venkateswara R. Naraparaju
Induction of Autoimmunity in the Absence of CD28 Costimulation
Kurt Bachmaier, Christian Pummerer, Arda Shahinian, John Ionescu, Nikolaus Neu, Tak W. Mak, and Josef M. Penninger

Inhibition of Superantigen-Induced Proinflammatory Cytokine Production and Inflammatory Arthritis in MRL-lpr/lpr Mice by a Transcriptional Inhibitor of TNF-α

Biochemical Characterization and Microsequencing of a 205-kDa Synovial Protein Stimulatory for T Cells and Reactive with Rheumatoid Factor Containing Sera
N. A. K. Hain, B. Stuhlmueller, G. R. Hahn, J. R. Kalden, R. Deutzmann, and G. R. Burmester

T-T Cellular Interaction between CD4−CD8− Regulatory T Cells and T Cell Clones Presenting TCR Peptide: Its Implication for TCR Vaccination Against Experimental Autoimmune Encephalomyelitis
Milena F. Kozovska, Takashi Yamamura, and Takeshi Tabira

Susceptibility of HIV-1 Plasma Virus to Complement-Mediated Lysis: Evidence for a Role in Clearance of Virus in Vivo
Brenda L. Sullivan, Elissa J. Knopoff, Mohammed Saifuddin, Daniel M. Takefman, Mary-Neil Saarloos, Beverly E. Sha, and Gregory T. Spear

Pathogenesis of Post-Thymectomy Autoimmune Gastritis: Identification of Anti-H/K Adenosine Triphosphatase-Reactive T Cells
Elisabeth Suri-Payer, Patricia J. Kehn, Allen W. Cheever, and Ethan M. Shevach

Eosinophil Recruitment Following Allergen Challenge Is Associated with the Release of the Chemokine RANTES into Asthmatic Airways
Luis M. Teran, Norio Nosu, Mary Carroll, Donna E. Davies, Stephen Holgate, and Jens-M. Schroeder

Author Index