TABLE OF CONTENTS

PRESIDENTIAL ADDRESS

2019 From Thymic Lineages Back to Hematopoietic Stem Cells, Sometimes Using Homing Receptors
Irving L. Weissman

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

2026 Leukophysin: An RNA Helicase A-Related Molecule Identified in Cytotoxic T Cell Granules and Vesicles
Mohamed M. Abdelhaleem, Shahid Hameed, Dale Klassen, and Arnold H. Greenberg

2036 Deficient CD4+ T Cell Proliferation in the Class I MHC-Restricted 2C TCR-Transgenic Mouse
Fen-Ling Chen and John T. Kung

2045 Differential Activation of Phospholipase C-γ1 and Mitogen-Activated Protein Kinase in Naive and Antigen-Primed CD4 T Cells by the Peptide/MHC Ligand
Per-Olof Ericsson, Patricia L. Orchansky, Douglas A. Carlow, and Hung-Sia Teh

2054 Antigen Receptors on Immature, but Not Mature, B and T Cells Are Coupled to Cytosolic Phospholipase A2 Activation: Expression and Activation of Cytosolic Phospholipase A2 Correlate with Lymphocyte Maturation
Jonathan J. Gilbert, Allison Stewart, Carol-Ann Courtney, Mairi-Claire Fleming, Pamela Reid, Clive G. Jackson, Arlene Wise, Michael J. O. Waketam, and Margaret M. Harnett

2062 Uncoupling IL-2 Production from Apoptosis and TNF Production by Changing the Signal Through the TCR
Lisa Glickstein, Stuart Macphail, and Osias Stutman

2068 Evidence for the Expression of HLA-C Class I mRNA and Protein by Human First Trimester Trophoblast
Ashley King, Christine Boocock, Andrew M. Sharkey, Lucy Gardner, Alberto Beretta, Antonio G. Siccardi, and Yung Wai Loke
2077 Frequency of V_{81}x Usage During B Cell Development: Initial Decline in Usage Is Independent of Ig Heavy Chain Cell Surface Expression  
Aaron J. Marshall, Gillian E. Wu, and Christopher J. Paige

2085 Accelerated Immune Response in Transgenic Mice Expressing Rat CD44v4-v7 on T Cells  
Jurgen Moll, Annette Schmidt, H. van der Putten, Ria Plug, Helmut Ponta,  
Peter Herrlich, and Margot Zöller

2095 Chemokines and T Lymphocyte Activation: I. β Chemokines Costimulate Human T Lymphocyte Activation In Vitro  
Dennis D. Taub, Susan M. Turcovski-Corales, Michael L. Key, Dan L. Longo,  
and William J. Murphy

2104 Chemokines and T Lymphocyte Activation: II. Facilitation of Human T Cell Trafficking in Severe Combined Immunodeficiency Mice  
William J. Murphy, Zhi-Gang Tian, Osamu Asai, Satoshi Funakoshi,  
Poppy Rotter, Michelle Henry, Robert M. Strieter, Steven L. Kunkel,  
Dan L. Longo, and Dennis D. Taub

2112 The Role of CD28 Costimulation in Immune-Mediated Responses Against Mouse Mammary Tumor Viruses  
Larry D. Palmer, Bhaskar Saha, Richard J. Hodes, and Ryo Abe

2119 IL-10 Inhibits Nuclear Factor-κB/Rel Nuclear Activity in CD3-Stimulated Human Peripheral T Lymphocytes  
Maria Fiammetta Romano, Annalisa Lamberti, Antonello Petrella, Rita Bisogni,  
Pier Francesco Tassone, Salvatore Formisano, Salvatore Venuta,  
and Maria Caterina Turco

2124 A Combination of IL-10 and Direct Contact with Plasma Cell Tumors Decreases CD23 Expression on Splenic B Cells  
Melanie C. Ruzek, Daniel Billadeau, and Ambika Mathur

2133 Phenotype and Function of CD4{sup +} T Cells in Mice Lacking Invariant Chain  
Phillip Wong and Alexander Y. Rudensky

2143 Regulation of B Cell Survival in xid Mice by the Proto-Oncogene bcl-2  
Robert T. Woodland, Madelyn R. Schmidt, Stanley J. Korsmeyer,  
and Kathryn A. Gravel

Molecular and Structural Immunology

2155 Defective Interactions Between TCR Chains and CD3 Heterodimers Prevent Membrane Expression of TCR-αβ in Human T Cells  
Jacques Arnaud, Christelle Chenu, Anne Huchenq, Cecile Gouaillard,  
Jan Kuhlmann, and Bent Rubin

2163 The Sheep Ig Variable Region Repertoire Consists of a Single V_{H} Family  
Vinciane Dufour, Sophie Malinge, and François Nau

2171 Allele-Specific Motifs Characterize HLA-DQ Interactions with a Diabetes-Associated Peptide Derived from Glutamic Acid Decarboxylase  
William W. Kwok, Mary Ellen Domeier, Fenella C. Raymond, Patricia Byers,  
and Gerald T. Nepom
Residues Near the Amino and Carboxyl Termini of Staphylococcal Enterotoxin E Independently Mediate TCR Vβ-Specific Interactions
James G. Lamphear, Joseph A. Mollick, Kristin B. Reda, and Robert R. Rich

Identification of a Contact Region for Peptide on the TAP1 Chain of the Transporter Associated with Antigen Processing
Marga Nijenhuis, Sabine Schmitt, Elena A. Armandola, Reinhard Obst, Josef Brunner, and Günther J. Hämmerling

Variation in HLA-DM Expression Influences Conversion of MHC Class II αβ-Class II-Associated Invariant Chain Peptide Complexes to Mature Peptide-Bound Class II αβ Dimers in a Normal B Cell Line
Lakshmi Ramachandra, Susan Kovals, Susan Eastman, and Alexander Y. Rudensky

HOST DEFENSE

Specificities and Functions of CD4+ HLA Class II-Restricted T Cell Clones Against a Human Sarcoma: Evidence for Several Recognized Antigens
Michael Heike, Jörg Schlaak, Henning Schulze-Bergkamen, Simone Heyl, Wolfgang Herr, Ute Schmitt, Peter M. Schneider, and Karl-Hermann Meyer zum Büschenfelde

Response of a γδ+ T Cell Receptor Invariant Subset During Bacterial Infection
Christina Ellis Roark, Michaelann K. Vollmer, Priscilla A. Campbell, Willi K. Born, and Rebecca L. O'Brien

Protection Against Lethal Escherichia coli Bacteremia in Baboons (Papio anubis) by Pretreatment with a 55-kDa TNF Receptor (CD120a)-Ig Fusion Protein, Ro 45-2081

Local Suppression of IFN-γ in Hepatic Granulomas Correlates with Tissue-Specific Replication of Leishmania chagasi
Mary E. Wilson, Matyas Sandor, Arthur M. Blum, Betty M. Young, Ahmed Metwali, David Elliott, Richard G. Lynch, and Joel V. Weinstock

INFLAMMATION

LPS-Dependent Cyclooxygenase-2 Induction in Human Monocytes Is Down-Regulated by IL-13, but Not by IFN-γ
Takeshi Endo, Fumitaka Ogushi, and Saburo Sone

Identification and Characterization of Complement C3 Receptors on Human Astrocytes
Philippe Gasque, Philippe Chan, Claire Mauger, Marie-Thérèse Schoult, Sim Singhrao, Manfred P. Dierich, B. Paul Morgan, and Marc Fontaine

A Physiologic Anti-Inflammatory Pathway Based on Thrombomodulin Expression and Generation of Activated Protein C by Human Mononuclear Phagocytes
Shane T. Grey and Wayne W. Hancock
2264 Lipoxin A_4 and B_4 Inhibit Leukotriene-Stimulated Interactions of Human Neutrophils and Endothelial Cells
Aikaterina Papayianni, Charles N. Serhan, and Hugh R. Brady

2273 Feedback Modulation of Ligand-Engaged αL/β_2 Leukocyte Integrin (LFA-1) by Cyclic AMP-Dependent Protein Kinase
Patrizia Rovere, Luca Inverardi, Jeffrey R. Bender, and Ruggero Pardi

CLINICAL IMMUNOLOGY

2282 Apoptosis Associated With Ex Vivo Down-Regulation of Bcl-2 and Up-Regulation of Fas in Potential Cytotoxic CD8^+ T Lymphocytes During HIV Infection
Florence Boudet, Hervé Lecoeur, and Marie-Lise Gougeon

2294 The In Vivo Mechanism of Action of CTLA4Ig
Thomas A. Judge, Aimin Tang, Lisa M. Spain, Jeanne Gratiot-Deans, Mohamed H. Sayegh, and Laurence A. Turka

2300 T Cells Bound by Vascular Cell Adhesion Molecule-1/CD106 in Synovial Fluid in Rheumatoid Arthritis: Inhibitory Role of Soluble Vascular Cell Adhesion Molecule-1 in T Cell Activation
Atsushi Kitani, Noriko Nakashima, Takemasa Matsuda, Baohui Xu, Su Yu, Tadashi Nakamura, and Takami Matsuyama

2309 Molecular Bases for Inherited Human Complement Component C6 Deficiency in Two Unrelated Individuals
Hiroaki Nishizaka, Takahiko Horiuchi, Zeng-Bian Zhu, Yasuo Fukumori, Kohei Nagasawa, Kenji Hayashi, Richard Krumdieck, C. Glenn Cobbs, Masanori Higuchi, Shin’ichiro Yasunaga, Yoshiyuki Niho, and John E. Volanakis

2316 Retrovirus-Mediated Transfer of Viral IL-10 Gene Prolongs Murine Cardiac Allograft Survival
Lihui Qin, Kenneth D. Chavin, Yaozhong Ding, Hideaki Tahara, Justin P. Favaro, Jennifer E. Woodward, Tadamichi Suzuki, Paul D. Robbins, Michael T. Lotze, and Jonathan S. Bromberg

2324 IL-7 Up-Regulates HIV-1 Replication in Naturally Infected Peripheral Blood Mononuclear Cells
Molly D. Smithgall, Justin G. P. Wong, Kathleen E. Critchett, and Omar K. Haffar

2331 Increased Frequency of Abnormal γδ T Cells in Blood of Patients with Inflammatory Bowel Diseases
Kalle Soderstrom, Anders Bucht, Eva Halapi, Alvar Grönberg, Inger Magnusson, and Rolf Kiessling

2340 Author Index