This information is current as of April 30, 2017.
EDITORIAL
2031 From Whence We Come (Happy Birthday to Us)
Robert R. Rich

Richard Weil

2051 IN THIS ISSUE

BRIEF REVIEWS
2053 Experimental Models to Study Development and Function of the Human Immune System In Vivo
Nicolas Legrand, Kees Weijer, and Hergen Spits

CUTTING EDGE
2059 Cutting Edge: An Alternative Pathway of CD4⁺ T Cell Differentiation Is Induced Following Activation in the Absence of γ-Chain-Dependent Cytokine Signals
Shane R. Mayack and Leslie J. Berg

2064 Cutting Edge: Influence of the TCR Vβ Domain on the Selection of Semi-Invariant NKT Cells by Endogenous Ligands
Jens Schumann, Marcin P. Mycko, Paolo Dellabona, Giulia Casorati, and H. Robson MacDonald

2069 Cutting Edge: Novel Human Dendritic Cell- and Monocyte-Attracting Chemokine-Like Protein Identified by Fold Recognition Methods
M. Teresa Pisabarro, Beatrice Leung, Mandy Kwong, Racquel Corpuz, Gretchen D. Frantz, Nancy Chiang, Richard Vandlen, Lauri J. Diehl, Nicholas Shelton, Hok Soen Kim, Dan Eaton, and Kerstin N. Schmidt

2074 Cutting Edge: Enhancement of Antibody Responses Through Direct Stimulation of B and T Cells by Type I IFN
Agnes Le Bon, Clare Thompson, Elisabeth Kamphuis, Vanessa Durand, Cornelia Rossmann, Ulrich Kalinke, and David F. Tough

2079 Cutting Edge: Gut Microenvironment Promotes Differentiation of a Unique Memory CD8 T Cell Population
David Masopust, Vaiva Vezys, E. John Wherry, Daniel L. Barber, and Rafi Ahmed

On the cover: The changing face of The Journal of Immunology. The cover design did not vary much over the first five decades of the journal’s life, but in the last 40 years, it has undergone multiple metamorphoses. Clockwise from top left: July 1, 1986; February 1916; April 1, 1991 (75th Anniversary Issue celebrating the 1916 founding of The JI); February 1936; July 1, 1997; June 1946; July 1, 1995; July 1926. Center: January 1, 2003.
CD11b+/Gr-1+ Myeloid Suppressor Cells Cause T Cell Dysfunction after Traumatic Stress
Valeriya P. Makarenkova, Vishal Bansal, Benjamin M. Matta, Lori Ann Perez, and Juan B. Ochoa

Accelerated Macrophage Apoptosis Induces Autoantibody Formation and Organ Damage in Systemic Lupus Erythematosus
Michael F. Denny, Parthapratim Chandaroy, Paul D. Killen, Roberto Caricchio, Emily E. Lewis, Bruce C. Richardson, Kyung-Dall Lee, Jerrie Gasalchkin, and Mariana J. Kaplan

LFA-1-Dependent HuR Nuclear Export and Cytokine mRNA Stabilization in T Cell Activation
Jin Gene Wang, Mark Collinge, Vinod Ramgolam, Oran Ayalon, Xinhao Cynthia Fan, Ruggero Pardi, and Jeffrey R. Bender

IL-3-Mediated TNF Production Is Necessary for Mast Cell Development
Harry V. Wright, Daniel Bailey, Mohit Katthyap, Christopher L. Kepley, Marina S. Drutskaia, Sergei A. Nedospasov, and John J. Ryan

Role of MHC Class II on Memory B Cells in Post-Germline Center B Cell Homeostasis and Memory Response
Michiko Shimoda, Tao Li, Jeanene P. S. Pihkala, and Pandelakis A. Koni

Hyperthermia Enhances CTL Cross-Priming
Hongzhen Shi, Tinghua Cao, John E. Connolly, Laurence Monnet, Lynda Bennett, Sylvie Chapel, Claude Bagnis, Patrice Mannoni, Jean Datour, A. Karolina Pulucka, and Jacques Banchereau

B Cell Tolerance Checkpoints That Restrict Pathways of Antigen-Driven Differentiation
Jacqueline William, Chad Euler, Nicole Primarolo, and Mark J. Sblomchik

P2X7 Receptors Regulate NKT Cells in Autoimmune Hepatitis
Hiroki Kawamura, Fred Awad, Masahiro Minagawa, Sugantha Govindarajan, and Gunther Dennert

A Major Lung CD103 (α6)-β7 Integrin-Positive Epithelial Dendritic Cell Population Expressing Langerin and Tight Junction Proteins
Sun-Sang J. Sung, Shu Man Fu, C. Edward Rose, Jr., Felicia Gaskin, Shyr-Te Ju, and Steven R. Beaty

Distinct Mechanisms Control Human Naive and Antigen-Experienced CD8+ T Lymphocyte Proliferation
Marco Migliaccio, Pedro Miguel Sousa Alves, Pedro Romero, and Nathalie Rufer

NF-κB-Dependent Regulation of the Timing of Activation-Induced Cell Death of T Lymphocytes
Akanksa Mittal, Salvatore Papa, Guido Franzoso, and Ranjan Sen

CD8 T Cells Specific for a Donor-Derived, Self-Restricted Transplant Antigen Are Nonpathogenic Bystanders after Vascularized Heart Transplantation in Mice
Anna Valujskikh, Qiwei Zhang, and Peter S. Heeger

Expression and Regulation of the Orphan Receptor RDC1 and Its Putative Ligand in Human Dendritic and B Cells
Simona Infantino, Barbara Moepps, and Marcus Thelen

Differential Role for Cyclic AMP Response Element Binding Protein-1 in Multiple Stages of B Cell Development, Differentiation, and Survival
Hui-Chen Chen, John C. Byrd, and Natarajan Muthusamy

The JNK Are Important for Development and Survival of Macrophages
S. Roy Hines, David P. Sester, Timothy Ravaei, Stephen L. Cronau, Tedjo Sasmono, and David A. Hume

Developmental Alterations in Thymocyte Sensitivity Are Actively Regulated by MHC Class II Expression in the Thymic Medulla
Steven C. Eck, Peimin Zhu, Marion Pepper, Steven J. Bensinger, Bruce D. Freedman, and Terri M. Laufer

Mast Cells Enhance T Cell Activation: Importance of Mast Cell Costimulatory Molecules and Secreted TNF
Susumu Nakae, Hajime Suto, Motoyasu Iikura, Maki Kakurai, Jonathon D. Sedgwick, Mindy Tsai, and Stephen J. Galli
Re-evaluating the Generation of a “Proteasome-Independent” MHC Class I-Restricted CD8 T Cell Epitope
E. John Wherry, Tatiana N. Golovina, Susan E. Morrison, Gomathinayagam Sinnathamby, Michael J. McElhaugh, David C. Shockey, and Lawrence C. Eisenlohr

Temporal and Dose-Dependent Relationships between In Vivo B Cell Receptor-Targeted Proliferation and Deletion-Induced by a Microbial B Cell Toxin
Carl S. Goodyear, Fujimi Sugiyama, and Gregg J. Silverman

Human Mast Cells Undergo TRAIL-Induced Apoptosis
Beata Berent-Maoz, Adrian M. Piliponsky, Isabelle Duval, Hans-Uwe Simon, and Francesca Levi-Schaffer

Adaptive Tolerance and Clonal Anergy Are Distinct Biochemical States
Lynda Chiodetti, Seeyoung Choi, Daniel L. Barber, and Ronald H. Schwartz

Antigen Exposure during Enhanced CTLA-4 Expression Promotes Allograft Tolerance In Vivo
Paolo R. O. Salvaggio, Geoffrey Camirand, Charlotte E. Ariyan, Songyan Deng, Linda Rogozinski, Giacomo P. Basadonna, and David M. Rothstein

Thymocyte Negative Selection Is Mediated by Protein Kinase C- and Ca$^{2+}$-Dependent Transcriptional Induction of Bim of Cell Death
Kirsten Canté-Barrett, Elena M. Gallo, Monte M. Winslow, and Gerald R. Crabtree

CD4-Dependent Potentiation of a High Molecular Weight-Melanoma-Associated Antigen-Specific CTL Response Elicited in HLA-A2/K$^b$ Transgenic Mice
Liaomin Peng, Eric Ko, Wei Luo, Xinhui Wang, Protul A. Shrikant, and Soldano Ferrone

Effector and Memory CD8$^+$ T Cells Can Be Generated in Response to Alloantigen Independently of CD4$^+$ T Cell Help
Nick D. Jones, Manuela Carvalho-Gaspar, Shiqiao Luo, Matthew O. Brook, Laurent Martin, and Kathryn J. Wood

Frequency of Natural Regulatory CD4$^+$CD25$^+$ T Lymphocytes Determines the Outcome of Tolerance across Fully Mismatched MHC Barrier through Linked Recognition of Self and Allogeneic Stimuli
Rita Facs, Joszilene T. Jesus, Paulo H. N. Souza Junior, Larissa Franco, Mauricio Vericimo, Maria Bellio, and Alberto Nobrega

Ex Vivo Characterization of Allo-MHC-Restricted T Cells Specific for a Single MHC-Peptide Complex

Chemokine Receptor CXCR3 Desensitization by IL-16/CD4 Signaling Is Dependent on CCR5 and Intact Membrane Cholesterol
Shilpa Rangangade, Roger Morgan, Claudia Heijens, Thomas C. Ryan, Hisato Yamauchi, Elizabeth Bentley, Elizabeth Sullivan, David M. Center, and William W. Cruikshank

CCL5 Modulates Pneumococcal Immunity and Carriage

Langerhans-Type Dendritic Cells Genetically Modified to Express Full-Length Antigen Optimally Stimulate CTLs in a CD4-Dependent Manner
Jianda Yuan, Jean-Baptiste Latouche, Joanna Hodges, Alan N. Houghton, Glenn Heller, Michel Sadelain, Isabelle Riviere, and James W. Young

A Polymeric Bacterial Protein Activates Dendritic Cells via TLR4
Paula M. Berguer, Juliana Mundizñano, Isabel Piazzon, and Fernando A. Goldbaum

Molecular and Structural Immunology

Meningococcal Porin PorB Binds to TLR2 and Requires TLR1 for Signaling
Paola Massari, Alberto Visintin, Jay Gunawardana, Kristen A. Hahmen, Carol A. King, Douglas T. Golenbock, and Lee M. Wetzler
2381 Position-Dependent Repression and Promotion of DQBI Intron 3 Splicing by GGGG Motifs  
Jana Královicová and Igor Vořechovský

2389 B Cell-Specific Deficiency for Smad2 In Vivo Leads to Defects in TGF-β-Directed IgA Switching and Changes in B Cell Fate  
Jörg Klein, Wenjun Ju, Jörg Heyer, Britta Wittek, Torsten Hanke, Petra Knaus, Raju Kucherlapati, Erwin P. Büttunger, Lars Nitschke, and Burkhard Kneitz

2397 CD161 (Human NKR-P1A) Signaling in NK Cells Involves the Activation of Acid Sphingomyelinase  
David Pozo, Mar Valéz-Gómez, Nasim Mavaddat, Sharon C. Williamson, Susan E. Chisholm, and Hugh Reyburn

2407 Involvement of Protein Kinase Cε in the Negative Regulation of Akt Activation Stimulated by Granulocyte Colony-Stimulating Factor  
Hong Liu, Yaling Qiu, Lei Xiao, and Fan Dong

2414 Endotoxin-Induced Down-Regulation of Elk-3 Facilitates Heme Oxygenase-1 Induction in Macrophages  
Su Wol Chung, Yen-Hsiu Chen, Shaw-Fang Yet, Matthew D. Layne, and Mark A. Perrella

2421 Scaffolding Adapter Grb2-Associated Binder 2 Requires Syk to Transmit Signals from FcεRI  
Min Yu, Cliff A. Lowell, Benjamin G. Neel, and Haitha Gu

2430 Functional Hierarchy of the N-Terminal Tyrosines of SLP-76  
Martha S. Jordan, Jeffrey Sadler, Jessica E. Austin, Lisa D. Finkelstein, Andrew L. Singer, Pamela L. Schwartzberg, and Gary A. Koretzky

2439 Regulation of IgH Gene Assembly: Role of the Intronic Enhancer and 5’DQ52 Region in Targeting D1H1 Recombination  
Roshi Afshar, Steven Pierce, Daniel J. Bolland, Anne Corcoran, and Eugene M. Oltz

**IMMUNOGENETICS**

2448 The Molecular Basis for Galα(1,3)Gal Expression in Animals with a Deletion of the α1,3Galactosyltransferase Gene  
Julie Milland, Dale Christiansen, Brooke D. Lazarus, Simon G. Taylor, Pei Xiang Xing, and Mauro S. Sandrin

**HOST DEFENSE**

2455 Modulation of the TLR-Mediated Inflammatory Response by the Endogenous Human Host Defense Peptide LL-37  

2465 Transepithelial Pathogen Uptake into the Small Intestinal Lamina Propria  
Alexandra Vallon-Eberhard, Limor Landsman, Nir Yoge, Bernard Verrier, and Stéffen Jung

2470 Cytolytic CD8+ T Cells Directed against a Cryptic Epitope Derived from a Retroviral Alternative Reading Frame Confer Disease Protection  
On Ho and William R. Green

2476 Activation of Invariant NKT Cells by the Helminth Parasite Schistosoma mansoni  
Thierry Mallevaey, Jean Pierre Zanetta, Christelle Faveeuw, Joëlle Fontaine, Emmanuel Maes, Frances Platt, Monique Capron, Maria Leite-de-Moraes, and François Trottein

2486 OX40 Ligation of CD4+ T Cells Enhances Virus-Specific CD8+ T Cell Memory Responses Independently of IL-2 and CD4+ T Regulatory Cell Inhibition  
Qigui Yu, Feng Yun Yue, Xiao X. Gu, Herbert Schwartz, Colin M. Kovacs, and Mario A. Ostrowski

2496 Impaired Protection against Mycobacterium bovis Bacillus Calmette-Guérin Infection in IL-15-Deficient Mice  
Kimika Saito, Toshiki Yajima, Shino Kumabe, Takehiko Doi, Hisakata Yamada, Subash Sad, Hao Shen, and Yasunobu Yoshikai
2505 Induction of Enhanced Immunity to Intestinal Nematodes Using IL-9-Producing Dendritic Cells
Melanie D. Leech and Richard K. Grencis

INFLAMMATION

2512 Gliadin Stimulation of Murine Macrophage Inflammatory Gene Expression and Intestinal Permeability Are MyD88-Dependent: Role of the Innate Immune Response in Celiac Disease
Karen E. Thomas, Anna Sapone, Alessio Fasano, and Stefanie N. Vogel

2522 Proinflammatory Cytokine Production in Liver Regeneration Is Myd88-Dependent, but Independent of Cd14, Tlr2, and Tlr4
Jean S. Campbell, Kimberly J. Riehle, John T. Brooling, Renay L. Bauer, Claudia Mitchell, and Nelson Fausto

2529 Priming of Glomerular Mesangial Cells by Activated Macrophages Causes Blunted Responses to Prolonged Stimuli
Kunihiro Hayakawa, Yiman Meng, Nobuhiko Hiramatsu, Ayumi Kasai, Kozae Yamauchi, Jian Yao, and Masanori Kitamura

2538 Neutrophils Regulate Airway Responses in a Model of Fungal Allergic Airways Disease
Stacy J. Park, Maria T. Wiekowski, Sergio A. Lira, and Borna Mehrad

2546 Impaired GATA3-Dependent Chromatin Remodeling and Th2 Cell Differentiation Leading to Attenuated Allergic Airway Inflammation in Aging Mice
Akihiro Hasegawa, Takako Miki, Hiroyuki Hosokawa, Mohammad B. Hosain, Chiori Shimizu, Kaboko Hashimoto, Motoko Y. Kimura, Masakatsu Yamashita, and Toshinori Nakayama

2555 Involvement of Group VIA Calcium-Independent Phospholipase A2 in Macrophage Engulfment of Hydrogen Peroxide-Treated U937 Cells
Rebeca Pérez, María A. Balboa, and Jesús Balsinde

2562 Deletion of CCR1 Attenuates Pathophysiologic Responses during Respiratory Syncytial Virus Infection
Allison L. Miller, Craig Gerard, Matthew Schaller, Achim D. Gruber, Allison A. Humbles, and Nicholas W. Lukacs

2568 Inhalation Tolerance Is Induced Selectively in Thoracic Lymph Nodes but Executed Pervasively at Distant Mucosal and Nonmucosal Tissues
David Alvarez, Filip K. Swirski, Teng-Chih Yang, Ramzi Fattouh, Ken Croitoru, Jonathan L. Bramson, Martin R. Stämpfli, and Manel Jordana

2581 Epithelial CXCR3-B Regulates Chemokines Bioavailability in Normal, but Not in Sjögren’s Syndrome, Salivary Glands
Paolo Sfriso, Francesca Oliviero, Fiorella Calabrese, Maria Miorin, Monica Farco, Antonella Contri, Anna Cabrelle, Ilenia Baesso, Franco Cozzi, Marilisa Andretta, Marco Antonio Causatella, Ugo Fiocco, Silvano Todesco, Yrjö T. Konttinen, Leonardo Punzi, and Carlo Agostini

CLINICAL IMMUNOLOGY

2590 Ceramide-Dependent Regulation of Human Epidermal Keratinocyte CD1d Expression during Terminal Differentiation
Rita Fishelevich, Alla Malanina, Irina Luzina, Sergei Atamas, Miriam J. Smyth, Steven A. Porcelli, and Anthony A. Gaspari

2600 The Shaving Reaction: Rituximab/CD20 Complexes Are Removed from Mantle Cell Lymphoma and Chronic Lymphocytic Leukemia Cells by THP-1 Monocytes
Paul V. Beum, Adam D. Kennedy, Michael E. Williams, Margaret A. Lindorfer, and Ronald P. Taylor

2610 Human NK Cells Positively Regulate γδ T Cells in Response to Mycobacterium tuberculosis
Ruijun Zhang, Xiaodong Zheng, Baiqing Li, Haiming Wei, and Zhigang Tian

2617 TNF-α Blockade Down-Regulates the CD40/CD40L Pathway in the Mucosal Microcirculation: A Novel Anti-Inflammatory Mechanism of Infliximab in Crohn’s Disease
Silvio Danese, Miquel Sans, Franco Scalfarelli, Alessandro Sgambato, Sergio Rutella, Achille Cittadini, Josep M. Piqué, Julian Panes, Jeffy A. Katz, Antonio Gasbarrini, and Claudio Fiocchi
Persistent Cytomegalovirus-Specific Memory Responses in the Lung Allograft and Blood following Primary Infection in Lung Transplant Recipients
Oksana A. Shlobin, Erin E. West, Noah Lechtzin, Susan M. Miller, Marvin Borja, Jonathan B. Orens, Lezia K. Dropulic, and John F. McDyer

Tolerance Induction by Transcutaneous Immunization through Ultraviolet-Irradiated Skin Is Transferable through CD4^+CD25^+ T Regulatory Cells and Is Dependent on Host-Derived IL-10
Mehran Ghoreishi and Jan P. Dutz

Longitudinal Studies of Clonally Expanded CD8 T Cells Reveal a Repertoire Shrinkage Predicting Mortality and an Increased Number of Dysfunctional Cytomegalovirus-Specific T Cells in the Very Elderly
Sine Reker Hadrup, Jan Strindhall, Tania Køllgaard, Tina Seremet, Boo Johansson, Graham Pawelec, Per thur Straten, and Anders Wikby

B Cells Are Crucial for Determinant Spreading of T Cell Autoimmunity among β Cell Antigens in Diabetes-Prone Nonobese Diabetic Mice
Jide Tian, Dan Zekzer, Yuxin Lu, Hoa Dang, and Daniel L. Kaufman

HIV-Specific Cytotoxic Cell Frequencies Measured Directly Ex Vivo by the Lysispot Assay Can Be Higher or Lower Than the Frequencies of IFN-γ-Secreting Cells: Anti-HIV Cytotoxicity Is Not Generally Impaired Relative to Other Chronic Virus Responses
Jennifer E. Snyder-Cappione, Anagha A. Divekar, Genny M. Maupin, Xia Jin, Lisa M. Demeter, and Tim R. Mosmann

Corrections

AAI Membership Application

AAI Trainee Membership Application