

PRESIDENTIAL ADDRESS

J. W. Uhr i Immunotoxins: Harnessing Nature's Poisons

COMMUNICATIONS

S. Kanamori, W. D. Walsh, T. H. Hansen, and H. Y. Tse	2811	Assessment of Antigen-Specific Restriction Sites on Ia Molecules as Defined by the <i>bm12</i> Mutation
B. S. Prabhakar, J. Saegusa, T. Onodera, and A. L. Notkins	2815	Lymphocytes Capable of Making Monoclonal Autoantibodies that React with Multiple Organs Are a Common Feature of the Normal B Cell Repertoire
S. D. Sharma, F. G. Araujo, and J. S. Remington	2818	Toxoplasma Antigen Isolated by Affinity Chromatography with Monoclonal Antibody Protects Mice against Lethal Infection with <i>Toxoplasma gondii</i>

CELLULAR IMMUNOLOGY

J. F. Marcelletti and D. H. Katz	2821	FcR ϵ^+ Lymphocytes and Regulation of the IgE Antibody System. I. A New Class of Molecules, Termed IgE-Induced Regulants (EIR), which Modulate FcR ϵ Expression by Lymphocytes
J. F. Marcelletti and D. H. Katz	2829	FcR ϵ^+ Lymphocytes and Regulation of the IgE Antibody System. II. FcR ϵ^+ B Lymphocytes Initiate a Cascade of Cellular and Molecular Interactions that Control FcR ϵ Expression and IgE Production
J. F. Marcelletti and D. H. Katz	2837	FcR ϵ^+ Lymphocytes and Regulation of the IgE Antibody System. III. Suppressive Factor of Allergy (SFA) Is Produced during the <i>In Vitro</i> FcR ϵ Expression Cascade and Displays Corollary Physiologic Activity <i>In Vivo</i>
J. F. Marcelletti and D. H. Katz	2845	FcR ϵ^+ Lymphocytes and Regulation of the IgE Antibody System. IV. Delineation of Target Cells and Mechanisms of Action of SFA and EFA in Inhibiting <i>In Vitro</i> Induction of FcR ϵ Expression
K. Hanaumi, P. Gray, and T. Suzuki	2852	Fc- γ Receptor-Mediated Suppression of γ -Interferon-Induced Ia Antigen Expression on a Murine Macrophage-Like Cell Line (P388d1)
K. Kane and W. R. Clark	2857	The Role of Class I MHC Products in Polyclonal Activation of CTL Function
Y. Asano and R. J. Hodes	2864	T Cell Regulation of B Cell Activation: An Antigen-Mediated Tripartite Interaction of Ts Cells, Th Cells, and B Cells Is Required for Suppression
A. J. Feeney and D. E. Mosier	2868	Helper T Lymphocytes from <i>xid</i> and Normal Mice Support Anti-Phosphocholine Antibody Responses with Equivalent T15, 511, and 603 Idiotypic Composition
C. W. Pierce, J. A. Kapp, C. M. Sorensen, and J. A. Trial	2874	T Cell Subsets in (Responder X Nonresponder) F1 Mice Regulating Antibody Responses to L-Glutamic Acid60-L-Alanine30-L-Tyrosine10 (GAT)
H. Yamamoto, S. Bitoh, and S. Fujimoto	2882	Regulation of Immune Responses Via Genetically Restricted Cellular Interactions. I. Augmentation of Antibody Responses by Idiotypic-Specific Enhancing B Lymphocytes
J. A. Kapp, P. E. Jensen, P. F. Robbins, and C. Fritschle	2888	Insulin-Specific Tolerance Induction. II. Tolerant Helper T Cells Can Be Rescued by Insulin Complexed to <i>Brucella abortus</i>
C. O. Elson and W. Ealding	2892	Cholera Toxin Feeding Did Not Induce Oral Tolerance in Mice and Abrogated Oral Tolerance to an Unrelated Protein Antigen
L. K. J. Sikora and J. G. Levy	2898	Immune Response to Ferredoxin: Nonresponder Status Is Not Due to Suppression

Continued on page 4

Continued from page 3

- | | | |
|---|------|--|
| D. L. Birx, M. Berger, and T. A. Fleisher | 2904 | The Interference of T Cell Activation by Calcium Channel Blocking Agents |
| M. G. Goodman and W. O. Weigle | 2910 | Mechanism of 8-Mercaptoguanosine-Mediated Adjuvanticity: Roles of Clonal Expansion and Cellular Recruitment |
| G. Corradin, M. A. Juillerat, and H. D. Engers | 2915 | Differential Effects of Two Anti-Apo-Cytochrome c-Specific Monoclonal Antibodies on the Function of Apo-Cytochrome c-Specific Murine T Cell Clones |
| R. C. Sizemore, N. W. Miller, M. A. Cuchens, C. J. Lobb, and L. W. Clem | 2920 | Phylogeny of Lymphocyte Heterogeneity: The Cellular Requirements for <i>In Vitro</i> Mitogenic Responses of Channel Catfish Leukocytes |
| R. A. Miller and O. Stutman | 2925 | T Cell Repopulation from Functionally Restricted Splenic Progenitors: 10,000-Fold Expansion Documented by Using Limiting Dilution Analyses |
| L. A. Holmberg, B. A. Miller, and K. A. Ault | 2933 | The Effect of Natural Killer Cells on the Development of Syngeneic Hematopoietic Progenitors |
| H. S. Boswell, P. M. Wade, Jr., and P. J. Guesenberry | 2940 | Thy-1 Antigen Expression by Murine High-Proliferation Capacity Hematopoietic Progenitor Cells. I. Relation Between Sensitivity to Depletion by Thy-1 Antibody and Stem Cell Generation Potential |
| A. Juretic, I. Vucak, B. Malenica, Z. A. Nagy, and J. Klein | 2950 | H-41, a New Minor Histocompatibility Locus. I. Histogenetic Analysis |
| T. B. Issekutz | 2955 | ✓ The Response of Gut-Associated T Lymphocytes to Intestinal Viral Immunization |
| Y.-H. Chin, R. Rasmussen, A. G. Cakiroglu, and J. J. Woodruff | 2961 | Lymphocyte Recognition of Lymph Node High Endothelium. VI. Evidence of Distinct Structures Mediating Binding to High Endothelial Cells of Lymph Nodes and Peyer's Patches |

CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

- | | | |
|---|------|---|
| B. Golding, A. V. Muchmore, and R. M. Blaese | 2966 | Newborn and Wiskott-Aldrich Patient B Cells Can Be Activated by TNP- <i>Brucella abortus</i> : Evidence that TNP- <i>Brucella abortus</i> Behaves as a T-Independent Type 1 Antigen in Humans |
| S. Kohl, T. A. Springer, F. C. Schmalstieg, L. S. Loo, and D. C. Anderson | 2972 | Defective Natural Killer Cytotoxicity and Polymorphonuclear Leukocyte Antibody-Dependent Cellular Cytotoxicity in Patients with LFA-1/OKM-1 Deficiency |
| E. A. Rinnooy Kan, E. Platzer, K. Welte, and C. Y. Wang | 2979 | Modulation Induction of the T3 Antigen by OKT3 Antibody Is Monocyte Dependent |
| J. M. Williams, B. J. Ransil, H. M. Shapiro, and T. B. Strom | 2986 | Accessory Cell Requirement for Activation Antigen Expression and Cell Cycle Progression by Human T Lymphocytes |
| T. Miyawaki, S. Ohzeki, N. Ikuta, H. Seki, K. Taga, and N. Taniguchi | 2996 | Immunohistologic Localization and Immune Phenotypes of Lymphocytes Expressing Tac Antigen in Human Lymphoid Tissues |
| D. Kozbor, P. Tripputi, J. C. Roder, and C. M. Croce | 3001 | A Human Hybrid Myeloma for Production of Human Monoclonal Antibodies |
| D. J. Volkman, E. S. Buescher, J. I. Gallin, and A. S. Fauci | 3006 | B Cell Lines as Models for Inherited Phagocytic Diseases: Abnormal Superoxide Generation in Chronic Granulomatous Disease and Giant Granules in Chediak-Higashi Syndrome |
| S. Izui and K. Masuda | 3010 | Resistance to Tolerance Induction Is Not Prerequisite to Development of Murine SLE |
| B. H. Hahn and F. M. Ebling | 3015 | A Public Idiotypic Determinant Is Present on Spontaneous Cationic IgG Antibodies to DNA from Mice of Unrelated Lupus-Prone Strains |
| V. Manohar, E. M. Brown, W. M. Leiserson, L. J. Edison, and T. M. Chused | 3020 | Ly-2+ T Cell Enlargement and Null Cell Proliferation Occur at the Onset of Splenomegaly and Autoantibody Production in New Zealand Black Mice |
| C. L. Geczy, I. M. Roberts, P. Meyer, and C. C. A. Bernard | 3026 | Susceptibility and Resistance to Experimental Autoimmune Encephalomyelitis and Neuritis in the Guinea Pig Correlate with the Induction of Procoagulant and Anticoagulant Activities |
| S. L. Hauser, A. K. Bhan, M. Che, F. Gilles, and H. L. Weiner | 3037 | Redistribution of Lyt-Bearing T Cells in Acute Murine Experimental Allergic Encephalomyelitis: Selective Migration of Lyt-1 Cells to the Central Nervous System Is Associated with a Transient Depletion of Lyt-1 Cells in Peripheral Blood |
| M. M. Griffiths and C. W. DeWitt | 3043 | Modulation of Collagen-Induced Arthritis in Rats by Non-RT1-Linked Genes |
| T. S. Kupper and D. R. Green | 3047 | Immunoregulation after Thermal Injury: Sequential Appearance of I-J+, Ly-1 T suppressor Inducer Cells and Ly-2 T Suppressor Effector Cells Following Thermal Trauma in Mice |

Continued on page 5

CYTOKINES • MEDIATORS • REGULATORY MOLECULES

- J. M. Depper, W. J. Leonard, M. Kronke, P. D. Noguchi, R. E. Cunningham, T. A. Waldmann, and W. C. Greene 3054 Regulation of Interleukin 2 Receptor Expression: Effects of Phorbol Diester, Phospholipase C, and Reexposure to Lectin or Antigen
- T. Teranishi, T. Hirano, B.-H. Lin, and K. Onoue 3062 Demonstration of the Involvement of Interleukin 2 in the Differentiation of *Staphylococcus aureus* Cowan I-Stimulated B Cells
- J. K. Gutowski, B. Mukherji, and S. Cohen 3068 The Role of Cytoplasmic Intermediates in IL 2-Induced T Cell Growth
- D. R. Salomon, D. J. Cohen, J. M. Williams, and C. B. Carpenter 3075 T Cell Synergy in the Primary MLR: Proliferative Kinetics, Effector Cell Generation, and IL 2 Production
- S. Kasakura, M. Taguchi, Y. Watanabe, T. Okubo, T. Murachi, H. Uchino, and M. Hanaka 3084 A Mitogenic Factor, Released by Stimulated Human Mononuclear Cells and Distinct from Interleukin 2 (IL 2), B Cell Growth Factor (BCGF), and Interleukin 1 (IL 1)
- C. B. Colby, M. Inoue, M. Thompson, and Y. H. Tan 3091 Immunologic Differentiation Between *E. coli* and CHO Cell-Derived Recombinant and Natural Human β -Interferons
- M. Shearer, J. Taylor-Papadimitriou, D. Griffin, and F. Balkwill 3096 Monoclonal Antibodies that Distinguish between Subspecies of Human Interferon- α and that Detect Interferon Oligomers
- F. Cofano, P. M. Comoglio, S. Landolfo, and G. Tarone 3102 Mouse Immune Interferon Enhances Fibronectin Production of Elicited Macrophages
- Y. Kaufmann, A. E. Chang, R. J. Robb, and S. A. Rosenberg 3107 Mechanism of Action of Cyclosporin A: Inhibition of Lymphokine Secretion Studied with Antigen-Stimulated T Cell Hybridomas
- S. D. Miller 3112 Suppressor T Cell Circuits in Contact Sensitivity. II. Induction and Characterization of an Efferent-Acting, Antigen-Specific, H-2-Restricted, Monoclonal T Cell Hybrid-Derived Suppressor Factor Specific for DNFB Contact Hypersensitivity
- D. L. Coleman, K. E. Culver, and J. L. Ryan 3121 Enhancement of Macrophage Immune and Nonimmune Receptor-Mediated Phagocytosis by a Low Molecular Weight Soluble Factor from Resident Thymocytes
- M. L. Weitzen and B. Bonavida 3128 Mechanism of Inhibition of Human Natural Killer Activity by Ultraviolet Radiation
- K. H. Brooks, J. W. Uhr, and E. S. Vitetta 3133 A B Cell Growth Factor-Like Activity Is Secreted by Cloned, Neoplastic B Cells

IMMUNOCHEMISTRY

- E. P. Lillehoj, W. D. Walsh, T. Potter, D. R. Lee, J. E. Coligan, and T. H. Hansen 3138 Chemical and Serological Definition of Two Unique D Region Encoded Molecules in the Wild-Derived Mouse Strain B10.GAA37
- T. Katagiri, T. Mori, T. Nakano, K. Ueno, and K. Kano 3143 Aberrant Expression of Forssman and Paul-Bunnell Antigens on Lymph Node Cells of MRL/MP-1 $pr/1pr$ Mice
- W. L. Bigbee, R. G. Langlois, M. Vanderlaan, and R. H. Jensen 3149 Binding Specificities of Eight Monoclonal Antibodies to Human Glycophorin A Studies with McM and MkEn(UK) Variant Human Erythrocytes and M- and MNV-Type Chimpanzee Erythrocytes
- Z. Moldoveanu, M. L. Egan, and J. Mestecky 3156 Cellular Origins of Human Polymeric IgA: Intracellular and Secreted Forms of IgA
- W. W. Young, Jr., Y. Tamura, D. M. Wolock, and J. W. Fox 3163 Staphylococcal Protein A Binding to the Fab Fragments of Mouse Monoclonal Antibodies
- R. L. Hunter and B. Bennett 3167 The Adjuvant Activity of Nonionic Block Polymer Surfactants. II. Antibody Formation and Inflammation Related to the Structure of Triblock and Octablock Copolymers
- B. N. Beck, L. H. Glimcher, A. E. Nilson, M. Pierres, and D. J. McKean 3176 The Structure-Function Relationship of I-A Molecules: Correlation of Serologic and Functional Phenotypes of Four I-Ak Mutant Cell Lines
- D. A. Hullett, K. K. Klyczek, and C. E. Hayes 3183 I-A-Controlled T Cell Molecules: Protease Sensitivity

C. Bernabeu, R. Maziarz, H. Spits, J. de Vries, S. J. Burakoff, and C. Terhorst	3188	Coexpression of the Human HLA-A2 or HLA-B7 Heavy Chain Gene and Human β 2-Microglobulin Gene in L Cells
K. Horibe, N. Flomenberg, M. S. Pollack, T. E. Adams, B. Dupont, and R. W. Knowles	3195	Biochemical and Functional Evidence that an MT3 Supertypic Determinant Defined by a Monoclonal Antibody is Carried on the DR Molecule on HLA-DR7 Cell Lines
K. Kubota	3203	Association of Serum β -2-Microglobulin with H-2 Class I Heavy Chains on the Surface of Mouse Cells in Culture
R. Mukai, M. Suzuki, T. Yabe, H. Hamaguchi, and H. Maeda	3211	Identification of the MT3 Molecule from HLA-DR4, 7, and w9 Homozygous Cell Lines
I. R. van Driel, P. A. Stearne, B. Grego, R. J. Simpson, and J. W. Goding	3220	The Receptor for Transferrin on Murine Myeloma Cells: One-Step Purification Based on its Physiology, and Partial Amino Acid Sequence
R. Nairn, M. L. Spengler, M. D. Hoffman, M. J. Solvay, and D. W. Thomas	3225	Macrophage Processing of Peptide Antigens: Identification of an Antigenic Complex
C.-W. Vogel, C. A. Smith, and H. J. Müller-Eberhard	3235	Cobra Venom Factor: Structural Homology with the Third Component of Human Complement
M. Nonaka, T. Fujii, T. Kaidoh, S. Natsuume-Sakai, M. Nonaka, N. Yamaguchi, and M. Takahashi	3242	Purification of a Lamprey Complement Protein Homologous to the Third Component of the Mammalian Complement System
M.-H. Jouvin, M. D. Kazatchkine, A. Cahour, and N. Bernard	3250	Lysine Residues, but not Carbohydrates, Are Required for the Regulatory Function of H on the Amplification C3 Convertase of Complement

IMMUNOPHARMACOLOGY

E. J. Goetzel and D. G. Payan	3255	Inhibition of Somatostatin of the Release of Mediators from Human Basophils and Rat Leukemic Basophils
D. G. Payan, D. R. Brewster, and E. J. Goetzel	3260	Stereospecific Receptors for Substance P on Cultured Human IM-9 Lymphoblasts
P. Jardieu, T. Uede, and K. Ishizaka	3266	IgE-Binding Factors from Mouse T Lymphocytes. III. Role of Antigen-Specific Suppressor T Cells in the Formation of IgE-Suppressive Factor
P. Manouvriez and H. Bazin	3274	<i>In Vivo</i> Kinetics and Nature of Rat IgE-Bearing Lymphocytes after IgE Stimulation
E. Razin and G. Marx	3282	Thrombin-Induced Degranulation of Cultured Bone Marrow-Derived Mast Cells
K. Akiyama, J. J. Pruzansky, and R. Patterson	3286	Hapten-Modified Basophils: A Model of Human Immediate Hypersensitivity that Can Be Elicited by IgG Antibody
A. El-Hag and R. A. Clark	3291	Down-Regulation of Human Natural Killer Activity against Tumors by the Neutrophil Myeloperoxidase System and Hydrogen Peroxide
G. M. Kammer and S. A. Rudolph	3298	Regulation of Human T Lymphocyte Surface Antigen Mobility by Purinergic Receptors
P. Szejda, J. W. Parce, M. S. Seeds, and D. A. Bass	3303	Flow Cytometric Quantitation of Oxidative Product Formation by Polymorphonuclear Leukocytes during Phagocytosis

MICROBIAL IMMUNOLOGY

L. S. McDaniel, W. H. Benjamin, Jr., C. Forman, and D. E. Briles	3308	Blood Clearance by Anti-Phosphocholine Antibodies as a Mechanism of Protection in Experimental Pneumococcal Bacteremia
A. D. O'Brien, B. A. Taylor, and D. L. Rosenstreich	3313	Genetic Control of Natural Resistance to <i>Salmonella typhimurium</i> in Mice During the Late Phase of Infection
S. J. Brown, S. Z. Shapiro, and P. W. Askenase	3319	Characterization of Tick Antigens Inducing Host Immune Resistance. Immunization of Guinea Pigs with <i>Amblyomma americanum</i> -Derived Salivary Gland Extracts and Identification of an Important Salivary Gland Protein Antigen with Guinea Pig Anti-Tick Antibodies
M. F. M. Horta and F. J. Ramalho-Pinto	3326	Subclasses of Rat IgG active in the Killing of Schistosomula of <i>Schistosoma mansoni</i> <i>In Vitro</i> and <i>In Vivo</i>

Continued from page 6

S. G. Reed, J. A. Inverso, and S. B. Roters	3333	Suppressed Antibody Responses to Sheep Erythrocytes in Mice with Chronic <i>Trypanosoma cruzi</i> Are Restored with Interleukin 2
F. Villalta and F. Kierszenbaum	3338	Role of Inflammatory Cells in Chagas' Disease. II. Interactions of Mouse Macrophages and Human Monocytes with Intracellular Forms of <i>Trypanosoma cruzi</i> : Uptake and Mechanism of Destruction
C. A. Nacy, M. S. Meltzer, and A. H. Fortier	3344	Macrophage Activation to Kill <i>Leishmania tropica</i> : Characterization of P/J Mouse Macrophage Defects for Lymphokine-Induced Antimicrobial Activities against <i>Leishmania tropica</i> Amastigotes
J. P. Sypek, C. B. Panosian, and D. J. Wyler	3351	Cell Contact-Mediated Macrophage Activation for Antileishmanial Defense. II. Identification of Effector Cell Phenotype and Genetic Restriction
G. B. Panosian, J. P. Sypek, and D. J. Wyler	3358	Cell Contact-Mediated Macrophage Activation for Antileishmanial Defense. I. Lymphocyte Effector Mechanism that is Contact Dependent and Non-cytotoxic
D. Moskopidhis and F. Lehmann-Grube	3366	The Immune Response of the Mouse to Lymphocytic Choriomeningitis Virus. IV. Enumeration of Antibody-Producing Cells in Spleens during Acute and Persistent Infection
J. L. Hurwitz, E. Weber-Katz, C. J. Hackett, and W. Gerhard	3371	Characterization of the Murine TH Response to Influenza Virus Hemagglutinin: Evidence for Three Major Specificities

MOLECULAR BIOLOGY • MOLECULAR GENETICS

S.-T. Ju, U. Siebenlist, and K. Kelly	3378	Effects of V- λ Gene Diversity on Generation of Antigen-Specific Lymphocytes
K. M. Coggeshall and J. C. Cambier	3382	B Cell Activation. VIII. Membrane Immunoglobulins Transduce Signals via Activation of Phosphatidylinositol Hydrolysis

TUMOR IMMUNOLOGY

C. L. Gately, L. M. Muul, M. A. Greenwood, S. Papazoglou, S. J. Dick, P. J. Kornblith, B. H. Smith, and M. K. Gately	3387	<i>In Vitro</i> Studies on the Cell-Mediated Immune Response to Human Brain Tumors. II. Leukocyte-Induced Coats of Glycosaminoglycan Increase the Resistance of Glioma Cells to Cellular Immune Attack
G.-X. Qian, S. M. Fu, D. L. Solanki, and K. R. Rai	3396	Circulating Monoclonal IgM Proteins in B Cell Chronic Lymphocytic Leukemia: Their Identification, Characterization and Relationship to Membrane IgM
P. D. Greenberg and M. A. Cheever	3401	Treatment of Disseminated Leukemia with Cyclophosphamide and Immune Cells: Tumor Immunity Reflects Long-Term Persistence of Tumor-Specific Donor T Cells
R. A. Miller and J. Gralow	3408	The Induction of Leu-1 Antigen Expression in Human Malignant and Normal B Cells by Phorbol Myristic Acetate (PMA)
S. C. Wright and B. Bonavida	3415	Studies on the Mechanism of Natural Killer Cell-Mediated Cytotoxicity. V. Lack of NK Specificity at the Level of Induction of Natural Killer Cytotoxic Factors in Cultures of Human, Murine, or Rat Effector Cells Stimulated with Mycoplasma-Free Cell Lines
R. N. Hiramoto, P. J. Cox, N. S. Hiramoto, and V. K. Ghanta	3424	Inhibition of Growth of MOPC 104E Cells in Immunosuppressed Mice
E. Leopardi, D. S. Friend, and W. Rosenau	3429	Target Cell Lysis: Ultrastructural and Cytoskeletal Alterations
Announcements	3437	
Errata	3439	
Author Index	3440	
Ad Hoc Reviewers	3442	
Author Index to Volume 133	3445	
Subject Index to Volume 133	3452	