Contents

PRESIDENTIAL ADDRESS

D. Bernard Amos

1727 The Era of the Immunogeneticist

CELLULAR IMMUNOLOGY

N. A. Speck, P. H. Maurer, and S. K. Pierce

1772 The Functional Helper T Cell Repertoire Specific for L-Glutamic Acid\textsuperscript{\textalpha}-L-Alanine\textsuperscript{\textbeta}-L-Tyrosine\textsuperscript{\textgamma} (GAT)

L. A. Holmberg, T. A. Springer, and K. A. Ault

1792 Natural Killer Activity in the Peritoneal Exudates of Mice Infected with Listeria monocytogenes: Characterization of the Natural Killer Cells by Using a Monoclonal Rat Anti-Murine Macrophage Antibody (M1/70)

M. Hirashima, J. Yodoi, and K. Ishizaka

-1804 Formation of IgE-Binding Factors by Rat T Lymphocytes. II. Mechanisms of Selective Formation of IgE-Potentiating Factors by Treatment with Bordetella pertussis Vaccine

M. Hirashima, J. Yodoi, T. F. Huff, and K. Ishizaka

-1810 Formation of IgE-Binding Factors by Rat T Lymphocytes. III. Mechanisms ofSelective Formation of IgE-Suppressive Factors by Treatment with Complete Freund's Adjuvant

T. A. Aune and C. W. Pierce

1828 Identification and Initial Characterization of a Nonspecific Suppressor Factor (Mφ-SF) Produced by Soluble Immune Response Suppressor (SIRS)-Treated Macrophages


1852 Spontaneous Release of a Factor with Properties of T Cell Growth Factor from a Continuous Line of Primate Tumor T Cells

J. Fan and B. Bonavida


B. M. Stadler, S. F. Dougherty, J. J. Farrar, and J. J. Oppenheim

1936 Relationship of Cell Cycle to Recovery of IL-2 Activity from Human Mononuclear Cells, Human and Mouse T Cell Lines

E. Pure, P. C. Isakson, K. Takatsu, T. Hamaoka, S. L. Swain, R. W. Dutton, G. Dennert, J. W. Uhr, and E. S. Vitetta

1953 Induction of B Cell Differentiation by T Cell Factors. I. Stimulation of IgM Secretion by Products of a T Cell Hybridoma and a T Cell Line

R. N. Germain

1964 Accessory Cell Stimulation of T Cell Proliferation Requires Active Antigen Processing, la-Restricted Antigen Presentation, and a Separate Nonspecific 2nd Signal Transfer of Lymphocytes of Peyer's Patches between Immunoglobulin Allotype Congenic Mice: Repopulation of the IgA Plasma Cells in the Gut Lamina Propria

J. Tseng

2039 Lymphokines and Aging: Interleukin-2 Production and Activity in Aged Animals

M. L. Thoman and W. O. Weigle

2102 Differentiation of T Cells from Immature Precursors in Murine T Cell Colonies

L.-M. Ching, S. Muraoka, and R. G. Miller

2156 Cutaneous Basophil Responses and Immune Resistance of Guinea Pigs to Ticks: Passive Transfer with Peritoneal Exudate Cells or Serum

CLINICAL IMMUNOLOGY

R. L. Whisler, D. A. Bobak, and Y. G. Newhouse

1758 Human B Lymphocyte Colony Responses. II. The Role of T Cells in the Enhancement of Colony Growth

P. L. Cohen, D. A. Litvin, and J. B. Winfield

1777 Activated T Cells in Human Peripheral Blood: Quantitation with a Reverse Hemolytic Plaque Assay

J. M. Depper, H. G. Bluestein, and N. J. Zvaifler

1899 Impaired Regulation of Epstein-Barr Virus-Induced Lymphocyte Proliferation in Rheumatoid Arthritis is Due to a T Cell Defect

Continued on page 4
Continued from page 3

G. T. Leven, S. S. Crago, W. H. Kutteh, and J. Mestecky 1967 Hemolytic Plaque Formation by Cellular and Noncellular Elements of Human Colostrum

J. S. Smolen, S. O. Sharrow, J. P. Reeves, W. A. Boegel, and A. D. Steinberg 1987 The Human Autologous Mixed Lymphocyte Reaction. I. Suppression by Macrophages and T Cells

B. R. Smith and K. A. Ault 2020 Increase of Surface Ia-Like Antigen Expression on Human Monocytes Independent of Antigenic Stimuli


M. M. Lederman, J. J. Ellner, and H. M. Rodman 2051 Defective Suppressor Cell Generation in Juvenile Onset Diabetes

A. R. Hayward, J. T. Kurnick, and D. F. Clarke 2079 T Cell Growth Factor-Enhanced PHA Response of Human Thymus Cells: Requirement for T3+ Cells

J. E. Nagel, F. J. Chrest, and W. H. Adler 2086 Enumeration of T Lymphocyte Subsets by Monoclonal Antibodies in Young and Aged Humans

J. M. Zalting, M. S. Dierckins, E. A. Sevenich, and K. A. Clouse 2118 Stimulation with Autologous Lymphoblastoid Cell Lines: Lysis of Epstein-Barr Virus-Positive and -Negative Cell Lines by Two Phenotypically Distinguishable Effector Cell Populations

E. G. Engleman, C. J. Benike, F. Carl Grumet, and R. L. Evans 2124 Activation of Human T Lymphocyte Subsets: Helper and Suppressor/Cytotoxic T Cells Recognize and Respond to Distinct Histocompatibility Antigens

P. A. Gatemy, B. L. Kotzin, and E. G. Engleman 2130 Induction of Immunoglobulin Secretion by Cells in the Human Autologous Mixed Leukocyte Reaction: Regulation by Helper and Suppressor Lymphocyte Subsets Defined with Monoclonal Antibodies

B. Häfstaff, J. R. Huddleston, P. Casali, T. C. Merigan, and M. B. A. Oldstone 2146 Interferon Acts Directly on Human B Lymphocytes to Modulate Immunoglobulin Synthesis

IMMUNOCHEMISTRY

R. L. Hirsch, D. E. Griffin, and J. A. Winkelstein 1740 Host Modification of Sindbis Virus Sialic Acid Content Influences Alternative Complement Pathway Activation and Virus Clearance

S. J. Betz and H. Isikey 1748 Antibody-Independent Interactions between Escherichia coli J5 and Human Complement Components


M. Mannik and K. A. David 1999 Covalently Cross-Linked Immune Complexes Prepared with Multivalent Cross-Linking Antigens

A. Nicholson-Weller, J. Burge, and K. F. Austen 2035 Purification from Guinea Pig Erythrocyte Stroma of a Decay-Accelerating Factor for the Classical C3 Convertase, C4b,2a

C. Mold and H. Gewurz 2089 Inhibitory Effect of C-Reactive Protein on Alternative C Pathway Activation by Liposomes and Streptococcus pneumoniae

S. Weitzman and J. Portmore 2095 Immunoglobulin Glycopeptides from an IgG2b-Producing Mouse Myeloma Cell Line and from Variant Cell Lines


J. Tseng 2140 Induction of Indigenous Immunoglobulin-Containing Cells by γ-Irradiation and Lymphoid Cell Transfer in Mice

T. Colner, K. Blaser, J. Kriedberg, M. Potter, and H. N. Eisen 2150 Mouse Myeloma Proteins with λ2 and λ3 Light Chains

IMMUNOGENETICS AND TRANSPLANTATION

R. E. Gress, M. N. Wesley, and R. J. Hodes 1763 The Role of H-2 in T Cell Recognition of Mls

P. Maryn, F. V. Leuven, J.-J. Cassiman, and H. V. D. Bergha 1782 A Monoclonal Antibody to a Neo-antigen on α2-Macroglobulin Complexes Inhibits Receptor-Mediated Endocytosis

P. K. Arora and G. M. Shearer 1822 Non-MHC-Linked Genetic Control of Murine Cytotoxic T Lymphocyte Responses to Hapten-Modified Syngeneic Cells

Continued on page 5
Two Distinct Murine Differentiation Antigens Determined by Genes Linked to the Ly-6 Locus

Parallel Cross-Reactivity Patterns of 2 Sets of Antigenically Distinct Cytochrome c Peptides: Possible Evidence for a Presentational Model of Ir Gene Function

Identification of a Macrophage Antigen-Processing Event Required for I-Region-Restricted Antigen Presentation to T Lymphocytes

Biochemical Characterization of la Alloantigens in Guinea Pigs. I. Synthesis of la Antigens by Subsets Enriched for B Cells, T Cells, or Macrophages

Clinical and Molecular Requirements for Optimal Proliferative Responses

Alloreactive T Cells from Individual Soft Agar Colonies Specific for Guinea Pig la Antigens. II. Cellular and Molecular Requirements for Optimal Proliferative Responses

Modulation of Thy-1 Alloantibody Responses: Donor Cell-Associated H-2 Inhibition and Augmentation without Recipient Ir Gene Control

The H-2 Phenotype of the Thymus Dictates the Self-specificity Expressed by la Antigens

Immunohistologic Localization of "Facteur Thymique Serique" (FTS) in Human Thymic Epithelium

Suppression of Experimental Allergic Encephalomyelitis in Guinea Pigs by Liposome-Associated Human Myelin Basic Protein

Studies of Defective Tolerance in Murine Lupus

Adoptive Transfer of Experimental Autoimmune Thyroiditis (EAT) with in vitro Activated Lymph Node Cells from Thyroglobulin-Sensitized Guinea Pigs: Characterization of the Cell That Transfers EAT

Adenosine 5'-Triphosphate (ATP) Mediated Stimulation and Suppression of DNA Synthesis in Lymphoid Cells. I. Characterization of ATP Responsive Cells in Mouse Lymphoid Organs

Unterscstrate Hydrolysis by Immune Complex-Activated Neutrophils: Effect of Physical Presentation of Complexes and Protease Inhibitors

Modulating Effect of the Late-Acting Components of the Complement System on the Bactericidal Activity of Human Polymorphonuclear Leukocytes on E. coli O111:B4

Unresponsiveness to Experimental Allergic Encephalomyelitis in Mice: Replacement of Suppressor Cells by a Soluble Factor

Response of Human Neutrophils to C5a in Biologic Activity

Naturally Occurring Blocking Antibodies Mediate Immediate Hypersensitivity Responses in Human Filariasis

Immunohistologic Localization of 'Facteur Thymique Serique' (FTS) in Human Thymic Epithelium
**MICROBIAL IMMUNOLOGY**

R. L. Epstein, M. L. Powers, and H. L. Weiner  
N. Khansari, M. Segre, and D. Segre  
J. V. Weinstock and D. L. Boros  
R. H. Zubler and J. A. Louis  
M. A. Vadas  
D. E. Burgess, R. E. Kuhn, and K. S. Carlson

1800 Interaction of Reovirus with Cell Surface Receptors. III. Reovirus Type 3 Induces Capping of Viral Receptors on Murine Lymphocytes  
1889 Immunosuppression in Murine Malaria: A Soluble Immunosuppressive Factor Derived from Plasmodium berghei-Infected Blood  
1906 Heterogeneity of the Granulomatous Response in the Liver, Colon, Ileum, and Ileal Peyer's Patches to Schistosome Eggs in Murine Schistosomiasis Mansoni  
1924 Clonal Assay for T Helper Cells (TH) and Conditions for H-2-Restricted Linked Cooperation between TH and Hapten-Primed B Cells: Application to the Quantitation of Hemocyanin or Leishmania tropica-specific TH in Primed Mice  
2083 Cyclophosphamide Pretreatment Induces Eosinophilia to Nonparasite Antigens  
2092 Induction of Parasite-Specific Helper T Lymphocytes during Trypanosoma cruzi Infections in Mice

**TUMOR IMMUNOLOGY**

A. Grönberg, R. Kiessling, E. Eriksson, and M. Hansson  
N. Hanna and R. C. Burton  
W. J. Johnson, C. C. Whisnant, and D. O. Adams  
R. C. Burton, S. P. Bartlett, V. Kumar, and H. J. Winn  
H. Okada, H. Tanaka, and J.-C. Cyong  
P. J. Martin, J. A. Hansen, A. W. Siadak, and R. C. Nowinski  
D. O. Adams, W. J. Johnson, E. Fiorito, and C. F. Nathan  
K. S. Landreth, C. Rosse, and J. Clagett  
J. M. Jessup, C. M. Macek, B. D. Kahan, and N. R. Pellis

1734 Variants from a MLV-Induced Lymphoma Selected for Decreased Sensitivity to NK Lysis  
1754 Definitive Evidence That Natural Killer (NK) Cells Inhibit Experimental Tumor Metastasis in Vivo  
1817 Natural Cytotoxicity and Interferon Production in Human Cancer: Deficient Natural Killer Activity and Normal Interferon Production in Patients with Advanced Disease  
1864 Studies on Natural Killer (NK) Cells. II. Serologic Evidence for Heterogeneity of Murine NK Cells  
1903 Resistance to Immune Cytolysis Induced by 4NQO and MNNG: A Possible Mechanism Involved in Chemical Carcinogenicity  
1920 Monoclonal Antibodies Recognizing Normal Human T Lymphocytes and Malignant Human B Lymphocytes: A Comparative Study  
1973 Hydrogen Peroxide and Cytolytic Factor Can Interact Synergistically in Effecting Cytolysis of Neoplastic Targets  
2007 Regulation of Human Natural Killing. I. The Role of Monocytes, Interferon, and Prostaglandins  
2027 Myelogenous Production and Maturation of B Lymphocytes in the Mouse  
2183 Effect of Murine Tumors upon Delayed Hypersensitivity to Dinitrochlorobenzene. III. In Vivo Activity of the Nonspecific Suppressor Cell

**COMMUNICATIONS**

L. Matsuuchi, J. Sharon, and S. L. Morrison  
N. D. Huh, Y. B. Kim, and D. B. Amos

2188 An Analysis of Heavy Chain Glycopeptides of Hybridoma Antibodies: Correlation between Antibody Specificity and Sialic Acid Content  
2190 Natural Killing (NK) and Antibody-Dependent Cellular Cytotoxicity (ADCC) in Specific Pathogen-Free (SPF) Miniature Swine and Germfree Piglets. III. Two Distinct Effector Cells for NK and ADCC

**LETTER TO THE EDITOR**

A. E. Kalderon  
Announcements  
Author Index