## Contents

### PRESIDENTIAL ADDRESS

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. Ishizaka</td>
<td>Twenty Years with IgE: From the Identification of IgE to Regulatory Factors for the IgE Response</td>
</tr>
</tbody>
</table>

### COMMUNICATIONS

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. T. Rijkers and D. E. Mosier</td>
<td>Pneumococcal Polysaccharides Induce Antibody Formation by Human B Lymphocytes In Vitro</td>
</tr>
<tr>
<td>R. W. Hoffman, J. A. Bluestone, O. Leo, and S. Shaw</td>
<td>Lysis of Anti-T3-Bearing Murine Hybridoma Cells by Human Allospecific Cytotoxic T Cell Clones and Inhibition of that Lysis by Anti-T3 and Anti-LFA-1 Antibodies</td>
</tr>
<tr>
<td>S. J. Mentzer, S. H. Gromkowski, A. M. Krenskey, S. J. Burakoff, and E. Martz</td>
<td>LFA-1 Membrane Molecule in the Regulation of Homotypic Adhesions of Human B Lymphocytes</td>
</tr>
</tbody>
</table>

### CELLULAR IMMUNOLOGY

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Clayberger, T. Uyehara, B. Hardy, J. Eaton, M. Karasek, and A. M. Krenskey</td>
<td>Target Specificity and Cell Surface Structures Involved in the Human Cytolytic T Lymphocyte Response to Endothelial Cells</td>
</tr>
<tr>
<td>J. P. Tite, M. B. Powell, and N. H. Ruddle</td>
<td>Protein-Antigen Specific Ia-Restricted Cytolytic T Cells: Analysis of Frequency, Target Cell Susceptibility, and Mechanism of Cytolysis</td>
</tr>
<tr>
<td>S. J. Mentzer, J. A. Barbosa, and S. J. Burakoff</td>
<td>T3 Monoclonal Antibody Activation of Nonspecific Cytolysis: A Mechanism of CTL Inhibition</td>
</tr>
<tr>
<td>D. L. French and J. M. D. Plate</td>
<td>A Role for Helper Cell Subpopulations in a Genetically Controlled Cytolytic T Lymphocyte Response to the H-2D(^{b}) Antigen</td>
</tr>
<tr>
<td>J. C. Hiserodt</td>
<td>Studies on the Cytolytic Attack Mechanism of the Cytotoxic T Lymphocyte (CTL): Preparation of Antiserum against Cellfree Cytosolic Extracts of a CTL Clone Capable of Blocking the Lethal Hit Stage of CTL Cytolysis and Analysis of the Cytolytic Structure</td>
</tr>
<tr>
<td>P. M. Flood, D. B. Murphy, M. Horowitz, K. P. LeClair, F. R. Smith, E. Stockert, M. A. Paladino, Jr., and A. B. DeLeo</td>
<td>A Monoclonal Antibody that Recognizes an Ly-6-Linked Antigen Inhibits the Generation of Functionally Active T Cell Subsets</td>
</tr>
<tr>
<td>M. L. Sopori, R. S. Perrone, S. Cherian, R. J. Cross, and A. M. Kaplan</td>
<td>Immunoregulation in the Rat: Characteristics of a Suppressor T Cell that Inhibits Antigen-Dependent Cell Proliferation</td>
</tr>
</tbody>
</table>

Continued on page 4
Continued from page 3

A. L. DeFranco, E. S. Raveche, and W. E. Paul 87 Separate Control of B Lymphocyte Early Activation and Proliferation in Response to Anti-IgM Antibodies
R. M. Franklin, D. W. McGee, and K. F. Shepard 95 Lacrimal Gland-Directed B Cell Responses
R. F. Ashman and E. J. Noel

T. L. Rothstein

M. Minami, H. Kawasaki, S. Taira, and H. Nariuchi 100 Antigen-Induced Acceleration of Shedding and Replacement of B Cell Antigen Receptors Requires Mature T Cells
S. Prakash, R. J. Robb, R. D. Stout, and D. C. Parker 106 Anti-immunoglobulin in Combination with Cytochalasin Stimulates Proliferation of Murine B Lymphocytes
S.-M. Hsu

C. D. Wood and G. Möller

H. Shau and J. R. Dawson

S. Schwarzbach and B. Diamond

G. Strassmann, T. A. Springer, and D. O. Adams


S. M. Minami, R. F. Ashman and E. J. Noel

C. D. Wood and G. Möller

H. Shau and J. R. Dawson

S. Schwarzbach and B. Diamond

G. Strassmann, T. A. Springer, and D. O. Adams


T. L. Rothstein

M. Minami, H. Kawasaki, S. Taira, and H. Nariuchi

S. Prakash, R. J. Robb, R. D. Stout, and D. C. Parker

S.-M. Hsu

C. D. Wood and G. Möller

H. Shau and J. R. Dawson

S. Schwarzbach and B. Diamond

G. Strassmann, T. A. Springer, and D. O. Adams


The Induction and Suppression of In Vitro IgG Anti-Tetanus Toxoid Anti-

Monoclonal Anti-Acetylcholine Receptor Antibodies with Differing Capaci-

A Role for the Spleen in the Appearance of IgM in the Bile of Rats Injected

Intravenously with Horse Erythrocytes

Immunoactive Products of Placenta. IV. Impairment by Placenta! Cells and Their Products of CTL Function at Effector Stage

A Myelin Basic Protein-Specific T Lymphocyte Line that Mediates Experimental Autoimmune Encephalomyelitis

Specificity of T Lymphocyte Lines for Peptides of Myelin Basic Protein

Monoclonal Anti-Acetylcholine Receptor Antibodies with Differing Capacities to Induce Experimental Autoimmune Myasthenia Gravis

Continued on page 5
Continued from page 4


B. S. Kim and K. M. Hui

D. Isenberg, C. Dudeney, F. Wojnaruska, B. S. Bhogal, J. Rauch, Y. Naparstek, D. Duggan, and A. Hack

J. Whittam, I. Goldschneider, D. Greiner, and R. Zurier

A. J. Sanker, C. R. Clark, and R. S. Sundick

R. Mann, B. Zakheim, M. Clayman, E. McCafferty, L. Michaud, and E. G. Neilson

242 Human Neuroblastoma Cell Lines Are Susceptible to Lysis by Natural Killer Cells but not by Cytotoxic T Lymphocytes

247 Monoclonal Antibodies Reactive with Human T Cell Lymphotropic Virus (HTLV) P19 Internal Core Protein: Cross-Reactivity With Normal Tissues and Differential Reactivity with HTLV Types I and II

255 Induction of Infectious Immunodeficiency in BALB/c Mice by Serial Transfer of Lymphocytes Immune to Alloantigens

261 Detection of Cross-Reactive Anti-DNA Antibody Idiotypes on Tissue-Bound Immunoglobulins from Skin Biopsies of Lupus Patients

265 Low Molecular Weight Clq in Systemic Lupus Erythematosus

272 Developmental Abnormalities of Terminal Deoxynucleotidyl Transferase Positive Bone Marrow Cells and Thymocytes in New Zealand Mice: Effects of Prostaglandin E1

281 The Induction of Tolerance to Thyroglobulin Significantly Reduces the Severity of Thyroiditis in Obese Strain Chickens

286 Murine Interstitial Nephritis. IV. Long-term Cultured L3T4+ T Cell Lines Transfer Delayed Expression of Disease as I-A-Restricted Inducers of the Effector T Cell Repertoire

294 Human Natural Killer Cytotoxic Factor (NKCF): Role of IFN-α

300 The Characteristics of Binding of Human Recombinant Interferon-γ to its Receptor on Human Monocytes and Human Monocyte-Like Cell Lines

306 Interferon-Like Activity in an Anti-Interferon Anti-Idiotypic Hybridoma Antibody

314 Role of Interleukin 1 in Promoting Human Monocyte-Mediated Tumor Cytotoxicity

321 IL 2 Receptor Induction on Human T Lymphocytes: Role for IL 2 and Monocytes

328 Generation of Anti-Peptide Monoclonal Antibodies which Recognize Mature Monocytes CSF-2a (IL 3) Protein

333 Functional Properties of Two Human B Cell Growth Factor Species Separated by Lectin Affinity Column

339 Characterization of a T4+ /Leu-8+ T Cell Clone that Directly Helps B Cell Ig Production by Secreting B Cell Differentiation Factor

344 Augmentation of Macrophage Complement Receptor Function In Vitro. V. Studies on the Mechanisms of Ligation of Macrophage Fe Receptors Required to Trigger Macrophages to Signal T Lymphocytes to Elaborate the Lymphokine that Activates Macrophage C3 Receptors for Phagocytosis

350 Modulation of Macrophage-Mediated Tumoricidal Activity by Neuropeptides and Neurohormones

355 E Receptor-Related Immunosuppressive Factor in Malignant Pleural Fluid and Plasma: Molecular Mechanism of Action on DNA-Polymerase-α

362 Monoclonal Antibodies Specific for Single Chain or Two Chain GAT-SpecificSuppressor Factors: Production and Analysis of In Vitro Modulating Properties

Continued on page 6
IMMUNOCHEMISTRY

P. M. Allen, G. R. Matsueda, E. Haber, and E. R. Unanue
L. Lefrançois and M. J. Bevan

E. K. Wakeland, B. Darby, and J. E. Coligan
G. D. Holt, S. J. Swiedler, J. H. Freed, and G. W. Hart
A. J. Sant, B. D. Schwartz, and S. E. Cullen
A. J. Sant, S. E. Cullen, and D. Schwartz
R. Z. Dintzis, M. H. Middleton, and H. M. Dintzis
P. B. Billings, J. R. Barton, and S. O. Hoch
D. W. Ballard, R. M. Baes, and E. W. Voss, Jr.
I. Gigli, J. Sorvillo, and L. Halbwachs-Mecarelli
K. H. Cheng, T. Wiedner, and P. J. Sims

368 Specificity of the T Cell Receptor: Two Different Determinants Are Generated by the Same Peptide and the I-Aβ Molecule
374 Novel Antigenic Determinants of the T200 Glycoprotein Expresed Preferentially by Activated Cytotoxic T Lymphocytes
384 Clonal T Lymphocyte Recognition of the Fine Structure of the HLA-A2 Molecule
391 Localization of Structural Variations Distinguishing I-Aβ-Related Molecules to the α1 and α2 Domains
399 Murine Ia-Associated Invariant Chain’s Processing to Complex Oligosaccharide Forms and Its Dissociation from the I-Aβ Complex
408 Cellular Distribution of the Ia-Associated Chondroitin Sulfate Proteoglycan
416 Biosynthetic Relationships of the Chondroitin Sulfate Proteoglycan with Ia and Invariant Chain Glycoproteins
423 Inhibition of Anti-DNP Antibody Formation by High Doses of DNP-Polyacrylamide Molecules: Effects of Hapten Density and Hapten Valence
428 A Murine Monoclonal Antibody Recognizes the 13,000 Molecular Weight Polypeptide of the Sm Small Nuclear Ribonucleoprotein Complex
433 Characterization of Monoclonal Anti-Fluorescein Antibodies from Autoimmune New Zealand Mice
440 Regulation and Dereulation of the Fluid-Phase Classical Pathway C3 Convertase
445 The Membrane Attack Complex of Complement: Relation of C7 to the Metastable Membrane Binding Site of the Intermediate Complex C5b-7
452 Self-Association of the Seventh Component of Human Complement (C7): Dimerization and Polymerization
459 Fluorescence Resonance Energy Transfer Study of the Associative State of Membrane-Bound Complexes of Complement Proteins C5b-8
465 Human C5a Modulates Monocyte Fc and C3 Receptor Expression

IMMUNOPHARMACOLOGY

S. Marullo, J. Hobebeke, J.-G. Guillet, and A. D. Strosberg
Y. Nawata, T. Kolke, H. Hosokawa, H. Tomioka, and S. Yoshida
T. Ishizaka, A. R. Sterk, M. Daeron, E. L. Becker, and K. Ishizaka
D. Boraschi, S. Censini, M. Bartalini, and A. Tagliabue
F. Homo-Delarche, D. Duval, and M. Papernik
P. A. Johnston, D. O. Adams, and T. A. Hamilton
F. K. Higson, L. Durbin, N. Pavlotsky, and A. I. Tauber
D. W. Goldman, L. A. Gifford, D. M. Olson, and E. J. Goetzl
S. H. Zigmond, A. Woodworth, and G. Daukas
A. M. Diener, P. G. Beatty, H. D. Ochs, and J. M. Harlan

471 Structural Analysis of the Epitope Recognized by a Monoclonal Antibody Directed against Tricyclic Antidepressants
476 Anti-IgE Autoantibody in Patients with Atopic Dermatitis
483 Isolation and Characterization of Human Intestinal Mucosal Mast Cells
492 Biochemical Analysis of Desensitization of Mouse Mast Cells
502 Regulation of Arachidonic Acid Metabolism in Macrophages by Immune and Nonimmune Interferons
506 Prostaglandin Production by Phagocytic Cells of the Mouse Thymic Reticulum in Culture and its Modulation by Indomethacin and Corticosteroids
513 Regulation of the Fc-Receptor-Mediated Respiratory Burst: Treatment of Primed Murine Peritoneal Macrophages with Lipopolysaccharide Selectively Inhibits H2O2 Secretion Stimulated by Immune Complexes
519 Studies of Cytochrome B_{566} Translocation in the PMA Stimulation of the Human Neutrophil NADPH-Oxidase
525 Transduction by Leukotriene B4 Receptors of Increases in Cytosolic Calcium in Human Polymorphonuclear Leukocytes
531 Effects of Sodium on Chemotactic Peptide Binding to Polymorphonuclear Leukocytes
537 The Role of Neutrophil Membrane Glycoprotein 150 (GP-150) in Neutrophil-Mediated Endothelial Cell Injury In Vitro

Continued on page 7
MICROBIAL IMMUNOLOGY

C. R. Lissner, D. L. Weinstein, and A. D. O'Brien

T. N. Kirkland and J. Fierer

M. Ogasawara, K. Granfors, D. H. Kone, J. L. Hill, and D. T. Yan Yu

J. V. Weinstein, A. M. Blum, and J. T. Kassab

D. L. Sacks, S. Hieny, and A. Sher

D. L. Hoover, M. Berger, C. H. Hammer, and M. S. Meltzer

J. Glorioso, U. Kees, G. Kimel, H. Kirchner, and P. H. Krammer

C. G. Orosz, N. E. Zinn, R. G. Olsen, and L. E. Mathes

A. Osterhaus, K. Weijer, F. Uytdehaag, O. Jarrett, B. Sundquist, and B. Morein

C. J. Pfuau, M.-F. Saron, and D. C. Pevear


MOLECULAR BIOLOGY • MOLECULAR GENETICS

A. Alonso, N. Hozumi, and H. Murialdo

P. Szurek, J. Petrini, and W. Dunnick

P. A. Rosa, D. S. Sepich, D. C. Shreffler, and R. T. Ogata

D. Paulnock-King, K. Sizer, Y. R. Freund, P. P. Jones, and J. R. Parnes


A. Kudo, Y. Nishimura, and T. Watanabe

MOLECULAR BIOLOGY • MOLECULAR GENETICS

A. Alonso, N. Hozumi, and H. Murialdo

P. Szurek, J. Petrini, and W. Dunnick

P. A. Rosa, D. S. Sepich, D. C. Shreffler, and R. T. Ogata

D. Paulnock-King, K. Sizer, Y. R. Freund, P. P. Jones, and J. R. Parnes


A. Kudo, Y. Nishimura, and T. Watanabe

TUMOR IMMUNOLOGY

J. J. Mulè, S. Shu, and S. A. Rosenberg


T. Kiyohara, J. W. Dennis, R. J. Boegman, and J. C. Roder

646 The Anti-Tumor Efficacy of Lymphokine-Activated Killer Cells and Recombinant Interleukin 2 In Vivo

653 The Generation of Monoclonal Anti-Idiotype Antibodies to Human B Cell-Derived Leukemias and Lymphomas

659 An Exoglycosidase-Sensitive Triggering Site on NK Cells which is Coupled to Transmethylation of Membrane Phospholipids

Continued on page 8
Continued from page 7

S. G. Kaminsky, I. Nakamura, and G. Cudkowicz
B. S. Wang, A. R. Lumanglas, V. M. Ruszala-Mallon, and F. E. Durr
I. Saiki and I. J. Fidler
J. A. Werkmeister, T. Triglia, P. Andrews, and G. F. Burns
P. Giacomini, P. Natali, and S. Ferrone
L. D. Powell, E. Bause, G. Legler, R. J. Molyneux, and G. W. Hart

665 Genetic Control of the Natural Killer Cell Activity in SJL and Other Strains of Mice
672 The Role of Interleukin 2 and T11 E Rosette Antigen in Activation and Proliferation of Human NK Clones
679 Induction of Tumor-inhibitory Macrophages with a Novel Synthetic Immunomodulator, 3,6-Bis(2-Piperidinoethoxy)Acridine Trihydrochloride (CL 246,738)
684 Synergistic Activation by Recombinant Mouse Interferon-γ and Muramyl Dipeptide of Tumoricidal Properties in Mouse Macrophages
689 Identification of a Structure on Human Melanoma Cells Recognized by CTL Exhibiting Anomalous Killer Cell Function
696 Analysis of the Interaction between a Human High Molecular Weight Melanoma-Associated Antigen and the Monoclonal Antibodies to Three Distinct Antigenic Determinants
703 Distinct Proliferative T Cell Clonotypes Are Generated in Response to a Murine Retrovirus-Induced Syngeneic T Cell Leukemia: Viral gp70 Antigen-Specific MT4+ Clones and Lyt-2+ Cytolytic Clones which Recognize a Tumor-Specific Cell Surface Antigen
714 Influence of Asparagine-Linked Oligosaccharides on Tumor Cell Recognition in the Mixed Lymphocyte Reaction

ERRATA

D. A. Melnick, W. N. Nauseef, S. D. Markowitz, J. P. Gardner, and H. L. Malech
D. Moynet, S. J. MacLean, K. H. Ng, D. Anctil, and D. M. Gibson

726 Biochemical Analysis and Subcellular Localization of a Neutrophil-Specific Antigen, PMN-7, Involved in the Respiratory Burst
726 Polymorphism of κ Variable Region (Vκ-1) Genes in Inbred Mice: Relationship to the Igκ-Ef2 Serum Light Chain Marker

Announcements

733

Author Index

736