THE JOURNAL OF IMMUNOLOGY®

Contents for April

CELLULAR IMMUNOLOGY

Studies on the Induction and Expression of T Cell-Mediated Immunity. I. Anti-
serum Blocking of Cell-Mediated Cytolysis. BENJAMIN BONAVIDA ............ 1308

Local and Systemic Cell-Mediated Immunity after Immunization of Guinea Pigs
with Live or Killed M. Tuberculosis by Various Routes. JAMES C. SPECK,
ROBERT H. WALDMAN, AND JOSEPH E. JOHNSON, III ......................... 1322

Comparison and Yield of Antigen- or Mitogen-Induced Human Lymphotoxins.
GALAL N. BOULOS, WERNER ROSENAU, AND MELVIN L. GOLDBERG ........... 1347

Cellular Events in Tolerance. II. Similar Specificity of Carrier Cross-Tolerance in
Vivo and Cross-Stimulation in Vitro. DAVID W. SCOTT .......................... 1354

Inhibition of Antigen- or Mitogen-Induced Human Lymphotoxins. GALAL N.
BOULOS, WERNER ROSENAU, AND MELVIN L. GOLDBERG ........... 1347

Cellular Events in Tolerance. II. Similar Specificity of Carrier Cross-Tolerance in
Vivo and Cross-Stimulation in Vitro. DAVID W. SCOTT .......................... 1354

Biologic Expressions of Lymphocyte Activation. III. Suppression of Plaque-Forming
Cell Responses in Vitro by Supernatant Fluids from Concanavalin A-Activated
Spleen Cell Cultures. ROBERT R. RICH AND CARL W. PIERCE ................. 1360

Requirement for Bone Marrow-Derived Cells in Resistance to Listeria. PRISCILLA
A. CAMPBELL, BARBARA L. MARTENS, H. REBECCA COOPER, AND J. KENNETH
McClatchy ....................... 1407

Early Detection of Lymphocyte Stimulation and Mixed Lymphocyte Interaction in
Man with a Semimicro Protein Synthesis Assay. N. FRANKLIN ADKINSON, JR.,
STEVEN A. ROSENBerg, AND WILLIAM D. TERRY ..................... 1426

The Production of Proliferation Inhibitory Factor (PIF) by Mouse Spleen Cells in
Vitro. ALISON M. BADGER, SIDNEY R. COOPERbAND, AND VINCENT J. MERLuzzi.. 1435

Products of Activated Lymphocytes: Leukocyte Inhibitory Factor (LIF) Distinct
from Migration Inhibitory Factor (MIF). ROSE E. ROCKLIN ........................ 1461

Blastogenesis of Autologous, Allogeneic, and Syngeneic (Identical Twins) Lympho-
cytes in Response to Lymphokines Generated in Dinitrochlorobenzene-Sensi-
tive Human Leukocyte Cultures. WILLIAM R. LEVIS, JOHN J. WHALEN, AND
A. EDGAR MILLER, JR ........................................................ 1488

Enumeration of B-Lymphocytes in Human Peripheral Blood by a Rosette Method for
the Detection of Surface-Bound Immunoglobulin. VINCENT J. GIULIANO, HUGO
E. JASIN, ERIC R. HURD, AND MORRIS ZIFF .................................... 1494

The Role of Lipid in the Induction of Hapten-Specific Delayed Hypersensitivity and
Contact Sensitivity. MORRIS O. DAILEY AND ROBERT L. HUNTER ............. 1526

Lymphokine Activity in Vivo in Relation to Circulating Monocyte Levels and De-
layed Skin Reactivity. TAKESHI YOSHIDA AND STANLEY COHEN ............... 1540

The Enhancement of MIF Activity by Inhibition of Macrophage Associated Ester-
ases. HEINZ G. REMOLD ..................................................... 1571

Studies of Cellular Immunity in Chagas Disease: Effect of Glutaraldehyde-Treated
Specific Antigen on Inhibition of Leukocyte Migration. ROSALIA LELCHUK,
AIDA PATRucco, AND JORGE A. MANNI ........................................... 1578

Priming in Recipient Mice Unable to Generate a Primary Antibody Response: Ki-
netics of Priming for an IgM Response. DAVID L. GROVES, GARY D. NIBLACK,
AND ELIZABETH S. CHRISTIAN ................................................. 1582

Identification of a Subpopulation of Mouse Lymphoid Cells Required for Interferon
Production after Stimulation with Mitogens. JACK STODO, IRA GREEN, LULA
JACkSON, AND SAMUEL BARON .............................................. 1589

IMMUNOCHEMISTRY

A Hybrid IgG4-IgG2 Immunoglobulin. J. B. NATVIG AND H. G. KUNKEL .......... 1277

Characterization of the Fv Fragment Isolated from a Human Immunoglobulin M.
Kichi KAKimoto AND KAoru ONOE ............................................. 1373

Antigenic Studies of a Human Immunoglobulin G. GERALDINE C. MEINKE AND
HANS L. SPIEGELBERG .......................... 1401

Crossover Immunoelectrophoresis and Electroimmunoassay of IgM. ANDERS O.
GRUBB ..................................................... 1420

Changes in Antigenic Properties of Human C3 upon Activation and Conversion by
Trypsin. J. L. MOLenaar, M. A. C. MULLER, C. P. ENGELFRIET, AND K. W.
PONDMAN ..................................................... 1444

Structural Studies on a Human IgA1 Myeloma Protein with a Carboxy-Terminal
Deletion. JEAN-PIERRE J. DESPONT, CARLOS A. ABEL, HOWARD M. GREY, AND
GERALD M. PENN ............................................................ 1517

Mucosal and Glandular Distribution of Immunoglobulin Components: Differential
Localization of Free and Bound SC in Secretory Epithelial Cells. PER BRANDT-
ZAFER ........................................................ 1553

Immunoglobulins with Multiple Binding Functions. II. The Use of Nylon-Polyserine
### Contents continued

Whisker Discs in Screening Myeloma Immunoglobulins for Binding Activity.  
**JANOS M. VARGA, SAUL LANDE, AND FRANK F. RICHARDS** .......................... 1565

#### IMMUNOGENETICS AND TRANSPLANTATION


The Isolation and Characterization of an Anti-Sheep Red Blood Cell Antibody Having Limited Heterogeneity. **RAYMOND L. BRATCHER, CHRISTINE A. CHONG, AND SHELDON DRAY** .................................................. 1337

Augmentation of Immunologic Memory in Mice Following Treatment with Oxisuran. **ALFRED E. FOX AND HENRY H. FREEDMAN** ........................................... 1394

Effect of Prior Blood Transfusions on Marrow Grafts: Abrogation of Sensitization by Procarbazine and Antithymocyte Serum. **RAINER STORB, GEORGI L. FLOERSHRIM, PAUL L. WEIDEN, THEODORE C. GRAHAM, HANS-JOCHEN KOLB, KENNETH G. LERNER, MARIA-LOUISIHE SCHROEDER, AND E. DONNALL THOMAS** ........................................ 1508

Membrane Properties and Functional Activity of Lymphocytes from Cyclophosphamide-Pretreated Rats. **RONALD D. GUTTMANN** ............................................. 1594

#### IMMUNOPATHOLOGY

Susceptibility to Cutaneous Anaphylaxis in Inbred Strains of Mice. **CELSO M. DE SOUZA, LUIZ C. SANCHENRON R MATA, AND NELSON M. VAZ** ..................... 1369

An *in vitro* Study of Exocytosis of Neutrophil Granule Enzymes in Chronic Granulomatous Disease Neutrophils. **RICHARD J. ULEVITCH, PETER HENSON, BEULAH HOLMES, AND ROBERT A. GOOD** ........................................ 1383

Experimental Autoimmune Renal Cortical Tubulointerstitial Disease in Guinea Pigs Lacking the Fourth Component of Complement (C4). **ULRICH H. RUDOFSKY, PHILIP R. B. McMASTER, WAT-SAI MA, RAYMOND W. STEBLAY, AND BERNARD POLLARA** ........................................ 1387

Decline and Restoration of Antibody-Forming Capacity in Aging Beagle Dogs. **BERNARD N. JAROSLOW, KATHERINE M. SCHRUBBER, AND THOMAS E. FRITZ** .......... 1477

Specificity and Development of Cytotoxic Thymus-Derived Lymphocytes in Lymphocytic Choriomeningitis. **PETER C. DOHERTY, ROLF M. ZINKERNAGEL, AND IAN A. RAMSHAW** ........................................... 1548

#### TUMOR IMMUNOLOGY

Studies on the Effect of Specific Antisera on the Metabolism of Cellular Antigens.  
I. Isolation of Thymus-Leukemia Antigens. **ALICE YU AND EDWARD P. COHEN** ........................................... 1285

Studies on the Effect of Specific Antisera on the Metabolism of Cellular Antigens.  
II. The Synthesis and Degradation of TL Antigens of Mouse Cells in the Presence of TL Antiserum. **ALICE YU AND EDWARD P. COHEN** ........................................... 1296

Attempts to Induce Cultures of BALB/c Myeloma and P3-J Burkitt’s Lymphoma Cells to Produce Specific Phage-Neutralizing Antibody. **R. G. KRUEGER AND A. C. WATKINS** ........................................... 1415

Comparative *in vitro* Studies on Effector Cell Diversity in the Cellular Immune Response to Murine Sarcoma Virus (MSV)-Induced Tumors in Mice. **FERNANDO PLATA, ELISABETH GOMARD, JEAN CLAUDE LECLERC, AND JEAN-PAUL LEVY** ........................................... 1477

Effect of Acute or Chronic Infection with Lactic Dehydrogenase Virus (LDV) on the Susceptibility of Mice to Plasmacytoma MOPC-315. **MARIA C. MICHAELIDES AND SONDRA SCHLESINGER** ........................................... 1560

#### VIRAL AND MICROBIAL IMMUNOLOGY

Immuneocyte Response to a Purified Bacterial Toxin (Choleragen) and Toxoid: Cytokinetincs, Immunoglobulin Class, and Specificity. **JOHN R. KATELY, SUSAN F. LYONS, AND HERMAN FREIDMAN** ........................................... 1452

The Characteristics of a Circulating Antigen in Schistosomiasis. **THEODORE E. NASH, BENJAMIN PRESCOTT, AND FRANKLIN A. NEVA** ........................................... 1500

Effect of Polyadenine: Polyuridine on Brucellosis in Conventional and Congenitally Athymic Mice. **CHRISTINA CHEERS AND ROBERT E. CONE** ........................................... 1535

#### COMMUNICATIONS

Discontinuous Antibody Secretion during the Secondary Response to Sheep Erythrocytes *in vitro*. **DAVID W. THOMAS** ........................................... 1602

Production of \(\alpha_1\) and \(\alpha_2\) Immunoglobulin Heavy Chains during Fetal Life. **LARS L. CEDERQUIST AND STEPHEN D. LITWIN** ........................................... 1605

Development of Regenic Antibody-Forming Cells in the Spleen and Bone Marrow of Immunized Mice. **LEON S. KIND AND WILLIAM F. MALLOY** ........................................... 1609

*In vitro* Reconstitution of T Cell-Deficient Mouse Spleen Cells by Co-Cultivation with Human Lymphocytes. **JOHN J. FARRAR** ........................................... 1613

#### ANNOUNCEMENTS

 .................................................................................. 1617