This information is current as of July 28, 2017.

**Subscription**
Information about subscribing to *The Journal of Immunology* is online at:
http://jimmunol.org/subscription

**Permissions**
Submit copyright permission requests at:
http://www.aai.org/About/Publications/JI/copyright.html

**Email Alerts**
Receive free email-alerts when new articles cite this article. Sign up at:
http://jimmunol.org/alerts
## Contents

### COMMUNICATIONS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>P. Estess, F. Otani, E. C. B. Milner, J. D. Capra, and P. W. Tucker</td>
<td>2319</td>
</tr>
<tr>
<td>Immunologic Studies of Aging. VIII. No Change in Cyclic Nucleotide Concentration in T Lymphocytes from Old Humans Despite Their Depressed Proliferative Response</td>
<td>2323</td>
</tr>
<tr>
<td>D. M. Zodda and S. M. Phillips</td>
<td>2326</td>
</tr>
<tr>
<td>Monoclonal Antibody-Mediated Protection against Schistosoma mansoni Infection in Mice</td>
<td>2329</td>
</tr>
<tr>
<td>R. G. Hoover, B. K. Dieckgraefe, J. Lake, J. D. Kemp, and R. G. Lynch</td>
<td>2332</td>
</tr>
<tr>
<td>Lymphocyte Surface Membrane Immunoglobulin in Myeloma. III. IgA Plasmacytomas Induce Large Numbers of Circulating, Adult-Thymectomy-Sensitive, ( \theta^+ ), Lyt-1^-2^- Lymphocytes with IgA-Fc Receptors</td>
<td>2335</td>
</tr>
<tr>
<td>H. R. Smith, D. R. Green, E. S. Raveche, P. A. Smathers, R. K. Gershon, and A. D. Steinberg</td>
<td>2338</td>
</tr>
<tr>
<td>Studies of the Induction of Anti-DNA in Normal Mice</td>
<td>2339</td>
</tr>
<tr>
<td>K-I. Yamamoto and S. Migita</td>
<td>2335</td>
</tr>
<tr>
<td>Evidence for Polymeric Assembly of C9 within the Membrane Attack Complex of Complement</td>
<td>2341</td>
</tr>
</tbody>
</table>

### CELLULAR IMMUNOLOGY

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alloreactive Cloned T Cell Lines. VI. Multiple Lymphokine Activities Secreted by Helper and Cytolytic Cloned T Lymphocytes</td>
<td>2347</td>
</tr>
<tr>
<td>L-M. Ching and R. G. Miller</td>
<td>2352</td>
</tr>
<tr>
<td>Development of Cytotoxic T Lymphocyte Precursor Cells in T Cell Colonies Grown in Vitro</td>
<td>2357</td>
</tr>
<tr>
<td>T. B. Bradley and B. Bonavida</td>
<td>2360</td>
</tr>
<tr>
<td>Mechanism of Cell-Mediated Cytotoxicity at the Single Cell Level. V. The Importance of Target Cell Structures in Cytotoxic T Lymphocyte-Mediated Antigen Nonspecific Lectin-Dependent Cellular Cytotoxicity</td>
<td>2368</td>
</tr>
<tr>
<td>H. M. Johnson, D. L. Archer, and B. A. Torres</td>
<td>2373</td>
</tr>
<tr>
<td>Cyclic GMP as the Second Messenger in Helper Cell Requirement for ( \gamma )-Interferon Production</td>
<td>2375</td>
</tr>
<tr>
<td>G. A. Dos Reis and E. M. Shevach</td>
<td>2379</td>
</tr>
<tr>
<td>Effect of Cyclosporin A on T Cell Function in Vitro: The Mechanism of Suppression of T Cell Proliferation Depends on the Nature of the T Cell Stimulus As Well As the Differentiation State of the Responding T Cell</td>
<td>2382</td>
</tr>
<tr>
<td>D. C. Flyer, R. W. Anderson, and S. S. Tevethia</td>
<td>2385</td>
</tr>
<tr>
<td>Lyt Phenotype of H-2(^b) CTL Effectors and Precursors Specific for the SV40 Transplantation Rejection Antigen</td>
<td>2389</td>
</tr>
<tr>
<td>M. A. Thompson and M. P. Cancro</td>
<td>2393</td>
</tr>
<tr>
<td>Dynamics of B Cell Repertoire Formation: Normal Patterns of Clonal Turnover Are Altered by Ligand Interaction</td>
<td>2396</td>
</tr>
<tr>
<td>A. J. Norin and M. K. Short</td>
<td>2397</td>
</tr>
<tr>
<td>Replicative Properties of Lipopolysaccharide-Induced Murine B Lymphocytes: Detection of Three Different Responses to Mitogenic Restimulation</td>
<td>2399</td>
</tr>
<tr>
<td>R. W. Chesnut, S. M. Colon, and H. M. Grey</td>
<td>2402</td>
</tr>
<tr>
<td>Requirements for the Processing of Antigens by Antigen-Presenting B Cells. I. Functional Comparison of B Cell Tumors and Macrophages</td>
<td>2406</td>
</tr>
<tr>
<td>H. M. Grey, S. M. Colon, and R. W. Chesnut</td>
<td>2389</td>
</tr>
<tr>
<td>Requirements for the Processing of Antigen by Antigen-Presenting B Cells. II. Biochemical Comparison of the Fate of Antigen in B Cell Tumors and Macrophages</td>
<td>2409</td>
</tr>
<tr>
<td>N. L. Letvin, R. S. Kauffman, and R. Finberg</td>
<td>2396</td>
</tr>
<tr>
<td>An Adherent Cell Lyses Virus-Infected Targets: Characterization, Activation, and Fine Specificity of the Cytotoxic Cell</td>
<td>2402</td>
</tr>
<tr>
<td>P. S. Steeg, H. M. Johnson, and J. J. Oppenheim</td>
<td>2407</td>
</tr>
<tr>
<td>Regulation of Murine Macrophage la Antigen Expression by an Immune Interferon-Like Lymphokine: Inhibitory Effect of Endotoxin</td>
<td>2409</td>
</tr>
<tr>
<td>S. J. Brown, F. M. Graziano, and P. W. Askenase</td>
<td>2382</td>
</tr>
<tr>
<td>Immune Serum Transfer of Cutaneous Basophil-Associated Resistance to Ticks: Mediation by 7S( \text{IgG1} ) Antibodies</td>
<td>2409</td>
</tr>
</tbody>
</table>

Continued on page 4
Continued from page 3

A. Fontana, F. Kristensen, R. Dubs, D. Gemsa, and E. Weber 2413 Production of Prostaglandin E and an Interleukin-1 Like Factor by Cultured Astrocytes and C6 Glioma Cells

E. Pure, P. C. Isakson, V. Paetkau, B. Caplan, E. S. Vitetta, and P. H. Krammer 2420 Interleukin-2 Does Not Induce Murine B Cells to Secret Ig

M-P. Chang, T. Makinodan, W. J. Peterson, and B. L. Strehler 2426 Role of T Cells and Adherent Cells in Age-Related Decline in Murine Interleukin 2 Production

J. N. Ihle, J. Keller, L. Henderson, F. Klein, and E. Palaszynski 2431 Procedures for the Purification of Interleukin 3 to Homogeneity


K. Dorshkind and R. A. Phillips 2444 Maturational State of Lymphoid Cells in Long-Term Bone Marrow Cultures

S. M. Friedman, G. S. Thompson, and M. A. Principato 2451 Allospecific Human T Cell Lines Which Mediate HLA-DR Restricted Helper Activity

G. Fabio, R. Scorza-Smeraldi, P. Bonara, M. G. Sabbadini Villa, M. Vanoli, F. Calabi, and C. Zanussi 2458 MLR-Specific Suppressor T Lymphocytes in Man. II. Functional and Membrane Characteristics of a Specific MLR Suppressor Subpopulation

S. Chouaib and D. Fradelizi 2463 The Mechanism of Inhibition of Human IL 2 Production

A. B. Tilden and C. M. Balch 2469 A Comparison of PGE2 Effects on Human Suppressor Cell Function and on Interleukin 2 Function

T. Miyawaki, A. Yachie, N. Uwadana, S. Ohzeki, T. Nagaoki, and N. Taniguchi 2474 Functional Significance of Tac Antigen Expressed on Activated Human T Lymphocytes: Tac Antigen Interacts with T Cell Growth Factor in Cellular Proliferation

R. Palacios 2479 Cloned Lines of Interleukin 2 Producer Human T Lymphocytes

A. Muruguchi, T. Kasahara, J. J. Oppenheim, and A. S. Fauci 2486 B Cell Growth Factor and T Cell Growth Factor Produced by Mitogen-Stimulated Normal Human Peripheral Blood T Lymphocytes Are Distinct Molecules

T. Kuritani and M. D. Cooper 2490 Human B Cell Differentiation. III. Enhancing Effect of Monoclonal Anti-immunoglobulin D Antibody on Pokeweed Mitogen-induced Plasma Cell Differentiation

C. Zabala and P. E. Lipsky 2496 Immunomodulatory Effects of Bacterial Lipopolysaccharide on Human B Lymphocyte Activation in Vitro


M. P. N. Nair and S. A. Schwartz 2511 Suppression of Human Natural and Antibody-Dependent Cytotoxicity by Soluble Factors from Unstimulated Normal Lymphocytes

K. Nishiya and D. A. Horwitz 2519 Contrasting Effects of Lactoferrin on Human Lymphocyte and Monocyte Natural Killer Activity and Antibody-Dependent Cell-Mediated Cytotoxicity

T. Morito, K. Kano and F. Milgrom 2524 Hanganutziu-Deicher Antibodies in Infectious Mononucleosis and Other Diseases

C. Boitard, L.-M. Chatenoud, and M. Debray-Sachs 2529 In Vitro Inhibition of Pancreatic B Cell Function by Lymphocytes from Diabetics with Associated Autoimmune Diseases: A T Cell Phenomenon


T. C. Chanh, C-L. H. Chen, and M. D. Cooper 2541 Mouse Monoclonal Antibodies to Chicken Vh Idiotype Determinants Reactivity with B and T Cells

K. H. Roux and D. W. Metzger 2548 Immunoelectron Microscopic Localization of Idiotypes and Allotypes on Immunoglobulin Molecules

J. Rocca-Serra, J-C. Mazie, D. Moine, L. Leclercq, G. Somme, J. Theze, and M. Fougerau 2554 The Limited Diversity of the Mouse Chains Anti-GAT Repertoire Does Not Seem to be Noticeably Amplified upon Class Switch

Continued on page 5
Continued from page 4

G. E. Sonenshein and J. McCormack 2559 Glycosylation and Secretion of an Altered Immunoglobulin Heavy Chain in Mouse Myeloma MOPC 315
C. E. Machamer and P. Cresswell 2564 Biosynthesis and Glycosylation of the Invariant Chain Associated with HLA-DR Antigens
H. M. Johnson, M. P. Langford, B. Lakchaura, T. S. Chan, and G. J. Stanton 2570 Neutralization of Native Human Gamma Interferon (HuIFNγ) by Antibodies to a Synthetic Peptide Encoded by the 5′ End of HuIFNγ cDNA
R. G. Liteplo, A. R. Shaw and M. Schlamowitz 2573 Partial Purification of the Fetal Rabbit Yolk Sac Membrane Fc Receptor
C-L. H. Chen, J. E. Lehmyer, and M. D. Cooper 2580 Evidence for an IgD Homologue on Chicken Lymphocytes
R. Palacios and O. Martinez-Maza 2586 Is the E Receptor on Human T Lymphocytes a "Negative Signal Receptor"?
U. R. Nilsson and B. Nilsson 2594 Analogous Antigenic Alterations Elicited in C3 by Physiologic Binding and by Denaturation in the Presence of Sodium Dodecylsulfate
Z. Fishelson and H. J. Müller-Eberhard 2603 C3 Convertase of Human Complement: Enhanced Formation and Stability of the Enzyme Generated with Nickel Instead of Magnesium

IMMUNOGENETICS AND TRANSPLANTATION

Z. A. Nagy, C. N. Baxevanis, and J. Klein 2608 Haplotype-Specific Suppression of T Cell Response to Lactate Dehydrogenase B in (Responder × Nonresponder)F1 Mice
H. C. Morse III, W. F. Davidson, R. A. Yetter, E. D. Murphy, J. B. Roth, and R. L. Coffman 2612 Abnormalities Induced by the Mutant Gene Ipr: Expansion of a Unique Lymphocyte Subset
P. J. Conrad, E. A. Lerner, D. B. Murphy, P. P. Jones, and C. A. Janeway, Jr. 2616 Differential Expression of la Glycoprotein Complexes in F1 Hybrid Mice Detected with Alloreactive Cloned T Cell Lines
V. H. Engelhard and C. Benjamin 2621 Isolation and Characterization of Monoclonal Mouse Cytotoxic T Lymphocytes with Specificity for HLA-A,B or -DR Alloantigens
J. W. Goding and F.-W. Shen 2636 Structure of the Murine Plasma Cell Alloantigen PC-1: Comparison with the Receptor for Transferrin
H. Goding, P. G. Foiles, and M. B. Rittenberg 2641 Partial Reconstitution of TNP-Ficoll Responses and IgG3 Expression in XID Mice Undergoing Graft-vs-Host Reaction

IMMUNOPATHOLOGY

G. H. Downie, O. A. Roholt, L. Jennings, M. Blau, J. R. Brentjens, and G. A. Andres 2647 Experimental Anti-alveolar Basement Membrane Antibody-Mediated Pneumonitis. II. Role of Endothelial Damage and Repair, Induction of Autologous Phase, and Kinetics of Antibody Deposition in Lewis Rats
M. C. Liu, K. Ishizaka, and M. Plaut 2653 T Lymphocyte Responses of Murine Lung: Immunization with Alloantigen Induces Accumulation of Cytotoxic and Other T Lymphocytes in the Lung
D. E. Tretham and C. E. Brinckerhoff 2668 Augmentation of Collagen Arthritis by Synthetic Anallogues of Retinoic Acid
D. E. Harrison, J. R. Archer, and C. M. Astle 2673 The Effect of Hypophysectomy on Thymic Aging in Mice
J. K. Czop and K. F. Austen 2678 Augmentation of Phagocytosis by a Specific Fibronectin Fragment That Links Particulate Activators to the Fibronectin Adherence Receptor of Human Monocytes
P. L. Cohen and R. A. Eisenberg 2682 Anti-Sm Autoantibodies in MRL Mice: In Vitro Detection and Generation of Antibody-Forming Cells
R. S. Beach, M. Eric Gershwin, and L. S. Hurley 2686 Nutritional Factors and Autoimmunity. III. Zinc Deprivation versus Restricted Food Intake in MLR/1 Mice—The Distinction between Interacting Dietary Influences
M. E. Kagnoff, R. K. Austin, H. C. L. Johnson, J. E. Bernardin, M. D. Dietler, and D. D. Kasarda 2693 Celiac Sprue: Correlation with Murine T Cell Responses to Wheat Gliadin Components

Continued on page 6
Continued from page 5

T. Nitta and T. Suzuki 2708 Biochemical Signals Transmitted by Fcγ Receptors: Triggering Mechanisms of the Increased Synthesis of Adenosine-3',5'-Cyclic Monophosphate Mediated by FcγRI and FcγRII-Receptors of a Murine Macrophage-Like Cell Line (P388D1)

M. G. Goodman and W. O. Weigle 2715 Bromination of Guanosine and Cyclic GMP Confers Resistance to Metabolic Processing by B Cells


R. A. Clark 2725 Chemotactic Factors Trigger Their Own Oxidative Inactivation by Human Neutrophils

J. N. Whitaker 2729 The Antigenic Reactivity of Small Fragments Derived from Human Myelin Basic Protein Peptide 43-68

---

**MICROBIAL IMMUNOLOGY**

M. E. Hemler and J. L. Strominger 2734 Monoclonal Antibodies Reacting with Immunogenic Mycoplasma Proteins Present in Human Hematopoietic Cell Lines

J-M. Grzych, M. Capron, H. Bazin, and A. Capron 2739 In Vitro and in Vivo Effector Function of Rat IgG2a Monoclonal Anti-S. mansoni Antibodies

F. Levi-Schaffer, M. D. Schryer, and M. Smolarsky 2744 The Resistance of Schistosomula of Schistosoma mansoni to Antibodies and Complement in Vitro Does Not Correlate with the Binding of Antibodies to the Surface of the Parasite

K. S. Garb, A. B. Stavitsky, G. R. Olds, J. W. Tracy, and A. A. F. Mahmoud 2752 Immune Regulation in Murine Schistosomiasis Japonica: Inhibition of in Vitro Antigen- and Mitogen-Induced Cellular Responses by Splenocyte Culture Supernatants and by Purified Fractions from Serum of Chronically Infected Mice

J. J. Wirth and F. Kierszenbaum 2759 Inhibitory Action of Elevated Levels of Adenosine-3',5' Cyclic Monophosphate on Phagocytosis: Effects on Macrophage-Trypanosoma cruzi Interaction

J. H. Mathews and J. T. Roehrig 2763 Determination of the Protective Epitopes on the Glycoproteins of Venezuelan Equine Encephalomyelitis Virus by Passive Transfer of Monoclonal Antibodies

B. P. Alberto, L. F. Callahan, and T. Pincus 2768 Evidence That Retrovirus Expression in Mouse Spleen Cells Results from B Cell Differentiation

M. Mondelli, G. M. Vergani, A. Alberti, D. Vergani, B. Portmann, A. L. W. F. Eddleston, and R. Williams 2773 Specificity of T Lymphocyte Cytotoxicity to Autologous Hepatocytes in Chronic Hepatitis B Virus Infection: Evidence that T Cells Are Directed against HBV Core Antigen Expressed on Hepatocytes

C. Orvell and M. Grandien 2779 The Effects of Monoclonal Antibodies on Biologic Activities of Structural Proteins of Sendai Virus

C. A. Biron and R. M. Welsh 2788 Blastogenesis of Natural Killer Cells during Vital Infection in Vivo

---

**TUMOR IMMUNOLOGY**

A. S. Perelson and G. I. Bell 2796 Delivery of Lethal Hits by Cytotoxic T Lymphocytes in Multicellular Conjugates Occurs Sequentially but at Random Times

M. S. Meltzer, W. R. Benjamin, and J. J. Farrar 2802 Macrophage Activation for Tumor Cytotoxicity: Induction of Macrophage Tumoricidal Activity by Lymphokines from EL-4, A Continuous T Cell Line

D. J. Ruiter, A. K. Bhan, T. J. Harrist, A. J. Sober, and M. C. Mihm, Jr. 2808 Major Histocompatibility Antigens and Mononuclear Inflammatory Infiltrate in Benign Nevomelanocytic Proliferations and Malignant Melanoma


Y. R. Freund and P. B. Blair 2826 Depression of Natural Killer Activity and Mitogen Responsiveness in Mice Treated with Pristane

J. Kornbluth, N. Flomenberg, and B. Dupont 2831 Cell Surface Phenotype of a Cloned Line of Human Natural Killer Cells

Announcements 2838
Author Index 2841
Ad Hoc Reviewers 2843
Author Index to Volume 125 2846
Subject Index to Volume 125 2852