This information is current as of April 14, 2017.

<table>
<thead>
<tr>
<th>Subscription</th>
<th>Information about subscribing to <em>The Journal of Immunology</em> is online at: <a href="http://jimmunol.org/subscription">http://jimmunol.org/subscription</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Permissions</td>
<td>Submit copyright permission requests at: <a href="http://www.aai.org/About/Publications/JI/copyright.html">http://www.aai.org/About/Publications/JI/copyright.html</a></td>
</tr>
<tr>
<td>Email Alerts</td>
<td>Receive free email-alerts when new articles cite this article. Sign up at: <a href="http://jimmunol.org/alerts">http://jimmunol.org/alerts</a></td>
</tr>
</tbody>
</table>
## Contents

### OPINION


1 Antigen Presentation: Comments on Its Regulation and Mechanism

### COMMUNICATIONS

**S. Takahashi, M. Takahashi, T. Kaidoh, S. Natsumu-Sakai, and T. Takahashi**

6 Genetic Mapping of Mouse C4-BP Locus to the H-2D-Qa Interval

**D. R. Kaplan, T. J. Henkel, V. Braciale, and T. J. Braciale**

9 Mycoplasma Infection of Cell Cultures: Thymidine Incorporation of Culture Supernatants as a Screening Test

**N. Koch and A. W. Harris**

12 Differential Expression of the Invariant Chain in Mouse Tumor Cells: Relationship to B Lymphoid Development


16 Distribution of IgA1, IgA2, and J Chain-containing Cells in Human Tissues

### CELLULAR IMMUNOLOGY

**M. F. Brown, M. Van, S. L. Abramscon, E. J. Fox, and R. R. Rich**

19 Cellular Requirements for Induction of Human Primary Proliferative Responses to Trinitrophenyl-Modified Cells

**R. Scollay, W-F Chen, and K. Shortman**

25 The Functional Capabilities of Cells Leaving the Thymus

**S. Lipkowitz, W. C. Greene, A. L. Rubin, A. Novogrodsky, and K. H. Stenzel**

31 Expression of Receptors for Interleukin 2: Role in the Commitment of T Lymphocytes to Proliferate

**J. J. Cohen and R. C. Duke**

38 Glucocorticoid Activation of a Calcium-dependent Endonuclease in Thymocyte Nuclei Leads to Cell Death

**P. F. Robbins, J. W. Thomas, P. E. Jensen, and J. A. Kapp**

43 Insulin-Specific Tolerance Induction. I. Abrogation of Helper T Cell Activity Is Controlled by H-2-linked Ir Genes

**N. Isakov and F. H. Bach**

50 High Frequency of Splenic Anti-Class I Cytotoxic T Lymphocyte Precursors Correlates with In Vivo Rejection of K/D Region Disparate Thyroid and Islet Grafts in Mice

**Y. Takai, T. Mizuochi, H. Fijiwara, and T. Hamaoka**

57 Effects of Hapten Epitope Structure and Hapten-Self Conjugation Pattern on T Cell Specificity and Ir Gene Control in Hapten-Self Cytotoxic and Helper T Cell Responses

**R. A. Miller**

63 Age-Associated Decline in Precursor Frequency for Different T Cell-Mediated Reactions, with Preservation of Helper or Cytotoxic Effect per Precursor Cell

**M. C. Correa-Freire, G. A. Powers, and V. H. Engelhard**

69 Introduction of HLA-A/B Antigens into Lymphoid Cell Membranes by Cell-Liposome Fusion

**V. H. Engelhard, G. A. Powers, L. C. Moore, M. J. Holterman, and M. C. Correa-Freire**

76 Cytotoxic T Lymphocyte Recognition of HLA-A/B Antigens Introduced Into EL4 Cells by Cell-Liposome Fusion

*Continued on page 4*
Continued from page 3

R. Bialick, R. Gill, G. Berke, and W. R. Clark
H. Nakatsu, I. Ohno, M. Kim, K. Okumura, and T. Tada
J. W. Cowens, H. Ozer, M. J. Ehrke, W. R. Greco, M. Colvin, and E. Mihič
A. Oseroff, S. Okada, and S. Strober
D. Bovbjerg, R. Ader, and N. Cohen
B. A. Pollok and J. F. Kearney
T. Hamano and R. Asofsky
N. Hashimoto, K. Takatsu, Y. Masuho, K. Kishida, T. Hara, and T. Hamaoka
A. K. Roska, A. R. Johnson, P. E. Lipsky
A. Schmidt, J. R. Ortaldo, and R. B. Herberman

Modulation of Cell-Mediated Cytotoxicity Function after Alteration of Fatty Acid Composition In Vitro
Establishment and Functional Analysis of a Cloned, Antigen-specific Suppressor Effector T Cell Line
Inhibition of the Development of Suppressor Cells in Culture by 4-Hydroperoxycyclophosphamide
Natural Suppressor (NS) Cells Found in the Spleen of Neonatal Mice and Adult Mice Given Total Lymphoid Irradiation (TLI) Express the Null Surface Phenotype
Acquisition and Extinction of Conditioned Suppression of a Graft-vs-Host Response in the Rat
Identification and Characterization of an Apparent Germline Set of Auto-Anti-Idiotypic Regulatory B Lymphocytes
Functional Studies on B Cell Hybridomas with B Cell Surface Antigens. IV. Direct Effects of Cytochalasin B on Differentiation
Selective Elimination of A B Cell Subset Having Acceptor Site(s) for T Cell-replacing Factor (TRF) with Biotinylated Antibody to the Acceptor Site(s) and Avidin-ricin A-Chain Conjugate
Immuneologic Function of Endothelial Cells: Guinea Pig Aortic Endothelial Cells Support Mitogen-Induced T Lymphocyte Activation, but do not Function as Antigen-Presenting Cells
Inhibition of Human Natural Killer Cell Reactivity by Exogenous Adenosine 5'-Triphosphate

CLINICAL IMMUNOLOGY - IMMUNOPATHOLOGY

L. L. Lanier and M. R. Loken
T. R. Cupps, L. C. Edgar, C. A. Thomas, and A. S. Fauci
A. Muraguchi, J. H. Kehrl, J. L. Butler, and A. S. Fauci
G. B. Toews, W. C. Vial, M. M. Duan, P. Guzzetta, G. Nunez, P. Stastny, and M. F. Lipscomb
B. H. Hahn and F. M. Ebling
P. A. Drew, G. K. Kirossoff, A. Ferrante, and R. C. Cohen
A. L. Cunningham and T. C. Merigan

Human Lymphocyte Subpopulations Identified by Using Three-Color Immunofluorescence and Flow Cytometry Analysis: Correlation of Leu-2, Leu-3, Leu-7, Leu-8, and Leu-11 Cell Surface Antigen Expression
MHC Determinants of Response to Rh Immunization
Effect of Activated Lymphocytes on the Regulation of Hematopoiesis: Suppression of In Vitro Granulopoiesis by OKT8' Ia' T Cells Induced by Alloantigen Stimulation
Alloantibodies to PHA-Activated Lymphocytes Detect Human Qa-like Antigens
Multiple Mechanisms of B Cell Immunoregulation in Man after Administration of In Vivo Corticosteroids
Sequential Requirements for Cell Cycle Progression of Resting Human B Cells After Activation by Anti-IG
The Accessory Cell Function of Human Alveolar Macrophages in Specific T Cell Proliferation
Suppression of Murine Lupus Nephritis by Administration of an Anti-Idiotype Antibody to Anti-DNA
Alterations in Immunoglobulin Synthesis by Peripheral Blood Mononuclear Cells from Splenectomized Patients with and without Splenic Regrowth
Leu-3'T Cells Produce γ-Interferon in Patients with Recurrent Herpes Labialis
Prevention of Granuloma Development in the Mouse by Using T Cell Hybridoma Products

Continued on page 5
### CYTOKINES • MEDIATORS • REGULATORY MOLECULES

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. L. Sidman, C. J. Paige, and M. H. Schreier</td>
<td>209</td>
</tr>
<tr>
<td>J. G. Giri, P. W. Kincade, and S. B. Mizel</td>
<td>223</td>
</tr>
<tr>
<td>T. Hirano, T. Teranishi, and K. Onoue</td>
<td>229</td>
</tr>
<tr>
<td>T. Lindsten, C. B. Thompson, F. D. Finkelman, B. Andersson, and I. Scher</td>
<td>235</td>
</tr>
<tr>
<td>V. E. Kelley, W. Fiers, and T. B. Strom</td>
<td>240</td>
</tr>
<tr>
<td>H. M. Johnson, B. A. Torres, E. M. Smith, L. D. Dion, and J. E. Blalock</td>
<td>246</td>
</tr>
<tr>
<td>O. Martinez-Maza, U. Andersson, J. Andersson, S. Britton, and M. De Ley</td>
<td>251</td>
</tr>
<tr>
<td>A. A. Gottlieb, J. L. Farmer, C. T. Matzura, R. B. Hester, and J. S. Rosenberg</td>
<td>256</td>
</tr>
<tr>
<td>R. P. Schleimer, A. Jacques, H. S. Shin, L. M. Lichtenstein, and M. Plaut</td>
<td>266</td>
</tr>
<tr>
<td>K. L. McCoy, K. Nielsen, and J. Clagett</td>
<td>272</td>
</tr>
</tbody>
</table>

### IMMUNOCHEMISTRY

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Tosi, N. Tanigaki, R. Sorrentino, D. Centis, and G. B. Ferrara</td>
<td>277</td>
</tr>
<tr>
<td>R. J. Ziccardi</td>
<td>283</td>
</tr>
<tr>
<td>H. Quill and B. D. Schwartz</td>
<td>289</td>
</tr>
<tr>
<td>H. Quill and B. D. Schwartz</td>
<td>297</td>
</tr>
<tr>
<td>J. A. Sawicki and P. J. Wettstein</td>
<td>310</td>
</tr>
<tr>
<td>P. M. Allen, D. I. Beller, J. Braun, and E. R. Unamue</td>
<td>323</td>
</tr>
<tr>
<td>J. P. McKeever, C. Baum, and J. M. Davie</td>
<td>332</td>
</tr>
<tr>
<td>Y. Yamamoto, H. Mitsui, and Y. Nishikawa</td>
<td>340</td>
</tr>
<tr>
<td>S. N. Vogel, G. S. Madonna, L. M. Wahl, and P. D. Rick</td>
<td>347</td>
</tr>
<tr>
<td>G. J. Spangrude, B. A. Braaten, and R. A. Daynes</td>
<td>354</td>
</tr>
</tbody>
</table>

Continued from page 4

Continued on page 6
Selective Transport of Serum-Derived IgA into Mucosal Secretions

A Quantitative Analysis of C3 Binding to O-Antigen Capsule, Lipopolysaccharide, and Outer Membrane Protein of E. coli 011B4

Complement Activation Via the Alternative Pathway by Purified Salmonella Lipopolysaccharide Is Affected by its Structure but Not by its O-Antigen Length

Effect of Erythrocyte Membrane Modulation by Lysolecithin on Complement-mediated Lysis

Use of Monoclonal Antibodies against Factor H to Investigate the Role of a Membrane-associated Protein Antigenically Related to H in C3b-Receptor Function

An Antigen-Activated DFP-Inhibitable Enzyme Controls Basophil Desensitization

Presence of an Antigenic Determinant Common to Rat IgE-Potentiating Factor, IgE-Suppressive Factor, and Fce Receptors on T and B Lymphocytes

Leukotrienes: Positive Signals for Regulation of γ-Interferon Production

Interaction of Vasoactive Intestinal Peptide with Mouse Lymphocytes: Specific Binding and the Modulation of Mitogen Responses

Oxidative Killing of the Intraerythrocytic Malaria Parasite Plasmodium yoelii by Activated Macrophages

In Vitro and In Vivo Studies on Protective and Inhibitory Antibodies against Plasmodium falciparum in the Saimiri Monkey

Monoclonal Antibodies to a 140,000-m.w. Protein on Plasmodium knowlesi Merozoites Inhibit Their Invasion of Rhesus Erythrocytes

Identification of Stage-Specific Sporozoite Antigens of Toxoplasma gondii by Monoclonal Antibodies

Prophylactic Immunization Against Experimental Leishmaniasis: II. Further Characterization of the Protective Immunity Against Fatal Leishmania Tropica Infection Induced by Irradiated Promastigotes

Prophylactic Immunization Against Experimental Leishmaniasis: III. Protection Against Fatal Leishmania Tropica Infection Induced by Irradiated Promastigotes Involves Lyt-1'2- T Cells That Do Not Mediate Cutaneous DTH

Role of IgE Receptors in Effector Function of Human Eosinophils

Generation of Memory Cell-Mediated Immune Responses after Secondary Infection of Mice with Pichinde Virus

Recognition of Herpes Simplex Virus Antigens on the Surface of Mouse Cells of the H-2b Haplotype by Virus-specific Cytotoxic T Lymphocytes

The Cytolytic T Lymphocyte Response to the Murine Cytomegalovirus. I. Distinct Maturation Stages of Cytolytic T Lymphocytes Constitute the Cellular Immune Response during Acute Infection of Mice with the Murine Cytomegalovirus
### MOLECULAR GENETICS

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. E. Bernstein, C. B. Alexander, E. P. Reddy, and R. C. Mage</td>
<td>490</td>
<td>Complete Sequence of a Cloned cDNA Encoding Rabbit Secreted (\mu)-Chain of VHa2 Allotype: Comparisons with VHal and Membranc (\kappa) Sequences</td>
</tr>
<tr>
<td>M. L. Satz and D. S. Singer</td>
<td>496</td>
<td>Effect of Mouse Interferon on the Expression of a Porcine Major Histocompatibility Gene Introduced into Mouse L Cells</td>
</tr>
<tr>
<td>L. Hendershot and D. Levitt</td>
<td>502</td>
<td>Analysis of Surface (\mu)-Chain Expression in Human Lymphoblastoid Cell Lines that do not Produce Light Chains</td>
</tr>
</tbody>
</table>

### TUMOR IMMUNOLOGY

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. E. de Vries and H. Spits</td>
<td>510</td>
<td>Cloned Human Cytotoxic T Lymphocyte (CTL) Lines Reactive with Autologous Melanoma Cells. I. In Vitro Generation, Isolation, and Analysis to Phenotype and Specificity</td>
</tr>
<tr>
<td>A. F. Tilkin, E. Gomard, B. Begue, and J.-P. Levy</td>
<td>520</td>
<td>T Cells from Naive Mice Suppress the In Vitro Cytotoxic Response against Endogenous Gross Virus-Induced Tumor Cells</td>
</tr>
<tr>
<td>G. Forni and M. Giovarelli</td>
<td>527</td>
<td>In Vitro Reeducated T Helper Cells from Sarcoma-Bearing Mice Inhibit Sarcoma Growth In Vivo</td>
</tr>
</tbody>
</table>

Announcements | 548  |
Errata         | 553  |
Author Index   | 554  |