# Contents

## K. F. Austen
- Presidential Address
  - Page 793

## OPINION

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. J. North</td>
<td>806</td>
</tr>
<tr>
<td>M. L. Karnovsky and J. K. Lazdins</td>
<td>809</td>
</tr>
<tr>
<td>Z. A. Cohn</td>
<td>813</td>
</tr>
</tbody>
</table>

- The Concept of the Activated Macrophage
- Biochemical Criteria for Activated Macrophages
- The Activation of Mononuclear Phagocytes: Fact, Fancy, and Future

## CELLULAR IMMUNOLOGY

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. I. E. Smith and L. Hammarström</td>
<td>823</td>
</tr>
<tr>
<td>R. B. Markham, P. W. Stashak, B. Prescott, D. F. Amsbaugh, and P. J. Baker</td>
<td>829</td>
</tr>
<tr>
<td>K. H. Stenzel, R. Schwartz, A. L. Rubin, and A. Novogrodsky</td>
<td>863</td>
</tr>
<tr>
<td>Y. Koide and M. Takasugi</td>
<td>872</td>
</tr>
<tr>
<td>T. J. Higgins, A. P. Sabatino, H. G. Remold, and J. R. David</td>
<td>880</td>
</tr>
<tr>
<td>T. V. Tittle and M. B. Rittenberg</td>
<td>936</td>
</tr>
<tr>
<td>S. M. Wahl, L. M. Wahl, and J. B. McCarthy</td>
<td>942</td>
</tr>
<tr>
<td>A. B. Wagshal and B. H. Waksman</td>
<td>966</td>
</tr>
<tr>
<td>P. Cohen, M. Ziff, and E. S. Vitetta</td>
<td>973</td>
</tr>
<tr>
<td>W. J. Pichler and S. Broder</td>
<td>1075</td>
</tr>
<tr>
<td>W. Knapp and G. Baumgartner</td>
<td>1145</td>
</tr>
<tr>
<td>J. Wybran, A. Govaerts, and T. Appleboom</td>
<td>1145</td>
</tr>
<tr>
<td>H. G. Durkin, J. M. Carboni, and B. H. Waksman</td>
<td>1152</td>
</tr>
<tr>
<td>D. W. Thomas and E. M. Shevach</td>
<td>1157</td>
</tr>
<tr>
<td>D. W. Thomas and E. M. Shevach</td>
<td>1157</td>
</tr>
<tr>
<td>S. J. Galli, R. B. Colvin, E. Verderber, A. S. Galli, R. Monohan, A. M. Dvorak, and H. F. Dvorak</td>
<td>1199</td>
</tr>
<tr>
<td>C. Sorg and C. L. Geczy</td>
<td>1199</td>
</tr>
</tbody>
</table>

- Sodium Polyanethole Sulfonate: A New Macrophage-Dependent Polymyxin-Inhibitable, Polyclonal B Cell Activator
- Selective Sensitivity to Hydrocortisone of Regulatory Functions That Determine the Magnitude of the Antibody Response to Type III Pneumococcal Polysaccharide
- Potentiation of Lymphocyte Activation by Colchicine
- Augmentation of Human Natural Cell-Mediated Cytotoxicity by A Soluble Factor. I. Production of N-Cell-Activating Factor (NAF)
- Selective Role of Macrophage Glycolipids as Receptors for Migration Inhibitory Factor (MIF)
- Distinct Subpopulations of IgG Memory B Cells Respond to Different Molecular Forms of the Same Hapten
- Lymphocyte-Mediated Activation of Fibroblast Proliferation and Collagen Production
- Regulatory Substances Produced by Lymphocytes. VIII. Cell Cycle Specificity of Inhibitor of DNA Synthesis (IDS) Action in Lymphocytes
- Characterization of a B Cell Defect in the NZB Mouse Manifested by an Increased Ratio of Surface IgM to IgD
- Suppression of Cytotoxic Lymphocyte Responses in Vitro by Soluble Products of Alloantigen-Activated Spleen Cells
- Cytotoxic Activities of Gut Mucosal Lymphoid Cells in Guinea Pigs
- Antigen-Induced Increase in Migration of Large Cortical Thymocytes (Regulatory Cells?) to the Marginal Zone and Red Pulp of the Spleen
- Nature of the Antigenic Complex Recognized by T Lymphocytes. VI. The Effect of Anti-TNP Antibody on T Cell Responses to TNP-Conjugated Macrophages
- Nature of the Antigenic Complex Recognized by T Lymphocytes. VII. Evidence for an Association between TNP-Conjugated Macrophage Membrane Components and la Antigens
- Preparation of a Rabbit Anti-guinea Pig Basophil Serum: In Vitro and in Vivo Characterization
- Antibodies to Guinea Pig Lymphokines. VII. Reactivity with Products of Lymphoid and Nonlymphoid Cells

## CLINICAL IMMUNOLOGY

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>W. J. Pichler and S. Broder</td>
<td>887</td>
</tr>
<tr>
<td>W. Knapp and G. Baumgartner</td>
<td>1177</td>
</tr>
<tr>
<td>J. Wybran, A. Govaerts, and T. Appleboom</td>
<td>1184</td>
</tr>
</tbody>
</table>

- Fc-IgM and Fc-IgG Receptors on Human Circulating B Lymphocytes
- Monocyte-Mediated Suppression of Human B Lymphocyte Differentiation in Vitro
- Inosimplex, a Stimulating Agent for Normal Human T Cells and Human Leukocytes
IMMUNOCHEMISTRY

M. Ventura, C. Bleux, Y. Crepin, and P. Liacopoulos 817 Ig-Isotype Diversity Generated in Antibody-Forming Cells of the Mouse
J. D. Capra, S.-T. Ju, and A. Nisonoff 953 Structural Studies on Induced Antibodies with Defined Idiotypic Specificities. VI. Amino Terminal Sequences of the Heavy and Light Chain Variable Regions of Anti-p-azophenylarsonate Antibodies from A/J Mice Suppressed for a Cross-Reactive Idiotype
S. Hickman and S. Kornfeld 990 Effect of Tunicamycin on IgM, IgA, and IgG Secretion by Mouse Plasmacytoma Cells
R. G. Cook, E. S. Vitetta, J. W. Uhr, J. Klein, C. E. Wilde III, and J. D. Capra 1015 Structural Studies on Protein Products of Murine Chromosome 17: III. Partial Amino Acid Sequence of an H-2Kq Molecule
E. R. Podack and H. J. Müller-Eberhard 1025 Binding of Desoxycholate, Phosphatidylcholine Vesicles, Lipoprotein and of the S-Protein to Complexes of Terminal Complement Components
A. Garcia Pardo, E. S. Rosenwasser, and B. Frangione 1040 The Primary Structure of A Human Immunoglobulin G2 (IgG2) pFc’ Fragment
M. J. Mattes and L. A. Steiner 1116 Surface Immunoglobulin on Frog Lymphocytes: Identification of Two Lymphocyte Populations
D. C. Brandt and J.-C. Jaton 1188 Occurrence of Idiotypically Identical Antibodies in the Sera of Two Outbred Rabbits Hyperimmunized with Type II Pneumococcal Vaccine
D. C. Brandt and J.-C. Jaton 1194 Identical Vγ Region Sequences of Two Antibodies from Two Outbred Rabbits Exhibiting Complete Idiotypic Cross-Reactivity and Probably the Same Antigen-Binding Site Fine Structure
A. Ehrnst 1206 Separate Pathways of C Activation by Measles Virus Cytotoxic Antibodies: Subclass Analysis and Capacity of F(ab) Molecules to Activate C via the Alternative Pathway

IMMUNOGENETICS AND TRANSPLANTATION

B. D. Schwartz, R. Cigen, I. Berggard, and E. M. Shevach 835 Guinea Pig Homologues of TL and Qa-2 Antigens
R. Naim and S. G. Nathenson 869 Structural Studies of the H-2D Products of the Mouse Mutant BALB/c-H-2Dd and the Parental Strain BALB/cKh-H-2Dd
D. M. Murasko 958 Apparent Lack of H-2 Restriction of Allograft Rejection
J. A. Kapp and D. S. Strayer 978 H-2 Linked Ir Gene Control of Antibody Responses to Porcine Insulin. I. Development of Insulin-Specific Antibodies in Some but Not All Nonresponder Strains Injected with Proinsulin
P. J. Durda and P. D. Gottlieb 983 Sequential Precipitation of Mouse Thymocyte Extracts with Anti-Lyt-2 and Anti-Lyt-3 Seria. I. Lyt-2.1 and Lyt-3.1 Antigenic Determinants Reside on Separable Molecular Species
E. S. Vitetta, D. A. Hart, and J. Forman 997 Relationship between Trinitrophenol and H-2 Antigens on Trinitrophenyl-Modified Spleen Cells. III. Quantitative Aspects of Trinitrophenol Binding on Cells Treated with Trinitrobenzene Sulfonic Acid
J. Forman and E. S. Vitetta 1002 Relationship between Trinitrophenol and H-2 Antigens on Trinitrophenyl-Modified Spleen Cells. IV. Correlation between the Loss of Cell Surface Trinitrophenyl-H-2 Molecules and Functional Activity of Derivatized Cells in an Anti-TNP-CML Assay
C. M. Warner, J. L. McVor, and T. J. Bernston 1020 Quantitative Analysis of Spleen Cell and Immunoglobulin Allotype Composition of (CBAxCBA/H-T6) ↔ C57BL/6 Allophenic Mice
R. B. Corley, B. Kindred, and I. Lefkovits 1082 Positive and Negative Allogenic Effects Mediated by MLR-Primed Lymphocytes: Quantitation by Limiting Dilution Analysis
Y. E. McHugh and B. Bonavida 1090 Autoreactive Antibody-Forming Cells Directed against Thymocytes and Thymus-Derived Lymphocytes
M. H. Roos, J. P. Atkinson, and D. C. Shreffler 1106 Molecular Characterization of the Ss and Slp (C4) Proteins of the Mouse H-2 Complex: Subunit Composition, Chain Size Polymorphism, and an Intracellular (PRO-Ss) Precursor
M. Mudgett-Hunter, M. L. Yarmush, B. A. Fraser, and T. J. Kindt 1132 Rabbit Latent Group a Allotypes: Characterization and Relationship to Nominal Group a Allotypic Specificities

Continued on page 4
**IMMUNOPATHOLOGY**

W. Stohl and N. K. Gonatas 844 Chronic Permeability of the Central Nervous System to Mononuclear Cells in Experimental Allergic Encephalomyelitis in the Lewis Rat

P. M. Henson, B. Zanolori, N. A. Schwartzman, and S. R. Hong 851 Intracellular Control of Human Neutrophil Secretion. I. C5a-Induced Stimulus-Specific Desensitization and the Effects of Cytochalasin B

E. Goetzl and R. E. Rocklin 891 Amplification of the Activity of Human Leukocyte Inhibitory Factor (LIF) by the Generation of a Low Molecular Weight Inhibitor of PMN Leukocyte Chemotaxis

R. M. Falkoff, J. F. Scavulli, and R. W. Dutton 897 Independent Analysis of T Helper and T Killer Cell Function in Young and Old NZB Mice

E. Gillespie 923 Concanaavalin A Increases Glyoxalase Enzyme Activities in Polymorphonuclear Leukocytes and Lymphocytes

J. F. Braley, C. A. Dawson, and V. L. Moore 926 Immunologic Block against Antigen Absorption from Isolated Perfused Rabbit Lungs

H. Scherzer and P. A. Ward 947 Lung Injury Produced by Immune Complexes of Varying Composition

**TUMOR IMMUNOLOGY**

M. C. Cohen, A. Goss, T. Yoshida, and S. Cohen 840 Inhibition of Migration of Tumor Cells in Vitro by Lymphokine-Containing Supernatants

A.-K. Ng, K. R. McIntire, H. T. Holden, and R. B. Herberman 856 Serologic Analysis of Tumor-Associated Surface Antigens on a Moloney Leukemia Virus-Induced Lymphoma MBL-2

N. L. Levy 903 Specificity of Lymphocyte-Mediated Cytotoxicity in Patients with Primary Intracranial Tumors

N. L. Levy 916 Cell-Mediated Cytotoxicity and Serum-Mediated Blocking: Evidence That Their Associated Determinants on Human Tumor Cells are Different

L. Matsuuchi, and S. L. Morrison 922 Estimation of Antibodies Specific for Dextran

F. DeLustro and J. S. Haskell, 1007 In Situ Cytotoxic T Cells in a Methylcholanthrene-Induced Tumor

J. W. Rohrer and R. G. Lynch 1066 Antigen-Specific Regulation of Myeloma Cell Differentiation in Vivo by Carrier-Specific T Cell Factors and Macrophages

M. S. Fisher and M. L. Kripke 1139 Further Studies on the Tumor-Specific Suppressor Cells Induced by Ultraviolet Radiation

M. Small 1173 Enhancement of Reactivities of Subpopulations of T Lymphocytes toward Syngeneic Tumor Cells: Separation of Early Thymocytes

S. V. Skurkovich, A. S. Skorikova, and E. I. Eremkina 1173 Enhancement of Reactivities of Subpopulations of T Lymphocytes toward Syngeneic Tumor Cells: Separation of Early Thymocytes

**VIRAL AND MICROBIAL IMMUNOLOGY**


J. P. Verhave, G. T. Strickland, H. A. Jaffe, and A. Ahmed 1052 Effect of in Vitro Virus Infection on Response of Human Monocytes and Lymphocytes to Mitogen Stimulation

N. J. Roberts, Jr. and R. T. Steigbigel 1096 Immunochemical Characterization of Native Polysaccharides from Group B Streptococcus: The Relationship of the Type III and Group B Determinants

D. L. Kasper, D. K. Goroff, and C. J. Baker 1128 Properties of the Cell Surface Fc-Receptor Induced by Herpes Simplex Virus

Y. Nakamura, J. Costa, T. S. Tralka, C. L. Yee, and A. S. Rabbson 1128 Properties of the Cell Surface Fc-Receptor Induced by Herpes Simplex Virus

**COMMUNICATION**

A. Ferreira, P. Weisz-Carrington, and V. Nussenzweig 1213 Testosterone Control of Serum Levels of C4-Binding Protein in Mice

Announcements 1216

Author Index 1217