

THE JOURNAL  
OF  
IMMUNOLOGY

VOLUME 42

BALTIMORE, MD.  
1941

## CONTENTS

### NUMBER 1, SEPTEMBER, 1941

Immunological Relationship between Spotted Fever and Exanthematic Typhus. M. Ruiz Castaneda and Roberto Silva.....	1
Cross Protection between Heterologous Agglutinogenic Types of Beta Hemolytic Streptococci. Alice C. Evans.....	15
Blood Constituents During Anaphylactic Shock in the Monkey. L. W. Kinsell, L. M. Kopeloff, R. L. Zwemer and N. Kopeloff.....	35
The Use of Chick Embryo Tissues and Fluid as Antigens in the Complement Fixation Reaction in Influenza. Clara Nigg, James H. Crowley, and Doris E. Wilson.....	51
Occurrence of Forssman Heterogenetic Antigen in the Nematode, <i>Trichinella spiralis</i> . Evelyn Abrams Mauss.....	71
The Relationship between Constant-Antiserum and Constant-Antigen Optimal Ratios Obtained with Rat and Guinea-Pig Precipitin. Charlotte A. Colwell and Guy P. Youmans.....	79
A Serological and Biochemical Study of Hemolytic Streptococci. Helen Plummer.....	91

### NUMBER 2, OCTOBER, 1941

A Factor in Normal Human Blood Which Participates in Streptococcal Fibrinolysis. Haskell Milstone.....	109
Development of Neutralizing Antibodies to the Viruses of Equine Encephalomyelitis (Western Strain) and St. Louis Encephalitis in the Blood and Cerebrospinal Fluid of Man and Animals together with recovery of the St. Louis virus from the blood of monkeys. Beatrice F. Howitt.....	117
Studies with <i>H. pertussis</i> . VI. Antigenicity of the Toxins and the Relation to Other Cellular Components from the Several Phases. Earl W. Flosdorf, A. Bondi and T. F. Dozois.....	133
The Polyvalency of Crotalidic Antivenins. IV. Antinecrotic, Anticoagulant and Antiproteolytic Actions. Thomas S. Githens.....	149
Studies on the Histamine-Content of the Blood and Tissues of the Rabbit During Anaphylactic Shock. Bram Rose.....	161
Proteic Fractions of a Strain of Group A Hemolytic Streptococcus. IV. Azo Dyes Containing Hemolytic Streptococcal Protein. Michael Heidelberger and Sverre Dick Henriksen.....	181
Fractionation of a Type 1 Strain of Group "A" Hemolytic Streptococci. Sverre Dick Henriksen and Michael Heidelberger.....	187
The Effect of Ninhydrin Upon Horse-Serum-Protein and Antibodies. Arnold H. Eggerth.....	199
The Effect of Dilution on the Reaction Between Pneumococcus and Its Specific Antibody. II. The Dilution Phenomenon. Marion C. Morris.....	219
Further Studies in Passive Protection Against the Virus of Influenza by the Intranasal Route. Joseph Zellat and Werner Henle.....	239

### NUMBER 3, NOVEMBER, 1941

Demonstration by the Electron Microscope of the Combination of Antibodies with Flagellar and Somatic Antigens. Stuart Mudd and Thomas F. Anderson.....	251
--	-----

The Relationship between Neutralizing Antibodies against Influenza A Virus in the Sera of Mothers and Infants. Elsmere R. Rickard and Frank L. Horsfall, Jr. . . . .	267
Experimental Diphtheric Paralysis. Rose R. Feiner. . . . .	273
Serological Studies with Free-Living Protista. Charles Tanzer. . . . .	291
Studies on the Mechanism of Sulfonamide Bacteriostasis, Inhibition and Resistance. Experiments with <i>E. coli</i> in a Synthetic Medium. Elias Strauss, John H. Dingle, and Maxwell Finland. . . . .	313
Studies on the Mechanism of Sulfonamide Bacteriostasis, Inhibition and Resistance. Experiments with <i>Staphylococcus aureus</i> . Elias Strauss, John H. Dingle, and Maxwell Finland. . . . .	331
The Influence of Iron on the Production of Diphtheria Toxin. J. Howard Mueller. . . .	343
Toxin-Production as Related to the Clinical Severity of Diphtheria. J. Howard Mueller. . . . .	353
The Inhibition of the Bactericidal Power of Human and Animal Sera by Antigenic Substances Obtained from Organisms of the Typhoid-Salmonella Group. Richard J. Cundiff and Herbert R. Morgan. . . . .	361

#### NUMBER 4, DECEMBER, 1941

An Experimental Investigation of an Immunologic Mechanism as the Cause of Glomerulonephritis. Calvin F. Kay, Pascal F. Lucchesi and Robert B. Rutherford. . . .	369
Quantitative Studies on the Group-Specific Substances in Human Blood and Saliva. II. Group-Specific Substance A, with Special Reference to the Subgroups. Alexander S. Wiener and Isidore Kosofsky. . . . .	381
The Passage of Antipneumococcal Antibodies into Pleural Exudates in Rabbits—a Comparison of the Penetration of the Pleura by Horse and Rabbit Sera. James W. Haviland and Joseph F. A. McManus. . . . .	395
The Occurrence of Salmonella Antigens in Dysentery Bacilli. S. Bornstein, I. Saphra and J. B. Daniels. . . . .	401
Influence of Collodion Particles on the Visible End-point in Antibody Titrations. Daniel M. Eisler. . . . .	405
A Test of the Alternation-("Lattice"-) Hypothesis with Divalent and Trivalent Haptens. Sanford B. Hooker and William C. Boyd. . . . .	419
Studies on the Mechanism of the Action of Sulfanilamide. V. On the Dissociation of the Phenomena of Growth-stimulation and Sulfanilamide-inhibition of Hemolytic Streptococci. Helen M. Lynch and John S. Lockwood. . . . .	435
Immune Response of Mice to Active Virus and to Formalin-Inactivated Virus of Eastern Equine Encephalomyelitis. Isabel M. Morgan and Peter K. Olitsky. . . . .	445
A Descriptive Theory of Specific Precipitation. I. The Theory. A. D. Hershey. . . . .	455
A Descriptive Theory of Specific Precipitation. II. Quantitative Applications. A. D. Hershey. . . . .	485
A Descriptive Theory of Specific Precipitation. III. The Individuality of Antibody. A. D. Hershey. . . . .	515
Index. . . . .	531