CONTENTS

NUMBER 1, JULY, 1951

Studies on the Immunization of Guinea Pigs and Mice to Brucella Infection by Means of the "Native Antigen." S. Elberg, M. Herzberg, P. Schneider, S. J. Silverman and K. F. Meyer .............................................................. 1

The Zone of Localization of Antibodies. XI. The in vivo Purification of Kidney-Localizing Anti-Kidney Antibody. David Pressman and Beila Sherman .................. 15

The Zone of Localization of Antibodies. XII. Immunological Specificities and Cross Reactions in the Vascular Beds of Liver, Kidney and Lung. David Pressman and Beila Sherman ................................................................. 21

Heterologous Strain Immunity in Experimental Syphilis. Harold J. Magnuson and Frederick A. Thompson, Jr .............................................................. 35

Relationship between Treponemal Immobilizing Antibodies and Acquired Immunity in Experimental Syphilis. Harold J. Magnuson, Frederick A. Thompson, Jr. and Charlotte P. McLeod ........................................................... 41

Serological Group II of the Proteolytic Clostridia. James W. Mandia ............... 49

The Effect of Antilymphocytic Serum on Circulating Antibody Levels. M. F. A. Woodruff, Bruce Forman and K. B. Fraser ........................................... 57


Surface Phagocytosis in vivo. Mary Ruth Smith, William D. Perry, John W. Berry and W. Barry Wood, Jr ............................................................. 71

Purification and Concentration of Mouse Encephalomyelitis Virus by Hemagglutination. O. Lahelle and Thomas G. Ward .......................................... 75

Alternate Passage of Influenza Virus. A Comparison of the Effects of Serial Passage and Alternate Passage of Type B Influenza Virus in Hamsters. Fred M. Davenport .. 83

NUMBER 2, AUGUST, 1951

Studies on the Specific Soluble Protein of Pasteurella pestis and Allied Organisms. I. Isolation, Fractionation and certain Physical, Chemical and Serological Properties. S. C. Seal ...................................................................... 93

The Antigenic Composition of Cryptococcus neoformans. E. Edward Evans and John F. Kessel ......................................................................... 109

Factors Influencing the Agglutination Titrations in Human Brucellosis. Richard J. Feinberg and George G. Wright ................................................ 115

Metabolic Studies of Rickettsiae. I. The Effects of Antimicrobial Substances and Enzyme Inhibitors on the Oxidation of Glutamate by Purified Rickettsiae. Charles L. Wisseman, Jr., Elizabeth B. Jackson, Fred E. Hahn, Anita C. Ley and Joseph E. Smadel ................................................................. 123

Effect of BCG Vaccination and Chemotherapy on Experimental Tuberculosis in Mice. Charles O. Siebenmann .............................................................. 137

The Size of Coxsackie Viruses and Lansing Poliomyelitis Virus Determined by Sedimentation and Ultracentrifugation. Joseph L. Melnick, Morris Rhian, Joel Warren and Sydney S. Breese, Jr. ................................................................. 151

A Portable Freeze-Drying Apparatus Employing Either Mechanical or Dry Ice Refrigeration. Joel Warren, Heinz Kugler and Herman M. Hall ................................................................. 163

What is Immunology? Geoffrey Edsall .......................................................... 167

NUMBER 3, SEPTEMBER, 1951

Experimental Streptococcal Pneumonia. I. The Pathologic and Bacteriologic Features of the Untreated Disease. Louis Weinstein, Charles G. Colburn, Raymond Seltser, G. Kenneth Mallory and Geo. W. Waring, Jr .............................................................. 173
Experimental Streptococcal Pneumonia. II. The Effect of Penicillin Therapy on the Pathologic and Bacteriologic Features. Louis Weinstein, Charles G. Colburn, Raymond Selts and G. Kenneth Mallory .......................................... 183
Experimental Streptococcal Pneumonia. III. The Anatomical Lesions Produced by the Injection of Dead Streptococci into the Lung. Louis Weinstein, Charles G. Colburn, Raymond Selts and G. Kenneth Mallory ...................................... 189
Antigenicity of Sarcomata Undergoing Atrophy in Rats. Margaret Reed Lewis and Paul Myron Aptekman ......................................................... 193
Studies on Herpes Simplex Virus. II. A Soluble Antigen of Herpes Virus Possessing Skin-Reactive Properties. Ernest Jawetz, Virginia Coleman and M. F. Allende.. 197
The Effect of the Calcium Hydroxide-Calcium Aluminate Antibody Purification Procedure on the Physical Properties of Rabbit Gamma Globulin. L. A. Sternberger and M. L. Petermann .......................................................... 207
Immunity Following Oral Administration of Poliomyelitis Virus to Monkeys. Joseph L. Melnick and Nada Ledinko .................................................. 213
Differences in the Degree of Infectiousness of Two Related Strains of Poliomyelitis Virus Following Their Oral Administration to Monkeys. Joseph L. Melnick...... 219
The Resistance of Mice to Myositis and Central Nervous System Infection Following Immunization with GDVII Mouse Encephalomyelitis Virus. Robert Rustigian, Alwin M. Pappenheimer and Thelma LeBlanc. 225
The Purification of Tetanus Toxoid by Ammonium Sulfate Fractionation. Leo Levine and Joseph L. Stone ........................................................... 235

NUMBER 4, OCTOBER, 1951

A Study of Cold Hemagglutinins for Normal and Trypsinized Red Blood Cells in the Serum of Normal Individuals and of Hemolytic Anemias. Bertha A. Bouroncle, Matthew C. Dodd and Claude-Starr Wright ............................................ 265
Antibody in Lymphocytes from Hyperimmunized Rabbits. Allan Erslev ............. 281
Preipitin Reactions with Soluble Antigens from Suspensions of Pasteurella pestis or from Tissues of Animals Dead of Plague. Carl L. Larson, Cornelius B. Philip, W. C. Wicht and L. E. Hughes ................................................... 289
Studies on the Chemotherapy of Vaccinia Virus. II. The Activity of Some Thiosemi-carbazones. Dorothy Hamre, K. A. Brownlee and Richard Donovick ............ 305
The Hybridization of Colipage T5 and Salmonella Phage PB. Mark H. Adams ............................................................ 313
Studies of Herpes Simplex Virus in Newborn Mice. Edwin D. Kilbourne and Frank L. Horsfall, Jr. .............................................................. 321
Increase in Virulence of the Lansing Strain of Poliomyelitis Virus with Passage in Mice. John D. Ainslie ...................................................... 331
Determination of Antibody Through the Use of I¹³¹ Label: Experiments with Equine Diphtheria Antitoxin. Sidney Cohen ............................................ 339
The Production of Antibody by Patients with Chronic Hepatic Disease. W. Paul Havens, Jr., James M. Shafer and Charles J. Hopke, Jr. .......................... 347
Western Equine and St. Louis Encephalitis Viruses in the Blood of Experimentally Infected Wild Birds and Epidemiological Implications of Findings. W. McD. Hammon, W. C. Reeves and Gladys E. Sather .................................................. 357
Interference between Mumps Virus and Pneumonia Virus of Mice (PVM). Fate of Mumps Virus in the Mouse Lung. Harold S. Ginsberg and Frank L. Horsfall, Jr. 369
CONTENTS

NUMBER 5, NOVEMBER, 1951

High Intensity Electrons as a Tool for Preparation of Vaccines. I. Preparation of Rabies Vaccine. Frederick B. Traub, Ulrich Friedemann, Arno Brasch and Wolfgang Huber ................................................................. 379

Pig Complement and Its Fractionation for the Production of Reagents Containing Third Component. Jon Jonsen, Wladyslaw Manski and Michael Heidelberger .......... 385

The in vivo Stability of the I²³¹ Protein Label of Rabbit Antibody in Guinea Pigs as Determined by the Quantitative Precipitin Reaction. L. R. Melcher and S. P. Masouredis ........................................................................ 389

Studies on Vaccinia Virus. I. The Development of Hemagglutinating and Infective Particles in the Chorioallantois of the Chick Embryo. B. A. Briody and Claudia Stannard ................................................................. 403

Studies on Vaccinia Virus. II. Neutralization of Vaccinia Virus by Normal Guinea Pig Serum. B. A. Briody, Nada Ledinko and Claudia Stannard ................................................................. 413

The Effect of Proflavine on the Growth of Viruses in the Chick Embryo. B. A. Briody and Claudia Stannard ................................................................. 423

Mouse-Egg Neutralization. Neutralization in the Mouse of Influenza Viruses not Adapted to the Mouse. Edwin D. Kilbourne and Frank L. Horsfall, Jr. ......................... 431

Attempts at a Quantitative Estimation of the Second Component of Complement. Michael Heidelberger, Jon Jonsen, Byron H. Waksman and Wladyslaw Manski . 449

Antiviral Properties of Ehrlichin, an Antibiotic Produced by Streptomyces lavendulae. Vincent Groupé, Jack W. Frankel, Mary Lechevalier and Selman A. Waksman . 471

Protection of Mice against the Vaccinia Virus by the Administration of Phenoxothiouracils. Randall L. Thompson, Marian Price, S. A. Minton, Jr., Elvira A. Falco and G. H. Hitchings ................................................................. 483

The Zone of Localization of Antibodies. XIII. The in vivo Localization of Anti-Liver-Blood-Vessel Antibodies in the Rat. David Pressman, Beila Sherman and Leonard Korngold ................................................................. 492


The Interaction of Influenza Virus and Intact Human Erythrocytes Observed by Replica Technique in the Electron Microscope. Morris Rhian, Alfred S. Evans, and Joseph L. Melnick ................................................................. 513

The Electron Microscopy of Chick Embryo Membranes Infected with Newcastle Disease. Lawrence Kilham, Councilman Morgan and Ralph W. G. Wyckoff .... 523

The Occurrence of Newcastle Disease Antihemagglutinin in Human Sera and Its Relationship to Mumps Virus. Alfred S. Evans ................................................................. 529

A Micro-Test for Measuring Circulating Antibodies against a Virus (PVM). J. Maclean Smith and George S. Mirick ................................................................. 539

Concurrent Infection with Influenza A and B Viruses in a Single Epidemic of Influenza. Edwin D. Kilbourne, Harold C. Anderson and Frank L. Horsfall, Jr. ......................... 547

INDEX ............................................................................. 559

NUMBER 6, DECEMBER, 1951

The Serological Response of Cotton Rats and Monkeys to Poliomyelitis Virus. Morris Pollard . ................................................................................................. 463


Protection of Mice against the Vaccinia Virus by the Administration of Phenoxothiouracils. Randall L. Thompson, Marian Price, S. A. Minton, Jr., Elvira A. Falco and G. H. Hitchings ................................................................. 483

The Zone of Localization of Antibodies. XIII. The in vivo Localization of Anti-Liver-Blood-Vessel Antibodies in the Rat. David Pressman, Beila Sherman and Leonard Korngold ................................................................. 492


The Interaction of Influenza Virus and Intact Human Erythrocytes Observed by Replica Technique in the Electron Microscope. Morris Rhian, Alfred S. Evans, and Joseph L. Melnick ................................................................. 513

The Electron Microscopy of Chick Embryo Membranes Infected with Newcastle Disease. Lawrence Kilham, Councilman Morgan and Ralph W. G. Wyckoff .... 523

The Occurrence of Newcastle Disease Antihemagglutinin in Human Sera and Its Relationship to Mumps Virus. Alfred S. Evans ................................................................. 529

A Micro-Test for Measuring Circulating Antibodies against a Virus (PVM). J. Maclean Smith and George S. Mirick ................................................................. 539

Concurrent Infection with Influenza A and B Viruses in a Single Epidemic of Influenza. Edwin D. Kilbourne, Harold C. Anderson and Frank L. Horsfall, Jr. ......................... 547

INDEX ............................................................................. 559