CONTENTS

NUMBER 1, JULY, 1952

Studies on the Purification of Diphtherial Toxin. Irwin H. Lepow and Louis Pillemer ........................................ 1
The Hemagglutination Test for Rheumatoid Arthritis. I. An Immunological Analysis of the Factors Involved in the Reaction. George Heller, Abraham S. Jacobson, Maxwell H. Kolodny, and Roslyn L. Schuman ......................................................... 27
Studies on the Chemical Inhibition of T2r+ Bacteriophage. Anne R. Bourke, Mary Louise Robbins, and Paul K. Smith ............................................................................................................. 75
Endotoxin in Pathogenic Fungi. S. B. Salvin ........................................................................................................... 89
Immunological Studies of Egg White Proteins. II. Resolution of the Quantitative Precipitin Reaction between Chicken Egg White and Rabbit Anti Egg-White Serum in Terms of the Reactions of Purified Egg White Proteins. L. R. Wetter, M. Cohn, and H. F. Deutsch ........................................................................................................... 109

NUMBER 2, AUGUST, 1952

The Antigen-Antibody Reaction. I. The Influence of Sodium Chloride Concentration on the Quantitative Precipitin Reaction. Frederick Aladjem and Miriam Lieberman ........................................................................... 117
The Antigen-Antibody Reaction. II. Sodium Uptake by the Antigen-Antibody Precipitate. Miriam Lieberman and Frederick Aladjem ........................................................................................................... 131
Studies on Vi Antigen. II. Purification of Vi Antigen from Escherichia coli 5396/38. Marion E. Webster, Maurice Landy, and Monroe E. Freeman ........................................................................................................... 135
Studies on Vi Antigen. III. Immunological Properties of Purified Vi Antigen Derived from Escherichia coli 5396/38. Maurice Landy and Marion E. Webster ......................................................... 143
Quantitative Aspects of Influenza Virus Multiplication. I. Production of “Incomplete” Virus. H. J. F. Cairns and Margaret Edney ........................................................................................................... 155
II. Heterologous Interference. S. Fazekas de St. Groth and Margaret Edney ........................................................................................................... 160
III. Average Liberation Time. H. J. F. Cairns ........................................................................................................... 168
IV. Definition of Constants and General Discussion. S. Fazekas de St. Groth and H. J. F. Cairns ........................................................................................................... 173
Electron Microscopic Counting of Elementary Bodies of the Virus of Meningo-Pneumonitis. H. Timothy Crocker and Blair M. Bennett ........................................................................................................... 183
Hemolysis with Complement of Intact Azo-Erythrocytes Sensitized with Antisera Homologous to the Attached Azo-Grouping. Arthur M. Silverstein and Frank Maltaner ........................................................................................................... 197
Influence of Preservatives, of Heat, and of Irradiation on Mouse Protective Activity and Detoxification of Pertussis Vaccine. Margaret Pittman ........................................................................................................... 201
The Effect of ACTH and Cortisone on the Quantitative Precipitin Reaction. Saul Malkiel and Betty Jean Hargis ........................................................................................................... 217
Neutralizing Antibodies against Certain Recently Isolated Viruses in the Sera of Human Beings Residing in East Africa. K. C. Smithburn ........................................................................................................... 223
SeroLogic and Dermal Reactions in Guinea Pigs Injected Intradermally with Brucella Antigens. Charles M. Carpenter, Ruth A. Boak, and Carl J. DeBoer ........................................................................................................... 235
CONTENTS

NUMBER 3, SEPTEMBER, 1952

Amboceptor Titration as a Statistically Controlled Assay. O. G. Bier, M. Siqueira and R. S. Furlanetto ............................................................... 241

Interaction of Protein Antigens and Antibodies.
  I. Inhibition Studies with the Egg Albumin-Anti-Egg Albumin System. W. J. Kleinschmidt and P. D. Boyer ............................................. 247
  II. Dissociation Studies with Egg Albumin-Anti-Egg Albumin Precipitates. W. J. Kleinschmidt and P. D. Boyer .......................................... 257
  III. Dissociation Studies with Diphtheria Toxoid-Antitoxin Precipitates. E. W. Turner and P. D. Boyer ................................................... 265

The Effect of Environmental Temperature on the Immune Response of Mice to Tetanus Toxoid. Johannes Ipsen, Jr ..................................................... 273

Effect of Multiple Injections of Antigen upon the Specificity of Antisera. Charles A. Leone ......................................................................... 285

Immunohemical Studies on the Specific Polysaccharide of Type II Pneumococcus. Sam B. Beiser, Elvin A. Kabat, and Joseph M. Schor 297

An Immunologic Study of the Iron-Binding Protein. B. V. Jager and C. J. Gubler ........................................................... 311

Anti-A Haemagglutinins in Seeds. G. W. G. Bird ........................................................... 319

Effect of Glucose on the Growth of Influenza Virus in Deembryonated Eggs and Tissue Cultures. Joan B. Daniels, Monroe D. Eaton, and Maude E. Perry ................ 321

The Influence of Cortisone on the Passive Transfer of Tuberculin Hypersensitivity in the Guinea Pig. Martin M. Cummings and Paul C. Hudgins ...... : ............... 331

Experimental Studies on Trichomoniasis. II. Immunity to Reinfection in T. vaginalis Infections of Mice. D. Richards Kelly and R. J. Schnitzer 337

Comparison of the Antigenic Patterns of Influenza A Virus Strains Determined by in ovo Neutralization and Hemagglutination-Inhibition. Maurice R. Hilleman and Frank L. Horsfall, Jr. ........................................................... 343

Use of Antigen-Antibody Reactions in Agar to Follow the Progress of Fractionation of Antigenic Mixtures: Application to Purification of Staphylococcal Enterotoxin. M. J. Surgalla, M. S. Bergdoll, and G. M. Dack ........................................................... 357

A Method for Removing Complement in vivo and Its Rate of Return. Gerard Seltzer, Samuel Baron, and Joseph Fusco ........................................................... 367

NUMBER 4, OCTOBER, 1952

Properties of Scarlet Fever Toxin of the NY5 Strain. Aaron H. Stock and Ethel Verney 373

Experiments with Teschen Disease (Virus Encephalomyelitis of Swine). Dorothy M. Horstmann ........................................................... 379

Identification of Coxsackie Viruses by Immunological Methods and Their Classification into 16 Antigenically Distinct Types. Guillermo Contreras, Vohamnie H. Barnett, and Joseph L. Melnick ........................................................... 395

Studies on Reactions of Incomplete Rh Antibodies with Enzyme Treated Rh Positive Red Cells. Helen Zwicker, Lucille Giordano, and Robert E. Hoyt ............... 415

Precipitin Production in Chickens. VIII. A Comparison of the Effect of Salt Concentration on Precipitate Formation of Pheasant, Owl, and Chicken Antisera. Morris Goodman and Harold R. Wolfe ........................................................... 423

A Cysteine-Activated Proteinase of Clostridium histolyticum. Irwin H. Lepow, Sidney Katz, Jack Pensky, and Louis Pillemer ........................................................... 435

The Influence of Chemicals on the Propagation of Poliomyelitis Virus in Tissue Culture. Gordon C. Brown ........................................................... 441

The Role of Heat-Stable Antigen in Serological Identification of Proteolytic Clostridia. James W. Mandia ........................................................... 451

Deposition of Small Doses of Injected Antigen in Rabbits. Charles F. Crampton and Felix Haurowitz ........................................................... 457

Toxicity of NDV for Mouse Lungs. Fred M. Davenport ........................................................... 461
CONTENTS

NUMBER 5, NOVEMBER, 1952

Immunochcmical Studies with Beta-Galactosidase and Structurally Related Proteins of Escherichia coli. Melvin Cohn and Anna Marie Torriani ................................................................. 471
California Encephalitis Virus, a Newly Described Agent.
II. Isolations and Attempts to Identify and Characterize the Agent. William McDi. Hammon, William C. Reeves, and Gladys Sather ................................................................. 493
III. Mosquito Infection and Transmission. William C. Reeves and, William McD. Hammon ................................................................. 511
Studies on the Immunization of White Mice against Infections with Bacterium tularensae.
J. Frederick Bell, Carl L. Larson, W. C. Wicht and Sara S. Ritter ................................................................. 515

Immunochcmical Studies on Tobacco Mosaic Virus.
VII. The Quantitative Precipitin Reaction with Equine Antiserum. Saul Malkiel ................................................................. 525
VIII. The Specificity of Chemically-Altered Virus. Saul Malkiel ................................................................. 533
Stability of Sensitizing and Blocking Antibodies in Allergic Serum following Ultraviolet Irradiation. Mary Hewitt Loveless ................................................................. 539
A Procedure Which Eliminates Nonspecific Inhibitor from Human Serum but Does Not Afect Specific Antibodies against Influenza Viruses. David A. J. Tyrrell and Frank L. Horsfall, Jr ................................................................. 563
Four New Provisional Serotypes of Shigella. W. H. Ewing and M. C. Hucks ................................................................. 575

NUMBER 6, DECEMBER, 1952

Uptake of Labeled Antigens by the Mitochondria of Mouse Liver. Max Fields and Raymond L. Libby ................................................................. 581
Involvement of a Complement-like Factor in the Activation of Blood Protease. Walton B. Geiger ................................................................. 597
Electrophoretic Studies on Hyperimmune Rabbit Sera for Neurotropic Viruses. Carl J. DeBoer, James van der Scheer, Gilbert Richmond, Edna Hazz, and Herald R. Cox ................................................................. 605
The Role of Tubercle Bacilli in Adjuvant Emulsions on Antibody Production to Egg Albumin. Edward E. Fischel, Elvin A. Kabat, Herbert C. Stoerk, and Ada E. Bezer ................................................................. 611
Inhibition of the Shwartzman Reaction by Pyrogenic Substances. Ivan L. Bennett, Jr., and Leighton E. Cluff ................................................................. 619
The Quantitative Determination of the Extent of Despeciation of Modified Equine Antitoxin. Leo Levine, Louise Wyman, Bei-Loo Chen, and Julia Murphy ................................................................. 627
General Preface to Studies on the Cultivation of Poliomyelitis Viruses in Tissue Culture. John F. Enders ................................................................. 639
Studies on the Cultivation of Poliomyelitis Viruses in Tissue Culture.
II. The Propagation of the Poliomyelitis Viruses in Roller-tube Cultures of Various Human Tissues. Frederick C. Robbins, Thomas H. Weller, and John F. Enders ................................................................. 673