## CONTENTS

### NUMBER 1, MAY, 1949

**Influenza Vaccination: A Comparison of Antibody Response Obtained by Various Methods of Administration.** Henry B. Bruyn, Gordon Meiklejohn, and Henry D. Brainerd .......................... 1

**Immunogenetic Studies of *Drosophila melanogaster*. I. The Development of Technics and the Detection of Strain Differences.** Allen S. Fox .......................... 13

**Experimental Rubella in Human Volunteers.** S. G. Anderson .......................... 29

**Precipitin-Tests in *Plasmodium lophurae* Malaria.** John C. Torrey and Morton C. Kahn. 41

**Chloromycetin in Experimental Rickettsial Infections.** Joseph E. Smadel, Elizabeth B. Jackson and Anita B. Cruise .......................... 49

**Mechanism of Detergent Effect on Egg-White Inhibition of Hemagglutination by Formalized Swine Influenza Virus.** Frank Lanni and J. W. Beard .......................... 67

**Differences in the Hemagglutinating and Antigenic Properties of Strains of Influenza Virus Isolated from One Outbreak.** M. Michael Sigel .......................... 81

**A Quantitative Study of Passive Anaphylaxis in the Guinea Pig. IV. Elvin A. Kabat and Baruj Benacerraf .......................... 97

**The Release of Histamine and Heparin by Antigen from the Isolated Perfused Liver of the Sensitized Dog.** A. Evelyn Scroggie and L. B. Jaques .......................... 103

**The Effect of a 42 Day Course of Treatment on the Sensitivity of the Tubercle Bacillus to Streptomycin.** William E. Swift, Jr. and Frederick A. Beardsey, Jr. .......................... 117

**Therapy of Experimental Brucella Infection in the Developing Chick Embryo.** Robert Magoffin, Dorothy Anderson and Wesley W. Spink .......................... 125

### NUMBER 2, JUNE, 1949

**Further Studies of the Immunological Properties of Polysaccharides from *Serratia Marcescens* (*Bacillus Prodigiosus*). II. Nature of the Antigenic Action and the Antibody Response in Mice.** D. R. A. Wharton and Hugh J. Creech .......................... 135

**Influence of Mode of Immunization on the Relationship Between the Development of Tissue Titers and the Release of Hemolysins in *vivo*.** Sidney Roberts, Elijah Adams and Abraham White .......................... 155

**The Immunochemistry of Allergens. IX. The Relationship of Carbohydrate to the Antigenic Properties of the Allergenic Protein from Cottonseed.** E. J. Coulson, Joseph R. Spies and Henry Stevens .......................... 171

**Prophylactic Use of Schistosomal Antigen.** Nellie Perry Watts .......................... 183

**The Use of Phenolized Allantoic Fluid Antigen in the Complement Fixation Test for Psittacosis.** Dorland J. Davis .......................... 193

**Some Quantitative Aspects of Immune Hemolysis.** Marion C. Morris .......................... 201


**Quantitative Studies on Induction of Active Immunity to Smooth, V Form *Salmonella typhosa*.** John K. Spitznagel, Captain, MC, and Ranee Y. Trainer, B.S. (Bact.) .......................... 229

**The Use of Adjuvants in the Production of Rh Antisera in Animals.** Harriett Sommer Shatin and William C. Boyd .......................... 237

**The Effect of Various Dyes *in Vitro* and *in Vivo* upon Influenza Virus Infection in Mice.** Moyer S. Fleisher .......................... 245

### NUMBER 3, JULY, 1949

**A Note on the Assay of Antigenic Polysaccharides and Vaccines.** K. A. Ludwig, F. J. Murray and E. J. Staubach .......................... 257
Serological Reactivity of Mucoid Strains of Escherichia coli. Sverre Dick Henriksen .................................................... 271
Studies on Diphtheria. IV. The Skin Factor in the Schick Reaction. Bo Vahlquist and Curt Högstedt .............................................................. 277
Comparison of Diagnostic Methods for Western Equine and St. Louis Encephalitis. Gordon Meiklejohn, M.D., Elva Rust and Oscar Brunetti ...................... 293
Level of Serum Antibody Associated with Intracerebral Immunity in Monkeys Vaccinated with Lansing Poliomyelitis Virus. Isabel M. Morgan ........................................ 301
Bovine Plasma Albumin in Buffered Saline Solution as a Diluent for Viruses. G. W. A. Dick and R. M. Taylor ......................................................... 311
The Influence of Certain Serum Factors on the Neutralization of Western Equine Encephalomyelitis Virus. Theodore F. Dozois, John C. Wagner, Cecelia M. Chemerda and Vivian M. Andrew ........................................ 319
Hemagglutinating Substances for Human Cells in Various Plants. William C. Boyd and Rose M. Reguera .............................................................. 333
The Neutralization Technique in Tsutsugamushi Disease (Scrub Typhus) and the Antigenic Differentiation of Rickettsial Strains. John P. Fox ......................... 341

Number 4. August, 1949

Some Fundamental Notions in Estimation of Complement Fixation. I. General Relations and a Proposed Uniform Notation. William R. Thompson, Christine E. Rice, Elizabeth Maltaner and Frank Maltaner ............................................. 353
A Delayed Chronic Inflammatory Reaction at an Antigen Depot in the Guinea Pig, Affected by Systemic Sensitization. Lenore M. Kopeloff and Nicholas Kopeloff ................ 363
The Relationship of Mengo Encephalomyelitis, Encephalomyocarditis, Columbia-SK and M. M. Viruses. G. W. A. Dick .............................................. 375
An Antibiotic Substance Produced by a Member of the Shigella Group. L. B. Fastier .......................................................... 399
The Reversal in Vivo by BAL of HgCl2-Inactivated Influenza A Virus in the Chick Embryo. J. Enrique Pérez, Josefina Baralt-Pérez and Morton Klein ........................................ 405
Cold Hemagglutination Reactions with Influenza Virus. John R. Overman and William F. Friedewald ............................................................... 415
The Effect of Aureomycin upon Infections with Bacillus tularensis in Experimental Animals. Carl L. Larson ............................................................. 425
Use of Ultraviolet Absorption Spectroscopy in the Quantitative Precipitin Reaction. David Gitlin ........................................................................................................ 437
The Solubility of Equine Tetanal Antitoxin in Methanol-Water Mixtures of Controlled pH, Ionic Strength and Temperature. Ruth G. Wittler and Louis Pillemer .......................................................... 463
On the Identity of the “Virulence Enhancement” Factor in Gastric Mucin. Maurice Landy and Herbert C. Batson ..................................................................................... 477
An Electron Microscope Study of Material from Tissue of the Central Nervous System of Poliomyelitic and Normal Mice and Cotton Rats. Morris Rhian, Serge G. Lensen and Robley C. Williams .............................................................. 487
The Calcium Requirement of Coliphage T5. Mark H. Adams .............................................................. 505