

Guava[®] and Amnis[®]
Flow Cytometers
are Now Part of Luminex.



Luminex[®]
complexity simplified.



72 (4)

J Immunol 1954; 72:243-340; ;
<http://www.jimmunol.org/content/72/4.citation>

This information is current as
of March 25, 2019.

Why *The JI*? [Submit online.](#)

- **Rapid Reviews! 30 days*** from submission to initial decision
- **No Triage!** Every submission reviewed by practicing scientists
- **Fast Publication!** 4 weeks from acceptance to publication

**average*

Subscription Information about subscribing to *The Journal of Immunology* is online at:
<http://jimmunol.org/subscription>

Permissions Submit copyright permission requests at:
<http://www.aai.org/About/Publications/JI/copyright.html>

Email Alerts Receive free email-alerts when new articles cite this article. Sign up at:
<http://jimmunol.org/alerts>

The Journal of Immunology is published twice each month by
The American Association of Immunologists, Inc.,
1451 Rockville Pike, Suite 650, Rockville, MD 20852
All rights reserved.
Print ISSN: 0022-1767 Online ISSN: 1550-6606.



CONTENTS

NUMBER 1, JANUARY, 1954

Phosphatase-Antiphosphatase Reaction. Competition Between the Specific Substrate and Anti-phosphatase for Phosphatase. M. G. Sevag, Melva Derrick Newcomb and Ruth E. Miller...	1
Studies of Rickettsial Toxins. I. Role of Hemolysis in Fatal Toxemia of Rabbits and Rats. Philip Y. Paterson, Charles L. Wisseman, Jr. and Joseph E. Smadel.....	12
Production of Pulmonary Lesions by Influenza Viruses in Immunized Mice. Harold S. Ginsberg..	24
Purification Studies on Lansing Poliomyelitis Virus. II. Analytical Electron Microscopic Identification of the Infectious Particle in Preparations of High Specific Infectivity. H. L. Bachrach and C. E. Schwerdt.....	30
Precipitin Production in Chickens	
X. Cellular Changes in the Spleen During Antibody Production. Takashi Makinodan, Royal F. Ruth and Harold R. Wolfe.....	39
XI. Site of Antibody Production. Takashi Makinodan, Royal F. Ruth and Harold R. Wolfe.	45
The Genetic Control of Response to Antigenic Stimuli. J. H. Sang and W. R. Sobey.....	52
The Hemagglutination Test for Rheumatoid Arthritis. II. The Influence of Human Plasma Fraction II (Gamma Globulin) on the Reaction. George Heller, Abraham S. Jacobson, Maxwell H. Kolodny and William H. Kammerer.....	66
Studies on Chick-Embryo-Adapted Rabies Virus	
IV. Immunization of Guinea Pigs and Description of a Potency Control Test. Hilary Koprowski and Jack Black.....	79
V. Protection of Animals with Antiserum and Living Attenuated Virus after Exposure to Street Strain of Rabies Virus. Hilary Koprowski and Jack Black.....	85
VI. Further Changes in Pathogenic Properties Following Prolonged Cultivation in the Developing Chick Embryo. Hilary Koprowski, Jack Black and Doris J. Nelsen.....	94
Comparative Characteristics of Two Coxsackie Viruses in Tissue Culture. Cyril S. Stulberg, Ruth Schapira and C. Richard Eidam.....	107
The Quantitative Precipitin Reaction of Equine Diphtheria Antitoxin. Harry E. Bowen, Barbara A. Polley and Jane Huang.....	112

NUMBER 2, FEBRUARY, 1954

The Cross Reactions Between Albumins of Different Species and Gamma Globulins of Different Species. Paul H. Maurer.....	119
Serum Neutralization Tests in Mice and in Tissue Culture Against Three Types of Poliomyelitis Virus. C. P. Li and Morris Schaeffer.....	123
The Relation of Circulating Antibody Concentration to Localization of Labeled (S ³⁵) Antigen. Justine S. Garvey and Dan H. Campbell.....	131
The Experimental Chemotherapy of Influenza Viruses. Kenneth K. Takemoto, Mary Louise Robbins and Paul K. Smith.....	139
Studies on the Transfer of Lymph Node Cells.	
I. Appearance of Antibody in Recipients of Cells From Donor Rabbits Injected With Antigen. Susanna Harris, T. N. Harris and Miriam B. Farber.....	148
II. Effects of Experimental Manipulation of the Donor System. T. N. Harris, Susanna Harris and Miriam B. Farber.....	161
Immunology and Serology of Some Parasitic Protozoan Flagellates. I. <i>Trichomonas vaginalis</i> and <i>Trichomonas foetus</i> . Nicholas J. Menolasino and Ernest Hartman.....	172
Inhibition of Fatal Anaphylactic Shock in the Mouse With Cortisone. Morris Solotorovsky and Seymour Winsten.....	177
Primary and Specific Anamnestic Antibody Responses of Rabbits to Heterologous Serum Protein Antigens. Frank J. Dixon, Paul H. Maurer and Maria P. Deichmiller.....	179
Studies on the Complement Function: Apparent Anomalies of the Complement Function. Arthur M. Silverstein.....	187
The Action of Fat-Acids on <i>Trichomonas Vaginalis</i> . Henry G. Frank and L. Reiner.....	191

NUMBER 3, MARCH, 1954

Jacques Jacob Bronfenbrenner (1883-1953): An Appreciation.....	195
The Effects of Vitamin Deficiencies on Some Physiological Factors of Importance in Resistance to Infection. Kenneth Wertman, Lee W. Smith and William M. O'Leary.....	196
Serological Aspects of the Suppression of Normal Bactericidal Action of Rabbit Serum Following Whole Body X-Irradiation. D. M. Donaldson and Stanley Marcus.....	203
Heterohemoantibodies in Inbred Strains of Mice.	
I. Natural Agglutinins for Sheep and Chicken Red Cells. Kurt Stern and Israel Davidsohn.	209
II. Immune Agglutinins and Hemolysins for Sheep and Chicken Red Cells. Israel Davidsohn and Kurt Stern.....	216
Tissue Culture Studies of Venezuelan Equine Encephalomyelitis Virus. I. Propagation in Human Uterine Tissue. D. Carleton Gajdusek, Ralph O. Anslow, Elizabeth J. Hubbell and Robert H. Yager.....	224
The Use of RDE to Improve the Sensitivity of the Hemagglutination-Inhibition Test for the Serologic Diagnosis of Influenza. W. S. Jordan, Jr. and R. O. Oseasohn.....	229
Studies on the Removal of the Encephalitogenic Factor From Rabies Vaccine. G. A. Hottle and J. H. Peers.....	236

NUMBER 4, APRIL, 1954

Inherent Immunizability to Tetanus Toxoid, Based on Studies in Pure Inbred Mice. Johannes Ipsen, Jr.....	243
Neutralizing Antibodies Against Certain Viruses in the Sera of Residents of India. K. C. Smithburn, J. A. Kerr and P. B. Gatne.....	248
Factors Affecting The Efficiency of Combined Prophylactics. I. Effect of Diphtheria Toxoid and Pertussis Vaccine on Tetanus Toxoid. Leo Levine and Joseph L. Stone.....	258
Studies on Immunity in Anthrax. III. Elaboration of Protective Antigen in a Chemically-Defined, Non-Protein Medium. G. G. Wright, M. A. Hedberg and J. B. Slein.....	263
Distribution of Sensitizing Antibody in Human Serum Proteins Fractionated by Electrophoresis-Convection. J. R. Cann and Mary H. Loveless.....	270
Studies on Immunization Against Plague. VII. A Serologic Comparison of Virulent and Avirulent Strains with Observations on the Structure of the Bacterial Cells and Its Relationship to Infection and Immunity. T. H. Chen and K. F. Meyer.....	282
The Effects of Vital Dyes Upon Experimental Foot and Mouth Virus Infection of Guinea Pigs. Giacinto Ciaccio, Giuseppe Gasparini and N. Ercoli.....	299
Cytopathogenic Agents Isolated From Patients During an Unusual Epidemic Exanthem. Franklin A. Neva and John F. Enders.....	307
Isolation of a Cytopathogenic Agent From an Infant With a Disease in Certain Respects Resembling Roseola Infantum. F. A. Neva and J. F. Enders.....	315
Studies on the Hemolytic Activity of Newcastle Disease Virus (NDV). Allan Granoff and Werner Henle.....	322
Studies on the Interaction of the Large and Small Hemagglutinating Components of Newcastle Disease Virus With Red Cells. Allan Granoff and Werner Henle.....	329
Correction.....	340

NUMBER 5, MAY, 1954

Infectivity Titrations of the Viruses of Western Equine Encephalomyelitis and Newcastle Disease by Tissue Culture Methods. Lyle B. Fastier.....	341
Growth of Neurotropic Viruses in Extraneural Tissues. VI. Absence of In Vivo Multiplication of Poliomyelitis Virus. Types I and II, After Intratesticular Inoculation of Monkeys and Other Laboratory Animals. C. A. Evans, Pamela H. Byatt, Velma C. Chambers and Wayne M. Smith.....	348
Growth of Neurotropic Viruses in Extraneural Tissues. VII. Cultivation of MM and Western Equine Encephalitis Viruses in Cultures of Rhesus Testicular Tissue. W. M. Smith and C. A. Evans..	353
Micromethods For the Study of Proteins and Antibodies. I. Procedure and General Applications of Hemagglutination and Hemagglutination-Inhibition Reactions with Tannic Acid and Protein-Treated Red Blood Cells. Abram B. Stavitsky.....	360

Micromethods For the Study of Proteins and Antibodies. II. Specific Applications of Hemagglutination and Hemagglutination-Inhibition Reactions with Tannic Acid and Protein-Treated Red Blood Cells. Abram B. Stavitsky.....	368
Antigenic Relationships Among Certain Arthropod-Borne Viruses as Revealed by Neutralization Tests. K. C. Smithburn.....	376
The Presence of H Antigen in <i>Escherichia coli</i> K Suspensions. Joyce Wright and Regina Villanueva	389
A Factor of Complement Inactivated by Histamine or Ethylenediamine. Helene P. Brumfield...	393
Staphylococcal Enterotoxin: Neutralization by Rabbit Antiserum. M. J. Surgalla, M. S. Bergdoll and G. M. Dack.....	398
Mannitol Negative Varieties of <i>Shigella flexneri</i> Serotypes. W. H. Ewing.....	404
Rapid Double Diffusion Precipitin Analysis. Robert K. Jennings and Frances Malone.....	411
Increased Susceptibility of Mice to Anaphylactic Shock Following Cobalt-60 Gamma Radiation. Richard D. Stoner and Wm. M. Hale.....	419
Separation of Hemagglutination Inhibitors for GDVII and Influenza Viruses in Normal Allantoic Fluid and Human Urine. Igor Tamm and David A. J. Tyrrell.....	424

NUMBER 6, JUNE, 1954

The Effect of a Synthetic Lysine Polypeptide upon the Velocity of Precipitation of Tobacco Mosaic Virus by Its Antiserum. M. A. Stahmann and R. E. F. Matthews.....	435
Precipitin Production in Chickens. XII. The Effects of Variation in Ionic Species and Concentration on Precipitate Formation. Morris Goodman, Harold R. Wolfe and Richard Goldberg.....	440
Anti-Virus Antibody Studies Following Induced Infection of Man with West Nile, Ilhéus and Other Viruses. Chester M. Southam and Alice E. Moore.....	446
On the Kinetics of Neutralization of Bacteriophage T2 by Specific Antiserum. John R. Cann and Eugene W. Clark.....	463
The Use of the Chick in Titration of Diphtheria Antitoxin. Sara E. Branham and Marion F. Wormald.....	478
The Inequality of Potential in Influenza Virus for Adaptation to Mice. Fred M. Davenport.....	485
A Sheep Erythrocyte Lysin Found in Guinea Pig Serum. Helene P. Brumfield and John D. Ross..	489
Separation of Inhibitors of Hemagglutination and Specific Antibodies for Influenza Viruses by Starch Zone Electrophoresis. David A. J. Tyrrell.....	494
Studies on Chick-Embryo-Adapted Rabies Virus. VII. Immunological Responses of Animals to Vaccination with High Egg Passage Flury Strain. Hilary Koprowski and Jack Black.....	503
Kinetic Studies on Immune Hemolysis. III. Description of a Terminal Process Which Follows the Ca ⁺⁺ and Mg ⁺⁺ Reaction Steps in the Action of Complement on Sensitized Erythrocytes. Manfred M. Mayer and Lawrence Levine.....	511
Kinetic Studies on Immune Hemolysis. IV. Rate Determination of the Mg ⁺⁺ and Terminal Reaction Steps. Manfred M. Mayer and Lawrence Levine.....	516
Index.....	531