

1937

1936-1937

The Rockefeller University

Follow this and additional works at: <https://digitalcommons.rockefeller.edu/semiannual-publications-rockefeller-institute>

---

#### Recommended Citation

The Rockefeller University, "1936-1937" (1937). *Semiannual List of the Publications of the Staff of the Rockefeller Institute*. 24.  
<https://digitalcommons.rockefeller.edu/semiannual-publications-rockefeller-institute/24>

This Book is brought to you for free and open access by the Campus Publications at Digital Commons @ RU. It has been accepted for inclusion in Semiannual List of the Publications of the Staff of the Rockefeller Institute by an authorized administrator of Digital Commons @ RU. For more information, please contact [mcsweej@mail.rockefeller.edu](mailto:mcsweej@mail.rockefeller.edu).

Results of the investigations conducted at The Rockefeller Institute for Medical Research, or elsewhere under its grants, are first reported in a variety of journals and publications. The Semiannual List, of which this is No. 42, gives the place of publication of the most recent reports of these investigations. It will be sent regularly upon request.

---

SEMIANNUAL LIST OF THE PUBLICATIONS OF  
THE STAFF OF THE ROCKEFELLER  
INSTITUTE FOR MEDICAL  
RESEARCH

NOVEMBER 1, 1936, TO MAY 1, 1937

THE DEPARTMENT OF THE LABORATORIES

*Chemistry*

†BARTLETT, PAUL D., KUNA, MARTIN, and LEVENE, P. A. The configurational relationship of  $\alpha$ -hydroxy-*n*-valeric and  $\alpha$ -hydroxyisovaleric acids, *Jour. Biol. Chem.*, April, 1937, **118**, pp. 503-511.

†—, —, and —. The configurational relationship of  $\alpha$ -hydroxy-*n*-caproic and  $\alpha$ -hydroxyisocaproic acids, *Jour. Biol. Chem.*, April, 1937, **118**, pp. 513-517.

BERGMANN, MAX. Proteins and proteolytic enzymes, *Harvey Lectures*, 1935-36, **31**, pp. 37-56.

†— and FRUTON, JOSEPH S. On proteolytic enzymes. XII. Regarding the specificity of aminopeptidase and carboxypeptidase. A new type of enzyme in the intestinal tract, *Jour. Biol. Chem.*, January, 1937, **117**, pp. 189-202.

†— and —. On proteolytic enzymes. XIII. Synthetic substrates for chymotrypsin, *Jour. Biol. Chem.*, April, 1937, **118**, pp. 405-415.

—, —, and POLLOK, HEINZ. The differentiation of pancreatic trypsins on the basis of their specificities, *Science*, April 23, 1937, **85**, pp. 410-411.

†— and NIEMANN, CARL. On the structure of proteins: cattle hemoglobin, egg albumin, cattle fibrin, and gelatin, *Jour. Biol. Chem.*, March, 1937, **118**, pp. 301-314.

†KUNA, MARTIN, and LEVENE, P. A. Configurational relationship of mandelic acid to lactic acid, *Jour. Biol. Chem.*, March, 1937, **118**, pp. 315-320.

---

† Published in *Studies 102*.

‡ To be published in *Studies 103*.

- \*LEVENE, P. A., and COMPTON, JACK. The synthesis of *d*-allomethylose by a series of Walden inversions accompanying alkaline hydrolysis of 5-tosyl monoacetone *l*-rhamnose, *Jour. Biol. Chem.*, November, 1936, **116**, pp. 169-188.
- \* — and —. A new method for the preparation of furanose derivatives of pentoses. Monoacetone *l*-arabofuranoside, *Jour. Biol. Chem.*, November, 1936, **116**, pp. 189-202.
- † — and —. Synthetic nucleosides. V. Theophylline-*d*-allomethyloside, *Jour. Biol. Chem.*, January, 1937, **117**, pp. 37-43.
- † — and MARDASHEW, SERGE. Configurational relationships of the aliphatic and aromatic amino acids, *Jour. Biol. Chem.*, January, 1937, **117**, pp. 179-182.
- † — and —. The correlation of the configuration of norleucine to 2-amino-hexane, *Jour. Biol. Chem.*, February, 1937, **117**, pp. 707-711.
- \* — and ROTHEN, ALEXANDRE. Rotatory dispersion of configurationally related aliphatic carbinols, *Jour. Biol. Chem.*, November, 1936, **116**, pp. 209-219.

#### Chemical Pharmacology

- JACOBS, WALTER A., and GOULD, R. GORDON, JR. The synthesis of substances related to lysergic acid, *Science*, March 5, 1937, **85**, pp. 248-249.

#### Physical Chemistry

- †DUBUISSON, M. pH changes of muscle during and after contraction, *Proc. Soc. Exp. Biol. and Med.*, January, 1937, **35**, pp. 609-611.
- †LONGSWORTH, LEWIS G., and MACINNES, DUNCAN A. Bacterial growth at constant pH. Apparent oxidation-reduction potential, acid production, and population studies of *Lactobacillus acidophilus* under anaerobic conditions, *Jour. Bact.*, November, 1936, **32**, pp. 567-585.
- MACINNES, DUNCAN A., and LONGSWORTH, LEWIS G. The potentials of galvanic cells with liquid junctions, in Cold Spring Harbor symposia on quantitative biology, Cold Spring Harbor, Long Island Biological Association, 1936, **4**, pp. 18-25.
- †MICHAELIS, LEONOR, SCHUBERT, MAXWELL P., and SMYTHE, C. V. Potentiometric study of the flavins, *Jour. Biol. Chem.*, December, 1936, **116**, pp. 587-607.
- \*SCHUBERT, MAXWELL P. The interaction of iodoacetic acid and tertiary amines, *Jour. Biol. Chem.*, November, 1936, **116**, pp. 437-445.

\* Published in *Studies 101*.

† Published in *Studies 102*.

SHEDLOVSKY, THEODORE. Distribution of electrolytes between non-miscible solvents, in Cold Spring Harbor symposia on quantitative biology, Cold Spring Harbor, Long Island Biological Association, 1936, **4**, pp. 27-32.

‡— and MACINNES, DUNCAN A. The determination of activity coefficients from the potentials of concentration cells with transference. III. Potassium chloride. IV. Calcium chloride, *Jour. Am. Chem. Soc.*, March, 1937, **59**, pp. 503-506.

†SMYTHE, C. V. Phosphoric acid esters from yeast extract. The isolation of a crystalline calcium salt consisting of an equimolar mixture of glucosemonophosphate and glycerophosphate, *Jour. Biol. Chem.*, January, 1937, **117**, pp. 135-146.

#### *Experimental Surgery*

‡CARREL, ALEXIS. The culture of whole organs. I. Technique of the culture of the thyroid gland, *Jour. Exp. Med.*, April 1, 1937, **65**, pp. 515-526.

PARKER, RAYMOND C. Studies on the production of antibodies *in vitro*, *Science*, March 19, 1937, **85**, pp. 292-294.

#### *Pathology and Bacteriology*

†ALEXANDER, H. E., and RAKE, GEOFFREY. Studies on meningococcus infection. X. A further note on the presence of meningococcus precipitinogens in the cerebrospinal fluid, *Jour. Exp. Med.*, March 1, 1937, **65**, pp. 317-321.

CLAUDE, ALBERT. L'action de le trypsine cristallisée sur l'agent d'un sarcome aviaire transmissible, *Rep. IInd Internat. Cong. Scient. and Social Campaign against Cancer*, Brussels, 1936, **2**.

‡—. Preparation of an active agent from inactive tumor extracts, *Science*, March 19, 1937, **85**, pp. 294-295.

DURAN-REYNALS, F. Les "facteurs de diffusion" et leur signification, *Ann. Inst. Pasteur*, December, 1936, **57**, pp. 597-621.

—. Localization of foreign proteins and dyes in neoplastic growth, *Proc. Soc. Exp. Biol. and Med.*, April, 1937, **36**, pp. 369-370.

‡— and CLAUSEN, H. J. A contagious tumor-like condition in the lizard (*Anolis equestris*) as induced by a new bacterial species, *Serratia anolium* (*sp. n.*), *Jour. Bact.*, April, 1937, **33**, pp. 369-379.

†FLEXNER, SIMON. Reinfection (second attack) in experimental poliomyelitis, *Jour. Exp. Med.*, April 1, 1937, **65**, pp. 497-513.

† Published in *Studies 102*.

‡ To be published in *Studies 103*.

- †JACOBS, JOHN. Serological reactions of azoproteins derived from aromatic hydrocarbons and diaryl compounds, *Jour. Gen. Physiol.*, January 20, 1937, **20**, pp. 353-361.
- KIDD, JOHN G. A complement-fixation reaction involving the rabbit papilloma virus (Shope), *Proc. Soc. Exp. Biol. and Med.*, January, 1937, **35**, pp. 612-614.
- and PARSONS, ROBERT J. Tissue affinity of Shope papilloma virus, *Proc. Soc. Exp. Biol. and Med.*, December, 1936, **35**, pp. 438-441.
- LANDSTEINER, KARL. Serological and allergic reactions with simple chemical compounds, *New England Jour. Med.*, December 24, 1936, **215**, pp. 1199-1204.
- \*— and JACOBS, JOHN. Studies on the sensitization of animals with simple chemical compounds. III. Anaphylaxis induced by arsphenamine, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 717-721.
- LYNCH, CLARA J. Present aspects of cancer in relation to heredity, *Rep. IIInd Internat. Cong. Scient. and Social Campaign against Cancer*, Brussels, 1936, **1**, pp. 122-129.
- †McMASTER, PHILIP D. Changes in the cutaneous lymphatics of human beings and in the lymph flow under normal and pathological conditions, *Jour. Exp. Med.*, March 1, 1937, **65**, pp. 347-372.
- †—. The lymphatics and lymph flow in the edematous skin of human beings with cardiac and renal disease, *Jour. Exp. Med.*, March 1, 1937, **65**, pp. 373-392.
- MURPHY, JAMES B. A discussion of the etiology of cancer based on present knowledge, The Nathan Lewis Hatfield Lecture. XV, *Tr. Coll. Physn. Philadelphia*, January-June, 1936, **4**, series 4, pp. 21-24.
- . Factors involved in the malignant process, *Acta Internat. Union against Cancer*, Brussels, 1936, **1**, pp. 352-356.
- . Inhibition of malignant growth by a factor from normal tissue, *Rep. IIInd Internat. Cong. Scient. and Social Campaign against Cancer*, Brussels, 1936, **1**, pp. 43-45.
- . Relation of filtrable viruses to malignant disease, *Proc. Staff Meetings Mayo Clinic*, December 9, 1936, **11**, pp. 789-790.
- OLITSKY, PETER K. Foot and mouth disease, in Brennemann, J., *Practice of pediatrics*, Hagerstown, Maryland, W. F. Prior Company, 1937, **2**, chapter 7, pp. 1-2.

---

\* Published in *Studies 101*.

† Published in *Studies 102*.

- \*OLITSKY, PETER K., SABIN, ALBERT B., and COX, HERALD R. An acquired resistance of growing animals to certain neurotropic viruses in the absence of humoral antibodies or previous exposure to infection, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 723-737.
- PARSONS, ROBERT J., and KIDD, JOHN G. A virus causing oral papillomatosis in rabbits, *Proc. Soc. Exp. Biol. and Med.*, December, 1936, **35**, pp. 441-443.
- RAKE, GEOFFREY. Some features of the epidemiology of meningococcus meningitis, *Canad. Pub. Health Jour.*, March, 1936, **27**, pp. 105-110.
- †—. The rapid invasion of the body through the olfactory mucosa, *Jour. Exp. Med.*, February 1, 1937, **65**, pp. 303-315.
- ROUS, PEYTON. The virus tumors and the tumor problem, *Harvey Lectures*, 1935-36, **31**, pp. 74-115.
- \*SABIN, ALBERT B., and OLITSKY, PETER K. Humoral antibodies and resistance of vaccinated and convalescent monkeys to poliomyelitis virus, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 739-748.
- and —. Influence of pathway of infection on pathology of olfactory bulbs in experimental poliomyelitis, *Proc. Soc. Exp. Biol. and Med.*, November, 1936, **35**, pp. 300-301.
- †— and —. The olfactory bulbs in experimental poliomyelitis. Their pathologic condition as an indicator of the portal of entry of the virus, *Jour. Am. Med. Assn.*, January 2, 1937, **108**, pp. 21-24.
- and —. Toxoplasma and obligate intracellular parasitism, *Science*, April 2, 1937, **85**, pp. 336-338.
- SABIN, FLORENCE R. Chemical agents: supravital stains, in McClung, C. E., *Handbook of microscopical technique*, New York, Paul B. Hoeber, 1937, 2nd edition, pp. 117-131.
- \*SMITHBURN, KENNETH C. The standardization of longevity against dose in experimental tuberculosis by intracerebral inoculation, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 771-790.
- WEBSTER, LESLIE T. Diagnostic and immunological tests of rabies in mice, *Am. Jour. Pub. Health*, December, 1936, **26**, pp. 1207-1210.
- †—. Inheritance of resistance of mice to enteric bacterial and neurotropic virus infections, *Jour. Exp. Med.*, February 1, 1937, **65**, pp. 261-286.
- and CLOW, ANNA D. Propagation of rabies virus in tissue culture and the successful use of culture virus as an antirabic vaccine, *Science*, November 27, 1936, **84**, pp. 487-488.

---

\* Published in *Studies 101*.

† Published in *Studies 102*.

### Physiology

- ERLANGER, JOSEPH, and GASSER, HERBERT S. Electrical signs of nervous activity, The Eldridge Reeves Johnson Foundation for Medical Physics Lectures, Philadelphia, University of Pennsylvania Press, 1937, 221 pages.
- GASSER, HERBERT S. Potentials developing in mammalian nerve fibers during activity and their relation to excitability, in The problems of nervous physiology and of behavior, Jubilee Symposium dedicated to Professor J. S. Beritoff, Georgian Branch, Academy of Sciences of U. S. S. R., Tiflis, Georgia, U. S. S. R., 1936, pp. 317-326.
- Sequence of potential changes, in Erlanger and Gasser, Electrical signs of nervous activity, The Eldridge Reeves Johnson Foundation for Medical Physics Lectures, Philadelphia, University of Pennsylvania Press, 1937, pp. 130-169.
- The excitability cycle, in Erlanger and Gasser, Electrical signs of nervous activity, The Eldridge Reeves Johnson Foundation for Medical Physics Lectures, Philadelphia, University of Pennsylvania Press, 1937, pp. 170-205.
- GRUNDFEST, HARRY. Effects of hydrostatic pressures upon the excitability, the recovery, and the potential sequence of frog nerve, in Cold Spring Harbor symposia on quantitative biology, Cold Spring Harbor, Long Island Biological Association, 1936, 4, pp. 179-186.
- ‡LEHMANN, JØRGEN ERIK. The effect of changes in pH on the action of mammalian A nerve fibers, *Am. Jour. Physiol.*, March 1, 1937, 118, pp. 600-612.
- ‡— The effect of changes in the potassium-calcium balance on the action of mammalian A nerve fibers, *Am. Jour. Physiol.*, March 1, 1937, 118, pp. 613-619.

### General Physiology

- ‡ANSON, M. L. The estimation of papain with hemoglobin, *Jour. Gen. Physiol.*, March 20, 1937, 20, pp. 561-563.
- ‡— The estimation of cathepsin with hemoglobin and the partial purification of cathepsin, *Jour. Gen. Physiol.*, March 20, 1937, 20, pp. 565-574.
- ‡— and NORTHROP, JOHN H. The calibration of diffusion membranes and the calculation of molecular volumes from diffusion coefficients, *Jour. Gen. Physiol.*, March 20, 1937, 20, pp. 575-588.

---

‡ To be published in *Studies* 103.

- †BLINKS, L. R. The effects of current flow on bioelectric potential. III. *Nitella*, *Jour. Gen. Physiol.*, November 20, 1936, **20**, pp. 229-265.
- ‡FRANCIS, W. L. The surface membranes of muscle fibers, *Proc. Roy. Soc. London, Series B*, April 1, 1937, **122**, pp. 140-154.
- †HERRIOTT, ROGER M. Inactivation of pepsin by iodine and the isolation of diiodo-tyrosine from iodinated pepsin, *Jour. Gen. Physiol.*, January 20, 1937, **20**, pp. 335-352.
- NORTHROP, JOHN H. Isolation and properties of pepsin and trypsin, *Harvey Lectures*, 1934-35, **30**, pp. 229-270.
- †—. The formation of enzymes, *Physiol. Rev.*, January, 1937, **17**, pp. 144-152.
- OSTERHOUT, W. J. V. Über einige chemische und elektrische Eigenschaften von Protoplasmaoberflächen, *Kolloid-Z.*, December, 1936, **77**, pp. 373-382.
- and HILL, S. E. Some ways to control bioelectrical behavior, in Cold Spring Harbor symposia on quantitative biology, Cold Spring Harbor, Long Island Biological Association, 1936, **4**, pp. 43-52.

#### *Biophysics*

- BEARD, J. W., and WYCKOFF, RALPH W. G. The isolation of a homogeneous heavy protein from virus-induced rabbit papillomas, *Science*, February 19, 1937, **85**, pp. 201-202.
- ‡HERČÍK, FERDINAND. Action of ultraviolet light on spores and vegetative forms of *B. megatherium sp.*, *Jour. Gen. Physiol.*, March 20, 1937, **20**, pp. 589-594.
- STANLEY, W. M., and WYCKOFF, RALPH W. G. The isolation of tobacco ring spot and other virus proteins by ultracentrifugation, *Science*, February 12, 1937, **85**, pp. 181-183.
- ‡WYCKOFF, RALPH W. G. Quantity ultracentrifugation with intense fields, *Science*, April 16, 1937, **85**, pp. 390-391.
- . The ultracentrifugal study of virus proteins [Abstract], *Proc. Am. Phil. Soc.*, April 22, 1937, **77**, pp. 455-462.
- †—, BISCOE, J., and STANLEY, W. M. An ultracentrifugal analysis of the crystalline virus proteins isolated from plants diseased with different strains of tobacco-mosaic virus, *Jour. Biol. Chem.*, January, 1937, **117**, pp. 57-71.
- \*— and COREY, ROBERT B. X-ray diffraction patterns of crystalline tobacco-mosaic proteins, *Jour. Biol. Chem.*, November, 1936, **116**, pp. 51-55.

\* Published in *Studies 101*.

‡ To be published in *Studies 103*.

† Published in *Studies 102*.



- †WYCKOFF, RALPH W. G., and COREY, ROBERT B. The-ultracentrifugal crystallization of tobacco-mosaic virus protein, *Science*, December 4, 1936, **84**, p. 513.
- ‡— and LAGSDIN, J. B. Improvements in the air-driven ultracentrifuge for molecular sedimentation, *Rev. Scient. Instr.*, March, 1937, **8**, pp. 74-77.

*Spectroscopic Laboratory*

- ‡LAVIN, G. I., and STANLEY, W. M. The ultraviolet absorption spectrum of crystalline tobacco-mosaic virus protein, *Jour. Biol. Chem.*, March, 1937, **118**, pp. 269-274.

THE DEPARTMENT OF THE HOSPITAL

- †ABERNETHY, THEODORE J. Studies on the somatic C polysaccharide of pneumococcus. II. The precipitation reaction in animals with experimentally induced pneumococcic infection, *Jour. Exp. Med.*, January 1, 1937, **65**, pp. 75-89.
- †— and FRANCIS, THOMAS, JR. Studies on the somatic C polysaccharide of pneumococcus. I. Cutaneous and serological reactions in pneumonia, *Jour. Exp. Med.*, January 1, 1937, **65**, pp. 59-73.
- COLE, RUFUS. Pneumonia. Prevention, management, and serum treatment, *N. Y. State Jour. Med.*, November 15, 1936, **36**, pp. 1699-1708.
- . Recent advances in the control of pneumonia, *Am. Jour. Pub. Health*, December, 1936, **26**, pp. 1191-1197.
- \*FARR, LEE E. The effect of dietary protein on the urea clearance of children with nephrosis, *Jour. Clin. Inv.*, November, 1936, **15**, pp. 703-710.
- . Tetany in the newborn, *Yale Jour. Biol. and Med.*, March, 1937, **9**, pp. 333-345.
- †HORSFALL, FRANK L., JR., and GOODNER, KENNETH. Lipids and immunological reactions. IV. The lipid patterns of specific precipitates from Type I antipneumococcus sera, *Jour. Exp. Med.*, December 1, 1936, **64**, pp. 855-863.
- , —, and MACLEOD, COLIN M. Type specific antipneumococcus rabbit serum, *Science*, December 25, 1936, **84**, pp. 579-581.
- MEYER, KARL, DUBOS, RENÉ, and SMYTH, ELIZABETH M. Action of the lytic principle of pneumococcus on certain tissue polysaccharides, *Proc. Soc. Exp. Biol. and Med.*, June, 1936, **34**, pp. 816-818.
- ‡—, —, and —. The hydrolysis of the polysaccharide acids of vitreous humor, of umbilical cord, and of streptococcus by the autolytic

\* Published in *Studies 101*.

‡ To be published in *Studies 103*.

† Published in *Studies 102*.

- enzyme of pneumococcus; *Jour. Biol. Chem.*, March, 1937, **118**, pp. 71-78.
- MILLER, BENJAMIN F., and DUBOS, RENÉ. Enzyme for decomposition of creatinine and its action on the "apparent creatinine" of blood, *Proc. Soc. Exp. Biol. and Med.*, November, 1936, **35**, pp. 335-336.
- †MIRSKY, A. E. Coagulation of myosin by dehydration, *Jour. Gen. Physiol.*, January 20, 1937, **20**, pp. 455-459.
- †— . The coagulation of myosin in muscle, *Jour. Gen. Physiol.*, January 20, 1937, **20**, pp. 461-474.
- †MOEN, JOHANNES K. Tissue culture studies on bacterial hypersensitivity. III. The persistence *in vitro* of the inherent sensitivity to tuberculin of cells from tuberculous animals, *Jour. Exp. Med.*, December 1, 1936, **64**, pp. 943-951.
- ‡— . Tissue culture studies on bacterial hypersensitivity. IV. Protective effect of immune plasma against the deleterious influence of streptococcal extract on hypersensitive cells, *Jour. Exp. Med.*, April 1, 1937, **65**, pp. 587-594.
- †PAGE, IRVINE H., and HEUER, GEORGE J. Treatment of essential and malignant hypertension by section of anterior nerve roots, *Arch. Int. Med.*, February, 1937, **59**, pp. 245-298.
- †PARKER, ROBERT F., and RIVERS, THOMAS M. Immunological and chemical investigations of vaccine virus. VI. Isolation of a heat-stable, serologically active substance from tissues infected with vaccine virus, *Jour. Exp. Med.*, February 1, 1937, **65**, pp. 243-249.
- †— and SMYTHE, C. V. Immunological and chemical investigations of vaccine virus. V. Metabolic studies of elementary bodies of vaccinia, *Jour. Exp. Med.*, January 1, 1937, **65**, pp. 109-120.
- †REZNIKOFF, PAUL, and GOEBEL, WALTHER F. The preparation of ferrous gluconate and its use in the treatment of hypochromic anemia in rats, *Jour. Pharmacol. and Exp. Therap.*, February, 1937, **59**, pp. 182-192.
- RIVERS, THOMAS M. General aspects of infection and resistance, in Brenne-  
mann, J., *Practice of pediatrics*, Hagerstown, Maryland, W. F. Prior  
Company, 1937, **2**, chapter 1, pp. 1-32.
- . Psittacosis, in Brenne-  
mann, J., *Practice of pediatrics*, Hagerstown,  
Maryland, W. F. Prior Company, 1937, **2**, chapter 16, pp. 1-4.
- . Viruses and Koch's postulates, *Jour. Bact.*, January, 1937, **33**, pp. 1-12.
- SENDROY, JULIUS, JR. Vessels for the storage of gases and liquids, *Ind. and Eng. Chem., Analytical Edition*, April 15, 1937, **9**, pp. 190-191.

† Published in *Studies 102*.

‡ To be published in *Studies 103*.

- † SMADEL, JOSEPH E. Experimental nephritis in rats induced by injection of anti-kidney serum. I. Preparation and immunological studies of nephrotoxin, *Jour. Exp. Med.*, December 1, 1936, **64**, pp. 921-942.
- ‡ —. Experimental nephritis in rats induced by injection of anti-kidney serum. III. Pathological studies of the acute and chronic disease, *Jour. Exp. Med.*, April 1, 1937, **65**, pp. 541-555.
- ‡ — and FARR, LEE E. Experimental nephritis in rats induced by injection of anti-kidney serum. II. Clinical and functional studies, *Jour. Exp. Med.*, April 1, 1937, **65**, pp. 527-540.
- † — and SWIFT, HOMER F. Reverse anaphylaxis in rats with special attention to kidney damage, *Jour. Immunol.*, January, 1937, **32**, pp. 75-81.
- ‡ SWIFT, HOMER F. A simple method for preserving bacterial cultures by freezing and drying, *Jour. Bact.*, April, 1937, **33**, pp. 411-421.
- ‡ — and SMADEL, JOSEPH E. Experimental nephritis in rats induced by injection of anti-kidney serum. IV. Prevention of the injurious effects of nephrotoxin *in vivo* by kidney extract, *Jour. Exp. Med.*, April 1, 1937, **65**, pp. 557-564.
- VAN SLYKE, D. D., and ALVING, ALF. La cura dietetica del morbo di Bright, *Attualità terap. med.*, 1937, **15**, pp. 101-122.

THE DEPARTMENT OF ANIMAL AND PLANT PATHOLOGY

*Animal Pathology*

- BOUGHTON, DONALD C. *Isospora volki n. sp.*, a new avian coccidian, *Jour. Parasitol.*, February, 1937, **23**, pp. 97-98.
- ‡ —. Studies on oöcyst production in avian coccidiosis. I. A dilution count technique, *Am. Jour. Hyg.*, March, 1937, **25**, pp. 187-202.
- GOWEN, JOHN W. Biological aspects of the quantum theory of radiation absorptions in tissues, in Duggar, B. M., *Biological effects of radiation*, New York and London, McGraw-Hill Book Company, 1936, **2**, pp. 1311-1330.
- and PRICE, W. C. Inactivation of tobacco-mosaic virus by x-rays, *Science*, December 11, 1936, **84**, pp. 536-537.
- GRAHAM, GEORGE L. The infections produced in rats by a single larva of *Strongyloides ratti*, *Proc. Helminth. Soc. Washington*, January, 1937, **4**, pp. 29-30.
- LITTLE, RALPH B. Mastitis detection and control, *Proc. 29th Ann. Convention Internat. Assn. Milk Dealers, Production Sect.*, Atlantic City, October 13, 1936, pp. 71-87.

† Published in *Studies* 102.

‡ To be published in *Studies* 103.

- †MCCOY, E. E., and GLASER, R. W. Nematode culture for Japanese beetle control, *State N. J. Dept. Agric., Bureau Plant Ind., Circular No. 265*, July, 1936, pp. 3-9.
- \*NELSON, JOHN B. Studies on an uncomplicated coryza of the domestic fowl. VII. Cultivation of the coccobacilliform bodies in fertile eggs and in tissue cultures, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 749-758.
- \*——. Studies on an uncomplicated coryza of the domestic fowl. VIII. The infectivity of fetal membrane and tissue culture suspensions of the coccobacilliform bodies, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 759-769.
- SHOPE, RICHARD E. The influenzas of swine and man, *Harvey Lectures*, 1935-36, **31**, pp. 183-213; also in *Medicine*, December, 1936, **15**, pp. 453-487.
- †——. Immunization of rabbits to infectious papillomatosis, *Jour. Exp. Med.*, February 1, 1937, **65**, pp. 219-231.
- \*—— and FRANCIS, THOMAS, JR. The susceptibility of swine to the virus of human influenza, *Jour. Exp. Med.*, November 1, 1936, **64**, pp. 791-801.
- †STOLL, NORMAN R. Tapeworm studies. IV. *Moniezia expansa* of sheep strain contracted by calf, *Proc. Helminth. Soc. Washington*, January, 1937, **4**, p. 32.
- †TRAGER, WILLIAM. A growth factor required by mosquito larvae, *Jour. Exp. Biol.*, April, 1937, **14**, pp. 240-251.
- †——. The hatching of spores of *Nosema bombycis* Nägeli and the partial development of the organism in tissue cultures, *Jour. Parasitol.*, April, 1937, **23**, pp. 226-227.

#### *Plant Pathology*

- CHESTER, K. STARR. A critique of plant serology. Part 1. The nature and utilization of phytoserological procedures, *Quart. Rev. Biol.*, March, 1937, **12**, pp. 19-46.
- HOLMES, F. O. Genes affecting response of *Nicotiana tabacum* hybrids to tobacco-mosaic virus, *Science*, January 22, 1937, **85**, pp. 104-105.
- †JENSEN, JAMES H. Studies on representative strains of tobacco-mosaic virus, *Phytopathology*, January, 1937, **27**, pp. 69-84.
- KUNKEL, L. O. Virus diseases of plants: twenty-five years of progress, 1910-1935, *Brooklyn Bot. Garden Mem.*, 1936, **4**, pp. 51-55.
- †——. Peach mosaic not cured by heat treatments, *Am. Jour. Bot.*, December, 1936, **23**, pp. 683-686.

\* Published in *Studies 101*.

† To be published in *Studies 103*.

† Published in *Studies 102*.

- †LORING, HUBERT S., and STANLEY, W. M. Isolation of crystalline tobacco-mosaic virus protein from tomato plants, *Jour. Biol. Chem.*, February, 1937, **117**, pp. 733-754.
- †PRICE, W. C. Classification of lily-mosaic virus, *Phytopathology*, April, 1937, **27**, pp. 561-569.
- †— and GOWEN, JOHN W. Quantitative studies of tobacco-mosaic virus inactivation by ultra-violet light, *Phytopathology*, March, 1937, **27**, pp. 267-282.
- †SPENCER, ERNEST L. Frenching of tobacco and thallium toxicity, *Am. Jour. Bot.*, January, 1937, **24**, pp. 16-24.
- †STANLEY, W. M. Chemical studies on the virus of tobacco mosaic. VIII. The isolation of a crystalline protein possessing the properties of aucuba mosaic virus, *Jour. Biol. Chem.*, January, 1937, **117**, pp. 325-340.
- †—. Chemical studies on the virus of tobacco mosaic. IX. Correlation of virus activity and protein on centrifugation of protein from solution under various conditions, *Jour. Biol. Chem.*, February, 1937, **117**, pp. 755-770.
- . Crystalline tobacco-mosaic virus protein, *Am. Jour. Bot.*, February, 1937, **24**, pp. 59-68.
- . Some biochemical investigations on the crystalline tobacco-mosaic virus proteins [Abstract], *Proc. Am. Phil. Soc.*, April 22, 1937, **77**, pp. 447-453.
- †WHITE, PHILIP R. Seasonal fluctuations in growth rates of excised tomato root-tips, *Plant Physiol.*, January, 1937, **12**, pp. 183-190.

† Published in *Studies 102*.

‡ To be published in *Studies 103*.

The papers marked \*, †, and ‡, and all similar reports from the Institute, are ultimately assembled in a series of volumes entitled **Studies from The Rockefeller Institute for Medical Research**. The price is \$2.00 per volume. A special rate of \$1.00 per volume is made to those who subscribe to *The Journal of Experimental Medicine*, or *The Journal of General Physiology*.

Other publications of The Rockefeller Institute are:

**The Journal of Experimental Medicine**, edited by **Simon Flexner, M.D., Peyton Rous, M.D., and Herbert S. Gasser, M.D.**

**The Journal of General Physiology**, edited by **W. J. Crozier, John H. Northrop, and W. J. V. Osterhout.**

**Monographs of The Rockefeller Institute for Medical Research.**

All correspondence should be addressed to the

PUBLICATION OFFICE  
THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH  
YORK AVENUE AND 66TH STREET  
NEW YORK, N. Y.

Results of the investigations conducted at The Rockefeller Institute for Medical Research, or elsewhere under its grants, are first reported in a variety of journals and publications. The Semiannual List, of which this is No. 43, gives the place of publication of the most recent reports of these investigations. It will be sent regularly upon request.

---

SEMIANNUAL LIST OF THE PUBLICATIONS OF  
THE STAFF OF THE ROCKEFELLER  
INSTITUTE FOR MEDICAL  
RESEARCH

MAY 1, 1937, TO NOVEMBER 1, 1937

THE DEPARTMENT OF THE LABORATORIES

*Chemistry*

- †BERGMANN, MAX, and FRAENKEL-CONRAT, HEINZ. The rôle of specificity in the enzymatic synthesis of proteins. Syntheses with intracellular enzymes, *Jour. Biol. Chem.*, July, 1937, **119**, pp. 707-720.
- †—, FRUTON, JOSEPH S., and FRAENKEL-CONRAT, HEINZ. On proteolytic enzymes. XV. Regarding the general nature of intracellular proteolytic enzymes, *Jour. Biol. Chem.*, June, 1937, **119**, pp. 35-46.
- \*— and NIEMANN, CARL. On proteolytic enzymes. XIV. On the general nature of the enzymatic degradation of proteins, *Jour. Biol. Chem.*, May, 1937, **118**, pp. 781-788.
- †— and —. Newer biological aspects of protein chemistry, *Science*, August 27, 1937, **86**, pp. 187-190.
- ‡LEVENE, P. A., and CHRISTMAN, CLARENCE C. On a catalytically induced reaction resembling the Cannizzaro reaction, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 575-590.
- and —. Catalytic reduction of the methyl ester of 2:3:4-triacetyl  $\alpha$ -methyl-*D*-galacturonide to methyl-*D*-galactoside, *Science*, October 22, 1937, **86**, p. 381.
- and KREIDER, LEONARD C. On the structure of pectin polygalacturonic acid, *Science*, June 25, 1937, **85**, p. 610.
- ‡— and —. Oxidation and hydrolysis of polygalacturonide methyl ester to levo-tartaric acid, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 591-595.

---

\* Published in *Studies* 103.

‡ To be published in *Studies* 105.

† Published in *Studies* 104.

- †LEVENE, P. A., and KREIDER, LEONARD C. The ring structure of  $\alpha$ -methyl-*d*-galacturonide and its derivatives, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 597-606.
- †— and —. Conversion of uronic acids into corresponding hexoses. I. Conversion of 2,3,4-trimethyl- $\alpha$ -methyl-*d*-galacturonide methyl ester into 2,3,4-trimethyl- $\alpha$ -methyl-*d*-galactoside, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 155-164.
- †— and KUNA, MARTIN. The preparation of crystalline  $\beta$ -4-glucosido-sorbitol and its nonomethyl derivative, *Science*, June 4, 1937, **85**, p. 550.
- †— and MEHLTRETTER, C. L. On lysolecithin and on tosylglycerides, *Enzymologia*, 1937, **4**, pp. 232-238.
- †— and ROTHEN, ALEXANDRE. Note on the configurational relationship of alkyl halides and 2-halogeno acids, *Jour. Biol. Chem.*, June, 1937, **119**, pp. 189-192.
- †—, —, and KUNA, MARTIN. Rotatory dispersion of configurationally related amines, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 759-775.
- †—, —, and —. The mechanism of the reaction of substitution and Walden inversion, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 777-797.
- †— and TIPSON, R. STUART. The structure of monoacetone *d*-xylulose, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 607-619.
- †— and —. Phosphorylation of monoacetone adenosine and of diacetyl adenosine, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 131-153.
- , —, and KREIDER, LEONARD C. Reduction of the methyl ester of 2:3:4-trimethyl  $\alpha$ -methyl-*d*-galacturonide to 2:3:4-trimethyl  $\alpha$ -methyl-*d*-galactoside, *Science*, October 8, 1937, **86**, pp. 332-333.
- †TIPSON, R. STUART. A note on the acridine salts of "yeast" and "muscle" adenylic acids, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 621-623.

#### *Chemical Pharmacology*

- †CRAIG, LYMAN C. A fractional-distillation microapparatus, *Ind. and Eng. Chem., Analytical Edition*, September 15, 1937, **9**, pp. 441-443.
- †JACOBS, WALTER A., and CRAIG, LYMAN C. The veratrine alkaloids. I. The degradation of cevine, *Jour. Biol. Chem.*, June, 1937, **119**, pp. 141-153.
- †— and —. The veratrine alkaloids. II. Further study of the basic degradation products of cevine, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 447-456.

---

† Published in *Studies 104*.

† To be published in *Studies 105*.

- †JACOBS, WALTER A., and GOULD, R. GORDON, JR. The ergot alkaloids. XII. The synthesis of substances related to lysergic acid, *Jour. Biol. Chem.*, August, 1937, **120**, pp. 141-150.
- †— and ISLER, OTTO. The sapogenins of *Polygala senega*, *Jour. Biol. Chem.*, June, 1937, **119**, pp. 155-170.

#### *Physical Chemistry*

- DUBUISSON, M. A method of recording pH changes of a muscle during activity, *Jour. Physiol.*, August 17, 1937, **90**, pp. 47 P-48 P.
- †LONGSWORTH, L. G. The densities of mixtures of light and heavy water, *Jour. Am. Chem. Soc.*, August, 1937, **59**, pp. 1483-1484.
- ‡— and MACINNES, D. A. Transference numbers and ion mobilities of some electrolytes in deuterium oxide and its mixtures with water, *Jour. Am. Chem. Soc.*, September, 1937, **59**, pp. 1666-1670.
- MACINNES, D. A. The interionic attraction theory of electrolytes, *Science*, July 9, 1937, **86**, pp. 23-29.
- . The contribution of Josiah Willard Gibbs to electrochemistry, *Tr. Electrochem. Soc.*, 1937, **71**, pp. 65-72.
- and LONGSWORTH, L. G. The measurement and regulation of pH with the glass electrode, *Tr. Electrochem. Soc.*, 1937, **71**, pp. 73-88.
- MICHAELIS, LEONOR. Review of the semiquinone problem, *Tr. Electrochem. Soc.*, 1937, **71**, pp. 107-123.
- †— and FETCHER, E. S., JR. Two-step oxidation of benzoin to benzil, *Jour. Am. Chem. Soc.*, July, 1937, **59**, pp. 1246-1249.
- ‡—, MORAGUES-GONZALEZ, V., and SMYTHE, C. V. Action of various dyestuffs on fermentation and phosphate synthesis in yeast extract, *Enzymologia*, 1937, **3**, pp. 242-251.
- †— and SCHUBERT, MAXWELL P. Some problems in two-step oxidation treated for the case of phenanthrenequinonesulfonate, *Jour. Biol. Chem.*, June, 1937, **119**, pp. 133-140.
- \*SMYTHE, C. V. An improved method of preparing hexosemonophosphate from yeast extract, *Jour. Biol. Chem.*, May, 1937, **118**, pp. 619-625.

#### *Experimental Surgery*

- CARREL, ALEXIS. Le présent et l'avenir de la cytologie expérimentale, Verhandlungen des IV. Internationalen Zellforscherkongresses, Copenhagen, *Arch. exp. Zellforsch.*, May 7, 1937, **19**, pp. 121-128.

\* Published in *Studies 103*.

‡ To be published in *Studies 105*.

† Published in *Studies 104*.



- CARREL, ALEXIS. La culture des viscères dans l'appareil de Lindbergh, *Paris méd.*, July 31, 1937, **27**, pp. 85-86.
- ‡OKKELS, HARALD. The culture of whole organs. II. The effects of perfusion on the thyroid epithelium, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 297-304.
- ‡——. The culture of whole organs. III. The problem of antihormones studied on isolated living thyroid glands, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 305-316.
- PARKER, RAYMOND C. La formation des anticorps *in vitro*, *Compt. rend. Soc. biol.*, Séance du 29 mai, 1937, **125**, pp. 315-318.

*Pathology and Bacteriology*

- ‡CLAUDE, ALBERT. Properties of the causative agent of a chicken tumor. XIII. Sedimentation of the tumor agent, and separation from the associated inhibitor, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 59-72.
- ‡——. Fractionation of chicken tumor extracts by high speed centrifugation, *Am. Jour. Cancer*, August, 1937, **30**, pp. 742-745.
- ‡——. Spreading properties of leech extracts and the formation of lymph, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 353-366.
- ‡——. Liver degeneration and cirrhosis produced by 1:2:5:6-dibenzanthracene, *Am. Jour. Cancer*, September, 1937, **31**, pp. 100-103.
- \*—— and DURAN-REYNALS, F. Chemical properties of the purified spreading factor from testicle, *Jour. Exp. Med.*, May 1, 1937, **65**, pp. 661-670.
- ‡CLAUSEN, H. J., and DURAN-REYNALS, F. Studies on the experimental infection of some reptiles, amphibia, and fish with *Serratia anolium*, *Am. Jour. Path.*, May, 1937, **13**, pp. 441-452.
- FLEXNER, SIMON. A half century of American medicine, *Science*, May 28, 1937, **85**, pp. 505-512.
- LANDSTEINER, K., and CHASE, M. W. Immunochemistry, in Luck, James M., Annual review of biochemistry, Stanford University, 1937, **6**, pp. 621-643.
- ‡—— and ——. Studies on the sensitization of animals with simple chemical compounds. IV. Anaphylaxis induced by picryl chloride and 2:4-dinitrochlorobenzene, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 337-351.
- §—— and PIRIE, N. W. Serological specificity in pyridine derivatives, *Jour. Immunol.*, October, 1937, **33**, pp. 265-270.

\* Published in *Studies 103*.

‡ Published in *Studies 104*.

‡ To be published in *Studies 105*.

§ To be published in *Studies 106*.

- †LANDSTEINER, K., and WIENER, ALEXANDER S. On the presence of M agglutinogens in the blood of monkeys, *Jour. Immunol.*, July, 1937, **33**, pp. 19-25.
- LYNCH, CLARA J. Genetic factors in relation to lung tumors in mice, in Some fundamental aspects of the cancer problem, Occasional Publications of the American Association for the Advancement of Science, No. 4, June, 1937, *Science*, **85**, suppl., pp. 22-28.
- ‡——. Studies on the relation between tumor susceptibility and heredity. VI. Lung tumors in mice with respect to the phenomenon of maternal influence, *Am. Jour. Cancer*, September, 1937, **31**, pp. 77-84.
- †McMASTER, PHILIP D., and KIDD, JOHN G. Lymph nodes as a source of neutralizing principle for vaccinia, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 73-100.
- MURPHY, JAMES B. The stimulation and inhibition of tumor growths, in Some fundamental aspects of the cancer problem, Occasional Publications of the American Association for the Advancement of Science, No. 4, June, 1937, *Science*, **85**, suppl., pp. 104-107.
- ‡NIGG, CLARA. Serological behavior of heated protein mixtures, *Jour. Immunol.*, September, 1937, **33**, pp. 229-234.
- §OLITSKY, PETER K., and HARFORD, CARL G. Intranuclear inclusion bodies in the tissue reactions produced by injections of certain foreign substances, *Am. Jour. Path.*, September, 1937, **13**, pp. 729-748.
- †—— and SABIN, ALBERT B. Comparative effectiveness of various chemical sprays in protecting monkeys against nasally instilled poliomyelitis virus, *Proc. Soc. Exp. Biol. and Med.*, May, 1937, **36**, pp. 532-535.
- †SABIN, ALBERT B., and OLITSKY, PETER K. Influence of host factors on neuroinvasiveness of vesicular stomatitis virus. I. Effect of age on the invasion of the brain by virus instilled in the nose, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 15-34.
- †—— and —— . Influence of host factors on neuroinvasiveness of vesicular stomatitis virus. II. Effect of age on the invasion of the peripheral and central nervous systems by virus injected into the leg muscles or the eye, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 35-57.
- SABIN, FLORENCE R. The contributions of Charles Denison and Henry Sewall to medicine, *Science*, October 22, 1937, **86**, pp. 357-364.
- WEBSTER, LESLIE T. Epidemiologic and immunologic experiments on rabies, *New England Jour. Med.*, October 28, 1937, **217**, pp. 687-690.

† Published in *Studies 104*.

§ To be published in *Studies 106*.

‡ To be published in *Studies 105*.

WEBSTER, LESLIE T. Japanese B encephalitis virus: its differentiation from St. Louis encephalitis virus and relationship to louping-ill virus, *Science*, October 29, 1937, **86**, pp. 402-403.

† — and CLOW, ANNA D. Propagation of rabies virus in tissue culture, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 125-131.

### Physiology

GASSER, HERBERT S. The control of excitation in the nervous system, *Harvey Lectures*, 1936-37, **32**, pp. 169-193; also in *Bull. N. Y. Acad. Med.*, June, 1937, **13**, series 2, pp. 324-348.

\*LEHMANN, JØRGEN ERIK. The effect of asphyxia on mammalian A nerve fibers, *Am. Jour. Physiol.*, May 1, 1937, **119**, pp. 111-120.

• LORENTE DE NÓ, R. The sensory endings in the cochlea, *Laryngoscope*, June, 1937, **47**, pp. 373-377.

### General Physiology

\*ANSON, M. L. Carboxypeptidase. I. The preparation of crystalline carboxypeptidase, *Jour. Gen. Physiol.*, May 20, 1937, **20**, pp. 663-669.

† —. Carboxypeptidase. II. The partial purification of pro-carboxypeptidase, *Jour. Gen. Physiol.*, July 20, 1937, **20**, pp. 777-780.

† —. Carboxypeptidase. III. The estimation of carboxypeptidase and pro-carboxypeptidase, *Jour. Gen. Physiol.*, July 20, 1937, **20**, pp. 781-786.

\*JACQUES, A. G. The kinetics of penetration. XIV. The penetration of iodide into *Valonia*, *Jour. Gen. Physiol.*, May 20, 1937, **20**, pp. 737-766; also in *Contrib. Bermuda Biol. Station Research*, No. 56, 1937.

\*OSTERHOUT, W. J. V. Changes of apparent ionic mobilities in protoplasm. II. The action of guaiacol as affected by pH, *Jour. Gen. Physiol.*, May 20, 1937, **20**, pp. 685-693.

— The protoplasmic surface in certain plant cells, *Tr. Faraday Soc.*, August, 1937, **33**, pp. 997-1002.

— Electrochemical methods in the study of plant cells, *Tr. Electrochem. Soc.*, 1937, **71**, pp. 93-101.

†TEORELL, TORSTEN. Studies on the diffusion effect upon ionic distribution. II. Experiments on ionic accumulation, *Jour. Gen. Physiol.*, September 20, 1937, **21**, pp. 107-122.

---

\* Published in *Studies 103*.

‡ To be published in *Studies 105*.

† Published in *Studies 104*.

*Biophysics*

- BEARD, J. W., FINKELSTEIN, HAROLD, and WYCKOFF, RALPH W. G. The pH stability range of the elementary bodies of vaccinia, *Science*, October 8, 1937, **86**, pp. 331-332.
- WYCKOFF, RALPH W. G. Méthode pour la préparation des protéines par l'ultracentrifugation, *Compt. rend. Soc. biol.*, Séance du 1 mai, 1937, **125**, pp. 3-5.
- . La préparation des virus-protéines par l'ultracentrifugation, *Compt. rend. Soc. biol.*, Séance du 1 mai, 1937, **125**, pp. 5-7.
- . Ultracentrifugal concentration of a homogeneous heavy component from tissues diseased with equine encephalomyelitis, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 771-773.
- . Die Isolierung hochmolekularer Eiweißstoffe mit der Ultrazentrifuge, *Naturwissenschaften*, July 23, 1937, **25**, pp. 481-483.
- . The ultracentrifugal purification and study of macromolecular proteins, *Science*, July 30, 1937, **86**, pp. 92-95.
- ‡— . The sedimentation constant of ooverdin, *Science*, October 1, 1937, **86**, pp. 311-312.
- ‡— . Molecular sedimentation constants of tobacco mosaic virus proteins extracted from plants at intervals after inoculation, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 219-224.
- and BEARD, J. W. pH stability of Shope papilloma virus and of purified papilloma virus protein, *Proc. Soc. Exp. Biol. and Med.*, May, 1937, **36**, pp. 562-563.

THE DEPARTMENT OF THE HOSPITAL

- ‡BARKER, W. HALSEY. Congo red in the treatment of pernicious anemia and sprue, *Am. Jour. Med. Sc.*, September, 1937, **194**, pp. 293-303.
- ‡BOURDILLON, JACQUES. Distribution in body fluids and excretion of ingested ammonium chloride, potassium chloride, and sodium chloride, *Am. Jour. Physiol.*, October 1, 1937, **120**, pp. 411-419.
- DOBRINER, KONRAD. Excretion of porphyrin by dogs, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 757-760.
- †— . Porphyrin excretion in the feces in normal and pathological conditions, *Jour. Biol. Chem.*, August, 1937, **120**, pp. 115-127.
- and BARKER, W. HALSEY. Total coproporphyrin I excretion in pernicious anemia, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 864-867.

---

† Published in *Studies 104*.

‡ To be published in *Studies 105*.

- \*DUBOS, RENÉ J. The autolytic system of pneumococci, *Jour. Exp. Med.*, June 1, 1937, **65**, pp. 873-883.
- The decomposition of yeast nucleic acid by a heat resistant enzyme, *Science*, June 4, 1937, **85**, pp. 549-550.
- † — Mechanism of the lysis of pneumococci by freezing and thawing, bile, and other agents, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 101-112.
- † — The effect of the bacteriolytic enzyme of pneumococcus upon the antigenicity of encapsulated pneumococci, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 113-123.
- and MACLEOD, COLIN M. Effect of a heat resistant enzyme upon the antigenicity of pneumococci, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 696-697.
- \*FARR, LEE E., and ABERNETHY, T. J. Renal physiology in lobar pneumonia, *Jour. Clin. Inv.*, May, 1937, **16**, pp. 421-429.
- and SMADEL, JOSEPH E. Influence of diet on the course of nephrotoxic nephritis in rats, *Proc. Soc. Exp. Biol. and Med.*, May, 1937, **36**, pp. 472-473.
- §FREEMAN, NORMAN E., and PAGE, IRVINE H. Hypertension produced by constriction of the renal artery in sympathectomized dogs, *Am. Heart Jour.*, October, 1937, **14**, pp. 405-414.
- GOEBEL, WALTHER F. The chemical constitution of benzoyl glucuronic acid, *Science*, July 30, 1937, **86**, pp. 105-106.
- † — and HOTCHKISS, ROLLIN D. Chemo-immunological studies on conjugated carbohydrate-proteins. XI. The specificity of azoprotein antigens containing glucuronic and galacturonic acids, *Jour. Exp. Med.*, August 1, 1937, **66**, pp. 191-205.
- ‡GOODNER, KENNETH, and HORSFALL, FRANK L., JR. Properties of the type specific proteins of antipneumococcus sera. I. The mouse protective value of Type I sera with reference to the precipitin content, *Jour. Exp. Med.*, October 1, 1937, **66**, pp. 413-424.
- ‡ — and —. Properties of the type specific proteins of antipneumococcus sera. II. Immunological fractionation of Type I antipneumococcus horse and rabbit sera, *Jour. Exp. Med.*, October 1, 1937, **66**, pp. 425-435.
- ‡ — and —. Properties of the type specific proteins of antipneumococcus sera. III. Immunochemical fractionation of Type I antipneumococcus horse and rabbit sera, *Jour. Exp. Med.*, October 1, 1937, **66**, pp. 437-448.

\* Published in *Studies 103*.

† Published in *Studies 104*.

‡ To be published in *Studies 105*.

§ To be published in *Studies 106*.

- §GOODNER, KENNETH, and HORSFALL, FRANK L., JR. Passive anaphylactic sensitivity to pneumococcal capsular polysaccharides, *Jour. Immunol.*, October, 1937, **33**, pp. 259-263.
- §— and —. The purpuric reaction produced in animals by derivatives of the pneumococcus, *Proc. Soc. Exp. Biol. and Med.*, October, 1937, **37**, pp. 178-180.
- §—, —, and DUBOS, RENÉ J. Type specific antipneumococcal rabbit serum for therapeutic purposes. Production, processing, and standardization, *Jour. Immunol.*, October, 1937, **33**, pp. 279-295.
- †HOLDEN, RAYMOND F., JR. Determination of fermentable blood sugar by gasometric measurement of the carbon dioxide formed by the action of yeast, *Jour. Biol. Chem.*, June, 1937, **119**, pp. 347-368.
- ‡—. Plasma cholesterol saturation in patients with hypertension. With a note on preparation of glass filters for micro-filtration of cholesterol digitonide, *Jour. Clin. Inv.*, September, 1937, **16**, pp. 763-765.
- HORSFALL, FRANK L., JR. The control of lobar pneumonia, *Canad. Pub. Health Jour.*, October, 1937, **28**, pp. 476-484.
- \*—, GOODNER, KENNETH, MACLEOD, COLIN M., and HARRIS, A. H., 2d. Antipneumococcus rabbit serum as a therapeutic agent in lobar pneumonia, *Jour. Am. Med. Assn.*, May 1, 1937, **108**, pp. 1483-1490.
- ‡HOTCHKISS, ROLLIN D., and GOEBEL, WALTHER F. Chemo-immunological studies on the soluble specific substance of pneumococcus. III. The structure of the aldobionic acid from the Type III polysaccharide, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 195-203.
- §HUMMEL, L. E. Liver extract and reticulocytosis in the guinea pig, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 657-661.
- ‡MILLER, D. K., and BARKER, W. HALSEY. Clinical course and treatment of sprue, *Arch. Int. Med.*, September, 1937, **60**, pp. 385-414.
- ‡— and RHOADS, C. P. The effect of diet on the susceptibility of the canine hematopoietic function to damage by amidopyrine, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 367-382.
- MIRSKY, A. E. Contraction of muscle and denaturation of myosin, *Proc. Soc. Exp. Biol. and Med.*, October, 1937, **37**, pp. 157-159.
- ‡PAGE, IRVINE H. Physiological properties of a central excitatory agent in fluid obtained by occipital puncture of man and animals, *Am. Jour. Physiol.*, October 1, 1937, **120**, pp. 392-400.
- ‡—, FARR, LEE E., and WEECH, A. A. The effect of prolonged low protein diet on the serum lipids of dogs, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 111-116.

\* Published in *Studies 103*.

† Published in *Studies 104*.

‡ To be published in *Studies 105*.

§ To be published in *Studies 106*.

- †PAGE, IRVINE H., and HEUER, GEORGE J. The effect of splanchnic nerve resection on patients suffering from hypertension, *Am. Jour. Med. Sc.*, June, 1937, **193**, pp. 820-841.
- ‡— and SWEET, J. E. The effect of hypophysectomy on arterial blood pressure of dogs with experimental hypertension, *Am. Jour. Physiol.*, October 1, 1937, **120**, pp. 238-245.
- †REZNIKOFF, PAUL, and GOEBEL, WALTHER F. The use of ferrous gluconate in the treatment of hypochromic anemia, *Jour. Clin. Inv.*, July, 1937, **16**, pp. 547-554.
- RHOADS, C. P. Effect of indol on hematopoiesis in dogs fed deficient diets, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 652-654.
- and MILLER, D. K. Effect of diet on susceptibility of canine hematopoietic system to damage by amidopyrine, *Proc. Soc. Exp. Biol. and Med.*, June, 1937, **36**, pp. 654-656.
- RIVERS, THOMAS M., in Cecil, Russell L., A textbook of medicine by American authors, Philadelphia and London, W. B. Saunders Company, 4th edition, 1937.
- Introduction to virus diseases, pp. 1-2.
- Herpes simplex, pp. 33-34.
- Psittacosis, pp. 60-62.
- Foot and mouth disease, pp. 63-64.
- Lymphocytic choriomeningitis, pp. 64-65.
- Epidemic encephalitis, pp. 74-78.
- St. Louis type of encephalitis, pp. 78-81.
- Postinfection encephalitis, pp. 81-83.
- \*—, SMADEL, JOSEPH E., and CHAMBERS, LESLIE A. Effect of intense sonic vibrations on elementary bodies of vaccinia, *Jour. Exp. Med.*, May 1, 1937, **65**, pp. 677-685.
- †— and WARD, S. M. Infectious myxomatosis of rabbits. Preparation of elementary bodies and studies of serologically active materials associated with the disease, *Jour. Exp. Med.*, July 1, 1937, **66**, pp. 1-14.
- ‡SENDROY, JULIUS, JR. Microdetermination of chloride in biological fluids, with solid silver iodate. I. Gasometric analysis, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 335-403.
- ‡—. Microdetermination of chloride in biological fluids, with solid silver iodate. II. Titrimetric analysis, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 405-417.

---

\* Published in *Studies 103*.

‡ To be published in *Studies 105*.

† Published in *Studies 104*.

- ‡SENDROY, JULIUS, JR. Microdetermination of chloride in biological fluids, with solid silver iodate. III. Colorimetric analysis, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 419-439.
- ‡——. Note on errors in the analysis of chloride in albuminous urine, *Jour. Biol. Chem.*, September, 1937, **120**, pp. 441-445.
- ‡SMADEL, JOSEPH E., and WALL, M. J. Elementary bodies of vaccinia from infected chorio-allantoic membranes of developing chick embryos, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 325-336.
- \*STEELE, J. MURRAY. Elevation of rectal temperature following mechanical obstruction to the peripheral circulation, *Am. Heart Jour.*, May, 1937, **13**, pp. 542-549.
- §——. Interpretation of arterial elasticity from measurements of pulse wave velocities. I. Effect of pressure, *Am. Heart Jour.*, October, 1937, **14**, pp. 452-465.
- SWIFT, HOMER F. Rheumatic fever, in Cecil, Russell L., A textbook of medicine by American authors, Philadelphia and London, W. B. Saunders Company, 4th edition, 1937, pp. 474-490.
- §—— and HIRST, GEORGE K. An apparatus for grinding bacteria at low temperatures, *Proc. Soc. Exp. Biol. and Med.*, October, 1937, **37**, pp. 162-166.

#### THE DEPARTMENT OF ANIMAL AND PLANT PATHOLOGY

##### *Animal Pathology*

- \*GREENE, HARRY S. N. Toxemia of pregnancy in the rabbit. I. Clinical manifestations and pathology, *Jour. Exp. Med.*, June 1, 1937, **65**, pp. 809-832.
- LITTLE, RALPH B. Bactericidal property of milk, *25th Ann. Rep. Internat. Assn. Milk Sanitarians*, Atlantic City, October 14, 1936, pp. 105-118. Published in July, 1937.
- †——. Bovine mastitis. I. The significance of the dose factor in the production of experimental mastitis, *Cornell Vet.*, July, 1937, **27**, pp. 297-308.
- †——. Bovine mastitis. II. The production of mastitis by the suction of streptococci into the duct of the teat, *Cornell Vet.*, July, 1937, **27**, pp. 309-316.
- \*NELSON, JOHN B. Infectious catarrh of mice. I. A natural outbreak of the disease, *Jour. Exp. Med.*, June 1, 1937, **65**, pp. 833-841.

\* Published in *Studies 103*.

† Published in *Studies 104*.

‡ To be published in *Studies 105*.

§ To be published in *Studies 106*.



- \*NELSON, JOHN B. Infectious catarrh of mice. II. The detection and isolation of coccobacilliform bodies, *Jour. Exp. Med.*, June 1, 1937, **65**, pp. 843-849.
- \*—. Infectious catarrh of mice. III. The etiological significance of the coccobacilliform bodies, *Jour. Exp. Med.*, June 1, 1937, **65**, pp. 851-860.
- †SEASTONE, C. V., and HERRIOTT, R. M. Immunological studies on pepsin and pepsinogen, *Jour. Gen. Physiol.*, July 20, 1937, **20**, pp. 797-806.
- SHOPE, RICHARD E. Recent knowledge concerning influenza, *Ann. Int. Med.*, July, 1937, **11**, pp. 1-12.
- †—. Immunological relationship between the swine and human influenza viruses in swine, *Jour. Exp. Med.*, August 1, 1937, **66**, pp. 151-168.
- †—. The effect of *Hemophilus influenzae suis* vaccines on swine influenza, *Jour. Exp. Med.*, August 1, 1937, **66**, pp. 169-175.
- †STOLL, NORMAN R. Tapeworm studies. V. Absence of *M. expansa* from the sheep intestine early after infection, *Am. Jour. Hyg.*, July, 1937, **26**, pp. 148-161.
- †TRAGER, WILLIAM. Cell size in relation to the growth and metamorphosis of the mosquito, *Aedes aegypti*, *Jour. Exp. Zool.*, August 5, 1937, **76**, pp. 467-489.
- ‡TRAUB, ERICH. Immunization of guinea pigs with a modified strain of lymphocytic choriomeningitis virus, *Jour. Exp. Med.*, September 1, 1937, **66**, pp. 317-324.

#### *Plant Pathology*

- CHESTER, K. STARR. A critique of plant serology. Part II. Application of serology to the classification of plants and the identification of plant products, *Quart. Rev. Biol.*, June, 1937, **12**, pp. 165-190.
- †—. A simple and rapid method for identifying plant viruses in the field, *Phytopathology*, June, 1937, **27**, pp. 722-727.
- †—. Anaphylaxis tests for differentiating the proteins of normal Solanaceae, *Am. Jour. Bot.*, July, 1937, **24**, pp. 451-454.
- ‡—. Serological studies of plant viruses, *Phytopathology*, September, 1937, **27**, pp. 903-912.
- . A critique of plant serology (concluded). Part III. Phytoserology in medicine and general biology. Bibliography, *Quart. Rev. Biol.* September, 1937, **12**, pp. 294-321.

---

\* Published in *Studies 103*.

† Published in *Studies 104*.

‡ To be published in *Studies 105*.

- \*HOLMES, FRANCIS O. Inheritance of resistance to tobacco-mosaic disease in the pepper, *Phytopathology*, May, 1937, **27**, pp. 637-642.
- \*KUNKEL, L. O. Effect of heat on ability of *Cicadula sexnotata* (Fall.) to transmit aster yellows, *Am. Jour. Bot.*, May, 1937, **24**, pp. 316-327.
- ‡LORING, HUBERT S., and WYCKOFF, RALPH W. G. The ultracentrifugal isolation of latent mosaic virus protein, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 225-230.
- \*OSBORN, H. T. Studies on the transmission of pea virus 2 by aphids, *Phytopathology*, May, 1937, **27**, pp. 589-603.
- †SPENCER, ERNEST L. Influence of host nutrition on systemic development of tobacco mosaic, *Plant Physiol.*, July, 1937, **12**, pp. 825-832.
- ‡STANLEY, W. M. Chemical studies on the virus of tobacco mosaic. X. The activity and yield of virus-protein from plants diseased for different periods of time, *Jour. Biol. Chem.*, October, 1937, **121**, pp. 205-217.
- †ULLSTRUP, ARNOLD J. Histological studies on wilt of China aster, *Phytopathology*, July, 1937, **27**, pp. 737-748.
- †WHITE, PHILIP R. Survival of isolated tomato roots at suboptimal and supraoptimal temperatures, *Plant Physiol.*, July, 1937, **12**, pp. 771-776.
- †—. Separation from yeast of materials essential for growth of excised tomato roots, *Plant Physiol.*, July, 1937, **12**, pp. 777-791.
- †—. Amino acids in the nutrition of excised tomato roots, *Plant Physiol.*, July, 1937, **12**, pp. 793-802.
- †—. Vitamin B<sub>1</sub> in the nutrition of excised tomato roots, *Plant Physiol.*, July, 1937, **12**, pp. 803-811.
- †—. A comparison of nutrient salt solutions for the cultivation of excised tomato roots, *Growth*, September, 1937, **1**, pp. 182-188.

---

\*Published in *Studies 103*.

‡ To be published in *Studies 105*.

†Published in *Studies 104*.

---

The papers marked \*, †, ‡, and §, and all similar reports from the Institute, are ultimately assembled in a series of volumes entitled **Studies from The Rockefeller Institute for Medical Research**. The price is \$2.00 per volume. A special rate of \$1.00 per volume is made to those who subscribe to *The Journal of Experimental Medicine*, or *The Journal of General Physiology*.

Other publications of The Rockefeller Institute are:

**The Journal of Experimental Medicine**, edited by **Simon Flexner, M.D., Peyton Rous, M.D., and Herbert S. Gasser, M.D.**

**The Journal of General Physiology**, edited by **W. J. Crozier**,  
**John H. Northrop**, and **W. J. V. Osterhout**.  
**Monographs of The Rockefeller Institute for Medical  
Research.**

---

All correspondence should be addressed to the  
PUBLICATION OFFICE  
THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH  
YORK AVENUE AND 66TH STREET  
NEW YORK, N. Y.