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NOVEMBER 1, 1935, TO MAY 1, 1936

THE DEPARTMENT OF THE LABORATORIES

Pathology and Bacteriology

- BAUER, JOHANNES H., COX, HERALD R., and OLITSKY, PETER K. Ultrafiltration of the virus of equine encephalomyelitis. *Proc. Soc. Exp. Biol. and Med.*, December, 1935, **33**, pp. 378-382.
- †CASEY, ALBERT E. The experimental alteration of malignancy with an homologous mammalian tumor material. III. Concerning the filtrability of the material. *Am. Jour. Cancer*, February, 1936, **26**, pp. 276-290.
- Inhibition of Brown-Pearce rabbit tumor with filtered homologous tumor material. *Proc. Soc. Exp. Biol. and Med.*, February, 1936, **34**, pp. 111-112.
- ‡CLAUDE, ALBERT, and ROTHEN, ALEXANDRE. Properties of the causative agent of a chicken tumor. XII. Ultraviolet light absorption spectrum of purified chicken tumor extracts containing the active principle. *Am. Jour. Cancer*, February, 1936, **26**, pp. 344-350.
- COX, HERALD R. Tissue cultures as a more sensitive method than animal inoculation for detecting equine encephalomyelitis virus. *Proc. Soc. Exp. Biol. and Med.*, January, 1936, **33**, pp. 607-609.
- ‡DURAN-REYNALS, F. The invasion of the body by animal poisons. *Science*, March 20, 1936, **83**, pp. 286-287.
- La invasion del organismo por los venenos animales. Nota preliminar. *Rev. parasitol., clin. y lab.*, March-April, 1936, **2**, pp. 161-163.
- FLEXNER, SIMON. Concerning active immunization in poliomyelitis. *Science*, November 1, 1935, **82**, pp. 420-421.
- †— The effects of nasally instilled virus of poliomyelitis on the cerebrospinal fluid and the blood of monkeys. *Jour. Exp. Med.*, December 1, 1935, **62**, pp. 787-804.
- †— Respiratory *versus* gastro-intestinal infection in poliomyelitis. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 209-226.

† Published in *Studies* 97.

‡ To be published in *Studies* 98.

- †HU, CH'UAN-K'UEI, ROSAHN, PAUL D., and PEARCE, LOUISE. Studies on the etiology of rabbit pox. III. Tests of the relation of rabbit pox virus to other viruses by crossed-inoculation and exposure experiments. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 353-378.
- †LANDSTEINER, K. On the group specific A substance in horse saliva. II. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 185-190.
- . The specificity of serological reactions. Springfield, Illinois, Charles C. Thomas, 1936, 178 pages.
- †— and VAN DER SCHEER, J. On cross reactions of immune sera to azo-proteins. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 325-339.
- LYNCH, CLARA J. Susceptibility of mouse strains to lung tumor and sarcoma induced by 1:2:5:6-dibenzanthracene. *Proc. Soc. Exp. Biol. and Med.*, December, 1935, **33**, pp. 401-403.
- †— and HUGHES, THOMAS P. The inheritance of susceptibility to yellow fever encephalitis in mice. *Genetics*, March, 1936, **21**, pp. 104-112.
- †NIGG, CLARA. On the presence of typhus virus in wild rats in New York City. *Jour. Infect. Dis.*, November-December, 1935, **57**, pp. 252-254.
- †— . Studies on culture strains of European and murine typhus. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 341-351.
- †OLITSKY, PETER K., and COX, HERALD R. Experiments on active immunization against experimental poliomyelitis. *Jour. Exp. Med.*, January 1, 1936, **63**, pp. 109-125.
- †— and — . Active immunization of guinea pigs with the virus of equine encephalomyelitis. I. Quantitative experiments with various preparations of active virus. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 311-324.
- †PEARCE, LOUISE, ROSAHN, PAUL D., and HU, CH'UAN-K'UEI. Studies on the etiology of rabbit pox. I. Isolation of a filterable agent: its pathogenic properties. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 241-258.
- †—, —, and — . Studies on the etiology of rabbit pox. V. Studies on species susceptibility to rabbit pox virus. *Jour. Exp. Med.*, April 1, 1936, **63**, pp. 491-507.
- †RAKE, GEOFFREY. Pathology of pneumococcus infection in mice following intranasal instillation. *Jour. Exp. Med.*, January 1, 1936, **63**, pp. 17-31.
- †— . Pathogenesis of pneumococcus infections in mice. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 191-208.
- . Absorption through the nasal mucosa of mice. *Proc. Soc. Exp. Biol. and Med.*, April, 1936, **34**, pp. 369-371.

† Published in *Studies* 97.

‡ To be published in *Studies* 98.

- †ROSAHN, PAUL D., GREENE, HARRY S. N., and HU, CH'UAN-K'UEI. Observations on the gestation period of the rabbit. *Jour. Exp. Zööl.*, November 5, 1935, **72**, pp. 195-212.
- ‡—, HU, CH'UAN-K'UEI, and PEARCE, LOUISE. Studies on the etiology of rabbit pox. II. Clinical characteristics of the experimentally induced disease. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 259-276.
- ‡—, —, and —. Studies on the etiology of rabbit pox. IV. Tests on the relation of rabbit pox virus to other viruses by serum neutralization experiments. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 379-396.
- ROUS, PEYTON, and BEARD, J. W. A comparison of the tar tumors of rabbits and the virus-induced tumors. *Proc. Soc. Exp. Biol. and Med.*, December, 1935, **33**, pp. 358-360.
- SABIN, ALBERT B., and OLITSKY, PETER K. Cultivation of poliomyelitis virus *in vitro* in human embryonic nervous tissue. *Proc. Soc. Exp. Biol. and Med.*, April, 1936, **34**, pp. 357-359.
- †SABIN, F. R., SMITHBURN, KENNETH C., and THOMAS, R. M. Cellular reactions to wax-like materials from acid-fast bacteria. The unsaponifiable fraction from the tubercle bacillus, Strain H-37. *Jour. Exp. Med.*, December 1, 1935, **62**, pp. 751-769.
- †—, —, and —. Cellular reactions to waxes from *Mycobacterium leprae*. *Jour. Exp. Med.*, December 1, 1935, **62**, pp. 771-786.
- ‡SCHERP, HENRY W., and RAKE, GEOFFREY. Studies on meningococcus infection. IX. Standardization and concentration of antimeningococcus horse serum (Type I). *Jour. Exp. Med.*, April 1, 1936, **63**, pp. 547-558.
- SCHMIDT, LOUIS. What value lantern slide projection? *Jour. Biol. Photographic Assn.*, December, 1935, **4**, pp. 111-116.
- *SMITHBURN, KENNETH C. The colony morphology of tubercle bacilli. III. The relation between virulence and colony form. *Jour. Exp. Med.*, November 1, 1935, **62**, pp. 645-663.
- §—. The colony morphology of tubercle bacilli. IV. The influence of the pH of culture medium on colony form, virulence, and serological behavior. *Tr. Nat. Tuberc. Assn.*, June 26, 1935, 31st Annual Meeting, pp. 161-165.
- †—. The colony morphology of tubercle bacilli. V. Influence of the pH of the culture medium on colony form. *Jour. Exp. Med.*, January 1, 1936, **63**, pp. 95-108.
- †VAN DER SCHEER, J., and LANDSTEINER, K. Serological tests with amino acids. *Jour. Immunol.*, November, 1935, **29**, pp. 371-376.

* Published in *Studies 96*.

† Published in *Studies 97*.

‡ To be published in *Studies 98*.

§ To be published in *Studies 99*.

- †WEBSTER, LESLIE T., and CLOW, ANNA D. The limited neurotropic character of the encephalitis virus (St. Louis type) in susceptible mice. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 433-448.
- †—, FITE, GEORGE L., and CLOW, ANNA D. Experimental studies on encephalitis. IV. Specific inactivation of virus by sera from persons exposed to encephalitis, St. Louis type, 1933. With a note on the evaluation of the results of mouse tests of sera by Hugo Muench. *Jour. Exp. Med.*, December 1, 1935, **62**, pp. 827-847.

Chemistry

- BERGMANN, MAX, and FRUTON, JOSEPH S. A new type of enzyme in the intestinal tract. *Science*, March 27, 1936, **83**, p. 306.
- †— and ROSS, WILLIAM F. On proteolytic enzymes. VIII. The proteolytic systems of papain. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 659-666.
- †— and ZERVAS, LEONIDAS. A method for the stepwise degradation of polypeptides. *Jour. Biol. Chem.*, March, 1936, **113**, pp. 341-357.
- †LEVENE, P. A. A new synthesis of 1-amino-2-hydroxypropane. *Jour. Biol. Chem.*, February, 1936, **113**, pp. 153-156.
- †— and COMPTON, JACK. Detosylation of 4- and 5-tosyl monoacetone *l*-methylrhamnosides. *Jour. Am. Chem. Soc.*, November, 1935, **57**, pp. 2306-2310.
- †— and —. The structure of *d*-xylomethylose. *Jour. Biol. Chem.*, January, 1936, **112**, pp. 775-783.
- †— and HARRIS, STANTON A. Maximum rotations of carboxylic acids containing a phenethyl group. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 725-733.
- †— and —. Optical rotation of methyloctylphenethylmethane. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 735-738.
- †— and —. Configurational relationships of methylphenyl- and methylhexylacetic acids and an attempt at the correlation of the configurations of 2-hydroxy acids with those of disubstituted acetic acids containing a methyl group. *Jour. Biol. Chem.*, December, 1935, **112**, pp. 195-208.
- †— and —. The configurational relationship of methylcyclohexylcarbinol to methylhexylcarbinol. *Jour. Biol. Chem.*, February, 1936, **113**, pp. 55-59.
- †— and ROTHEN, ALEXANDRE. Optical rotation of configurationally related aldehydes. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 739-747.

† Published in *Studies 97*.

‡ To be published in *Studies 98*.

- †LEVENE, P. A., and ROTHEN, ALEXANDRE. Rotatory dispersion of aliphatic aldehydes. *Jour. Chem. Phys.*, January, 1936, **4**, pp. 48-52.
- and —. Optical activity and chemical structure. *Jour. Org. Chem.*, March, 1936, **1**, pp. 76-133.
- †— and YANG, P. S. The oxidation of *dl*- α -hydroxystearic acid and its significance as regards the structure of cerebronic acid. A reply to the paper of Klenk and Ditt. *Jour. Biol. Chem.*, November, 1935, **111**, p. 751.
- ‡RAYMOND, ALBERT L. Hexosemonophosphates. Glucose-4-phosphate. *Jour. Biol. Chem.*, March, 1936, **113**, pp. 375-382.

Chemical Pharmacology

- §ELDERFIELD, ROBERT C. Strophanthin. XXXV. The nature of "the acid, $C_{23}H_{30}O_8$," from strophanthidin. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 631-635.
- JACOBS, WALTER A., and CRAIG, LYMAN C. The ergot alkaloids. Synthesis of 4-carboline carbonic acids. *Science*, November 1, 1935, **82**, pp. 421-422.
- and —. The ergot alkaloids. The structure of lysergic acid. *Science*, January 10, 1936, **83**, pp. 38-39.
- §— and —. The ergot alkaloids. VIII. The synthesis of 4-carboline carbonic acids. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 759-765.
- §— and —. The ergot alkaloids. IX. The structure of lysergic acid. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 767-778.
- ‡—, —, and ROTHEN, ALEXANDRE. The ergot alkaloids. The ultra-violet absorption spectra of lysergic acid and related substances. *Science*, February 14, 1936, **83**, pp. 166-167.
- §— and ELDERFIELD, ROBERT C. Strophanthin. XXXIII. The oxidation of anhydroaglucone derivatives. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 611-624.
- §— and —. Strophanthin. XXXIV. Cyanhydrin syntheses with dihydrostrophanthidin and derivatives. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 625-630.

Experimental Surgery

- ‡BAKER, LILLIAN E. Un milieu artificiel pour les cellules épithéliales et les fibroblastes. *Compt. rend. Soc. biol.*, Séance du 7 décembre, 1935, **120**, pp. 932-934.

† Published in *Studies 97*.

§ To be published in *Studies 99*.

‡ To be published in *Studies 98*.

- ‡BAKER, LILLIAN E. La culture des monocytes dans un milieu artificiel. *Compt. rend. Soc. biol.*, Séance du 21 décembre, 1935, **120**, pp. 1160–1162.
- §—. L'effet de l'acide ascorbique sur la prolifération des monocytes. *Compt. rend. Soc. biol.*, Séance du 1 février, 1936, **121**, pp. 427–429.
- CARREL, ALEXIS. La incógnita del hombre. Translated by Ferry, Maria Ruiz. Barcelona and Madrid, Joaquín Gil, 1936, 371 pages.

General Physiology

- ‡BLINKS, L. R. The effects of current flow on bioelectric potential. I. *Valonia*. *Jour. Gen. Physiol.*, March 20, 1936, **19**, pp. 633–672.
- ‡—. The polarization capacity and resistance of *Valonia*. I. Alternating current measurements. *Jour. Gen. Physiol.*, March 20, 1936, **19**, pp. 673–691.
- ‡CALVERY, HERBERT O., HERRIOTT, ROGER M., and NORTHROP, JOHN H. The determination of some amino acids in crystalline pepsin. *Jour. Biol. Chem.*, February, 1936, **113**, pp. 11–14.
- †HERRIOTT, ROGER M. Acetylation of tyrosine in pepsin. *Jour. Gen. Physiol.*, November 20, 1935, **19**, pp. 283–299.
- †HILL, S. E., and OSTERHOUT, W. J. V. Pacemakers in *Nitella*. I. Temporary local differences in rhythm. *Jour. Gen. Physiol.*, November 20, 1935, **19**, pp. 307–309.
- †JACQUES, A. G. The kinetics of penetration. XII. Hydrogen sulfide. *Jour. Gen. Physiol.*, January 20, 1936, **19**, pp. 397–418.
- ‡—. The kinetics of penetration. XIII. Effect of pH on the entrance of potassium into *Nitella* at low concentrations. *Proc. Nat. Acad. Sc.*, March, 1936, **22**, pp. 191–193.
- †OSTERHOUT, W. J. V. Chemical restoration in *Nitella*. II. Restorative action of blood. *Jour. Gen. Physiol.*, January 20, 1936, **19**, pp. 423–425.
- . Electrical phenomena in large plant cells. *Physiol. Rev.*, April, 1936, **16**, pp. 216–237.
- †TEORELL, TORSTEN. An attempt to formulate a quantitative theory of membrane permeability. *Proc. Soc. Exp. Biol. and Med.*, November, 1935, **33**, pp. 282–285.
- §—. A method of studying conditions within diffusion layers. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 735–748.

Physical Chemistry

- †GODDARD, DAVID R., and MICHAELIS, LEONOR. Derivatives of keratin. *Jour. Biol. Chem.*, December, 1935, **112**, pp. 361–371.

† Published in *Studies 97*.

§ To be published in *Studies 99*.

‡ To be published in *Studies 98*.

- §LONGSWORTH, LEWIS G., and MACINNES, D. A. Bacterial growth at constant pH. Quantitative studies on the physiology of *Lactobacillus acidophilus*. *Jour. Bact.*, March, 1936, **31**, pp. 287-300.
- MACINNES, D. A., and BROWN, ALFRED S. The determination of activity coefficients from the potentials of concentration cells with transference. *Chem. Rev.*, April, 1936, **18**, pp. 335-346.
- ‡MICHAELIS, LEONOR. Glass electrode with galvanometer reading. *Science*, February 28, 1936, **83**, pp. 213-214.
- §— and SMYTHE, C. V. Influence of certain dyestuffs on fermentation and respiration of yeast extract. *Jour. Biol. Chem.*, April, 1936, **113**, pp. 717-734.
- RUNNSTRÖM, JOHN. Acid formation in frozen and thawed *Arbacia punctulata* eggs and its possible bearing on the problem of activation. *Biol. Bull.*, December, 1935, **69**, pp. 345-350.
- Influence of iodoacetate on activation and development of the eggs of *Arbacia punctulata*. *Biol. Bull.*, December, 1935, **69**, pp. 351-355.
- †SCHUBERT, MAXWELL P. Combination of thiol acids with methylglyoxal. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 671-678.

Biophysics

- §COREY, ROBERT B., LAGSDIN, J. B., and WYCKOFF, RALPH W. G. Line focus with a gas type x-ray tube. *Rev. Scient. Inst.*, April, 1936, **7**, p. 193.
- §WYCKOFF, RALPH W. G., and COREY, ROBERT B. X-ray diffraction patterns from reprecipitated connective tissue. *Proc. Soc. Exp. Biol. and Med.*, March, 1936, **34**, pp. 285-287.
- †— and LAGSDIN, J. B. An improved self-rectifying gas x-ray tube. *Rev. Scient. Inst.*, January, 1936, **7**, pp. 35-37.

THE DEPARTMENT OF THE HOSPITAL

- §ABERNETHY, THEODORE J. Concentrated antipneumococcus serum in Type I pneumonia. Control of dosage by skin tests with type-specific polysaccharide. *N. Y. State Jour. Med.*, April 15, 1936, **36**, pp. 627-634.
- ‡—, HORSFALL, FRANK L., JR., and MACLEOD, COLIN M. Pneumothorax therapy in lobar pneumonia. *Bull. Johns Hopkins Hosp.*, January, 1936, **58**, pp. 35-58.
- ‡ALVING, ALF S., and MIRSKY, A. E. The nature of plasma and urinary proteins in nephrosis. *Jour. Clin. Inv.*, March, 1936, **15**, pp. 215-220.

† Published in *Studies 97*.

§ To be published in *Studies 99*.

‡ To be published in *Studies 98*.

- COHN, ALFRED E. An analysis of the apparent increase in the heart diseases. *Jour. Am. Med. Assn.*, November 2, 1935, **105**, pp. 1394-1395.
- *— and STEELE, J. MURRAY. The influence of frequency of contraction of the isolated mammalian heart upon the consumption of oxygen. *Am. Jour. Physiol.*, November 1, 1935, **113**, pp. 654-658.
- *— and —. The metabolism of the isolated heart of dogs related to age. *Jour. Clin. Inv.*, November, 1935, **14**, pp. 915-922.
- ‡— and —. Changes with age in cardiac and body weights of wire-haired fox terriers. *Am. Jour. Anat.*, January 15, 1936, **58**, pp. 103-107.
- *FARR, LEE E. A micro method for blood urea and an automatic urine collector for urea clearance in infants. *Jour. Clin. Inv.*, November, 1935, **14**, pp. 911-913.
- FRANCIS, THOMAS, JR. Etiological and immunological aspects of influenza. *Health Examiner*, February, 1936, **5**, pp. 13-16.
- and MAGILL, T. P. Vaccination of human subjects with virus of human influenza. *Proc. Soc. Exp. Biol. and Med.*, January, 1936, **33**, pp. 604-606.
- HOTCHKISS, ROLLIN D., and GOEBEL, WALTHER F. The synthesis of the heptacetyl methyl ester of gentiobiuronic acid. *Science*, April 10, 1936, **83**, pp. 353-354.
- †KIRK, ESBEN, LEWIS, WILLIAM H., JR., and THOMPSON, WILLIAM R. The effect of age on the plasma calcium content of men. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 641-642.
- *MACKEY, EATON M., and BUTLER, ALLAN M. Studies of sodium and potassium metabolism. The effect of potassium on the sodium and water balances in normal subjects and patients with Bright's disease. *Jour. Clin. Inv.*, November, 1935, **14**, pp. 923-939.
- §MILLER, D. K., and RHOADS, C. P. The effect of liver extract on the small intestine of patients with sprue. *Am. Jour. Med. Sc.*, April, 1936, **191**, pp. 453-456.
- ‡MIRSKY, A. E. Sulfhydryl and disulfide groups of proteins. IV. Sulfhydryl groups of the proteins of muscle. *Jour. Gen. Physiol.*, March 20, 1936, **19**, pp. 559-570.
- ‡— . The change in state of the proteins of muscle in rigor. *Jour. Gen. Physiol.*, March 20, 1936, **19**, pp. 571-575.
- †— and ANSON, M. L. Sulfhydryl and disulfide groups of proteins. II. The relation between number of SH and S-S groups and quantity of insoluble protein in denaturation and in reversal of denaturation. *Jour. Gen. Physiol.*, January 20, 1936, **19**, pp. 427-438.

* Published in *Studies 96*.

† Published in *Studies 97*.

‡ To be published in *Studies 98*.

§ To be published in *Studies 99*.

- †MIRSKY, A. E., and ANSON, M. L. Sulfhydryl and disulfide groups of proteins. III. Sulfhydryl groups of native proteins—hemoglobin and the proteins of the crystalline lens. *Jour. Gen. Physiol.*, January 20, 1936, **19**, pp. 439-450.
- †— and —. The reducing groups of proteins. *Jour. Gen. Physiol.*, January 20, 1936, **19**, pp. 451-459.
- PAGE, IRVINE H. A highly active pressor substance from cerebral ventricular fluid of human beings. *Science*, December 6, 1935, **82**, pp. 550-551.
- ‡—. Production of nephritis in dogs by Roentgen rays. *Am. Jour. Med. Sc.*, February, 1936, **191**, pp. 251-256.
- . Terminal hemorrhagic nephritis: a case exemplifying the protean character of its signs and symptoms. *Ann. Int. Med.*, April, 1936, **9**, pp. 1419-1427.
- ‡— and FARR, LEE E. The influence of high and low fat diets and thyroid substance on plasma lipids of nephrotic patients. *Jour. Clin. Inv.*, March, 1936, **15**, pp. 181-191.
- †—, KIRK, ESBEN, LEWIS, WILLIAM H., JR., THOMPSON, WILLIAM R., and VAN SLYKE, DONALD D. Plasma lipids of normal men at different ages. *Jour. Biol. Chem.*, November, 1935, **111**, pp. 613-639.
- †—, —, and VAN SLYKE, DONALD D. Plasma lipids in chronic hemorrhagic nephritis. *Jour. Clin. Inv.*, January, 1936, **15**, pp. 101-107.
- †—, —, and —. Plasma lipids in essential hypertension. *Jour. Clin. Inv.*, January, 1936, **15**, pp. 109-113.
- and SWEET, J. E. Effect of extirpation of pituitary gland on arterial blood pressure of dogs with experimental hypertension. *Proc. Soc. Exp. Biol. and Med.*, March, 1936, **34**, pp. 260-262.
- †PARKER, ROBERT F., and RIVERS, THOMAS M. Immunological and chemical investigations of vaccine virus. III. Response of rabbits to inactive elementary bodies of vaccinia and to virus-free extracts of vaccine virus. *Jour. Exp. Med.*, January 1, 1936, **63**, pp. 69-94.
- ‡RIVERS, THOMAS M., and SCOTT, T. F. McNAIR. Meningitis in man caused by a filterable virus. II. Identification of the etiological agent. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 415-432.
- §SCHULTZ, MARK P. Cardiovascular and arthritic lesions in guinea-pigs with chronic scurvy and hemolytic streptococcal infections. *Arch. Path.*, April, 1936, **21**, pp. 472-495.
- ‡SCOTT, T. F. McNAIR, and RIVERS, THOMAS M. Meningitis in man caused by a filterable virus. I. Two cases and the method of obtaining a virus from their spinal fluids. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 397-414.

† Published in *Studies 97*.

§ To be published in *Studies 99*.

‡ To be published in *Studies 98*.

- SPRUNT, DOUGLAS H., and BERRY, GEORGE P. Psittacosis. A review of the literature on the lesions of the central nervous system with a report of a case. *Jour. Infect. Dis.*, March-April, 1936, **58**, pp. 129-133.
- †STILLMAN, ERNEST G. Duration of demonstrable antibodies in the serum of rabbits immunized with heat-killed Type II and Type III pneumococci. *Jour. Infect. Dis.*, November-December, 1935, **57**, pp. 223-232.
- †— and SCHULZ, R. Z. The reaction of partially immunized rabbits to inhalation of Type I pneumococci. *Jour. Infect. Dis.*, November-December, 1935, **57**, pp. 233-237.
- †— and —. The reaction of normal and partially immunized rabbits to intranasal instillation of Type I pneumococci. *Jour. Infect. Dis.*, November-December, 1935, **57**, pp. 238-246.
- SWIFT, HOMER F. The nature of rheumatic fever. *Jour. Lab. and Clin. Med.*, March, 1936, **21**, pp. 551-563.
- VAN SLYKE, DONALD D., and DILLON, ROBERT T. Gasometric determination of carboxyl groups in amino acids. *Proc. Soc. Exp. Biol. and Med.*, April, 1936, **34**, pp. 362-363.
- *—, HILLER, ALMA, and MILLER, BENJAMIN F. The clearance, extraction percentage and estimated filtration of sodium ferrocyanide in the mammalian kidney. Comparison with inulin, creatinine and urea. *Am. Jour. Physiol.*, November 1, 1935, **113**, pp. 611-628.
- *—, —, and —. The distribution of ferrocyanide, inulin, creatinine and urea in the blood and its effect on the significance of their extraction percentages. *Am. Jour. Physiol.*, November 1, 1935, **113**, pp. 629-641.
- *—, PAGE, IRVINE H., HILLER, ALMA, and KIRK, ESBEN. Studies of urea excretion. IX. Comparison of urea clearances calculated from the excretion of urea, of urea plus ammonia, and of nitrogen determinable by hypobromite. *Jour. Clin. Inv.*, November, 1935, **14**, pp. 901-910.

THE DEPARTMENT OF ANIMAL AND PLANT PATHOLOGY

Animal Pathology

- †ANDREWES, C. H., and SHOPE, RICHARD E. A change in rabbit fibroma virus suggesting mutation. III. Interpretation of findings. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 179-184.
- †GOWEN, JOHN W. Inheritance as it affects survival of rats fed a diet deficient in vitamin D. *Genetics*, January, 1936, **21**, pp. 1-23.

* Published in *Studies 96*.

† To be published in *Studies 98*.

† Published in *Studies 97*.

- ‡HURST, E. WESTON. Studies on pseudorabies (infectious bulbar paralysis, mad itch). III. The disease in the *rhesus* monkey, *Macaca mulatta*. *Jour. Exp. Med.*, March 1, 1936, **63**, pp. 449-463.
- ‡LITTLE, RALPH B., and FOLEY, EDWARD J. Staphylococci associated with mastitis. *Jour. Am. Vet. Med. Assn.*, December, 1935, n.s. **40**, pp. 637-649.
- ‡MERRILL, MALCOLM H: The mass factor in immunological studies upon viruses. *Jour. Immunol.*, February, 1936, **30**, pp. 169-184.
- ‡— . Quantitative studies on the neutralization of equine encephalomyelitis virus by immune serum. I. Combination of virus and antibody *in vitro*. *Jour. Immunol.*, February, 1936, **30**, pp. 185-192.
- ‡— . Quantitative studies on the neutralization of equine encephalomyelitis virus by immune serum. II. The "percentage law." *Jour. Immunol.*, February, 1936, **30**, pp. 193-202.
- *— and TENBROECK, CARL. The transmission of equine encephalomyelitis virus by *Aedes aegypti*. *Jour. Exp. Med.*, November 1, 1935, **62**, pp. 687-695.
- ‡NELSON, JOHN B. Studies on an uncomplicated coryza of the domestic fowl. V. A coryza of slow onset. *Jour. Exp. Med.*, April 1, 1936, **63**, pp. 509-513.
- ‡— . Studies on an uncomplicated coryza of the domestic fowl. VI. Coccobacilliform bodies in birds infected with the coryza of slow onset. *Jour. Exp. Med.*, April 1, 1936, **63**, pp. 515-522.
- †ORCUTT, MARION L., and SHOPE, RICHARD E. The distribution of swine influenza virus in swine. *Jour. Exp. Med.*, December 1, 1935, **62**, pp. 823-826.
- †SHOPE, RICHARD E. Infectious fibroma of rabbits. III. The serial transmission of *Virus myxomatosum* in cottontail rabbits, and cross-immunity tests with the fibroma virus. *Jour. Exp. Med.*, January 1, 1936, **63**, pp. 33-41.
- †— . Infectious fibroma of rabbits. IV. The infection with *Virus myxomatosum* of rabbits recovered from fibroma. *Jour. Exp. Med.*, January 1, 1936, **63**, pp. 43-57.
- ‡— . A change in rabbit fibroma virus suggesting mutation. II. Behavior of the variant virus in cottontail rabbits. *Jour. Exp. Med.*, February 1, 1936, **63**, pp. 173-178.
- †STOLL, NORMAN R. Tapeworm studies. II. Persistence of the pasture stage of *M. expansa*. *Am. Jour. Hyg.*, November, 1935, **22**, pp. 683-703.

* Published in *Studies 96*.

‡ To be published in *Studies 98*.

† Published in *Studies 97*.

- §STOLL, NORMAN R. Tapeworm studies. III. Sheep parasitized with one *Moniezia expansa* each. *Jour. Parasitol.*, April, 1936, **22**, pp. 161-179.
- *TENBROECK, CARL, HURST, E. WESTON, and TRAUB, ERICH. Epidemiology of equine encephalomyelitis in the eastern United States. *Jour. Exp. Med.*, November 1, 1935, **62**, pp. 677-685.
- †TRAUB, ERICH. An epidemic in a mouse colony due to the virus of acute lymphocytic choriomeningitis. *Jour. Exp. Med.*, April 1, 1936, **63**, pp. 533-546.

Plant Pathology

- §JENSEN, JAMES H. Studies on the origin of yellow-mosaic viruses. *Phytopathology*, March, 1936, **26**, pp. 266-277.
- §KUNKEL, L. O. Immunological studies on the three peach diseases, yellows, rosette, and little peach. *Phytopathology*, March, 1936, **26**, pp. 201-219.
- . Powdery mildew of potato in New Jersey. *Phytopathology*, April, 1936, **26**, pp. 392-393.
- †SPENCER, ERNEST L. Studies on frenching of tobacco. *Phytopathology*, December, 1935, **25**, pp. 1067-1084.
- §STANLEY, W. M. Chemical studies on the virus of tobacco-mosaic. VI. The isolation from diseased Turkish tobacco plants of a crystalline protein possessing the properties of tobacco-mosaic virus. *Phytopathology*, April, 1936, **26**, pp. 305-320.
- and LORING, H. S. The isolation of crystalline tobacco mosaic virus protein from diseased tomato plants. *Science*, January 24, 1936, **83**, p. 85.

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*.

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INSTITUTE FOR MEDICAL
RESEARCH

MAY 1, 1936, TO NOVEMBER 1, 1936

THE DEPARTMENT OF THE LABORATORIES

Chemistry

- BERGMANN, MAX, and FRUTON, JOSEPH S. Regarding the general nature of catheptic enzymes. *Science*, July 24, 1936, **84**, pp. 89-90.
- †— and NIEMANN, CARL. On blood fibrin. A contribution to the problem of protein structure. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 77-85.
- †— and ROSS, WILLIAM F. On proteolytic enzymes. X. The enzymes of papain and their activation. *Jour. Biol. Chem.*, July, 1936, **114**, pp. 717-726.
- and —. Synthetic substrates for protein-digesting enzymes. *Jour. Am. Chem. Soc.*, August, 1936, **58**, p. 1503.
- †— and ZERVAS, LEONIDAS. On proteolytic enzymes. IX. The inactivation of papain with iodine. *Jour. Biol. Chem.*, July, 1936, **114**, pp. 711-715.
- †—, —, and FRUTON, JOSEPH S. On proteolytic enzymes. XI. The specificity of the enzyme papain peptidase I. *Jour. Biol. Chem.*, October, 1936, **115**, pp. 593-611.
- †LEVENE, P. A. Note on the hydrogenation of phenylated carbinols. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 275-277.
- *— and COMPTON, JACK. Synthetic nucleosides. IV. Theophylline-5-methyl-*l*-rhamnofuranoside. *Jour. Biol. Chem.*, May, 1936, **114**, pp. 9-26.
- †— and MARKER, R. E. Optical rotations in homologous series of aliphatic amines. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 267-274.
- †— and ROTHEN, ALEXANDRE. Optical rotations of configurationally related azides. *Jour. Biol. Chem.*, September, 1936, **115**, pp. 415-428.
- †—, —, and MARKER, R. E. Analysis of rotatory dispersions of configurationally related halides. *Jour. Chem. Phys.*, July, 1936, **4**, pp. 442-449.

* Published in *Studies 99*.

† Published in *Studies 100*.

‡ To be published in *Studies 101*.

†LEVENE, P. A., ROTHEN, ALEXANDRE, and MARKER, R. E. Optical rotations and rotatory dispersions in homologous series of aliphatic nitriles. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 253-266.

†—, —, and MEYER, G. M. Configurational relationship of members of disubstituted acetic and propionic acids containing an ethyl group. *Jour. Biol. Chem.*, September, 1936, **115**, pp. 401-413.

†— and TIPSON, R. STUART. An improved method for the preparation of xylulose and ribulose. *Jour. Biol. Chem.*, October, 1936, **115**, pp. 731-747.

Chemical Pharmacology

*CRAIG, LYMAN C. A microdistillation apparatus. *Ind. and Eng. Chem., Analytical Edition*, May 15, 1936, **8**, pp. 219-220.

†ELDERFIELD, ROBERT C. On thevetin. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 247-252.

‡JACOBS, WALTER A., and CRAIG, LYMAN C. The ergot alkaloids. X. On ergotamine and ergoclavine. *Jour. Org. Chem.*, July, 1936, **1**, pp. 245-253.

†— and —. The ergot alkaloids. XI. Isomeric dihydrolysergic acids and the structure of lysergic acid. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 227-238.

*— and ELDERFIELD, ROBERT C. The N-alkyl group of aconine (aconitine). *Jour. Am. Chem. Soc.*, June, 1936, **58**, p. 1059.

†— and —. The lactone group of the cardiac aglycones and Grignard reagent. *Jour. Biol. Chem.*, July, 1936, **114**, pp. 597-599.

Physical Chemistry

‡LONGSWORTH, L. G. The estimation of bacterial populations with the aid of a photoelectric densitometer. *Jour. Bact.*, September, 1936, **32**, pp. 307-328.

*MICHAELIS, LEONOR. Potentiometric study of β -naphthoquinone sulfonate. A further contribution to the semiquinone problem. *Jour. Am. Chem. Soc.*, June, 1936, **58**, pp. 873-878.

†—. Semiquinones of neutral red and safranines. *Jour. Am. Chem. Soc.*, September, 1936, **58**, pp. 1816-1817.

†— and SCHUBERT, MAXWELL P. Dimethylglycine buffer. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 221-222.

—, —, and SMYTHE, C. V. The semiquinone of the flavine dyes, including vitamin B₂. *Science*, August 7, 1936, **84**, pp. 138-139.

* Published in *Studies 99*.

‡ To be published in *Studies 101*.

† Published in *Studies 100*.

- *SCHUBERT, MAXWELL P. Compounds of thiol acids with aldehydes. *Jour. Biol. Chem.*, May, 1936, **114**, pp. 341-350.
- ‡SHEDLOVSKY, THEODORE, and MACINNES, DUNCAN A. The determination of activity coefficients from the potentials of concentration cells with transference. II. Hydrochloric acid at 25°. *Jour. Am. Chem. Soc.*, October, 1936, **58**, pp. 1970-1972.
- †SMYTHE, C. V. The reaction of iodoacetate and of iodoacetamide with various sulfhydryl groups, with urease, and with yeast preparations. *Jour. Biol. Chem.*, July, 1936, **114**, pp. 601-612.

Experimental Surgery

- BAKER, LILLIAN E. Artificial media for the cultivation of fibroblasts, epithelial cells, and monocytes. *Science*, June 19, 1936, **83**, pp. 605-606.
- CARREL, ALEXIS. Man, the unknown. New York, Harper and Brothers, 1935, 346 pages. Translated into Czecho-Slovak, Danish, Dutch, German, Hungarian, Italian, Norwegian, Polish, Portuguese, Spanish, and Swedish.
- The mystery of death, in Medicine and mankind, The New York Academy of Medicine, New York, D. Appleton-Century Company, 1936, pp. 197-217.
- EBELING, ALBERT H. Effect of high concentrations of glucose on fibroblasts, leucocytes, and epithelial cells. *Proc. Soc. Exp. Biol. and Med.*, June, 1936, **34**, pp. 886-889.
- *PARKER, RAYMOND C. The cultivation of large quantities of adult tissue in fluid media. *Science*, June 12, 1936, **83**, pp. 579-581.
- †— The cultivation of tissues for prolonged periods in single flasks. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 121-130.

Pathology and Bacteriology

- BEARD, J. W., and KIDD, JOHN G. Antigenic individuality of certain papilloma viruses. *Proc. Soc. Exp. Biol. and Med.*, May, 1936, **34**, pp. 451-453.
- †CASEY, ALBERT E., ROSAHN, PAUL D., HU, CH'UAN-K'UEI, and PEARCE, LOUISE. The hemocytological constitution of adult male rabbits from fifteen standard breeds. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 453-469.
- *COX, HERALD R., and OLITSKY, PETER K. Active immunization of guinea pigs with the virus of equine encephalomyelitis. II. Immuni-

* Published in *Studies 99*.

‡ To be published in *Studies 101*.

† Published in *Studies 100*.

- zation with formolized virus. *Jour. Exp. Med.*, May 1, 1936, **63**, pp. 745-765.
- †COX, HERALD R., and OLITSKY, PETER K. Active immunization of guinea pigs with the virus of equine encephalomyelitis. III. Quantitative studies of serum antiviral bodies in animals immunized with active and inactive virus. *Jour. Exp. Med.*, August 1, 1936, **64**, pp. 217-222.
- †— and —. Active immunization of guinea pigs with the virus of equine encephalomyelitis. IV. Effect of immune serum on antigenicity of active and inactive virus. *Jour. Exp. Med.*, August 1, 1936, **64**, pp. 223-232.
- and RAKE, GEOFFREY. Effect of tannic acid on intranasal infection with pneumococci. *Proc. Soc. Exp. Biol. and Med.*, May, 1936, **34**, pp. 514-516.
- †KIDD, JOHN G., BEARD, J. W., and ROUS, PEYTON. Serological reactions with a virus causing rabbit papillomas which become cancerous. I. Tests of the blood of animals carrying the papilloma. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 63-77.
- †—, —, and —. Serological reactions with a virus causing rabbit papillomas which become cancerous. II. Tests of the blood of animals carrying various epithelial tumors. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 79-96.
- *LANDSTEINER, K., and CHASE, M. W. On group specific A substances. III. The substance in commercial pepsin. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 813-817.
- †— and JACOBS, JOHN. Studies on the sensitization of animals with simple chemical compounds. II. *Jour. Exp. Med.*, October 1, 1936, **64**, pp. 625-639.
- LYNCH, CLARA J. The interplay of heredity and environment in experimental cancer. *Am. Jour. Clin. Path.*, May, 1936, **6**, pp. 293-313.
- MACFADYEN, DOUGLAS A., and STURM, ERNEST. Further observations on factors from normal tissues influencing the growth of transplanted cancer. *Science*, July 17, 1936, **84**, pp. 67-68.
- MCMASTER, PHILIP D., and KIDD, JOHN G. Development of antiviral properties within lymph nodes. *Proc. Soc. Exp. Biol. and Med.*, May, 1936, **34**, pp. 547-548.
- ‡PEARCE, LOUISE, HU, C.-K., and MU, J. W. Failure to demonstrate *Spirochaeta pallida* in cerebrospinal fluid of syphilitic Chinese patients. *Arch. Dermatol. and Syphilol.*, October, 1936, **34**, pp. 639-649.

* Published in *Studies 99*.

‡ To be published in *Studies 101*.

† Published in *Studies 100*.

- ‡PEARCE, LOUISE, HU, C.-K., and ROSAHN, PAUL D. The reaction of the nursing rabbit to vaccination with vaccine virus. *Jour. Immunol.*, August, 1936, **31**, pp. 73-94.
- ‡—, ROSAHN, PAUL D., and HU, C.-K. Epidemiological aspects of spontaneously acquired vaccinia in the rabbit. *Jour. Path. and Bact.*, September, 1936, **43**, pp. 299-312.
- RAKE, GEOFFREY, and COX, HERALD R. Absorption through the nasal mucosa of tannic-acid treated mice. *Proc. Soc. Exp. Biol. and Med.*, June, 1936, **34**, pp. 716-718.
- ‡ROSAHN, PAUL D., and CASEY, ALBERT E. Quantitative variations in the hemacytologic constitution of healthy men and rabbits. *Am. Jour. Med. Sc.*, October, 1936, **192**, pp. 456-471.
- *— and GREENE, HARRY S. N. The influence of intrauterine factors on the fetal weight of rabbits. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 901-921.
- ‡—, HU, C.-K., and PEARCE, LOUISE. The reaction of normal and rabbit pox immune adult rabbits to vaccination with vaccine virus. *Jour. Immunol.*, August, 1936, **31**, pp. 59-71.
- ROUS, PEYTON. The virus tumors and the tumor problem. *Am. Jour. Cancer*, October, 1936, **28**, pp. 233-272.
- ‡—, BEARD, J. W., and KIDD, JOHN G. Observations on the relation of the virus causing rabbit papillomas to the cancers deriving therefrom. II. The evidence provided by the tumors: general considerations. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 401-424.
- and KIDD, JOHN G. The carcinogenic effect of a virus upon tarred skin. *Science*, May 15, 1936, **83**, pp. 468-469.
- ‡—, —, and BEARD, J. W. Observations on the relation of the virus causing rabbit papillomas to the cancers deriving therefrom. I. The influence of the host species and of the pathogenic activity and concentration of the virus. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 385-400.
- *SABIN, ALBERT B. The protective action of nasally instilled immune serum against infection with certain neurotropic viruses by way of the nose. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 863-876.
- Influence of climate on susceptibility of monkeys to intranasal infection with poliomyelitis virus. *Proc. Soc. Exp. Biol. and Med.*, June, 1936, **34**, pp. 686-688.
- *—, OLITSKY, PETER K., and COX, HERALD R. Protective action of certain chemicals against infection of monkeys with nasally instilled poliomyelitis virus. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 877-892.

* Published in *Studies 99*.

‡ To be published in *Studies 101*.

† Published in *Studies 100*.

- †SABIN, F. R., MILLER, F. R., SMITHBURN, K. C., THOMAS, R. M., and HUMMEL, L. E. Changes in the bone marrow and blood cells of developing rabbits. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 97-120.
- *WEBSTER, LESLIE T., and CLOW, ANNA D. Experimental encephalitis (St. Louis type) in mice with high inborn resistance. A chronic sub-clinical infection. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 827-845.

Physiology

- †GASSER, HERBERT S., and GRUNDFEST, HARRY. Action and excitability in mammalian A fibers. *Am. Jour. Physiol.*, September 1, 1936, **117**, pp. 113-133.

General Physiology

- *BLINKS, L. R. The effects of current flow on bioelectric potential. II. *Halicystis*. *Jour. Gen. Physiol.*, May 20, 1936, **19**, pp. 867-898.
- HERRIOTT, ROGER M., and NORTHROP, JOHN H. Isolation of crystalline pepsinogen from swine gastric mucosae and its autocatalytic conversion into pepsin. *Science*, May 15, 1936, **83**, pp. 469-470.
- KUNITZ, M., and NORTHROP, JOHN H. Die Isolierung von kristallisiertem Trypsinogen und dessen Umwandlung in kristallisiertes Trypsin, in Abderhalden, E., Handbuch der biologischen Arbeitsmethoden, Berlin and Vienna, Urban and Schwarzenberg, 1936, Abt. 4, Teil 1/2, pp. 2461-2464.
- †— and —. Isolation from beef pancreas of crystalline trypsinogen, trypsin, a trypsin inhibitor, and an inhibitor-trypsin compound. *Jour. Gen. Physiol.*, July 20, 1936, **19**, pp. 991-1007.
- NORTHROP, JOHN H. Concentration and partial purification of bacteriophage. *Science*, July 24, 1936, **84**, pp. 90-91.
- and KUNITZ, M. Pepsin, Trypsin, Chymo-Trypsin, in Abderhalden, E., Handbuch der biologischen Arbeitsmethoden, Berlin and Vienna, Urban and Schwarzenberg, 1935, Abt. 4, Teil 2, pp. 2213-2224.
- OSTERHOUT, W. J. V. The absorption of electrolytes in large plant cells. *Bot. Rev.*, June, 1936, **2**, pp. 283-315.
- †— . Changes of apparent ionic mobilities in protoplasm. I. Effects of guaiacol on *Valonia*. *Jour. Gen. Physiol.*, September 20, 1936, **20**, pp. 13-43.
- †TEORELL, TORSTEN. Ionic transference numbers in cellophane membranes. *Jour. Gen. Physiol.*, July 20, 1936, **19**, pp. 917-927.

* Published in *Studies 99*.

† To be published in *Studies 101*.

† Published in *Studies 100*.

Biophysics

- BISCOE, J., HERČÍK, FERDINAND, and WYCKOFF, RALPH W. G. The size of antibodies. *Science*, June 19, 1936, **83**, pp. 602-603.
- *—, PICKELS, E. G., and WYCKOFF, RALPH W. G. Light metal rotors for the molecular ultracentrifuge. *Rev. Scient. Instr.*, June, 1936, **7**, pp. 246-250.
- †—, —, and —. An air-driven ultracentrifuge for molecular sedimentation. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 39-45.
- *COREY, ROBERT B., and WYCKOFF, RALPH W. G. Long spacings in macromolecular solids. *Jour. Biol. Chem.*, June, 1936, **114**, pp. 407-414.
- WYCKOFF, RALPH W. G. The ultracentrifugal concentration of pneumococcal antibodies. *Science*, September 25, 1936, **84**, pp. 291-293.

THE DEPARTMENT OF THE HOSPITAL

- COHN, ALFRED E. The value of research in chronic illness, in The significance of research in prevention and care of chronic illness, New York, The Committee on Chronic Illness of the Welfare Council of New York City, January 22, 1936, pp. 8-10.
- COLE, RUFUS. The treatment of pneumonia. *Ann. Int. Med.*, July, 1936, **10**, pp. 1-12.
- †FARR, LEE E., and SMADEL, JOSEPH E. The urea clearance of rats: its technique and normal range. *Am. Jour. Physiol.*, July 1, 1936, **116**, pp. 349-357.
- *FRANCIS, THOMAS, JR., and MAGILL, T. P. The incidence of neutralizing antibodies for human influenza virus in the serum of human individuals of different ages. *Jour. Exp. Med.*, May 1, 1936, **63**, pp. 655-668.
- *— and SHOPE, RICHARD E. Neutralization tests with sera of convalescent or immunized animals and the viruses of swine and human influenza. *Jour. Exp. Med.*, May 1, 1936, **63**, pp. 645-653.
- †GOEBEL, WALTHER F. Chemoinmunological studies on conjugated carbohydrate-proteins. X. The immunological properties of an artificial antigen containing glucuronic acid. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 29-38.
- †GOODNER, KENNETH, and HORSFALL, FRANK L., JR. The complement fixation reaction with pneumococcus capsular polysaccharide. *Jour. Exp. Med.*, August 1, 1936, **64**, pp. 201-216.
- †— and —. The protective action of Type I antipneumococcus serum in mice. IV. The prozone. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 369-375.

* Published in *Studies 99*.

† Published in *Studies 100*.

- †GOODNER, KENNETH, and HORSFALL, FRANK L., JR. The protective action of Type I antipneumococcus serum in mice. V. The effect of added lipids on the protective mechanism. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 377-383.
- , —, and BAUER, JOHANNES H. Ultrafiltration of Type I antipneumococcal sera. *Proc. Soc. Exp. Biol. and Med.*, June, 1936, **34**, pp. 617-619.
- †HORSFALL, FRANK L., JR., and GOODNER, KENNETH. Lipids and immunological reactions. II. Further experiments on the relation of lipids to the type-specific reactions of antipneumococcus sera. *Jour. Immunol.*, August, 1936, **31**, pp. 135-140.
- †— and —. Lipids and immunological reactions. III. Lipid content of specific precipitates from Type I antipneumococcus sera. *Jour. Exp. Med.*, October 1, 1936, **64**, pp. 583-599.
- HOTCHKISS, ROLLIN D., and GOEBEL, WALTHER F. The synthesis of the aldobionic acid of gum acacia. *Jour. Am. Chem. Soc.*, May, 1936, **58**, pp. 858-859.
- †— and —. Derivatives of glucuronic acid. VII. The synthesis of aldobionic acids. *Jour. Biol. Chem.*, August, 1936, **115**, pp. 285-292.
- *MAGILL, T. P., and FRANCIS, THOMAS, JR. Studies with human influenza virus cultivated in artificial medium. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 803-811.
- †MILLER, BENJAMIN F., and VAN SLYKE, DONALD D. A direct microtitration method for blood sugar. *Jour. Biol. Chem.*, July, 1936, **114**, pp. 583-595.
- †— and WINKLER, ALEXANDER. The ferrocyanide clearance in man. *Jour. Clin. Inv.*, September, 1936, **15**, pp. 489-492.
- †MIRSKY, A. E. The visual cycle and protein denaturation. *Proc. Nat. Acad. Sc.*, February, 1936, **22**, pp. 147-149.
- . Protein coagulation as a result of fertilization. *Science*, October 9, 1936, **84**, pp. 333-334.
- †— and PAULING, LINUS. On the structure of native, denatured, and coagulated proteins. *Proc. Nat. Acad. Sc.*, July, 1936, **22**, pp. 439-447.
- †MOEN, JOHANNES K. Tissue culture studies on bacterial hypersensitivity. II. Reactions of tissues from guinea pigs infected with group C hemolytic streptococci. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 355-368.
- †— . A skin test for detecting group C hemolytic streptococcal infection causing epizootic lymphadenitis in guinea pigs. Applications in selecting breeding stock. *Jour. Exp. Med.*, October 1, 1936, **64**, pp. 553-558.

* Published in *Studies 99*.

† To be published in *Studies 101*.

† Published in *Studies 100*.

- †MOEN, JOHANNES K., and SWIFT, HOMER F. Tissue culture studies on bacterial hypersensitivity. I. Tuberculin sensitive tissues. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 339-353.
- †PAGE, IRVINE H. The phosphatid content of albuminous urine. *Am. Jour. Med. Sc.*, August, 1936, **192**, pp. 217-219.
- ‡——. Vaso-pressor action of extracts of plasma of normal dogs and dogs with experimentally produced hypertension. *Proc. Soc. Exp. Biol. and Med.*, October, 1936, **35**, pp. 112-116.
- †PARKER, ROBERT F., and RIVERS, THOMAS M. Immunological and chemical investigations of vaccine virus. IV. Statistical studies of elementary bodies in relation to infection and agglutination. *Jour. Exp. Med.*, September 1, 1936, **64**, pp. 439-452.
- RIVERS, THOMAS M. Viruses and the diseases caused by them. *Ann. Int. Med.*, May, 1936, **9**, pp. 1466-1474.
- . Recent advances in the study of viruses and viral diseases. *Jour. Am. Med. Assn.*, July 18, 1936, **107**, pp. 206-210.
- †SCHULTZ, MARK P. Studies of ascorbic acid and rheumatic fever. II. Test of prophylactic and therapeutic action of ascorbic acid. *Jour. Clin. Inv.*, July, 1936, **15**, pp. 385-391.
- †SENDROY, JULIUS, JR., and SCHULTZ, MARK P. Studies of ascorbic acid and rheumatic fever. I. Quantitative index of ascorbic acid utilization in human beings and its application to the study of rheumatic fever. *Jour. Clin. Inv.*, July, 1936, **15**, pp. 369-383.
- ‡——, SHEDLOVSKY, THEODORE, and BELCHER, DONALD. The validity of determinations of the pH of whole blood at thirty-eight degrees with the glass electrode. *Jour. Biol. Chem.*, September, 1936, **115**, pp. 529-542.
- STEELE, J. MURRAY. Fever in heart disease. *Internat. Clin.*, March, 1936, **1**, series 46, pp. 17-37.
- *——. Renal insufficiency developing during prolonged use of alkalis. Report of a case. *Jour. Am. Med. Assn.*, June 13, 1936, **106**, pp. 2049-2050.
- ‡SWIFT, HOMER F., and HODGE, B. E. Type-specific anti-M precipitins in rheumatic and non-rheumatic patients with hemolytic streptococcal infections. *Proc. Soc. Exp. Biol. and Med.*, June, 1936, **34**, pp. 849-854.
- *—— and SCHULTZ, MARK P. Studies in synergy. The synergic action of staphylo toxin and beef lens extract in rabbits. *Jour. Exp. Med.*, May 1, 1936, **63**, pp. 703-724.
- *—— and —— . Studies in synergy. Synergic stimulating effect of hypersensitivity to foreign protein and to bacteria. *Jour. Exp. Med.*, May 1, 1936, **63**, pp. 725-735.

* Published in *Studies 99*.

† Published in *Studies 100*.

‡ To be published in *Studies 101*.

THE DEPARTMENT OF ANIMAL AND PLANT PATHOLOGY

Animal Pathology

- †GRAHAM, GEORGE L. Studies on *Strongyloides*. I. *S. ratti* in parasitic series, each generation in the rat established with a single homogenic larva. *Am. Jour. Hyg.*, July, 1936, **24**, pp. 71-87.
- †MERRILL, MALCOLM H. Effect of purified enzymes on viruses and Gram-negative bacteria. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 19-28.
- *SHOPE, RICHARD E. The incidence of neutralizing antibodies for swine influenza virus in the sera of human beings of different ages. *Jour. Exp. Med.*, May 1, 1936, **63**, pp. 669-684.
- †—. Immunization experiments with swine influenza virus. *Jour. Exp. Med.*, July 1, 1936, **64**, pp. 47-61.
- STOLL, NORMAN R. Certain net effects in helminthic parasitism, with special reference to the sheep host. *Cornell Vet.*, April, 1936, **26**, pp. 171-179.
- †—. Observations on cattle nematode infections, with a demonstration of their secondary transmission to grazing sheep. *Jour. Parasitol.*, August, 1936, **22**, pp. 386-407.
- †TRAGER, WILLIAM. The utilization of solutes by mosquito larvae. *Biol. Bull.*, October, 1936, **71**, pp. 343-352.
- *TRAUB, ERICH. Persistence of lymphocytic choriomeningitis virus in immune animals and its relation to immunity. *Jour. Exp. Med.*, June 1, 1936, **63**, pp. 847-861.
- †—. The epidemiology of lymphocytic choriomeningitis in white mice. *Jour. Exp. Med.*, August 1, 1936, **64**, pp. 183-200.

Plant Pathology

- †CHESTER, K. STARR. Serological tests with Stanley's crystalline tobacco-mosaic protein. *Phytopathology*, August, 1936, **26**, pp. 715-734.
- †—. Separation and analysis of virus strains by means of precipitin tests. *Phytopathology*, August, 1936, **26**, pp. 778-785.
- †—. Liberation of neutralized virus and antibody from antiserum-virus precipitates. *Phytopathology*, October, 1936, **26**, pp. 949-964.
- †HOLMES, FRANCIS O. Comparison of derivatives from distinctive strains of tobacco-mosaic virus. *Phytopathology*, September, 1936, **26**, pp. 896-904.
- †—. Interspecific transfer of a gene governing type of response to tobacco-mosaic infection. *Phytopathology*, October, 1936, **26**, pp. 1007-1014.

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‡ To be published in *Studies 101*.

† Published in *Studies 100*.

- ‡KUNKEL, L. O. Heat treatments for the cure of yellows and other virus diseases of peach. *Phytopathology*, September, 1936, **26**, pp. 809-830.
- *PRICE, W. C. Virus concentration in relation to acquired immunity from tobacco ring spot. *Phytopathology*, June, 1936, **26**, pp. 503-529.
- †— . Specificity of acquired immunity from tobacco ring spot diseases. *Phytopathology*, July, 1936, **26**, pp. 665-675.
- STANLEY, W. M. The inactivation of crystalline tobacco-mosaic virus protein. *Science*, June 26, 1936, **83**, pp. 626-627.
- ‡— . Chemical studies on the virus of tobacco mosaic. VII. An improved method for the preparation of crystalline tobacco-mosaic virus protein. *Jour. Biol. Chem.*, October, 1936, **115**, pp. 673-678.
- †ULLSTRUP, ARNOLD J. The occurrence of *Gibberella fujikuroi* var. *subglutinans* in the United States. *Phytopathology*, July, 1936, **26**, pp. 685-693.
- ‡— . Leaf blight of China aster caused by *Rhizoctonia solani*. *Phytopathology*, October, 1936, **26**, pp. 981-990.
- WHITE, PHILIP R. Plant tissue cultures. *Bot. Rev.*, August, 1936, **2**, pp. 419-437.

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