

APPENDIX III

CONTRACTS AND GRANTS OTHER THAN RESEARCH AWARDED IN FISCAL YEAR 1954

Conferences in Support of Science

- AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Mass.; *The Validation of Scientific Theories*; \$5,000.
- AMERICAN PSYCHOLOGICAL ASSOCIATION, Washington, D. C.; *Fourteenth International Congress of Psychology*; \$10,000.
- BELOIT COLLEGE, Beloit, Wis.; *Geology Research in Small Colleges*; \$7,000.
- BROWN UNIVERSITY, Providence, R. I.; *Liquid Structure and Acoustics*; \$7,000.
- BRYN MAWR COLLEGE, Bryn Mawr, Pa.; *The Place of Biological Research in the Liberal Arts College*; \$7,000.
- UNIVERSITY OF CALIFORNIA, Berkeley, Calif.; *Anomalous Magnetization of Rocks*; \$7,400.
- UNIVERSITY OF CALIFORNIA, Los Angeles, Calif.; *The Significance and Possibilities of High Speed Computing in Meteorology*; \$6,000.
- CARNEGIE INSTITUTION OF WASHINGTON, Washington, D. C.; *Radio Astronomy*; \$8,500.
- UNIVERSITY OF CHICAGO, Chicago, Ill.; *Nuclear Processes in Geological Settings*; \$4,800.
- COLUMBIA UNIVERSITY, New York, N. Y.; *Role of Proteins in the Transport of Ions Across Membranes*; \$4,100.
- COLUMBIA UNIVERSITY, New York, N. Y.; *The Crust of the Earth*; \$6,000.
- CORNELL UNIVERSITY, Ithaca, N. Y.; *Fundamental Problems of Perception*; \$4,500.
- HARVARD UNIVERSITY, Cambridge, Mass.; *Problems in Comparative Behaviour*; \$6,300.
- INDIANA UNIVERSITY, Bloomington, Ind.; *Stellar Atmospheres*; \$3,300.
- UNIVERSITY OF KANSAS, Lawrence, Kans.; *Genetic, Psychological, and Hormonal Factors in the Regulation of Patterns of Sexual Behaviour in Mammals*; \$5,000.
- LONG ISLAND BIOLOGICAL ASSOCIATION, Cold Spring Harbor, N. Y.; *The Mammalian Fetus—Physiological Aspects of Development*; \$6,500.
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Mass.; *Problems in Human Communication and Control*; \$5,200.
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Mass.; *Mathematical Tables*; \$4,700.
- UNIVERSITY OF MICHIGAN, Ann Arbor, Mich.; *Multidimensional Analysis*; \$5,300.
- NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; *Radiation Biochemistry*; \$3,100.
- NEW YORK UNIVERSITY, New York, N. Y.; *Problem Solving Behavior*; \$5,700.
- SOCIETY FOR THE STUDY OF DEVELOPMENT AND GROWTH, University of Pennsylvania, Philadelphia, Pa.; *Thirteenth Symposium on Development and Growth*; \$1,500.
- SWARTHMORE COLLEGE, Swarthmore, Pa.; *Astronomy Research in Colleges*; \$5,000.

Studies in Science

- AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Mass.; A. H. Dupree; *History of Activities of the Federal Government in Science*; 2 years; \$29,400.
- AMERICAN PSYCHOLOGICAL ASSOCIATION, Washington, D. C.; *Study of the Development and Status of Psychology*; \$45,000.

- BATTELLE MEMORIAL INSTITUTE, Chicago, Ill.; *Study of Research Activities of Trade Associations, Cooperative Industrial Research Organizations, and Industry Supported Research Activities of Professional Societies and Associations*; \$42,331.
- UNIVERSITY OF CHICAGO, Chicago, Ill.; I. Veith, Department of Medicine and Division of the Biological Sciences; *Study of Endowed and Grant Supported Research in the Division of Biological Sciences of the University of Chicago Over the Past Twenty-five Years*; 3 years; \$12,500.
- HARVARD UNIVERSITY, Cambridge, Mass.; P. G. Frank, Department of Physics; *Study of "Reasons for Acceptance of Scientific Theories"*; 1 year; \$11,600.
- ROGER WILLIAMS TECHNICAL AND ECONOMIC SERVICES, INC., New York, N. Y.; *Pilot Study of Industry—Government Relationships in Research by Survey of Present Status of Basic and Applied Research Bearing on Industrial Fermentation Processes*; \$15,000.
- SYRACUSE UNIVERSITY, Syracuse, N. Y.; *Survey of Past History and Present Status of Research Activities of Independent and Quasi-Independent Nonprofit Research Institutes and of Commercial Research Laboratories*; \$32,000.

Education in the Sciences

- UNIVERSITY OF CALIFORNIA, Berkeley, Calif.; *Summer Conference for Teachers of Astronomy*; 4 weeks; \$8,750.
- CITY COLLEGE, New York, N. Y.; *Preliminary Survey of the Teaching of Biochemistry*; \$500.
- COLUMBIA UNIVERSITY, New York, N. Y.; *Conference on Nuclear Physics in Engineering Education*; 10 days; \$8,200.
- UNIVERSITY OF ILLINOIS, Urbana, Ill.; *Conference on Solid State Physics in Engineering Education*; 10 days; \$7,000.
- MATHEMATICAL ASSOCIATION OF AMERICA, University of Buffalo, Buffalo, N. Y.; *Program of Visiting Scientists*; 1 year; \$15,000.
- NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; *Committee on Educational Policies in the Division of Biology and Agriculture of the National Research Council*; \$1,725.
- NATIONAL ASSOCIATION OF BIOLOGY TEACHERS, Crystal Lake, Ill.; *Southeast Conference on Training in Biology*; \$15,000.
- UNIVERSITY OF NORTH CAROLINA, Chapel Hill, N. C.; *Summer Conference in Collegiate Mathematics*; 8 weeks; \$15,000.
- NORTHWESTERN UNIVERSITY, Evanston, Ill.; *Conference on the Training of Laboratory Assistants in Physics*; \$2,220.
- UNIVERSITY OF OREGON, Eugene, Oreg.; *Summer Conference in Collegiate Mathematics*; 8 weeks; \$15,000.
- SCIENCE SERVICE, INC., Washington, D. C.; *Service Clubs of America*; 1 year; \$10,000.
- UNIVERSITY OF WASHINGTON, Seattle, Wash.; *Summer Conference for High School Mathematics Teachers*; 4 weeks; \$10,000.
- WASHINGTON AND LEE UNIVERSITY, Lexington, Va.; *Conference on Undergraduate Research in Chemistry*; 3 days; \$5,700.
- UNIVERSITY OF WYOMING, Laramie, Wyo.; *Summer Conference in Collegiate Chemistry*; 5 weeks; \$10,500.

Scientific Manpower

- AMERICAN CHEMICAL SOCIETY, Washington, D. C.; *Register of Scientific and Technical Personnel in the Field of Chemistry*; \$69,000.
- AMERICAN INSTITUTE OF PHYSICS, New York, N. Y.; H. A. Barton, Director; *Register of Scientific and Technical Personnel in the Field of Physics*; 1 year; \$14,500.

- AMERICAN MATHEMATICAL SOCIETY, Providence, R. I.; *Register of Scientific and Technical Personnel in Field of Mathematical Sciences*; 1 year; \$13,800.
- AMERICAN METEOROLOGICAL SOCIETY, Boston, Mass.; K. C. Spengler, Executive Secretary; *Register of Scientific and Technical Personnel in the Field of Meteorology*; 1 year; \$9,000.
- AMERICAN PSYCHOLOGICAL ASSOCIATION, Washington, D. C.; *Register of Scientific and Technical Personnel in the Field of Psychology*; 1 year; \$11,600.
- ENGINEERS JOINT COUNCIL, New York, N. Y.; *Register of Scientific and Technical Personnel in Engineering*; \$25,000.
- UNIVERSITY OF MINNESOTA, Minneapolis, Minn.; *The Loss of Talent Through Educational Drop-Out at High School Graduation: A Followup Study of Talented High School Graduates Who Did Not Attend College*; \$8,250.
- NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; American Geological Institute; *Register of Scientific and Technical Personnel in the Earth Sciences*; \$5,500.
- NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; American Institute of Biological Sciences; *Register of Scientific and Technical Personnel in the Field of Biology*; 1 year; \$19,200.
- NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; M. H. Trytten, Office of Scientific Personnel, National Research Council; *Studies on Doctoral Degrees*; 1 year; \$12,000.
- NATIONAL BUREAU OF ECONOMIC RESEARCH, INC., New York, N. Y.; *A Technical Study of Methods for Determining Demand and Supply of Specialized Personnel*; 1 year; \$25,000.

International Travel Grants

- A. A. ALBERT, University of Chicago, Chicago, Ill., to Amsterdam, Netherlands.
- L. W. ALVAREZ, University of California, Berkeley, Calif., to Canberra, Australia.
- N. C. BAENZIGER, State University of Iowa, Iowa City, Iowa, to Paris, France.
- E. BALL, North Carolina State College, Raleigh, N. C., to Paris, France.
- S. S. BALLARD, Santa Monica, Calif., to Parma, Italy.
- J. J. BIESELE, Sloan-Kettering Institute for Cancer Research, New York, N. Y., to Leiden, Netherlands.
- J. E. BIRREN, National Institutes of Health, Bethesda, Md., to London, England.
- J. BJERKNES, University of California, Los Angeles, Calif., to Rome, Italy.
- H. F. BLANEY, Agricultural Research Service, Los Angeles, Calif., to Rome, Italy.
- R. M. BLOUCH, Colorado A. and M. College, Fort Collins, Colo., to Paris, France.
- W. BLUM, Washington, D. C., to London, England.
- R. BRAUER, Harvard University, Cambridge, Mass., to Amsterdam, Netherlands.
- W. R. BRENEMAN, Indiana University, Bloomington, Ind., to London, England.
- D. BROUWER, Yale University, New Haven, Conn., to Leningrad, Russia.
- J. E. CANRIGHT, Indiana University, Bloomington, Ind., to Paris, France.
- E. C. CANTINO, University of Pennsylvania, Philadelphia, Pa., to Paris, France.
- A. J. CARLSON, University of Chicago, Chicago, Ill., to London, England.
- E. CHARGAFF, Columbia University, New York, N. Y., to London, England.
- L. C. COCHRAN, University of California, Riverside, Calif., to Paris, France.
- A. L. COHEN, Oglethorpe University, Oglethorpe University, Ga., to Paris, France.
- H. B. CREIGHTON, Wellesley College, Wellesley, Mass., to Paris, France.
- A. T. CROSS, West Virginia University, Morgantown, W. Va., to Paris, France.
- K. K. DARROW, Bell Telephone Laboratory, New York, N. Y., to London, England.
- E. W. DEMPSEY, Washington University, St. Louis, Mo., to London, England.
- J. D. H. DONNAY, Johns Hopkins University, Baltimore, Md., to Paris, France.
- J. D. DWYER, St. Louis University, St. Louis, Mo., to Paris, France.
- J. D. EBERT, Indiana University, Bloomington, Ind., to Leiden, Netherlands.

- A. ERDELYI, California Institute of Technology, Pasadena, Calif., to Amsterdam, Netherlands.
- H. I. EWEN, Harvard University, Cambridge, Mass., to Amsterdam, Netherlands.
- I. FANKUCHEN, Polytechnic Institute of Brooklyn, Brooklyn, N. Y., to Paris, France.
- H. FEIGL, University of Minnesota, Minneapolis, Minn., to Zurich, Switzerland.
- M. GELL-MANN, University of Chicago, Chicago, Ill., to Glasgow, Scotland.
- A. GORBMAN, Columbia University, New York, N. Y., to London, England.
- C. S. GREENE, Howard University, Washington, D. C., to Lisbon, Portugal.
- R. O. GREEP, Harvard University, Boston, Mass., to London, England.
- C. GROBSTEIN, National Cancer Institute, Bethesda, Md., to Leiden, Netherlands.
- J. E. GUNCKEL, Rutgers University, New Brunswick, N. J., to Paris, France.
- P. L. HALMOS, University of Chicago, Chicago, Ill., to Amsterdam, Netherlands.
- R. R. HEINRICH, St. Louis University, St. Louis, Mo., to Rome, Italy.
- A. C. HELMHOLZ, University of California, Berkeley, Calif., to Glasgow, Scotland.
- J. H. M. HENDERSON, Tuskegee Institute, Tuskegee Institute, Ala., to Paris, France.
- L. HENKIN, University of California, Berkeley, Calif., to Amsterdam, Netherlands.
- E. HEWITT, University of Washington, Seattle, Wash., to Amsterdam, Netherlands.
- E. HILLE, Yale University, New Haven, Conn., to The Hague, Netherlands.
- F. L. HISAW, Harvard University, Cambridge, Mass., to London, England.
- F. G. HOFFMAN, Columbia University, New York, N. Y., to London, England.
- A. S. HOLT, University of Illinois, Urbana, Ill., to Paris, France.
- V. H. JONES, University of Michigan, Ann Arbor, Mich., to Paris, France.
- E. C. JORDAN, University of Illinois, Urbana, Ill., to Amsterdam, Netherlands.
- O. J. KAPLAN, San Diego State College, San Diego, Calif., to London, England.
- M. C. KIK, University of Arkansas, Fayetteville, Ark., to Quezon City, Philippines.
- I. M. KOLTHOFF, University of Minnesota, Minneapolis, Minn., to Birmingham, England.
- P. J. KRAMER, Duke University, Durham, N. C., to Paris, France.
- W. D. LAMBERT, Canaan, Conn., to Rome, Italy.
- J. H. LEATHEN, Rutgers University, New Brunswick, N. J., to London, England.
- W. A. LEWIS, Illinois Institute of Technology, Chicago, Ill., to Rio de Janeiro, Brazil.
- G. O. G. LOF, Denver, Colo., to Rio de Janeiro, Brazil.
- G. H. LOWERY, JR., Louisiana State University, Baton Rouge, La., to Basel, Switzerland.
- G. S. S. LUDFORD, University of Maryland, College Park, Md., to Amsterdam, Netherlands.
- S. MACLANE, University of Chicago, Chicago, Ill., to The Hague, Netherlands.
- W. MAGNUS, New York University, New York, N. Y., to The Hague and Amsterdam, Netherlands.
- H. MARGENAU, Yale University, New Haven, Conn., to Zurich, Switzerland.
- L. MARTON, National Bureau of Standards, Washington, D. C., to London, England.
- S. L. MEYER, Florida State University, Tallahassee, Fla., to Paris, France.
- E. E. MOISE, University of Michigan, Ann Arbor, Mich., to Amsterdam, Netherlands.
- M. G. MORGAN, Dartmouth College, Hanover, N. H., to Amsterdam, Netherlands.
- R. S. MULLIKEN, University of Chicago, Chicago, Ill., to Lund, Sweden.
- M. R. MURRAY, Columbia University, New York, N. Y., to Leiden, Netherlands.
- J. J. NASSAU, Case Institute of Technology, Cleveland, Ohio, to Leningrad, Russia.
- A. H. NORRIS, Baltimore City Hospital, Baltimore, Md., to London, England.
- L. S. OLIVE, Columbia University, New York, N. Y., to Paris, France.
- I. I. OSTER, Institute of Animal Genetics, Edinburgh, Scotland, to Leiden, Netherlands.
- R. G. PEARSON, Northwestern University, Evanston, Ill., to Birmingham, England.
- J. M. PETTIT, Stanford University, Stanford, Calif., to Amsterdam, Netherlands.

- E. A. PHILLIPS, Pomona College, Claremont, Calif., to Paris, France.
 C. M. POMERAT, University of Texas, Galveston, Tex., to Leiden, Netherlands.
 H. RIS, University of Wisconsin, Madison, Wisc., to Leiden, Netherlands.
 V. H. RUMSEY, Ohio State University, Columbus, Ohio, to Amsterdam, Netherlands.
 W. H. SAWYER, New York University, New York, N. Y., to London, England.
 A. M. SCHECHTMAN, University of California, Los Angeles, Calif., to Leiden, Netherlands.
 M. O. SCHMIDT, University of Illinois, Urbana, Ill., to Rome, Italy.
 L. P. SCHULTZ, Takoma Park, Md., to Quezon City, Philippines.
 W. G. SHEPHERD, University of Minnesota, Minneapolis, Minn., to Amsterdam, Netherlands.
 C. G. SIBLEY, Cornell University, Ithaca, N. Y., to Basel, Switzerland.
 P. C. SILVA, University of Illinois, Urbana, Ill., to Paris, France.
 S. SILVER, University of California, Berkeley, Calif., to Amsterdam, Netherlands.
 W. E. SMITH, American Geophysical Union, Washington, D. C., to Rome, Italy.
 R. SMOLUCHOWSKI, Carnegie Institute of Technology, Pittsburgh, Pa., to London, England.
 R. W. STORER, University of Michigan, Ann Arbor, Mich., to Basel, Switzerland.
 A. W. SULLIVAN, University of Florida, Gainesville, Fla., to Amsterdam, Netherlands.
 A. TARSKI, University of California, Berkeley, Calif., to Amsterdam, Netherlands.
 R. H. THOMPSON, University of Kansas, Lawrence, Kans., to Paris, France.
 J. THORP, Earlham College, Richmond, Ind., to Quezon City, Philippines.
 R. M. TRYON, Missouri Botanical Garden, St. Louis, Mo., to Paris, France.
 D. F. TUTTLE, Stanford University, Stanford, Calif., to Amsterdam, Netherlands.
 C. VAURIE, American Museum of Natural History, New York, N. Y., to Basel, Switzerland.
 B. E. WARREN, Massachusetts Institute of Technology, Cambridge, Mass., to Paris, France.
 P. WEISS, National Research Council, Washington, D. C., to Europe.
 J. A. WHEELER, Princeton University, Princeton, N. J., to London, England.
 G. T. WHYBURN, University of Virginia, Charlottesville, Va., to Amsterdam, Netherlands.
 R. L. WILDER, University of Michigan, Ann Arbor, Mich., to Amsterdam, Netherlands.
 H. G. WILN, State University of New York, Syracuse, N. Y., to Rome, Italy.
 E. WITSCHI, State University of Iowa, Iowa City, Iowa, to London, England.
 CHIEN-SHIUNG WU, Columbia University, New York, N. Y., to Glasgow, Scotland.
 W. H. ZACHARIASEN, University of Chicago, Chicago, Ill., to Paris, France.
 L. ZIPPIN, Queens College, Flushing, N. Y., to Amsterdam, Netherlands.

Scientific Information Exchange

- AMERICAN INSTITUTE OF PHYSICS, New York, N. Y.; *A Study of a Comprehensive Russian-English Translating Service in the Field of Physics*; \$3,300.
 AMERICAN MATHEMATICAL SOCIETY, Providence, R. I.; *Preparation and Distribution of Selected Translations of Russian Mathematics Articles*; 1 year; \$14,500.
 UNIVERSITY OF CALIFORNIA, Berkeley, Calif.; *Preparation of a Punched Card File of Double Star Measures*; \$15,500.
 UNIVERSITY OF CHICAGO, Chicago, Ill.; S. Polyak, Department of Anatomy; *Publishing Results of Basic Research Entitled "The Vertebrate Visual System"*; 4 years; \$13,300.
 DOCUMENTATION, INC., Washington, D. C.; *Semi-Mechanized System for Indexing and Retrieving Scientific Information*; \$8,000.
 UNIVERSITY OF HAWAII, Honolulu, Hawaii; *Exchange of Biological Research Information at the Hawaii Marine Laboratory*; \$6,000.

- LIBRARY OF CONGRESS, Washington, D. C.; *Compilation of Lists of Current Biological Periodicals*; \$8,800.
- LIBRARY OF CONGRESS, Washington, D. C.; *Compilation of Lists of Scientific and Technical Serial Publications*; 6 months; \$6,500.
- LIBRARY OF CONGRESS, Washington, D. C.; R. L. Zwemer, Chief, Science Division; *Establishing and Operating a Center for Recording, Reporting, Duplicating, and Distributing Translations of Scientific Literature*; 1 year; \$29,500.
- LIBRARY OF CONGRESS, Washington, D. C.; D. E. Gray, Chief, Technical Information Division; *Study of Publications Stemming from Defense-Related Technical Reports*; 1 year; \$4,000.
- MARINE BIOLOGICAL LABORATORY, Woods Hole, Mass.; *Participation in the Exchange of Scientific Information at the Marine Biological Laboratory, Woods Hole, Mass.*; \$1,800.
- MINERALOGICAL SOCIETY OF AMERICA, Washington, D. C.; *Publishing an Expanded Issue of "The American Mineralogist"*; 1 year; \$1,100.
- NATIONAL ACADEMY OF SCIENCES, Washington, D. C.; *Preparation of a Monograph on the Training of Scientists and Engineers in Russia*; \$1,900.
- NEW YORK UNIVERSITY, New York, N. Y.; S. A. Korff, Department of Physics; *Survey of High Altitude Cosmic Ray Stations*; 2 years; \$1,000.
- UNIVERSITY OF PENNSYLVANIA, Philadelphia, Pa.; L. V. Heilbrunn, Zoological Laboratory; *Assistance in Editing an International Treatise on Protoplasm Entitled "Protoplasmatologia"*; \$1,000.
- SMITHSONIAN INSTITUTION, Washington, D. C.; S. L. Deignan; *Partial Support of "Biological Sciences Information Exchange"*; 1 year; \$22,000.
- THE TORREY BOTANICAL CLUB, New York, N. Y.; E. Lawton, Treasurer; *Publishing a "75-year Index of the Bulletin of the Torrey Botanical Club"*; 3 years; \$5,000.
- UNITED STATES DEPARTMENT OF AGRICULTURE GRADUATE SCHOOL, Washington, D. C.; R. R. Shaw, Librarian; *Investigation of the Effectiveness of Information Sources Available to American Scientists*; 1 year; \$20,700.
- WAYNE UNIVERSITY, Detroit, Mich.; *Human Biology, A Quarterly Journal of Research*; \$3,250.