

longer carry the weight they did in the past when facilities, objectives, and knowledge were more limited and less emphasis was given to the comparative approach. Certainly the behavior of domestic rodents merits detailed study. But the investigator should not lose sight of the fact that these rodents are specialized offshoots produced by laboratory rearing and artificial selection, and that their activities give but weak and often distorted reflections of those of wild animals. Choosing the animal to fit the experiment has, indeed, proved its value in many fields of study, but this approach contains pitfalls for the behaviorist.

My statement that the remarkable feats of mice of the genus *Peromyscus* far exceed the performances of domestic rodents referred to the known performances of domestic animals. I do not doubt that domestic rodents could be coaxed into performing some of the feats that wild animals learn with comparative facility. In this connection, however, the importance of offering extrinsic rewards to deprived

animals in order to elicit responses has been overemphasized in theories of motivation because of the lethargic, comparatively sedentary behavior of the animals that customarily are employed. Thus punishment and severe deprivation often must be used to elicit activities of domestic rodents which the wild rodent engages in spontaneously.

I do not, of course, subscribe to the view that wild animals are the only ones that can be used meaningfully in learning experiments. However, if general principles of behavior are defined as those that apply to the representatives of many taxonomic groups, in order to establish such principles it is imperative to concentrate our studies upon a wide representation of wild animals rather than upon the artificially produced variants of a few species. Unfortunately, in the past the emphasis has been reversed.

A new era in the rationale and design of psychologically oriented animal experimentation may indeed be in its inception. I suggest this because I re-

ceived numerous highly favorable communications from psychologists concerning my report but no adverse ones. The comments imply a radical change in the climate of thought regarding the design, value, and limitations of behavioral studies of domestic animals.

Many investigators appear to have the impression that all wild mice are fierce and unmanageable. Therefore it should be noted that even freshly captured mice may be very "tame" and tractable. After a few weeks in the laboratory, captive and captive-born animals often are as gentle and easy to handle and work with as domestic mice and rats. In addition many species of *Peromyscus* breed readily in confinement and most are as easy to care for as domestic rodents. Accordingly, the psychologist can use his familiar techniques on these forms as readily as upon domestic rodents and make meaningful comparisons between them.

J. LEE KAVANAU

Department of Zoology, University of California, Los Angeles

9 July 1964

ASSOCIATION AFFAIRS

Election of AAAS Officers

The following nominees for AAAS offices were selected by the AAAS Committee on Nominations and Elections at a meeting that was held on 9 June. All have agreed to serve if elected.

President-elect (one to be elected)

John W. Gardner
Alfred S. Romer

Members of the Board of Directors
(two to be elected)

James D. Ebert
Mina S. Rees
William C. Steere
John A. Wheeler

Members of the Committee on Council Affairs (three to be elected)

Stanley S. Ballard
Barry Commoner
Hugh H. Hussey
Trevor Lloyd
Charles F. Savage
Oscar Touster

On petition signed by no fewer than 30 members of the Council and submitted to the Executive Officer no later than 1 November, the names of additional nominees may be included on the election ballot that will be mailed

to Council members shortly after 1 November. Results of the election will be announced at the Council meeting on 27 December in Montreal.

Brief biographies of the nominees follow.

For President-Elect

John W. Gardner was appointed to the Board of Directors in 1963 to complete the remaining two and a half years of a term vacated by the resignation of William W. Rubey. Alfred S. Romer was a member of the Board from 1960 through 1963.

John W. Gardner

John W. Gardner, 51 (psychology), instructor, Connecticut College, 1938–40; assistant professor, Mount Holyoke College, 1940–42; head, Latin-American Section, Foreign Broadcast Intelligence Service, Federal Communications Commission, 1942–43; staff member to president, Carnegie Corporation of New York, 1946–; president, Carnegie Foundation for the Advancement of Teaching, 1955–; American Psychological Association: chairman, Committee

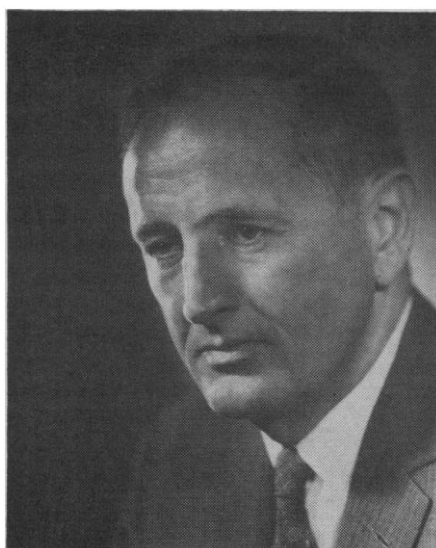
on Public Relations, 1949–51, member, Policy Planning Board, 1951–52, Finance Committee, 1953–56; trustee, New York School of Social Work, 1949–55; chairman, Social Sciences Panel, Scientific Advisory Board, U.S. Air Force, 1951–55; trustee, Educational Testing Service, 1955–64; trustee, System Development Corporation, 1957–61; chairman, Panel on Education, Rockefeller Brothers Special Studies Project, 1958; Advisory Committee for Social Sciences, National Science Foundation, 1959–62; President's Special Task Force on Education, 1960; chairman, U.S. Advisory Commission on International Educational and Cultural Affairs, 1962–64; author of *Excellence* and *Self-Renewal*; editor, President John F. Kennedy's book *To Turn the Tide*; received U.S. Air Force Exceptional Services Award, 1956, Distinguished Service Award to Higher Education, 1959, Presidential Medal of Freedom, 1964.

AAAS activities: Honorary Reception Committee, 1956 and 1960 annual meetings; Board of Directors, 1963–65; Council, 1963–65.

Alfred S. Romer

Alfred S. Romer, 69 (zoology, paleontology), instructor in anatomy, New York University and Bellevue Hospital Medical College, and member, Department of Comparative Anatomy, American Museum of Natural History, 1921–23; associate professor to professor of vertebrate paleontology, University of Chicago, 1923–34; professor of zoology and curator of vertebrate paleontology, Harvard University, 1934–, director, Biological Laboratories, 1945–46, director, Museum of Comparative Zoology, 1946–61, Alexander Agassiz professor of zoology, 1947–; vice president, Paleontological Society, 1939; president, Society of Vertebrate Paleontology, 1941; president, American Society of Zoologists, 1950; vice president, Society for the Study of Evolution, 1947, president, 1953; president, Society of Systematic Zoology, 1952; president, 16th International Zoological Congress, 1963; member, National Academy of Sciences; received Thompson, Hayden, and Elliot medals, Penrose Medal, Geological Society of America.

AAAS activities: vice president and chairman, Section on Zoological Sciences (F), 1948; Council, 1948, 1960–63; Board of Directors, 1960–63.



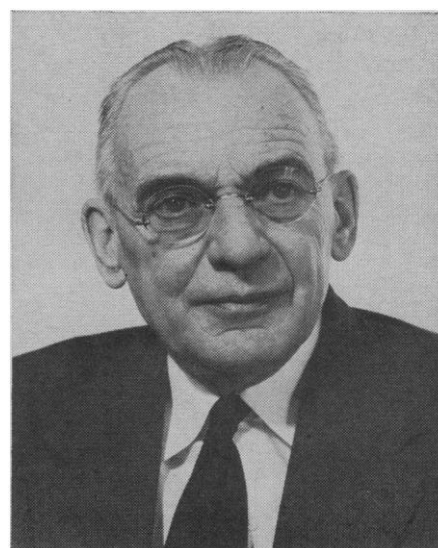
John W. Gardner [Fabian Bachrach]

For Board of Directors

Mina S. Rees this year completes her second 3-year term on the Board of Directors; both terms were by Board appointment. Doctors Ebert, Steere, and Wheeler have not previously served on the Board. Two of the four nominees are to be elected for 4-year terms.

James D. Ebert

James D. Ebert, 42 (embryology), instructor in biology, Massachusetts Institute of Technology, 1950–51; assistant to associate professor of zoology, Indiana University, 1951–55; director, Department of Embryology, Carnegie Institution of Washington, 1956–; professor, Johns Hopkins University and School of Medicine, 1956–; visiting scientist, Medical Department, Brookhaven National Laboratory, 1953–54; Philips visiting professor, Haverford College, 1961; instructor-in-charge, Embryology Training Program, Marine Biological Laboratory, 1962–; Patten visiting professor, Indiana University, 1963; National Science Foundation: Advisory Panel on Genetic and Developmental Biology, 1955–56, Divisional Committee for Biological and Medical Sciences, 1962–; president, Society for Study of Development and Growth, 1957–58; Cell Biology Study Section, National Institutes of Health, 1958–62; president, American Institute of Biological Sciences, 1963; Child Health and Human Development Training Committee, 1963–; Editorial Board, *Journal of Embryology and Experimental Morphology*.

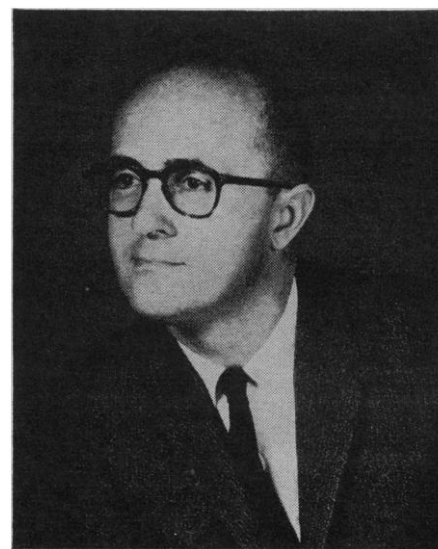


Alfred S. Romer

AAAS activities: vice president and chairman, Section on Medical Sciences (N), 1964; Council, 1964.

Mina S. Rees

Mina S. Rees (mathematics), instructor to professor and dean of faculty, Hunter College, 1926–61; professor and dean of graduate studies, City University of New York, 1961–; technical aide and executive assistant to chief, Applied Mathematics Panel, National Defense Research Committee, Office of Scientific Research and Development, 1943–46; head, Mathematics Branch, Office of Naval Research, 1946–49, director, Mathematical Sciences Division, 1949–52, deputy science director, 1952–53; National Research



James D. Ebert



Mina S. Rees [Blackstone-Shelburne N.Y.]

Council: Mathematics Division, 1953–56, chairman, Subcommittee on Applied Mathematics, Committee on Survey of Research in Mathematics in U.S.A., 1954–56; chairman, Advisory Committee on Mathematics, National Bureau of Standards, 1954–57; Advisory Panel on Mathematics, National Science Foundation, 1955–58; trustee, American Mathematical Society, 1955–59; councilor, New York Academy of Sciences, 1957–60; Conference Board of the Mathematical Sciences, 1959–62; Commission on Administration, American Council on Education, 1963–; Advisory Board, School Mathematics Study Group, 1963–; National Science Board, 1964–; received President's Certificate of Merit, 1948, King's Medal for Service in the Cause of Freedom (British), 1948, First Award for Distinguished Service to Mathematics, 1962, New York City's Public Service Award for Professional Achievement, 1964.

AAAS activities: vice president and chairman, Section on Mathematics (A), 1954; Council, 1954, 1958–; Board of Directors, 1958–60, 1962–64; Committee on Public Understanding of Science, 1962–63.

William C. Steere

William C. Steere, 56 (botany), instructor in biology, Temple University, 1929–31; instructor in botany to professor and chairman of the department, University of Michigan, 1931–50; professor of biology, Stanford University, 1950–58, dean of the graduate division, 1955–58; director, New York Botanical Garden, 1958–; professor of



William C. Steere

botany, Columbia University, 1958–; exchange professor, University of Puerto Rico, 1939–40; senior botanist, U.S. Board of Economic Warfare Cinchona Missions, Colombia, 1942–43, Ecuador, 1943–44; senior botanist, Alaska Terrain and Permafrost Section, U.S. Geological Survey, 1949–54; program director, systematic biology, National Science Foundation, 1954–55; president, American Bryological Society, 1936–37; editor-in-chief, *The Bryologist*, 1938–54; president, California Botanical Society, 1953; editor, *American Journal of Botany*, 1953–57; president, American Society of Naturalists, 1957–58; president, Botanical Society of America, 1959; president, American Society of Plant Taxonomists, 1959; president, Torrey Botanical Club, 1961;



John A. Wheeler

president, New York State Association of Museums, 1961–62.

AAAS activities: vice president and chairman, Section on Botanical Sciences (G), 1948; Council, 1948, 1963–; Committee on AAAS Meetings, 1959–61; committeeman-at-large, Section on Botanical Sciences (G), 1959–66; Committee on Nominations and Elections, 1963–65.

John Archibald Wheeler

John A. Wheeler, 53 (physics), assistant professor, University of North Carolina, 1935–38; assistant professor to professor, Princeton University, 1938–; physicist on atomic energy projects: Princeton, 1939–42, University of Chicago, 1942, E. I. duPont de Nemours and Company, 1943–44, Los Alamos Scientific Laboratory, 1950–53, director, Project Matterhorn, Los Alamos and Princeton, 1951–53, and Project 137, Advanced Research Projects Agency, Department of Defense, 1958; Lorentz professor, University of Leiden, 1956; science adviser, U.S. Senate delegation, Congress of NATO Parliamentarians, Paris, and on formation of NATO science fellowship program, 1957; vice president, International Union of Physics, 1951–54; associate editor at various times of *Physical Review*, *Reviews of Modern Physics*, *Journal of Mathematical Physics*, and *Il Nuovo Cimento*; Advisory Committee, Oak Ridge National Laboratory, 1957–; trustee, Battelle Memorial Institute, 1960–; trustee, Princeton University Press, 1961–; Science Advisory Board, U.S. Air Force, 1961–62; chairman, Joint Committee of the American Physical Society and the American Philosophical Society on the History of Theoretical Physics in the Twentieth Century, 1961–; Council, American Physical Society, 1961–, vice-president elect, 1964; Council, American Philosophical Society, 1963–66; member, National Academy of Sciences; received A. Cressy Morrison Prize, New York Academy of Sciences, 1947.

For Committee on Council Affairs

At the end of 1964, Stanley S. Ballard will have completed a 3-year term on the Committee on Council Affairs. Barry Commoner was a member in 1961 and 1962. Doctors Hussey, Lloyd, Savage, and Touster have not previ-

ously served on the committee. Three of the six nominees are to be elected for 3-year terms.

Stanley S. Ballard

Stanley S. Ballard, 55 (physics), instructor to assistant professor, University of Hawaii, 1935-41; lieutenant to commander, U.S. Naval Reserve, on active duty in U.S. Navy Bureau of Ordnance, 1941-46; professor and department chairman, Tufts College, 1946-53; physicist, the RAND Corporation, 1953-54; research physicist, Scripps Institution of Oceanography, 1954-58; professor and department head, University of Florida, 1958-; vice president, International Commission for Optics, 1948-56, president, 1956-59; chairman, Western Spectroscopy Association, 1956-57; executive secretary, Committee on Vision, Armed Forces-National Research Council, 1956-59; president, Sigma Pi Sigma, 1959-; Governing Board, American Institute of Physics, 1962-; president, Optical Society of America, 1963; Physical Sciences Division, National Research Council, 1963-.

AAAS activities: Council, 1959-; secretary, Section on Physics (B), 1960-; Committee on Council Affairs, 1961-64.

Barry Commoner

Barry Commoner, 47 (biology), university fellow, Harvard University, 1937-40; instructor, Queens College, 1940-42; lieutenant, U.S. Naval Reserve, on active duty with Naval Air Force, 1942-46; associate professor of plant physiology, Washington University, 1947-53, professor, 1953-, secretary, Committee on Cancer Research, 1953-58, chairman, Committee on Molecular Biology, 1957-61, chairman, Planning Council for Biology, 1962-, chairman, Executive Committee, Department of Botany, 1964-; Honorary Advisory Panel, *Problems of Virology*, 1957-; Editorial Board, *International Review of Cytology*, 1957-; vice president, St. Louis Committee for Nuclear Information, 1958-; Editorial Board, *American Naturalist*, 1959-; Editorial Board, *Theoretical Biology*, 1960-; Council, Society of General Physiologists, 1961; Long-Range Planning Council, American Institute of Biological Sciences, 1961; Board of Directors, Scientists' Institute for Public Information, 1963-; received AAAS Newcomb Cleveland Prize, 1953.



Stanley S. Ballard



Barry Commoner



Hugh H. Hussey [Brown-Suarez]

AAAS activities: chairman, Committee on AAAS Research Grants, 1954-58; secretary, Section on Botanical Sciences (G), 1954-60; Council, 1954-60, 1964-; Committee on Social Aspects of Science, 1956-58; Committee on Popular Books in Science, 1956-61; Steering Committee, AAAS Parliament of Science, 1958; chairman, Committee on Science in the Promotion of Human Welfare, 1958-; vice president and chairman, Section on Botanical Sciences (G), 1960; Committee on Council Affairs, 1961-62.

Hugh H. Hussey

Hugh H. Hussey, 53 (medicine), instructor to professor of medicine, Georgetown University School of Medicine, 1936-62, chairman, Department of Preventive Medicine and Public Health, 1953-56, dean, 1958-62; director, Division of Scientific Activities, American Medical Association, 1963-; clinical professor of medicine, University of Illinois School of Medicine, 1964-; associate physician, visiting physician, and chief of Georgetown Medical Division, D.C. General Hospital, 1936-58; senior consultant in peripheral vascular disease, Mt. Alto Veterans Hospital, 1946-50, senior consultant in medicine, 1953-56; civilian consultant in medicine, Walter Reed Army Hospital, 1948-50; consultant in medicine, Glenn Dale Sanatorium, 1950-62; chairman, Department of Medicine, and physician-in-chief, Georgetown University Hospital, 1956-58; associate editor, *Medical Annals of District of Columbia*, 1940-56; Executive Board, D.C. Medical Society, 1950-56; medical editor, *GP*, 1951-59; D.C. Public Health Advisory Council, 1953-56; Board of Trustees, American Medical Association, 1956-62, chairman, 1961-62; chairman, Council on Clinical Cardiology, American Heart Association, 1958-59; president, American Medical Research Foundation, 1960-62; Board of Regents, National Library of Medicine, Public Health Service, 1960-64; Commission on Drug Safety, Pharmaceutical Manufacturers Association, 1962-64; Board of Directors, National Society for Medical Research, 1963-.

AAAS activities: Council, 1964-.

Trevor Lloyd

Trevor Lloyd, 58 (geography), fellow in geography, Clark University, 1938-40; assistant professor, Carleton



Trevor Lloyd

College, 1941–42; assistant professor to professor, Dartmouth College, 1942–59, chairman, Geography Department, 1947–52; professor, McGill University, 1959–, chairman, Geography Department, 1962–; visiting lecturer, University of Manitoba, University of Rochester, Dalhousie University, and University of British Columbia; field work in Europe, Arctic Canada, Greenland, and Lapland; Canadian Government: senior research assistant, Wartime Information Board, 1943, consul in Greenland, 1944–45, chief, Geographi-



Charles F. Savage [Fabian Bachrach]



Oscar Touster

cal Bureau, Ottawa, 1947–48, project officer, Royal Commission on Government Organization, 1961–62; editor, *Arctic*, 1947–48; Board of Governors, Arctic Institute of North America, 1949–51 and 1961–64; president, New England Geographical Conference, 1953; Executive Committee, American Association of Geographers, 1953–56; president, Canadian Association of Geographers, 1957–58; Committee on Polar Research, National Academy of Sciences, 1957–59; Board of Governors, Institute of Current World Affairs, 1959–.

AAAS activities: vice president and chairman, Section on Geology and Geography (E), 1964; Council, 1964.

Charles F. Savage

Charles F. Savage, 58 (engineering), with General Electric Company since 1928, division engineer, Meter and Instrument Department, 1939–47, assistant to manager—Engineering, 1947–53, manager—Engineering Administrative Service, 1953–54, consultant—Engineering Professional Relations, Engineering Services, 1954–60, manager—Engineering Placement and Professional Relations, 1960–; patents: gyroscope attitude indicator, pressure sensitive recording paper, thermostat design; adviser, Defense Advisory Committee on Professional and Technical

Compensation, 1956–57; chairman, Instrumentation Division, American Institute of Electrical Engineers, 1957–58; Institute of Aerospace Sciences: Instrument Editorial Board, 1945–53, chairman, Boston Section, 1952, Council, 1953–54; Committee on Development of Young Engineers, Engineers Council for Professional Development, 1961–; chairman, Technical Planning Committee, Engineers Joint Council, 1962–, member, Board of Directors, 1963–; Intersociety Relations Committee, Institute of Electrical and Electronics Engineers, 1963–, chairman, Professional Relations Committee, 1964; chairman, Professional Engineers' Conference Board for Industry, Inc., 1964; Committee on Qualifications for Registration, National Council of State Boards of Engineering Examiners, 1964.

AAAS activities: committeeman-at-large, Section on Engineering (M), 1959–63; vice president and chairman, Section on Engineering (M), 1964; Council, 1964.

Oscar Touster

Oscar Touster, 43 (biochemistry), chemist, Atlas Powder Company, 1942–43; research biochemist, Abbott Laboratories, 1943–45; special research fellow in chemistry, University of Illinois, 1945–47; instructor to professor, Vanderbilt University School of Medicine, 1947–; chairman, Department of Molecular Biology, Vanderbilt University, 1964–; Guggenheim fellow, Oxford University, 1957–58; Howard Hughes investigator, 1957–60; visiting lecturer in chemistry, University of Illinois, 1959; visiting professor of biochemistry, Cornell University, 1963; Biochemistry Training Committee, National Institutes of Health, 1961–; Organizing Committee, Sixth International Congress of Biochemistry, 1963–64; Editorial Board, *Journal of Biological Chemistry*, 1964–; received AAAS Theobald Smith Award in the Medical Sciences, 1956.

AAAS activities: Committee of Judges, Theobald Smith Award in the Medical Sciences, 1961; secretary, Section on Medical Sciences (N), 1961–64; Council, 1961–.