

AAAS Annual Elections

The Association's 1975 elections will be held in September. All members will receive ballots in the general election for president-elect, members of the Board of Directors, and members of the Committee on Nominations. Each member who is enrolled in one of the 21 electorates corresponding to the AAAS sections will receive an electorate ballot for members of the electorate nominating committee, section chairman-elect, and member-at-large of the section committee. In addition, seven electorates will elect Council delegates this year. Members who have not yet enrolled in an electorate are invited to inform the Association of the electorate (section) of their choice.

Biographies of all candidates are given below, following interviews with the candidates for president-elect. Additional names may be placed in nomination for any position by petition submitted to the Executive Officer not later than 21 July. Petitions nominating candidates for president-elect, members of the Board, or members of the Committee on Nominations must bear the signatures of at least 100 members of the Association. Petitions nominating candidates for any electorate or section position must bear the signatures of at least 50 members of the electorate. A petition to place an additional name in nomination for any position must be accompanied by the nominee's curriculum vitae and statement of acceptance of nomination.

The terms of all officers, Council delegates, and committee members to be elected will begin on 1 January 1976.



Emilio Q. Daddario, 56, is a native of Newton Centre, Massachusetts. A lawyer by training, he has become one of the best-known names in scientific circles for his efforts on behalf of science and technology during his 12-year tenure in the U.S. House of Representatives. Now out of Congress, he finds himself back on Capitol Hill as director of the congressionally mandated Office of Technology Assessment. It was in this office

only a few steps from the U.S. Capitol that this interview was conducted.

Since Daddario had no advanced training in science, it seemed fitting to ask how his interest developed. "It would be difficult to live in a country such as ours and not have an interest in science and technology," Daddario responded. "My interest builds from a combination of events early in my life." These included a liberal arts education, friends who became scientists or university professors, and World War II and Korean War experiences as an intelligence officer, which formed in him a "high regard for the people who produced knowledge and the way in which that knowledge injected itself into the strength and vitality of nations."

After being elected to the Congress in 1958, Daddario recalls that he was attracted to the new Committee on Science and Astronautics (now Science and Technology), of which he became a charter member. Although it originally stressed space and the missile gap, Daddario came to feel that the committee "should look at its other jurisdictions, responsibilities which had been mandated to it but which it hadn't been using in the area of oversight of science research and development generally throughout government." He thus led the efforts to form a Subcommittee on Science, Research and Development and served as its first chairman.

While Daddario's impact was far-reaching during his career in Congress, he considers one of his most important accomplishments to have been the initiation of the legislation that broadened and strengthened the National Science Foundation (NSF) some 15 years after its creation. Among other things, this legislation broadened NSF coverage of research and education in

the social and applied sciences, unified and augmented the authority of the director, and eliminated the requirement for organizing around the lines of scientific disciplines.

And it was under Daddario's influence that the term "technology assessment" became an accepted and integral part of science policy deliberations. How did this come about? "Technology assessment seemed to follow gradually and logically along the lines we had been working. Some of these activities . . . showed there was concern about science and its application in the community at large. There were certain signs of antagonism growing. The antagonism seemed to be generating around the junking of automobiles, extensive use of resources, the consumer movement, scarcity of materials—the whole set of circumstances that was building up."

"In a sense they had always been there but had been submerged, ignored, not properly part of planning. We came logically to the point that we needed an 'early warning mechanism' to more quickly determine what these problems were, look at them under more rational rather than emotional circumstances, and take steps accordingly."

Daddario believes that technology assessment is a job for all citizens. He stresses the need for the "gradual, consistent education of the public to perform the kind of town-meeting appraisals of technology which must be done for almost any community development in this day and age." He maintains that a "broad-scale capability in technology assessment is the key" to determining how we employ technological potential in a manner consistent with our national goals and values.

What role can and should AAAS play in the development of science policy? Daddario urges that AAAS use its prestige to speak on matters affecting science. "AAAS and its leadership could improve its input measurably . . . to make the case that science is important to the society, that science has a role to play in the society, that it has a contribution to make, and that it is not looking for a handout but is looking more to participate and to find ways to do that."

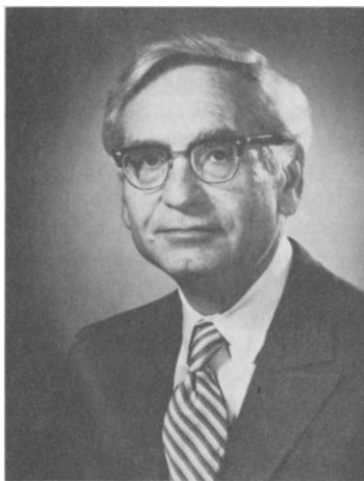
Why did Daddario agree to run for AAAS president-elect? It is obvious he has given this question a great deal of thought. "When I was first elected to run for the Board of Directors," he relates, "I wondered if I ought to because I'm not a scientist. I figured, well, perhaps I ought to do it because it's really not a scientific matter but more a matter—from my point of view—of policy. How does an organization such as this fit into the scheme of things? In a sense, I have pointed my finger at such organizations in the past and said, 'You're not doing enough in this area of communication, making your voices heard, being involved in matters of public policy.' And, in a sense, I had been responsible

through the development of that debate for the . . . creation of committees of science and public policy within these organizations and it was a matter of continuing interest."

After serving on the Board, Daddario decided that the AAAS presidency "might be another opportunity for me to do something that would be satisfying for me personally and where some slight contribution might be made. . . . The important elements were in fact the ones of public policy, the ones that were aimed at how our society as a whole works and the responsibilities we all have as individuals to participate the best way we possibly can to improve the democratic process. . . . I decided that it might be worthwhile to give the membership such an alternative [to a scientist for president-elect] at this time."

Daddario has long believed that professional societies and other organizations need to communicate better both within the political process and among themselves. "There ought to be more opportunities for the people who are the heads of these organizations to sit down and talk to each other," he suggests. This would enable them to better meet crises as they come up, he believes, including highly charged ones such as the antiballistic missile, supersonic transport, energy, and water, and the less emotional ones, such as continuous funding for basic research and support for fellowships and grants.

What does Daddario think of the current government science advisory apparatus? "I have never thought the National Science Foundation director could realistically or properly serve as the science adviser" (to the President). "The job of running that agency . . . is a big job in itself." He feels it is essential for the President to have a top-level science adviser "in order for there to be scientific and technical input as the decision is made at the highest level. If it is screened out earlier than that, the other elements of decision-making—the economic, the legal, and others—can predominate."



Alvin M. Weinberg, 60-year-old native of Chicago, is an internationally renowned authority on nuclear energy and an internationally recognized writer and lecturer on science policy issues. His face appears to be almost as familiar in Washington, D.C., where this interview recently took place, as in Oak Ridge, Tennessee, where he has made his home for the past 30 years. This is probably because of his frequent travels to

Washington to serve on key national governmental and nongovernmental science advisory groups.

For many years, Weinberg has articulated the difficult public policy problems posed by the growth of modern science and the complex relationship that exists between science and today's society. He explains that the "issues that we are now confronted with in relationship between science and society fall into the realm of what I like to call 'trans-science.' Namely, the scientific elements of the issues can be clarified, but only to a degree. After the scientific issues have been fully clarified, there remain questions of value, questions of judgment which can only be settled in what is more or less a political forum."

The biggest "trans-science" issue facing society today, according to Weinberg, is the question of "how safe is safe enough?" Specifically, he points out that this question is critical as we consider using such things as chemical pesticides, drugs, and nuclear and other forms of energy. "In every instance you are balancing a benefit against a risk. . . . The scientist and technologist can state as accurately as he can what the probabilities are and what the likelihoods are but the scientist isn't the one who decides . . . that society is going to go in this direction. These are questions that only the society can settle. . . . Since these issues impinge on people's lives, ultimately they must be political decisions."

Weinberg feels "there should be a scientific forum in which these questions are elucidated from a scientific point of view and where, insofar as possible, dialogue between scientists and the public can take place." This is where Weinberg suggests that AAAS can make an important contribution—as a "bridge between the public and science." Observing that "questions that lie at the intersection of science and society very properly fall within the province of the AAAS," Weinberg notes that AAAS "can serve an important role in keeping this political debate (on 'trans-science' questions) orderly, disciplined, and informed." He continues to explain that "the AAAS, at least in recent years, has had that tradition," through such mechanisms as the annual meetings and *Science* magazine. His belief in the significance of this role for AAAS is one of the reasons he agreed to run for AAAS president-elect.

Can these immense problems be solved? Weinberg thinks the answer to that question is yes. Noting that many people are pessimists, he admits to being "much more of a technological optimist" because he believes that many of these problems imposed on society by technology are in turn solvable by science and technology. He calls such solutions "technological fixes." However, he concedes that his optimism has been somewhat tempered by things that have happened in recent years. As examples he points out that energy has turned out to be more expensive than he thought it would be, and that biological science discoveries are raising serious questions about whether we are moving into territory that we shouldn't.

Is there any particular issue he would like to see highlighted if he were AAAS president? "The main role I see for AAAS is to help make the scientific debate on public issues a responsible debate. When a scientist speaks irresponsibly in the *scientific* forum, his status as a scientist is impaired. When he speaks on science irresponsibly in the *public* forum, there are no mechanisms for disciplining him. Can AAAS help to bring discipline to the scientific debate conducted outside the scientific forum? I would hope AAAS could appoint a committee to recommend what the Association might do. This issue is particularly relevant to our choice of energy options—in particular, nuclear energy. I hope AAAS can help make this debate a more sensible debate, a more informed debate. . . ."

Weinberg is in a singularly unique position to discuss energy issues, since he perceived some 20 years ago an impending energy crisis of acute dimensions. In addition, his career has closely paralleled the growth of nuclear energy development in the United States. He helped design the first large nuclear power reactors and for 25 years helped administer major U.S. nuclear energy programs as Research Director and the Director of the Oak Ridge National Laboratory. And this summer he will become Director of the Institute for Energy Analysis, a small energy think-tank in Oak Ridge that he conceived in the fall of 1973. There he will spend a good deal of time thinking about energy in a broad sense, which will include systems planning, energy R&D, and technological assessment.

For many years Weinberg has contributed to the formulation

of public policy concerning the relationship between science and government. How then does he view the government science policy apparatus today? He is very direct in describing it as poor and inefficient. While noting that there is no major science presence in the White House itself, he also observes that "an awful lot of what is done in government is not done in the White House but in the government bureaucracy." While he doesn't discount the need for a presidential science advisory mechanism, he asserts, "Where the apparatus has to be really strengthened is in the Office of Management and Budget." There, he notes, so many of the important decisions are made. He also sees a need for strengthening scientific and technical input into other areas of the government bureaucracy.

General Election

The following nominees for president-elect and membership on the Board of Directors are presented by the Committee on Nominations.

President-Elect

(One to be elected for a 3-year term—the second year as president; the third year as retiring president and chairman of the Board.)

Emilio Q. Daddario
Alvin M. Weinberg

Emilio Q. Daddario

Emilio Q. Daddario, 56 (law and public service), has been director of the Office of Technology Assessment since its establishment by Congress in 1973. He received his B.A. from Wesleyan University in 1939 and LL.B. from the University of Connecticut Law School in 1942.

He was mayor of Middletown, Connecticut, from 1946 to 1948 and judge of the Middletown Municipal Court from 1948 to 1950. In 1958 he was elected to the U.S. House of Representatives, where he served for 12 years. While in Congress he was a member of the Committee on Science and Astronautics; chairman of the Subcommittee on Science, Research and Development; a member of the Manned Space Flight Subcommittee; and chairman of the Special Subcommittee on Patents and Scientific Inventions. He left in 1970 to become the Democratic nominee for governor of Connecticut.

Daddario was a senior partner in the Hartford law firm of Daddario, Slitt, Jacobs and Sullivan from 1952 to 1973. From 1971 to 1973 he was also senior vice president of Gulf and Western Precision Engineering Group, Gulf and Western Industries, Inc., and in 1970 and 1971 was a visiting professor at Massachusetts Institute of Technology. He has been a Pollack Lecturer at Harvard University (1971) and a Marganeau Lecturer at Hartwick College (1971-72).

He is a fellow of the American Academy of Arts and Sciences and a member of the Institute of Medicine. He has served on the boards of trustees or directors of Wesleyan University, University Corporation for Atmospheric Research, and Institute of the Future; Board of Visitors, Vanderbilt School of Engineering; Space Applications Board, National Academy of Engineering; National Commission on Electronic Funds Transfer; Citizens' Commission on Law, Drugs and the Food Supply; Council on Trends and Perspectives, National Chamber of Commerce; Committee on Science and Tech-

nology, National Association of Manufacturers; Advisory Board, Harvard Program for Technology and Society.

Daddario holds honorary degrees from Wesleyan University (Doctor of Science) and Rensselaer Polytechnic Institute (Doctor of Law). In 1974 he received the Ralph Coats Roe Award, American Society of Mechanical Engineers.

In AAAS he is currently a member of the Board of Directors, Executive Committee, and Council, and is cochairman of the AAAS-American Bar Association National Conference on Science and the Law. He has also been a member of the Committee on Industry, Technology, and Society.

Alvin M. Weinberg

Alvin M. Weinberg, 60 (physics), served during 1974 as director of the Federal Energy Administration's Office of Energy Research and Development. Now at Oak Ridge, his time is devoted to lecturing, writing, and consulting, primarily on energy issues. He received the S.B., S.M., and Ph.D. (1939) at the University of Chicago and was a research associate there from 1939 to 1941; from 1942 to 1945 he was a member of the Metallurgical Laboratory.

In 1945 he joined the Oak Ridge National Laboratory, where he was director of the Physics Division (1947-48), research director (1948-55), and director (1955-73). In 1973 he was a guest scholar at Woodrow Wilson International Center for Scholars, followed by appointments as University Professor at Vanderbilt University and then at Cornell University. He served briefly as director of the Institute for Energy Analysis, which he established at Oak Ridge Associated Universities in 1974.

Weinberg is a member of the National Academy of Sciences, National Academy of Engineering, American Academy of Arts and Sciences, and Council of the United Kingdom Science Policy Foundation. He is a fellow of the American Physical Society and the American Nuclear Society, of which he was president in 1959 to 1960. He has served on numerous advisory groups, including the Scientific Advisory Board to the Air Force, President's Science Advisory Committee, Harvard Overseers Engineering and Applied Physics Visiting Committee, President's Committee on the National Medal of Science, President's Task Force on Science Policy, National Cancer Plan Evaluation Committee, NAS Committee on Science and Public Policy, NAS Council, National Research Council Assembly of Behavioral and Social Sciences, and the White House Energy Policy Office R & D Advisory Council. He is also a member of the Krupp Energy Prize Committee

During the nearly 20 years Weinberg spent as Director of the Oak Ridge National Laboratory, he developed the role of the National Laboratory in modern society as the home of both basic and applied research. Thus, it is not surprising to hear that he sees no conflict between the two. He maintains that you need both and he feels the widely touted belief in such a conflict has largely died out. He observes that while "universities, largely under pressure from their students, have tried desperately to be relevant," whether the university can be relevant is questionable "because of the university structure." And, he goes on to caution, that "in all this cry for relevance, we must not quench the fire of basic research. . . . It's very important that there be people who get a kick out of basic research."

and of the International Institute for Applied Systems Analysis Energy Policy Committee.

He has been on the editorial advisory boards of several publications, is a member of the Board of Directors of Annual Reviews, Inc., and is the author of *Reflections on Big Science* and *Physical Theory of Neutron Chain Reactors* (with Eugene P. Wigner). He is the holder or co-holder of 20 reactor patents.

Weinberg shared the Atoms for Peace Award in 1960 and was the recipient of the E. O. Lawrence Memorial Award (1960), the University of Chicago Alumni Medal (1966), the University of Tennessee Dougherty Award in Engineering (1968), and the American Nuclear Society Chernick Memorial Award (1971). He has honorary degrees from the University of Chattanooga (1963); University of the Pacific (1966); Alfred University and Denison University (1967); Kenyon College (1969); Worcester Polytechnic Institute (1971); University of Rochester, Stevens Institute of Technology, and Butler University (1973); and Wake Forest University (1974).

On 1 July of this year, Weinberg will return to the Institute for Energy Analysis as director.

Members of the Board of Directors

(Two to be elected for 4-year terms.)

Jewel Plummer Cobb
Mi'e McCormack
Bert Scharrer
Chen Jing Yang

Jewel Plummer Cobb



Jewel Plummer Cobb, 51 (cell physiology and education), is professor of zoology and dean of Connecticut College, New London. She is a graduate of Talladega College (A.B., 1944) and New York University (M.S., 1947, Ph.D. in biology, 1950). She holds honorary degrees from Lowell Technical Institute (D.Sc.) and Wheaton College (LL.D.).

Between 1945-50, she was a biology instructor at New York University; from 1950-52, a National Cancer Institute fellow; and from 1952-54, an instructor of anatomy at the University of Illinois Medical School. In 1955, she returned to New York University as an instructor of research surgery at the Postgraduate

Medical School, and between 1956 and 1960 was assistant professor at Hunter College. She was professor of biology at Sarah Lawrence College from 1960-69, when she assumed her present position.

Cobb's research is involved with factors influencing growth and differentiation of normal and malignant pigment cells. Recent research specifically deals with in vitro control of melanization by pituitary hormones. Planned work includes somatic cell genetic studies of melanin formation using complementation analysis procedures. Thirty-four articles based on her research have been published by leading medical and biological journals.

She is a member of the American Council on Education and a fellow of the New York Academy of Science. She has served on the boards of the National Science Foundation, Travelers Insurance Companies, A Better Chance, National Center for Resource Recovery, Inc., 21st Century Foundation, and Institute for Educational Management.

Cobb became a member of the AAAS Committee on Opportunities in Science in 1974.

Mike McCormack



Mike McCormack, 53 (chemistry and public service), one of two scientists in Congress, was elected in 1970 from the 4th District of Washington State. He is a member of the House Committee on Public Works, Committee on Science and Astronautics, and Joint Committee on Atomic Energy.

He earned his Bachelor's and Master's degrees in chemistry at Washington State University, and was employed as a research scientist at the Atomic Energy Commission's Hanford Project from 1950 until 1970. He served in the Washington State House of Representatives from 1956 to 1960 and in the State Senate from 1960 to 1970.

In his first year in Congress, McCormack was elected chairman of the Freshmen Democratic Caucus. Later in 1971, he was selected to chair the House Task Force on Energy, an appointment unprecedented for a freshman congressman. At the beginning of his second term in 1973, he was appointed chairman of a new Subcommittee on Energy of the Science and Astronautics Committee. In 1974, he was chosen chairman of the congressional committee to celebrate the 200th anniversary of the Congress.

McCormack is the author of legislation establishing the comprehensive Geothermal Energy Research, Development, and Demonstration Program; of the Solar Heating and Cooling Demonstration Act of 1974; and of legislation creating a new national program for long-range solar energy research development and demonstration (including the establishment of a national institute of solar technology, a public data bank for solar energy, and educational programs to provide the necessary scientific and technical manpower).

He has become the leading congressional advocate for the Nuclear Fusion Program and obtained substantial increases in its funding for fiscal 1974 and 1975. He has sponsored legislation allowing greater participation by individual states in the siting of nuclear power plants and a plan to create a nuclear power park in each region of the country.

McCormack is a member of the American Legion, Veterans of Foreign Wars, the Shrine, Sigma Chi Fraternity, the Grange, American Nuclear Society, and American Chemical Society.

He served as a member of the AAAS Committee on Industry, Technology, and Society from 1972 to 1974 and has participated in the Congressional Seminars sponsored by AAAS and the Brookings Institution.

Berta Scharrer



Berta Scharrer, 68 (anatomy), has been professor of anatomy at Albert Einstein College of Medicine, New York, since 1955. A native of Germany, she received her Ph.D. in zoology from the University of Munich in 1930, and has been active in research (comparative neuroendocrinology) and teaching

at the Edinger Institute of Neurology (Frankfurt, Germany), the University of Chicago, Rockefeller Institute (now Rockefeller University), Western Reserve University, University of Colorado (Guggenheim Fellow), and Albert Einstein College of Medicine.

She is a member of the National Academy of Sciences, American Academy of Arts and Sciences, International Brain Research Organization, and Deutsche Akademie der Naturforscher Leopoldina; an honorary member of the European Society for Comparative Endocrinology; a charter and council member of the International Society of Neuroendocrinology. Currently she serves on the Committee on Brain Sciences of the National Research Council and on the executive committees of the American Association of Anatomists and the American Society of Zoologists.

Chen Ning Yang



Chen Ning Yang, 52 (physics), is Albert Einstein Professor of Physics at the State University of New York at Stony Brook, a position he has held since 1966. He is also director of the Institute for Theoretical Physics at the same campus.

He received his Ph.D. in 1948 at the University of Chicago.

In 1949, he joined the Institute for Advanced Study in Princeton, where he was professor from 1955 to 1966. He has been a Gibbs Lecturer of the American Mathematical Society, Loeb Lecturer at Harvard University, Vanuxem Lecturer at Princeton University, and a Lincoln Lecturer of the Board of Foreign Scholars of the State Department.

Yang is a member of the National Academy of Sciences, American Physical Society, Sigma Xi, and American Philosophical Society. He served as chairman of the panel on theoretical physics, Physics Survey Committee, National Academy of Sciences, in 1965. Currently he is chairman of the Division of Particles and Fields of the International Union of Pure and Applied Physics.

In 1957, Yang received both the Albert Ein-

stein Commemorative Award and (with Tsing-Dao Lee) the Nobel Prize for Physics. He holds honorary D.Sc. degrees from Princeton University (1958) and Brooklyn Polytechnic Institute (1965).

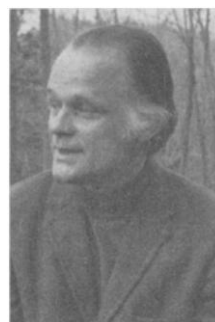
Committee on Nominations

The following nominees for membership on the Committee on Nominations are presented by the Committee on Council Affairs.

(Three to be elected for 2-year terms.)

F. Herbert Bormann
George Bugliarello
H. Jack Geiger
John A. Knauss
Dean F. Peterson
Estelle R. Ramey

F. Herbert Bormann



F. Herbert Bormann, 53 (ecology), is professor of ecology at the Yale University School of Forestry and Environmental Studies, a position he has held since 1967.

He graduated from Rutgers University in 1948 and attained the Ph.D. (ecology) from Duke University in 1952. Before going to Yale, he taught at Emory University (1952-56) and Dartmouth College (1956-66). He was a visiting scientist at Brookhaven National Laboratory in 1963-64.

His major research interest is the structure and function of natural ecosystems, and for the last 11 years he has been the co-principal investigator on the Hubbard Brook ecosystem study. In 1954 he received the George Mercer Award for ecological research from the Ecological Society of America.

Bormann is a member of the National Academy of Sciences, American Academy of Arts and Sciences, and executive committee of the Assembly of Life Sciences of NAS-NRC. He was president of the Ecological Society of America at the time the Society was designing and founding the Institute of Ecology. He has served on the board of trustees for the Institute and on the ecology advisory committee for Brookhaven National Laboratory.

He was a member of the AAAS Committee on Environmental Alterations from 1972 to 1974.

George Bugliarello



George Bugliarello, 47 (engineering), was elected in 1973 as the first president of the Polytechnic Institute of New York. He received his Dr.Eng. from the University of Padua in 1952 and his Sc.D. from Massachusetts Institute of Technology in 1959.

In 1959, he went to Carnegie-Mellon University where he was professor of biotechnology and civil engineering (1966-69) and chairman of the biotechnology program (1965-69). From 1969 to 1973, he was Dean of Engineering

at the University of Illinois at Chicago Circle.

Bugliarello has served as secretary of the International Society of Hemorheology and as chairman of the Engineering Mechanics Division, American Society of Civil Engineers; ad hoc Committee on Educational Technology, National Academy of Engineering; and Committee on Computers and Computer Languages, International Association for Hydraulic Research. He has been a member of a number of advisory groups, including the U.S. Delegation on Water Resources to the People's Republic of China in 1974.

Currently he is editor of *Biorheology*, a consultant to the chemotherapy program of the National Cancer Institute, a director of the Society of Engineering Science, vice-chairman of the National Research Council's Board of Science and Technology on International Development, and chairman of the Board's Advisory Committee on Technological Innovation.

Bugliarello was awarded the Huber Research Prize of the American Society of Civil Engineers in 1967 and a NATO Senior Postdoctoral Fellowship at the Technical University of Berlin in 1968.

H. Jack Geiger



H. Jack Geiger, 49 (community medicine and epidemiology), is professor of community medicine and department chairman in the School of Medicine, State University of New York at Stony Brook. He received his M.D. in 1959 from Western Reserve University and the M.Sci.-Hyg. in 1960 from

Harvard University. After holding various positions in the Schools of Medicine and Public Health at Harvard, he moved to Tufts University in 1965 and from there to Stony Brook in 1971.

He is a member of the Governing Council of the American Public Health Association and of the Board of Directors of the Scientists' Institute for Public Information. He has served in the past on the Board of the National Citizens Commission of Inquiry into Health Services for Americans; Board of Governors, Institute of Current World Affairs; National Commission on Hunger and Malnutrition in the United States; and Planning Committee for the White House Conference on Youth.

His professional interests have included social epidemiology, the development of neighborhood health centers, citizen participation in health services, and the integration of medicine and other disciplines.

Geiger has served on three AAAS committees: Social Aspects of Science (1957-58), Science in the Promotion of Human Welfare (1959-62), and Environmental Alterations (1969-73).

**Please note:
Your ballot form
will arrive about
mid-September**

John A. Knauss



John A. Knauss, 49 (oceanography), has been dean of the Graduate School of Oceanography at the University of Rhode Island since 1962 and provost for marine affairs since 1969. He received his B.S. from Massachusetts Institute of Technology, M.A. from the University of Michigan, and Ph.D. from

Scripps Institution of Oceanography (1959). He held earlier positions at the Navy Electronics Laboratory, San Diego; Office of Naval Research; and Scripps. His research interests center on problems of ocean circulation.

He participated in the work leading to the passage by Congress of the Sea Grant Program and the Coastal Zone Management Act, and has taken an active role in Law of the Sea problems. He received the National Sea Grant Award of 1974.

Knauss was the first president of the Association of Sea Grant Colleges and is a past president of the Oceanographic Section, American Geophysical Union. He has been a member of the Commission on Marine Science, Resources and Engineering (the Stratton Commission) and chairman of its Panel on Environment; a member of the U.S. delegation to the preparatory meeting of the United Nations Seabeds Committee and science adviser to the U.S. delegations at the Law of the Sea Conferences in Caracas and Geneva; a member of the National Academy of Sciences, Ocean Affairs Board, and chairman of its Ocean Science Committee. Currently he is chairman of the NAS Freedom of Science Task Group and of the University National Oceanographic Laboratory System.

He has served AAAS as vice president and chairman of the Section on Atmospheric and Hydrospheric Sciences (W), 1972; member-at-large, Section W Committee, 1969-70; and Council member, 1969-72.

Dean F. Peterson



Dean F. Peterson, 62 (civil engineering), is vice president for research at Utah State University. Previously he was dean of the College of Engineering (1957-73) except for 2 years as water resources adviser to the President's Science Adviser (1965-66) and as director of the Water for Peace Program,

Department of State (1968-69). He was head of the Civil Engineering Department at Colorado State University from 1947 to 1957.

He has been chairman of the Universities Council on Water Resources, National Science Foundation's Panel on Weather Modification, and the U.S. Committee for the International Hydrological Decade. He has served on a number of panels of the National Academy of Sciences; in 1971, he chaired the NAS panel which reviewed the World Bank's plan for water resource development in East Pakistan and represented NAS as U.S. delegate to the Pakistan Association for the Advancement of Science. He has been a consultant to overseas agencies

since 1959 and a member or chief of the U.S. study teams sent to Afghanistan, Iran, and Israel, and, in 1974, the People's Republic of China.

In 1968, Peterson received the Royce Tipton award of the American Society of Civil Engineers, and from 1972 to 1974 served as vice president of the Society. He was elected to the National Academy of Engineering in 1974 in recognition of his contributions toward improving international agriculture through the practice of irrigation and drainage.

As a member of the AAAS Committee on Arid Lands since 1970, Peterson has been active in organizing symposia at the Association's annual meetings.

Estelle R. Ramey



Estelle R. Ramey, 57 (physiology and endocrinology), is professor of physiology and biophysics at Georgetown University Medical School. She joined the faculty in 1956 and was appointed to her present position in 1966. Her M.A. is from Columbia University (1940) and her Ph.D. from the Uni-

versity of Chicago (1950).

From 1938 to 1941, she taught at Queens College. From 1942 to 1947, she taught and did research at the University of Tennessee. Upon receipt of her doctorate, Ramey was awarded a U.S. Public Health Service postdoctoral fellowship in endocrinology to work at the Michael Reese Hospital Research Institute and as assistant professor in the Department of Physiology at the University of Chicago School of Medicine. Her research during the next 6 years was in the area of the relationship of glands and the nervous system to stress responses; she has also worked in the field of diabetes mellitus.

At Georgetown University, Ramey has continued her endocrine research and teaches medical, dental, and graduate students. Her administrative responsibilities have included the acting chairmanship of the Department of Physiology. She has been vice president of the Washington Heart Association and is currently a member of their Board of Directors.

Electorate Elections

The AAAS is apportioned into 21 electorates, corresponding to its 21 sections. Each member may designate one section as his electorate, may vote in that electorate only, and may be nominated only by the nominating committee of that electorate for any position filled by vote of an electorate: Council delegate, member of the electorate nominating committee, section chairman-elect, and member-at-large of the section committee.

Slates for positions to be filled by electorates in the September election follow, with the sections corresponding to the electorates listed in alphabetical order.

Information on the candidates published here was supplied by the candidates themselves, or was taken from standard reference works.

Section A-Mathematics

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Richard F. Arens
Richard S. Palais
James B. Serrin
Alice Whittemore

Richard F. Arens (mathematics), 1919; A.B., University of California, 1941; A.M., Harvard University, 1942, Ph.D., 1945; fellow and tutor, Harvard University, 1942-45; staff assistant, Institute for Advanced Study, 1945-47; assistant to associate professor, University of California, Los Angeles, 1947-57, professor, 1957-; editor, *Pacific Journal of Mathematics*, 1964-; analysis of function spaces; topological algebra.

Richard S. Palais (mathematics), 1931; B.A., Harvard College, 1952; M.A., Harvard University, 1954, Ph.D., 1956; instructor, University of Chicago, 1956-58; assistant to associate professor, Brandeis University, 1960-65, professor, 1965-, chairman, Department of Mathematics, 1966-68; editor, *Transactions of the American Mathematical Society*, 1966-69; Advisory Panel for Mathematics, National Science Foundation, 1968-72; trustee, American Mathematical Society, 1971-, Committee on Education and Employment Policy, 1970-74; analysis.

James B. Serrin (mathematics), 1926; B.A., Western Michigan College, 1947; M.A., Indiana University, 1949, Ph.D., 1951; assistant to associate professor, University of Minnesota, 1954-59, professor, 1959-, head, School of Mathematics, 1964-65; lecturer, Stanford University, 1961; visiting professor, University of Chicago, 1964, 1975, Johns Hopkins University, 1966, University of Sussex, 1967-68, 1970, 1972; co-editor, *Archive of Rational Mechanics and Analysis*, 1967-; president, Society for Natural Philosophy, 1969-74; Council, American Mathematical Society, 1972-74; partial differential equations; calculus of variations; mechanics of fluids.

Alice Whittemore (mathematics), 1936; B.S., Marymount Manhattan College, 1958; M.A., Hunter College, 1964; Ph.D., City University of New York, 1967; assistant professor, Hunter College, 1967-72, associate professor, 1972-; on leave at the Institute of Environmental Medicine, New York University Medical Center, 1974-76; environmental carcinogenesis.

Section Chairman-Elect (one to be elected for a 2-year term).

Johannes C. C. Nitsche
Dorothy M. Stone

Johannes C. C. Nitsche (mathematics), 1925; Diplom für Mathematik, University of Göttingen, 1950; Ph.D., University of Leipzig, 1951; Privatdozent für Mathematik, Technical University of Berlin-Charlottenburg, 1955; visiting associate professor, University of Cincinnati, 1956-57; associate professor, University of Minnesota, 1957-60, professor, 1960-, head, School of Mathematics, 1971-; Fulbright research fellow, Stanford University, 1955-56; visiting professor, University of Puerto Rico, 1960-61, University of Hamburg, 1965, Technische Hochschule Vienna, 1968, University of Bonn, 1971; Editorial Board, *Archive of Rational Mechanics and Analysis*.

Dorothy M. Stone (mathematics), 1917; B.Sc., Carnegie Institute of Technology, 1937; Ph.D., Bryn Mawr College, 1940; assistant lecturer, University of Manchester, England, 1952-61; professor, University of Rochester,

1961-; member, Institute for Advanced Study, 1940-42; National Science Foundation senior postdoctoral fellow, 1965-66; Council, American Mathematical Society, 1972-75, Executive Committee, 1973-75; member-at-large, National Science Foundation, 1972-75; Committee on the Undergraduate Program in Mathematics, Mathematical Association of America, 1969-72; measure theory and allied fields.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Richard D. Anderson
Gertrude Blanch

Richard D. Anderson (mathematics), 1922; B.A., University of Minnesota, 1941; Ph.D., University of Texas, 1948; instructor to associate professor, University of Pennsylvania, 1948-56; professor, Louisiana State University, 1956-58, Boyd professor, 1958-; member, Institute for Advanced Study, 1951-52, 1955-56; Alfred P. Sloan research fellow, 1960-63; visiting professor, University of Amsterdam, 1970-71; vice president, American Mathematical Society, 1972-73; Advisory Committee on Science Education, National Science Foundation, 1974-; member-at-large, Section on Mathematics Committee, AAAS, 1972-75, Council, 1965-68, 1972-73; topology, especially infinite-dimensional topology.

Gertrude Blanch (mathematics), 1897; B.S., Washington Square College, 1932; Ph.D., Cornell University, 1935; mathematician, National Bureau of Standards, 1941-54; senior mathematician, Wright-Patterson Air Force Base, 1954-67; retired, 1967; Federal Woman's Award, 1964; numerical analysis, particularly in connection with table making.

Section B-Physics

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Richard D. Deslattes
J. A. Giordmaine
Bruce Hawkins
Claire Ellen Max

Richard D. Deslattes (radiology, physics), 1931; B.S., Loyola University, 1952; Ph.D., Johns Hopkins University, 1959; instructor, Loyola University, 1954-55; research associate, Florida State University, 1956-58, Cornell University, 1958-62; physicist, National Bureau of Standards, 1962-68, chief, Quantum Metrology Section, Optical Physics Division, 1968-; Committee on Fundamental Constants and on Atomic and Molecular Physics, NAS-NRC; U.S. representative, CODATA Task Group on Fundamental Constants; x-ray physics; fundamental constants; laser spectroscopy.

J. A. Giordmaine (physics), 1933; B.A., University of Toronto, 1955; A.M., Columbia University, 1957, Ph.D., 1960; instructor, Columbia University, 1959-61; technical staff, Bell Telephone Laboratories, Inc., 1961-67, head, Solid State Spectroscopy Research, 1967-71, director, Chemical Physics Research, 1971-; visiting professor, Munich Technical University, 1966; Advisory Committee on Basic Research, NAS-NRC, 1967-72, Committee on Atomic and Molecular Physics, 1971-74; Nominating Committee, American Physical Society, 1973-74; Award Committees, Optical Society of America, 1974-75; solid state physics; nonlinear optics; lasers.

Bruce Hawkins (physics), 1930; B.A., Am-

herst College, 1951; Ph.D., Princeton University, 1954; instructor, Yale University, 1955-57; assistant professor, Oberlin College, 1957-61; assistant professor, Smith College, 1961-68, associate professor, 1968-, department chairman, 1970-; National Science Foundation postdoctoral fellow, ETH, Zürich; acoustics of violins.

Claire Ellen Max (plasma physics), 1946; A.B., Radcliffe College; Ph.D., Princeton University; postdoctoral fellow, University of California, Berkeley; plasma physicist, Laser Fusion Program, Lawrence Livermore Laboratory; Executive Committee, High Energy Astrophysics Division, American Astronomical Society; physics of laser-plasma interactions; electron-beam plasma interactions; application of plasma physics to astrophysical plasmas.

Section Chairman-Elect (one to be elected for a 2-year term).

Maurice Goldhaber
Norman F. Ramsey

Maurice Goldhaber (physics), 1911; Ph.D., Cambridge University, 1936; assistant professor to professor, University of Illinois, 1938-50; senior scientist, Brookhaven National Laboratory, 1950-60, department chairman, 1960-61, director, 1961-73, Associated Universities, Inc., Distinguished Scientist, 1973-; Charles Kingsley Bye fellow, Magdalene College, 1936-38; member, National Academy of Sciences; Tom W. Bonner Prize in Nuclear Physics, American Physical Society, 1971; Atomic Energy Commission Citation for Meritorious Contributions, 1973; nuclear physics; fundamental particles.

Norman F. Ramsey (physics), 1915; A.B., Columbia University, 1935, Ph.D., 1940; M.A., Cambridge University, 1941; associate, University of Illinois, 1940-42; associate professor, Columbia University, 1942-47; associate professor to professor, Harvard University, 1947-66, Higgins professor, 1966-, director, Nuclear Laboratory, 1948-50, 1952, president, Universities Research Association, 1966-; Guggenheim fellow, 1954-55; director, Varian Associates, 1963-66; Eastman professor, Oxford University, 1973-74; trustee, Brookhaven National Laboratory, Carnegie Endowment for International Peace; member, National Academy of Sciences; Lawrence Award and Medal, 1960; Davisson-Germer Prize; General Advisory Committee, U.S. Atomic Energy Commission, 1960-72; nuclear moments; molecular beams; high energy particles; nuclear interactions in molecules.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Benjamin Bederson
Daniel Kleppner

Benjamin Bederson (physics), 1921; B.S., City College of New York, 1946; M.A., Columbia University, 1948; Ph.D., New York University, 1950; scientific aide, Los Alamos Scientific Laboratory, 1944-46; staff member, Research Laboratory of Electronics, Massachusetts Institute of Technology, 1950-52; assistant to associate professor, New York University, 1952-59, professor, 1959-; associate editor, *Atomic and Nuclear Data Journal*; secretary, International Conference on Physics of Electronic and Atomic Collisions, 1958-67; chairman, Division of Electron and Atomic Physics, American Physical Society, 1975; chairman, Committee on Atomic and Molecular Physics, NAS-NRC, 1970-73; Physics Advisory Panel, National Science Foundation, 1973-75; experimental atomic

physics and plasma physics; atomic structure and interactions.

Daniel Kleppner (physics), 1932; B.A., Williams College, 1953; B.A., Cambridge University, 1955; Ph.D., Harvard University, 1959; research fellow to assistant professor, Harvard University, 1959–66; associate professor, Massachusetts Institute of Technology, 1966–; Fulbright fellow, Cambridge University, 1953–55; National Science Foundation fellow, Harvard University, 1958–59; Alfred E. Sloan Foundation fellow, 1962–66; atomic resonance physics; atomic structure; high precision frequency measurements.

Section C-Chemistry

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Henry A. Bent

Ernest L. Eliel

David Garvin

Bruno J. Zwolinski

Henry A. Bent (chemistry), 1926; A.B., Oberlin College, 1949; Ph.D., University of California, 1952; instructor, University of Connecticut, 1952–55; research fellow to professor, University of Minnesota, 1955–69; professor, North Carolina State University, 1969–; lecturer, Gulbenkian Institute, Portugal, 1970, 1971, 1973; NSF-AAAS Chautauqua short course director, 1972, 1973, 1975; College Chemistry Teacher Award, Manufacturing Chemists Association, 1972; Committee on Professional Training, American Chemical Society, 1972–; theories of electronic structure of matter; foundations of thermodynamics; history, philosophy of science.

Ernest L. Eliel (chemistry), 1921; D.phys., University of Havana, 1946; Ph.D., University of Illinois, 1948; instructor to associate professor, University of Notre Dame, 1948–60, professor, 1960–72, department head, 1964–66; William Rand Kenan, Jr., professor, University of North Carolina, 1972–; National Science Foundation senior research fellow, 1958–59, 1967–68; Ford Foundation Lecturer, Lima, Peru, 1966; Lemieux Lecturer, University of Ottawa, 1971; Lutz Lecturer, University of Virginia, 1973; visiting lecturer, University of Cologne, 1971, University of Madrid, 1974; member, National Academy of Sciences; councilor, American Chemical Society, 1965–73, 1975–; Morley Medal, 1965; Laurent Lavoisier Medal, 1968; organic chemistry.

David Garvin (chemistry), 1923; B.A., Yale University, 1948; M.A., Harvard University, Ph.D., 1951; instructor to assistant professor, Princeton University, 1951–61; research chemist and supervisor, National Bureau of Standards, 1961–; CODEN advisory committee, CODATA task groups on chemical kinetics and presentation of numerical data; chemical kinetics data tables.

Bruno J. Zwolinski (physical chemistry), 1919; B.S., Canisius College, 1941; M.S., Purdue University, 1943; M.A., Princeton University, 1944, Ph.D., 1947; research scientist, Manhattan Project, 1944–46; assistant professor, University of Utah, 1948–53; senior physicist, Stanford Research Institute, 1953–54; assistant to the director, Chemistry Program, National Science Foundation, 1954–57; senior lecturer and principal research chemist, Carnegie Institute of Technology, 1957–61; professor, Texas A&M University, 1961–, director, TRC Data Distribution Office, 1961–, Thermodynamics Research Center, 1966–; visiting professor, New

Mexico Highlands University, 1962, Polish Academy of Sciences, Warsaw, 1967; editor, *Journal of Chemical and Engineering Data*, 1971–; executive officer, International DATA Series, 1973–.

Section Chairman-Elect (one to be elected for a 2-year term).

Joseph F. Foster

Norman Hackerman

Joseph F. Foster (chemistry), 1918; B.S., Iowa State University, 1940; Ph.D., 1943; research chemist, American Maize Products Company, 1945–46; assistant to associate professor, Iowa State College, 1946–54; associate professor, Purdue University, 1954–57; professor, 1957–, head, Department of Chemistry, 1968–74; Prolamine Foundation fellow, Harvard Medical School, 1943–45; physical chemistry of biological macromolecules, especially proteins; conformational transitions; microheterogeneity of proteins; protein turnover.

Norman Hackerman (chemistry), 1912; A.B., Johns Hopkins University, 1932; Ph.D., 1935; assistant professor to professor, University of Texas, 1945–70, director, Corrosion Research Laboratory, 1948–61, dean, Research and Sponsored Programs, 1960–61, vice president and provost, 1961–63, vice chancellor, Academic Affairs, 1963–67, president, 1967–70; professor and president, Rice University, 1970–; member, National Academy of Sciences; editor, *Journal of the Electrochemical Society*, 1969–; president, Electrochemical Society, 1957–58, Palladium Medal, 1965; Joseph L. Mattiello Award, 1964; Southwest Regional Award, American Chemical Society, 1965, Executive Committee, Colloid Division, 1955–58; National Science Board, 1968–, chairman, 1974–; National Board on Graduate Education, 1971–; chairman, Board on Energy Studies, NAS-NRC, 1974–; chairman, Committee on AAAS Meetings, AAAS, 1973–74.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Alan F. Clifford

Charles C. Price

Alan F. Clifford (chemistry), 1919; A.B., Harvard University, 1941; M.S., University of Delaware, 1947, Ph.D., 1949; assistant professor, Illinois Institute of Technology, 1949–52; assistant to associate professor, Purdue University, 1953–66; professor and head, Department of Chemistry, Virginia Polytechnic Institute and State University, 1966–; Guggenheim fellow, Cambridge University, 1951–53; national councilor, Fluorine Division, American Chemical Society, 1974–, Inorganic Nomenclature Committee, 1970–; Committee on Equilibrium Data and Subcommittee on Solubility Data, International Union of Pure and Applied Chemistry; fluorine chemistry; rare earth chemistry; Mössbauer spectroscopy.

Charles C. Price (organic chemistry), 1913; A.B., Swarthmore College, 1934; M.S., Harvard University, 1935, Ph.D., 1936; research associate to associate professor, University of Illinois, 1936–46; professor and department head, University of Notre Dame, 1946–54; professor and department chairman, University of Pennsylvania, 1954–65, Benjamin Franklin professor, 1966–; president, American Chemical Society, 1965; Council, AAAS, 1970–73, chairman, Section on Chemistry (C), 1971, member-at-large, Section C Committee, 1972–75; structure and reactivity in organic chemistry.

Section D-Astronomy

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Peter S. Conti

Robert M. Hjellming

David Morrison

Stewart Sharpless

Peter S. Conti (astronomy), 1934; B.S., Rensselaer Polytechnic Institute, 1956; Ph.D., University of California, 1963; research fellow, California Institute of Technology, 1963–66; assistant professor, Lick Observatory, 1966–71; Fulbright visiting professor, University of Utrecht, 1969–70; visiting fellow, Joint Institute for Laboratory Astrophysics, University of Colorado, 1971–72, fellow, 1972–, professor, 1971–; stellar atmospheres.

Robert M. Hjellming (radio astronomy), 1938; B.S., University of Chicago, 1960, M.S., 1961, Ph.D., 1965; assistant professor, Case Western Reserve University, 1965–68; associate scientist, National Radio Astronomy Observatory, Charlottesville, 1968–71, scientist, 1971–; Editorial Board, *Journal of Earth and Extraterrestrial Sciences*; Committee on Publications, American Astronomical Society; radio stars.

David Morrison (astronomy), 1940; A.B., University of Illinois, 1962; M.A., Harvard University, 1964, Ph.D., 1969; assistant astronomer, University of Hawaii, 1969–73, associate astronomer, 1973–; co-investigator, Mariner-10 IR Radiometer Experiment, 1971–; visiting associate in astronomy, California Institute of Technology, 1972; secretary-treasurer, Division for Planetary Sciences, American Astronomical Society, 1971–; Working Group on Planetary Nomenclature, International Astronomical Union, 1973–, chairman, Task Group on Nomenclature for the Planet Mercury, 1973–; Editorial Board, *Icarus*, 1975–; NASA Mariner Jupiter Orbiter Science Advisory Committee, 1975–; planetary science.

Stewart Sharpless (astronomy), 1926; Ph.B., University of Chicago, 1948, Ph.D., 1952; astronomer to director, Astronomy and Astrophysics Division, U.S. Naval Observatory, 1953–64; professor, University of Rochester, 1964–, director, C. E. K. Mees Observatory, 1964–74; Carnegie fellow, Mt. Wilson and Palomar Observatories, 1952–56; visiting astronomer, Lowell Observatory, 1971; Panel on Research Associateship Programs, NAS-NRC, 1972–; director-at-large, Association of Universities for Research in Astronomy, Inc., 1966–69; Board of Directors, New York Astronomical Corporation, 1968–; structure of galaxies; infrared spectroscopy.

Section Chairman-Elect (one to be elected for a 2-year term).

Beverly T. Lynds

Richard L. Sears

Beverly T. Lynds (astronomy), 1929; B.S., Centenary College, 1949; Ph.D., University of California, 1955; research associate, University of California, 1956–58, National Radio Astronomy Observatory, 1959–61; assistant to associate professor, University of Arizona, 1962–71; assistant to the director and associate astronomer, Kitt Peak National Observatory, 1971–; councilor, American Astronomical Society, 1974; Warner/Pierce Prize Committee, 1971–74, chairman, 1974; Astronomy Manpower Committee, Committee on Science and Public Policy, National Academy of Sciences, 1974–;

Editorial Advisory Board, *Astrophysical Letters*, 1975–; interstellar medium.

Richard L. Sears (astronomy), 1931; A.B., Harvard College, 1953; M.A., Indiana University, 1955, Ph.D., 1958; instructor, Indiana University, 1958–59; research assistant, Lick Observatory, 1959–61; research fellow to senior research fellow, California Institute of Technology, 1960–64; visiting assistant professor, Vanderbilt University, 1964–65; assistant professor, University of Michigan, 1965–70, associate professor, 1970–; National Science Foundation predoctoral fellowship, 1955–57; stellar interiors and evolution; solar neutrinos.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Anne P. Cowley

Michael J. S. Belton

Anne P. Cowley (astronomy), 1938; B.A., Wellesley College, 1959; M.A., University of Michigan, 1961, Ph.D., 1963; research associate, University of Chicago, 1963–67, University of Michigan, 1968–73, associate research scientist, 1973–; guest worker, Dominion Astrophysical Observatory, 1974–75; representative, IAU-USNC II, American Astronomical Society; Organizing Committee for Commission #45, International Astronomical Union; member-at-large, Section on Astronomy Committee, AAAS, 1972–75, Council, 1972–73; stellar spectroscopy.

Michael J. S. Belton (astronomy), 1934; B.Sc., University of St. Andrews, Scotland, 1959; Ph.D., University of California, 1964; junior to associate astronomer, Kitt Peak National Observatory, 1964–73, astronomer, 1973–; Lick fellow, University of California, 1962–63; associate editor, *Icarus*, 1970–; NASA Group Achievement Award, 1974; NASA Astronomy Subcommittee, 1968–70; UV Spectroscopy Advisory Team, Mariner Venus/Mercury 1973 Mission, 1969–70; team leader, Imaging Experiment Team, Definition Phase of the Outer Planets Mission, 1971–72; planetary sciences.

Section E-Geology and Geography

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Donald R. Deskins

Robert W. Durrenberger

John C. Frye

Suzanne Takken

Donald R. Deskins (geography), 1932; A.B., University of Michigan, 1960, M.A., 1963, Ph.D., 1971; lecturer to assistant professor, University of Michigan, 1968–72, associate professor, 1973–, department chairman, 1974–; councilor, American Association of Geographers, 1973–; NSF-AAAS Chautauqua short course director, 1973–; Maritime Research Panel, National Academy of Sciences, 1974; Geography Test Committee, Educational Testing Service, Graduate Record Examinations Program, 1974–; urban geography; urban and regional planning.

Robert W. Durrenberger (geography), 1918; B.S., Moorhead State College, 1940; B.S., California Institute of Technology, 1941; M.S., University of Wisconsin, 1949; Ph.D., University of California, 1955; assistant professor and department chairman, California State University, Los Angeles, 1949–56; associate professor to professor, department chairman, and dean, Graduate Studies, California State University, Northridge, 1956–70; professor, director, Labo-

ratory of Climatology, and Arizona State climatologist, Arizona State University, 1970–; National Science Foundation visiting scientist, 1970; president, Association of Pacific Coast Geographers, 1974–75; Arizona Water Resources Committee, 1975–; climatology.

John C. Frye (geology), 1912; A.B., Marietta College, 1934; M.S., University of Iowa, 1937, Ph.D., 1938; geologist, U.S. Geological Survey, 1938–42; assistant director and assistant state geologist, Kansas State Geological Survey, 1942–45, executive director, 1945–54, state geologist, 1952–54; assistant professor to professor, University of Kansas, 1942–54; chief, Illinois Geological Survey, 1954–74; professor, University of Illinois, 1963–74; executive secretary, Geological Society of America, 1974–; president, American Geological Institute, 1966; U.S. Department of Interior Public Service Award, 1972; Advisory Committee on Remote Sensing, National Research Council, 1966–, chairman, 1966–69; Advisory Committee on Chemical Technology, Oak Ridge National Laboratory, 1972–; quaternary geology; hydrogeology.

Suzanne Takken (geology), 1925; B.S., University of Michigan; petroleum geologist, Mobil Oil Corporation, 1947–70; consultant, 1970–; delegate, American Association of Petroleum Geologists House of Delegates; lecturer, Landmen's Institute, University of Oklahoma; past president, Oklahoma City Geological Society and Oklahoma Section, American Institute of Professional Geologists; petroleum and geothermal geology.

Section Chairman-Elect (one to be elected for a 2-year term).

Howard R. Gould

James W. Skehan

Howard R. Gould (geology), 1921; B.A., University of Minnesota, 1943; Ph.D., University of Southern California, 1953; associate marine geologist, University of California, 1943–46; geologist, U.S. Geological Survey, 1947–53; assistant professor, University of Washington, 1953–56; senior geologist to chief, Geologic Research Section, Humble Oil & Refining Company, 1956–64, manager, Stratigraphic and Structural Geology Division, 1964–67; research scientist, Exxon Production Research Company, 1967–; American Association of Petroleum Geologists Distinguished Service Award, 1972; vice president, Society of Economic Paleontologists and Mineralogists, 1968; Environmental Committee, American Petroleum Institute, 1972–; Education Committee, American Geological Institute, 1974–; sedimentology; marine geology; petroleum exploration.

James W. Skehan (geology), 1923; A.B., Boston College, 1946; A.M., Harvard University, 1951, Ph.D., 1953; assistant to associate professor, Boston College, 1956–68, professor, 1968–, chairman, Department of Geology, 1958–70, director, Weston Observatory, 1973–, Energy Research Center, 1975; assistant academic director, Boston College/NASA Expedition to Surtsey and Iceland, 1970; president, National Association of Geology Teachers, 1971–72; secretary-treasurer, American Geological Institute, 1973; chairman, New England Section, Association of Engineering Geologists, 1974–75, Executive Committee, 1974–75; chairman-elect, Engineering Geology Division, Geological Society of America, 1974–75.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Allen F. Agnew

J. Thomas Dutro, Jr.

Allen F. Agnew (geology), 1918; A.B., University of Illinois, 1940, M.S., 1942; Ph.D., Stanford University, 1949; assistant geologist, Illinois Geological Survey, 1939–42; geologist, U.S. Geological Survey, 1942–55; assistant professor, University of Alabama, 1948–49; associate professor to professor, University of South Dakota, 1955–63; state geologist, South Dakota, 1957–63; professor and director, Water Resources Research Center, Indiana University, 1966–69; professor and director, Water Resources Center, Washington State University, 1969–74; senior specialist, Environmental Policy Division, Library of Congress, 1974–; Ordovician stratigraphy; lead-zinc deposits; hydrogeology.

J. Thomas Dutro, Jr. (geology), 1923; B.A., Oberlin College, 1948; M.A., Yale University, 1950, Ph.D., 1953; geologist, U.S. Geological Survey, 1948–, chief, Paleontology and Stratigraphy Branch, 1962–68; research associate, Smithsonian Institution, 1962–; visiting lecturer, American University, 1957–59, George Washington University, 1962–63; secretary-treasurer, American Geological Institute, 1966–71; Council, AAAS, 1969–72, chairman, Electorate Nominating Committee, Section on Geology and Geography, 1974; systematics and biostratigraphy of brachiopods in Arctic Paleozoic.

Section G-Biological Sciences

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

John E. Dowling

Anthony P. Mahowald

Lynn Riddiford

Joel L. Rosenbaum

John E. Dowling (neurobiology), 1935; B.A., Harvard University, 1957, Ph.D., 1961; assistant professor, Harvard University, 1961–64; associate professor, Johns Hopkins University, 1964–71; professor, Harvard University, 1971–; Friedenwald Award, Association for Research in Vision and Ophthalmology, 1970; councilor, Society for General Physiology, 1971–; trustee, Marine Biological Laboratory, 1970–; Executive Committee, 1971–74; Visual Sciences Study Section, National Institutes of Health, 1970–74; visual physiology.

Anthony P. Mahowald (developmental biology), 1932; B.A., Spring Hill College, 1958; Ph.D., Johns Hopkins University, 1962; research fellow, Johns Hopkins University, 1962–66; assistant professor, Marquette University, 1966–70; assistant member and visiting investigator, Institute for Cancer Research, 1970–72; associate professor, Indiana University, 1972–; Woodrow Wilson honorary fellow, 1958; National Science Foundation predoctoral fellow, 1958–62; ultrastructure of early development; structure and function of germ plasma; developmental genetics.

Lynn Riddiford (insect development), 1936; B.A., Radcliffe College, 1958; Ph.D., Cornell University, 1961; instructor, Wellesley College, 1963–65; assistant to associate professor, Harvard University, 1966–73; associate professor, University of Washington, 1973–75, professor, 1975–; National Science Foundation predoctoral fellow, 1958–60, postdoctoral fellow, 1961–63; National Institutes of Health predoctoral fellow, 1960–61, Tropical Medicine and Parasitology Study Section, 1974–78; program chairman, Division of Endocrinology, American Society of Zoologists, 1973–74; Youth Science Development Committee, Entomological Society of America, 1973–; hormo-

nal control of insect development and behavior.

Joel L. Rosenbaum (cell biology), 1933; B.A., Syracuse University, 1955; M.A., St. Lawrence University, 1956; M.S., Syracuse University, 1959, Ph.D., 1963; assistant professor, Yale University, 1966–70, associate professor, 1970–; National Institutes of Health predoctoral fellow, 1961–63, postdoctoral fellow, 1963–66; AAAS-Newcomb Cleveland Prize Award, 1968; Council, American Society for Cell Biology, 1974–; Organizing Committee, International Congress of Cell Biology, 1975; biochemistry and development of filamentous organelles.

Section Chairman-Elect (one to be elected for a 2-year term).

Mary E. Clark
Richard J. Goss

Mary E. Clark (comparative cellular physiology), 1927; B.A., University of California, 1949, M.A., 1951, Ph.D., 1960; visiting professor, Lund University, 1967; assistant to associate professor, San Diego State University, 1969–73, professor, 1973–; postdoctoral fellow, National Institutes of Health, 1961–63, Science Research Council of Great Britain, 1964–66, California Institute of Technology, 1968; Electorate Nominating Committee, Section on Biological Sciences, AAAS, 1974–75; physical chemistry of water and solutes in cells.

Richard J. Goss (biology), 1925; A.B., Harvard University, 1948, Ph.D., 1952; instructor to associate professor, Brown University, 1952–64, professor, 1964–, chairman, Developmental Biology Section, 1972–; fellow, Carnegie Institution of Washington, 1960–61; chairman, Developmental Biology Division, American Society of Zoologists, 1969; secretary, Section on Biological Sciences, AAAS, 1970–73, Council, 1970–73, AAAS-Newcomb Cleveland Prize Committee of Judges, 1971–73; regeneration and organ growth regulation.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

John R. Coleman
Mary Lou Pardue

John R. Coleman (developmental biology), 1933; B.A., University of Minnesota, 1955; Ph.D., Indiana University, 1961; assistant professor, University of Connecticut, 1962–63; assistant professor, Brown University, 1963–69, associate professor, 1969–; predoctoral fellow, National Cancer Institute, 1957–60; National Institutes of Health special research fellow, 1969–70, Cell Biology Study Section, 1974–; cell differentiation in culture.

Mary Lou Pardue (cellular and molecular biology), 1933; B.A., College of William and Mary, 1955; M.S., University of Tennessee, 1959; Ph.D., Yale University, 1970; associate professor, Massachusetts Institute of Technology, 1972–; National Science Foundation predoctoral fellow, 1957–59; American Cancer Society postdoctoral fellow, 1970–72; Editorial Boards, *Journal of Cell Biology*, *Genetics*, *Cell*, *Cytogenetics and Cell Genetics*; Genetic Study Section, National Institutes of Health, 1975–; chromosome structure and function.

Section H-Anthropology

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Michael H. Crawford
Don E. Dumond
Delmos J. Jones
Willis E. Sibley

Michael H. Crawford (physical anthropology), 1939; B.A., University of Washington, 1960, M.A., 1965, Ph.D., 1967; instructor, University of Washington, 1967; assistant professor, University of Pittsburgh, 1967–71; associate professor, University of Kansas, 1971–; associate editor, *Journal of Ethnology*, 1967–69; anthropological genetics; biological bases of human behavior; primate genetics.

Don E. Dumond (anthropology), 1929; B.A., University of New Mexico, 1949; M.A., Mexico City College, 1957; Ph.D., University of Oregon, 1962; assistant to associate professor, University of Oregon, 1962–71, professor, 1971–, department chairman, 1972–; research training fellow, Social Science Research Council, 1961–62; archaeology; ethnohistory; demography.

Delmos J. Jones (cultural and social anthropology), 1936; B.A., San Francisco State College, 1959; M.A., University of Arizona, 1962; Ph.D., Cornell University, 1967; assistant professor, University of Colorado, 1967–70, Graduate Center, City University of New York, 1970–; urban problems; socio-cultural change; inner group relations.

Willis E. Sibley (anthropology), 1930; B.A., Reed College, 1951; M.A., University of Chicago, 1953, Ph.D., 1958; instructor, Miami University (Ohio), 1956–58; assistant professor, University of Utah, 1958–60; assistant professor to professor, Washington State University, 1960–71; professor and department chairman, Cleveland State University, 1971–; honorary Fulbright Award, Philippines, 1964–65; Rockefeller Foundation visiting professor, University of the Philippines, 1968–69; Regional Organizing Committee, IX International Congress of Anthropological and Ethnological Sciences, 1971–73; Executive Board, Central States Anthropological Society; social organization; technology and change.

Section Chairman-Elect (one to be elected for a 2-year term).

Charles C. Hughes
Raymond H. Thompson

Charles C. Hughes (anthropology), 1929; A.B., Harvard College, 1951; M.A., Cornell University, 1953, Ph.D., 1957; assistant professor, Cornell University, 1958–62, associate director, Program in Social Psychiatry, 1957–62; associate professor, Michigan State University, 1962–64, professor, 1964–73, director, African Studies Center, 1962–70, chairman, Human Behavior Group, College of Human Medicine, 1970–73; professor and chairman, Division of Behavioral Sciences, Department of Family and Community Medicine, University of Utah College of Medicine, 1973–; fellow, Center for Advanced Study in the Behavioral Sciences, 1961–62; president, Society for Applied Anthropology, 1969–70; Behavioral Sciences Testing Committee, National Board of Medical Examiners, 1973–76; Steering Committee, Association for Behavioral Sciences in Medical Education, 1975–78; medical anthropology.

Raymond H. Thompson (anthropology and archaeology), 1924; B.S., Tufts University, 1947; A.M., Harvard University, 1950, Ph.D., 1955; assistant professor and curator, Museum of Anthropology, University of Kentucky, 1952–56; assistant director, Archaeological Field School, University of Arizona, 1956–60, director, 1961–, assistant to associate professor, 1956–64, professor, department head, and director, Arizona State Museum, 1964–; Advisory Panel, Program on Anthropology, National Science Foundation, 1963–65; Panel on National Science Foundation Graduate Fellows, NAS-

NRC, 1964–66; Review Committee on Public Health Service Research Nursing in Patient Care, 1967–; archaeology of New World; archaeological theory; ceramic technology.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

James B. Griffin
Eleanor B. Leacock

James B. Griffin (anthropology and archaeology), 1905; Ph.B., University of Chicago, 1927, M.A., 1930; Ph.D., University of Michigan, 1936; research associate, University of Michigan Museum of Anthropology, 1938–41, associate curator, 1942–45, curator, 1945–75, director, 1946–75; associate professor, University of Michigan, 1945–49, professor, 1949–, chairman, 1972–75; president, Society for American Archaeology, 1951–52; Viking Fund Medal and Award; Permanent Council, International Union of Prehistory and Protohistory of Science, 1950–, Executive Committee, 1962–; vice president and chairman, Section on Anthropology, AAAS, 1953; eastern United States archaeology and connections with Northeastern Asia and Mesoamerica.

Eleanor B. Leacock (social and applied anthropology), 1922; B.A., Barnard College, 1944; M.A., Columbia University, 1946, Ph.D., 1952; research assistant, Cornell University Medical College, 1952–55; lecturer, Queens College, 1955–56, City College of New York, 1956–60; lecturer to professor, Polytechnic Institute of Brooklyn, 1962–72; professor and department head, City College of the City University of New York, 1972–; secretary-treasurer, American Indian Ethnohistorical Conference, 1961–65; Executive Board, American Anthropological Association, 1971–73; Executive Committee, Society for Applied Anthropology, 1972–75; Council, AAAS, 1961–65, secretary, Section on Anthropology, 1962–65; North American Indians; anthropological theory; applied anthropology; cross-cultural study of women.

Section J-Psychology

Council Delegates (two to be elected for 3-year terms).

Nancy S. Anderson
James A. Bayton
Lloyd G. Humphreys
John I. Lacey

Nancy S. Anderson (psychology), 1930; B.A., University of Colorado, 1952, M.A., 1953; Ph.D., Ohio State University, 1956; staff psychologist, IBM Research, 1956–59; assistant to associate professor, University of Maryland, 1959–66, professor, 1966–, assistant provost, 1973–; National Science Foundation postdoctoral fellow, MRC Cambridge, England, 1964–65; Council, AAAS, 1974–75, Council Committee on Fellows, 1974–75.

James A. Bayton (psychology), 1912; B.S., Howard University, 1935, M.S., 1936; Ph.D., University of Pennsylvania, 1943; assistant professor, Virginia State College, 1935–43; social science analyst, U.S. Department of Agriculture, 1943–45, 1948–52; associate professor, Southern University, 1945–46, Morgan State College, 1946–47; professor, Howard University, 1947–; senior fellow, Brookings Institution, 1967–68; personality; social psychology; consumer behavior.

Lloyd G. Humphreys (psychology), 1913; B.S., University of Oregon, 1935; M.A., Indiana University, 1936; Ph.D., Stanford University,

1938; instructor to assistant professor, Northwestern University, 1939-46; associate professor, University of Washington, 1946-48, Stanford University, 1948-52; professor, University of Illinois, 1957-, department head, 1959-69; assistant director for education, National Science Foundation, 1970-71; editor, *American Journal of Psychology*, 1968-; Council, AAAS, 1957-64, 1974-75, chairman, Section on Psychology (J), 1963, member-at-large, Section J Committee, 1961-64; intellectual performance and the nature and organization of human abilities.

John I. Lacey (physiological psychology), 1915; A.B. Cornell University, 1937, Ph.D., 1941; instructor, Queens College, 1941-42; assistant to associate professor, Antioch College, 1946-56, professor, 1956-; research scientist to chairman, Department of Psychophysiology-Neurophysiology, and chief, Section on Behavioral Physiology, Fels Research Institute, 1946-; Commonwealth Fund senior postdoctoral fellow, 1957-59; president, Society for Psychophysiological Research, 1961-62, Board of Directors, 1965-68, Award for Distinguished Contributions to Psychophysiology, 1970; president, Division of Physiological and Comparative Psychology, American Psychological Association, 1969-70, Board of Directors, 1974-; Board of Directors, American Psychosomatic Society, 1959-62; member, study sections, National Institute of Mental Health, 1957-71; psychophysiology of the autonomic nervous system.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Neil R. Bartlett

Earl B. Hunt

Edith D. Neimark

L. Starling Reid

Neil R. Bartlett (psychology), 1917; B.S., University of Vermont, 1937; M.Sc., Brown University, 1939, Ph.D., 1941; research psychologist, Brown University, 1941-43; assistant professor, Johns Hopkins University, 1946-48; professor and chairman, Hobart College, 1948-58; professor, University of Arizona, 1958-, chairman, 1958-74; visiting scientist, U.S. Navy Electronics Research Laboratory, San Diego, summers, 1959-70; National Institute of Mental Health research fellow, University of Paris, 1965-66, Psychology Training Review Committee, 1967-71; president, Division 2, American Psychological Association, 1967-68; vision and human timing.

Earl B. Hunt (psychology), 1933; B.A., Stanford University, 1954; Ph.D., Yale University, 1960; assistant professor, Yale University, 1960-61; staff research specialist, Western Management Science Institute, University of California, Los Angeles, 1961-62; lecturer, University of Sydney, 1963-65; associate professor, University of California, Los Angeles, 1965-66; professor, University of Washington, 1966-, department chairman, 1971-; Personality and Cognition Review Group, National Institute of Mental Health, 1972-; individual differences in cognition, artificial intelligence, and mathematical models and techniques in social and biological sciences.

Edith D. Neimark (psychology), 1928; A.B., Skidmore College, 1949; M.A., Indiana University, 1952, Ph.D., 1953; lecturer, Tulane University, 1953-55; assistant professor, Goucher College, 1955-56; research psychologist, U.S. Air Force AFP&TRC, Lackland, Texas, 1956-58; assistant to associate professor, New York University, 1958-64; associate professor to professor, Douglass College, Rutgers University,

1964-, chairman, 1966-71; president, Rutgers Chapter, American Association of University Professors, 1972-73; cognitive development.

L. Starling Reid (psychology), 1920; B.A., University of Mississippi, 1943, M.A., 1944; Ph.D., Ohio State University, 1949; assistant to associate professor, University of Virginia, 1949-61, professor, 1961-, chairman, 1960-72; consulting editor, *Journal of Experimental Psychology*, 1959-74; editor, Human Experimental Section, *Catalog of Selected Documents in Psychology*, 1974-; chairman, Panel for the Selection of Graduate Fellows, National Science Foundation, 1963-65, Program Committee, Eastern Psychological Association; Council, AAAS, 1972-73, member-at-large, Section on Psychology Committee, 1972-75; information processing and human memory.

Section Chairman-Elect (one to be elected for a 2-year term).

William Bevan

Donald B. Lindsley

William Bevan (psychology), 1922; A.B., Franklin and Marshall College, 1942; M.A., Duke University, 1943, Ph.D., 1948; assistant professor to professor, Emory University, 1948-59; professor and department chairman, Kansas State University, 1959-62, dean, School of Arts and Sciences, 1962-63, vice president, Academic Affairs, 1963-66; professor, Johns Hopkins University, 1966-74, vice president and provost, 1966-70; executive officer, AAAS, 1970-74; William Preston Few professor, Duke University, 1974-; Fulbright research scholar and guest professor, University of Oslo, 1952-53; National Science Foundation senior postdoctoral fellow, Center for Advanced Study in the Behavioral Sciences, 1965-66; Alumni Citation Award, Franklin and Marshall College, 1966; Education and Training Board, American Psychological Association, 1962-68, chairman, 1966; AAAS-ABA National Conference on Science, Technology, and the Law, 1974-; trustee, Associated Universities, Inc., BioSciences Information Services, Center for Creative Leadership, College Retirement Equities Fund, Franklin and Marshall College, Human Resources Research Organization, American Psychological Foundation; experimental psychology.

Donald B. Lindsley (psychology), 1907; A.B., Wittenberg College, 1929; M.A., State University of Iowa, 1930, Ph.D., 1932; assistant professor, Brown University, 1938-46; director, Psychology and Neurophysiology Laboratories, Bradley Hospital, 1943-45; professor, Northwestern University, 1946-51; professor, University of California, Los Angeles, 1951-, department chairman, 1959-62; William James Lecturer, Harvard University, 1958; Walter B. Pillsbury Lecturer, Cornell University, 1963; Guggenheim fellow, 1959; member, National Academy of Sciences; past president, Western Electroencephalographic Society, Western Psychological Association, American Electroencephalographic Society; treasurer, International Brain Research Organization, 1967-72; chairman, Psychology Section, National Academy of Sciences, 1958-62; Distinguished Scientific Contribution Award, American Psychological Association, 1959, Board of Scientific Affairs, 1957-59; Board of Governors, Psychonomic Society, 1960-65; Undersea Warfare Committee, National Research Council, 1951-64; vice president and chairman, Section on Psychology, AAAS, 1954, Council 1954, 1966-68, Editorial Board, *Science*, 1974-; physiological psychology.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Frank W. Finger

Janet T. Spence

Frank W. Finger (psychology), 1915; B.A., Syracuse University, 1936, M.A., 1937; Ph.D., Brown University, 1940; instructor, Brown University, 1940-42; assistant to associate professor, University of Virginia, 1942-55, professor, 1955-; visiting fellow, Yale University, 1953-54; consulting editor, *Journal of Comparative and Physiological Psychology*, 1950-62; president, Division of General Psychology, American Psychological Association, 1960-61, Division of Experimental Psychology, 1971-72, Council, 1959-69, 1972-, Policy and Planning Board, 1975-; panel member, Office of Institutional Programs, National Science Foundation, 1961-63; Experimental Psychology Study Section, National Institutes of Health, 1962-66; Council, AAAS, 1958-67, 1969-70, secretary, Section on Psychology, 1960-67, chairman, 1970; experimental/abnormal psychology.

Janet T. Spence (psychology), 1923; A.B., Oberlin College, 1945; M.A., Ph.D., University of Iowa, 1949; instructor to associate professor, Northwestern University, 1949-60; research psychologist, Veterans Administration Hospital, Iowa City, 1960-64; professor, University of Texas, Austin, 1964-, chairman, 1968-73; honorary research associate, Harvard University, 1974-75; Ford Foundation fellow, 1974-75; editor, *Contemporary Psychology*, 1973-; president, Southwestern Psychological Association, 1971; secretary-treasurer, Psychonomic Society, 1975-; Board of Scientific Affairs, American Psychological Association, 1970-73; National Science Foundation Fellowship Panel, 1974-; Electorate Nominating Committee, Section on Psychology, AAAS, 1975-77; personality.

Section K-Social and Economic Sciences

Council Delegate (one to be elected for a 3-year term).

Louisa P. Howe

Claire Nader

Louisa P. Howe (sociology), 1915; A.B., Harvard University, 1937, A.M., 1939, Ph.D., 1949; assistant professor of psychology, University of Kansas, 1950-52; research fellow, Institute of Child Welfare, University of California, Berkeley, 1952-54, associate research sociologist, School of Public Health, 1954-58; professor, Harvard Medical School, 1958-; associated with Massachusetts General Hospital, Laboratory for Community Psychiatry, College Mental Health Center, Boston; consultant, National Institute of Mental Health; mental health; the process of identification.

Claire Nader (political science and international relations); A.B., Smith College; M.A., Ph.D., Columbia University; associate director, Oak Ridge National Laboratory-National Science Foundation Environmental Program, Oak Ridge National Laboratory, consultant; guest scholar, Woodrow Wilson International Center for Scholars; Commission for the Advancement of Public Interest Organizations; advising member, Academy of Contemporary Problems; vice president, International Studies Association, co-editor, *International Studies Quarterly*; member, U.S. National Academy of Sciences Delegation, Joint Colloquium with Bulgarian National Academy of Sciences on National Science Policy; chairwoman, Committee on Opportunities in Science, AAAS,

1973-, chairwoman, Panel on Women Scientists, 1973-, Council, 1974-75, Committee on Council Affairs, 1974-75; science-technology; public policy.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Walter R. Gove
Valerie K. Oppenheimer
Paul Taubman
Martin Trow

Walter R. Gove (sociology), 1938; B.S., New York State University, 1960; M.A., University of Washington, 1967, Ph.D., 1968; assistant professor, Vanderbilt University, 1968-71, associate professor, 1971-; advisory editor, *Social Forces*, 1971-74; consulting editor, *American Journal of Sociology*, 1974-; associate editor, *Social Science Research*, 1974-; deviant behavior.

Valerie K. Oppenheimer (sociology), 1932; A.B., Vassar College, 1954; M.A., University of California, 1962, Ph.D., 1966; assistant professor, University of Arizona, 1963-66, University of Illinois at Chicago Circle, 1967-69; assistant professor, University of California, Los Angeles, 1972-73, associate professor, 1973-; director, Population Association of America, 1974-77; Assembly of Behavioral and Social Sciences, NAS-NRC, 1971-75; Behavioral Sciences Research Contract Review Committee, Center for Population Research, 1973-75; social demography.

Paul Taubman (economics), 1939; B.S., University of Pennsylvania, 1961, Ph.D., 1964; assistant professor, Harvard University, 1964-65, staff member, Council of Economic Advisers, 1965-66; associate professor, University of Pennsylvania, 1966-72, professor, 1972-; Board on Human Resources, National Academy of Sciences, 1970-74, chairman, Panel on Benefits of Higher Education, 1971-74; income distribution.

Martin Trow (sociology), 1926; M.E., Stevens Institute of Technology, 1947; Ph.D., Columbia University, 1957; assistant professor, Bennington College, 1953-57; assistant professor to professor, University of California, Berkeley, 1957-; fellow, Center for Advanced Study in the Behavioral Sciences, 1965-66; National Academy of Education, 1972-; Commission on Human Resources, 1974-; higher education.

Section Chairman-Elect (one to be elected for a 2-year term).

Robert Dubin
Matilda W. Riley

Robert Dubin (sociology and administration), 1916; A.B., University of Chicago, 1936, M.A., 1940, Ph.D., 1947; assistant professor, University of Chicago, 1947; associate professor, University of Illinois, 1948-51, professor, 1951-54; professor, University of Oregon, 1954-57, research professor, 1957-69; professor, University of California, Irvine, 1969-; fellow, Center for Advanced Study in the Behavioral Sciences, 1956-57; Guggenheim fellow, 1963-64; senior Fulbright research scholar, Germany, 1963-64, England, 1968-69; resident scholar, Rockefeller Center, Bellagio, Italy, 1974; Executive Board, Industrial Relations Research Association, 1953-56; Council, American Sociological Association, 1963-66, Executive Committee, 1964-66; organizational behavior and theory.

Matilda W. Riley (sociology), 1911; A.B., Radcliffe College, 1931; M.A., Harvard University, 1937; vice president, Market Research Company of America, 1936-49; executive offi-

cer, American Sociological Association, 1950-61; professor and director, Sociology Laboratory, Rutgers University, 1951-73; professor and department chairman, Bowdoin College, 1973-; staff sociologist, Russell Sage Foundation, 1974-; vice president, American Sociological Association, 1973-74; Lindback Research Award, Rutgers University, 1970; Social Science Award for Aging and Society, University of Southern California, 1974; Grant Committee, National Institute of Child Health and Human Development, 1970-75; Committee on the Middle Years, Social Science Research Council, 1972-; sociological research; sociology of age.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Clifford Hildreth
Nelson W. Polsby

Clifford Hildreth (economics and statistics), 1917; A.B., University of Kansas, 1939; M.S., Iowa State University, 1941, Ph.D., 1947; assistant professor, Iowa State University, 1947-49; associate professor, University of Chicago, 1949-53; professor, North Carolina State University, 1953-55; professor, Michigan State University, 1955-64, department head, 1958-60; professor, University of Minnesota, 1964-; fellow, Center for Advanced Study in the Behavioral Sciences, 1961-62; Fulbright Lecturer, University of Tokyo, 1970; editor, *Journal of the American Statistical Association*, 1960-64; president, American Statistical Association, 1973; econometrics and decision theory.

Nelson W. Polsby (political science), 1934; B.A., Johns Hopkins University, 1956; M.A., Yale University, 1958, Ph.D., 1961; instructor, University of Wisconsin, 1959-60; assistant professor to professor, Wesleyan University, 1961-68; professor, University of California, Berkeley, 1968-; fellow, Social Science Research Council, 1959, Brookings Institution, 1959-60, Center for Advanced Study in the Behavioral Sciences, 1965-66; managing editor, *American Political Science Review*, 1971-; Committee on Public Engineering Policy, National Academy of Engineering, 1973-; U.S. national politics and government.

Section L-History and Philosophy of Science

Council Delegate (one to be elected for a 3-year term).

Stephen Jay Gould
Margaret W. Rossiter

Stephen Jay Gould (paleontology and history of science), 1941; A.B., Antioch College, 1963; Ph.D., Columbia University, 1967; assistant to associate professor, Harvard University, 1967-73, professor, 1973-; vice president, Society for the Study of Evolution, 1973-; Board of Syndics, Harvard University Press, 1973-; Council, AAAS, 1973-75; evolution of growth and form; history of evolutionary biology and geology.

Margaret W. Rossiter (history of science), 1944; A.B., Radcliffe College, 1966; M.S., University of Wisconsin, 1967; M. phil., Yale University, 1969, Ph.D., 1971; National Science Foundation postdoctoral fellow, Brown University, 1971-72; fellow, Charles Warren Center for Studies in American History, Harvard University, 1972-73; acting assistant professor, University of California, Berkeley, 1973-; Council, History of Science Society, 1973-; member-at-large, Section on History and Philosophy of Science Committee, AAAS, 1975-78; 19th- and 20th-century science.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Edward MacKinnon
Morton L. Schagrin
Cyril Stanley Smith
William C. Wimsatt

Edward MacKinnon (philosophy), 1928; B.S., Boston College, 1950, M.A., 1954; M.A., Harvard University, 1956; Ph.D., St. Louis University, 1959; S.T.L., Weston College, 1962; assistant professor to professor, Boston College, 1965-71; professor, California State University, Hayward, 1971-; Hecker lectures, 1968; associate editor, *Philosophy Forum*, 1968-; Executive Council, American Catholic Philosophical Association, 1970-73; philosophy of science.

Morton L. Schagrin (philosophy and history of science), 1930; A.B., University of Chicago, 1951, B.S., 1952, M.A., 1953; Ph.D., University of California, 1966; assistant professor, University of Florida, 1961-63; assistant to associate professor, Denison University, 1963-70; associate professor and department chairman, State University of New York, College at Fredonia, 1970-74, professor, 1974-; research associate, Harvard Project Physics, 1966-67; visiting lecturer, National Science Foundation Summer Institute, Knox College, 1968-71; president, Tri-State Philosophical Association, 1971-; Committee on Unionization, American Philosophical Association, 1974-76; logic of science; early 19th-century physical sciences.

Cyril Stanley Smith (metallurgy and history of technology), 1903; B.Sc., University of Birmingham, 1924; Sc.D., Massachusetts Institute of Technology, 1926; research metallurgist, American Brass Company, 1927-42; associate division leader, Los Alamos Scientific Laboratory, 1943-46; professor, University of Chicago, 1946-61; professor, Massachusetts Institute of Technology, 1961-69, emeritus professor, 1969-; Clamer Medal, Franklin Institute, 1952; Douglas Medal, Institute of Mining, Metallurgical, and Petroleum Engineers, 1963; Gold Medal, American Society of Metals, 1964; da Vinci Medal, Society for the History of Technology, 1966, president, 1963-65; Platinum Medal, British Institute of Metals, 1970; General Advisory Committee, U.S. Atomic Energy Commission, 1946-52; President's Science Advisory Committee, 1959; member-at-large, Section on History and Philosophy of Science Committee, AAAS, 1955-58, Section chairman, 1971, Council, 1965-67, 1970-71; physical metallurgy; history of materials; general theory of structure.

William C. Wimsatt (philosophy and biology), 1941; A.B., Cornell University, 1965; M.A., University of Pittsburgh, 1968, Ph.D., 1971; assistant professor and Committee on Conceptual Foundations of Science, University of Chicago, 1971-74, secretary of Committee, 1972-; Governing Board, Biology Collegiate Division, 1973-; Committee on Evolutionary Biology, 1974-, associate professor, 1974-; Woodrow Wilson fellow, 1965-66; visiting research fellow, Cornell University, 1974-75; philosophy of biology, psychology, and social sciences with theoretical and methodological interests in functional organization.

Section Chairman-Elect (one to be elected for a 2-year term).

John W. Abrams
Ernan McMullin

John W. Abrams (history and philosophy of science), 1913; A.B., University of California, 1933, Ph.D., 1939; assistant professor, University of Manitoba, 1945-46, Wesleyan Univer-

sity, 1946-49; Canadian Defence Research Board, 1949-63; associate professor, University of Toronto, 1963-67, professor, 1967-, director, Institute on the History and Philosophy of Science and Technology, 1967-72; Coronation Medal; Centennial Medal; president, Canadian Society for the History and Philosophy of Science, 1972-75; chairman, Committee on Education, International Union of the History and Philosophy of Science, 1971-; secretary-general, International Cooperation in History of Technology Committee, 1974-; history and philosophy of engineering systems.

Ernan McMullin (philosophy), 1924; B.Sc., Maynooth College, Ireland, 1945; Ph.D., University of Louvain, 1954; faculty member, University of Notre Dame, 1954-, department chairman, 1965-72, professor, 1967-; visiting professor, University of Minnesota, 1964-65; National Science Foundation research grants, Cambridge University, 1968-69, 1973-74; U.S. delegate, International Congresses in Logic, Methodology and Philosophy of Science, 1967-71, International Congresses of Philosophy, 1968-73; president, American Catholic Philosophical Association, 1966-67, Metaphysical Society of America, 1973-74; Panel on History and Philosophy of Science, National Science Foundation, 1963-65; Executive Council, Philosophy of Science Association, 1970-73; Council for Philosophical Studies, 1970-; history and philosophy of science.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Diana L. Hall
Erwin Hiebert

Diana L. Hall (history of biology and medicine), 1938; B.A., Smith College, 1959; M.A., Yale University, 1960, Ph.D., 1966; lecturer, Boston University, 1970-73, assistant professor, 1973-; associate editor, *Journal of the History of Biology*, 1973-; Council, History of Science Society, 1975-78; history of modern physiology.

Erwin Hiebert (history of science), 1919; B.A., Bethel College, 1941; M.S., University of Chicago, 1949; Ph.D., University of Wisconsin, 1954; assistant professor, San Francisco State College, 1952-54; instructor, Harvard University, 1955-57; assistant to associate professor, University of Wisconsin, 1957-63, professor and chairman, 1963-70; professor, Harvard University, 1970-; Fulbright Lecturer, Max Planck Institute, 1954-55; visiting scholar, Institute for Advanced Study, 1961-62, 1968-69; visiting professor, University of Tübingen, 1964-65; lecturer, Hebrew University, 1973; president, History of Science Society, 1972-74; vice president, Division of History of Science, International Union of the History and Philosophy of Science, 1975-; physical sciences and philosophical thought since 1800.

Section M-Engineering

Council Delegates (two to be elected for 3-year terms).

Robert Adler
Arthur J. McNair
Joseph M. Pettit
F. Karl Willenbrock

Robert Adler (electronics), 1913; Ph.D., University of Vienna, 1937; in charge of laboratory, Scientific Acoustics Ltd., London, 1940, Associated Research, Inc., Chicago, 1941; research engineer, Zenith Radio Corporation, 1941-52, associate director of research, 1952-63, director

of research, 1963-; member, National Academy of Engineering; Inventor of Year, Patent, Trademark and Copyright Research Institute, George Washington University, 1968; Consumer Electronics Award, Institute of Electrical and Electronics Engineers, 1970, member, several committees; Telecommunications, Committee, National Academy of Engineering, 1968-72; television engineering; ultrasonics.

Arthur J. McNair (civil engineering), 1914; B.S., University of Colorado, 1934, M.S., 1935, C.E., 1945; instructor to associate professor, University of Colorado, 1935-49; professor and head, Surveying Department, Cornell University, 1949-66, professor of geodetic and photogrammetric engineering, 1966-; National Science Foundation fellow, Royal Institute of Technology, Stockholm, 1963; program director, National Science Foundation Visiting Scientists Programs, 1966-68; exchange scientist to Polish Academy of Sciences, 1968; president, American Society of Photogrammetry, 1961-62; chairman, Surveying and Mapping Division, American Society of Civil Engineers; chairman, Civil Engineering Division, American Society for Engineering Education, 1954, Council, 1955-57; Award of Excellence, National Council of Land Surveyors, 1971; Advisory Committee on Remote Sensing Programs for Earth Resource Surveys, Cartography Panel, NAS-NRC, 1966-74; Geodesy and Cartography Advisory Committee, NASA, 1967-74; Electorate Nominating Committee, Section on Engineering, AAAS, 1974-75; geodesy; photogrammetry; remote sensing; education.

Joseph M. Pettit (electrical engineering), 1916; B.S., University of California, 1938; Ph.D., Stanford University, 1942; instructor, University of California, 1940-42; special research associate, Harvard University, 1942-45; supervising engineer, AIL, Inc., New York, 1945-47; associate professor to professor, Stanford University, 1947-72, dean, School of Engineering, 1958-72; president, Georgia Institute of Technology, 1972-; educational administration.

F. Karl Willenbrock (applied physics), 1920; B.S., Brown University, 1942; A.M., Harvard University, 1947, Ph.D., 1950; research fellow and lecturer to director of laboratories and associate dean, Division of Engineering and Applied Physics, Harvard University, 1950-67; professor and provost, State University of New York at Buffalo, 1967-70; director, Institute for Applied Technology, National Bureau of Standards, 1970-; Distinguished Service Engineering Award, Brown University, 1962; member, National Academy of Engineering; president, Institute of Electrical and Electronics Engineers, 1969, Board of Directors, 1962-71; Office of Science Information Service Committee, National Science Foundation, 1969-73; Board of Directors, Engineers' Council for Professional Development, 1974-; physical electronics-engineering and applied science management-engineering information dissemination.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Paul F. Chenea
Richard L. Ealum
Hans M. Mark
Marjorie R. Townsend

Paul F. Chenea (engineering mechanics), 1918; B.S., University of California, 1940; M.S., University of Michigan, 1947, Ph.D., 1949; instructor to associate professor, University of Michigan, 1946-52; professor and department chairman to vice president, Academic Affairs, Purdue University, 1952-67; scientific director,

Research Laboratories, General Motors Corporation, 1967-69; vice president, 1969-; Outstanding Achievement Award, University of Michigan, 1968; member, National Academy of Engineering; trustee, Rensselaer Polytechnic Institute, 1972-; director, Industrial Research Institute, 1972-; Energy Research and Advisory Council, U.S. Energy Policy Office, 1973-; Technical Advisory Board, U.S. Department of Commerce, 1974-; industrial research administration.

Ricahrd L. Ealum (engineering), 1925; B.S., Missouri School of Mines and Metallurgy, 1961; M.S., Cornell University, 1970, Ph.D., 1971; civil engineer, U.S. Geological Survey, 1958-68; physical scientist, Geophysical and Space Sciences Division, Aeronautical Chart and Information Center, St. Louis, 1968-73, supervisory physical scientist, assistant chief, Geophysical and Space Sciences Division, Defense Mapping Agency Aerospace Center, 1973-74, supervisory cartographer, chief, Techniques and Engineering Office, Positional Data Division, 1974-; Meritorious Service Award from Secretary of the Interior, 1968; geodetic and photogrammetric engineering.

Hans M. Mark (physics), 1929; A.B., University of California, 1951; Ph.D., Massachusetts Institute of Technology, 1954; research physicist and lecturer, University of California, Berkeley, 1955-58; assistant professor, Massachusetts Institute of Technology, 1958-60; lecturer to professor, department chairman and administrator, Berkeley Research Reactor, University of California, Berkeley, 1960-69; lecturer, University of California, Davis, 1969-73; director, NASA-Ames Research Center, Moffett Field, 1969-; consulting professor, Stanford University, 1973-; Tau Beta Pi Outstanding Engineering Teacher Award, 1966; NASA Distinguished Service Medal, 1972; director, Society for Engineering Science, 1972-; U.S. Air Force Scientific Advisory Board, 1969-; Committee on Atomic and Molecular Physics, NAS-NRC, 1972-; Board of Directors, Hertz Scholarship Foundation, 1973-.

Marjorie R. Townsend (electronic engineering), 1930; B.E.E., George Washington University, 1951; physical science aide, National Bureau of Standards, 1948-51; electronic scientist, Naval Research Laboratory, 1951-59; research engineer, Goddard Space Flight Center, 1959-62, electronic engineer, Aero-Space Technology, 1962-67, project manager, Small Astronomy Satellite, 1967-; TIROS Project Group Achievement Award, 1963; Nimbus Project Group Achievement Award, 1969; Volunteers for Education Award, 1970; NASA Exceptional Service Medal, 1971; Federal Woman's Award, 1973; co-inventor, Digital Telemetry Systems; chairman, Washington Section, Institute of Electrical and Electronics Engineers, 1974-75; National Capital Section Council, American Institute for Aeronautics and Astronautics, 1973-75.

Section Chairman-Elect (one to be elected for a 2-year term).

C. Towner French
Ernst Weber

C. Towner French, 1911; business administration, University of Maryland; Home Owners Loan Corporation, 1934-36; sales and sales management, 1936-42; sales engineer to general manager, Industrial Products Division, Fairchild Camera and Instrument Corporation, 1942-58; manager, General Precision, Inc., 1958-62; manager, Government Relations, P. R. Mallory & Company, Inc., 1962-74; consul-

tant, 1975-; president, Institute of Navigation, 1963-65; National Council, American Defense Preparedness Association, 1974-75; Advisory Committee Council, National Security Industrial Association, 1972-75, Executive Committee, 1972-75, director, Washington Chapter, 1974-76; Council, AAAS, 1970-73, member-at-large, Section on Engineering Committee, 1972-75, Section secretary, 1973.

Ernst Weber (electrical engineering), 1901; E.E., Technical University, Vienna, 1924; Ph.D., University of Vienna, 1927; visiting professor to research professor, Polytechnic Institute of Brooklyn, 1930-45, professor, department head, and director, Microwave Institute, 1945-57, president of Institute, 1957-69; chairman, Division of Engineering, National Research Council, 1969-74, consultant, Commission on Sociotechnical Systems, 1975-; member, National Academy of Engineering; president, Institute of Radio Engineers, 1959, Institute of Electrical and Electronics Engineers, 1963, Engineers Council for Professional Development, 1968-70; Presidential Certificate of Merit, 1948; Electorate Nominating Committee, Section on Engineering, AAAS, 1974-75.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Harold Chestnut

Margaret B. Hays

Harold Chestnut (electrical engineering), 1917; B.S.E.E., Massachusetts Institute of Technology, 1939, M.S.E.E., 1940; manager, Systems Engineering and Analysis, General Electric Company, 1940-66, Information Science Laboratory, Research and Development Center, 1966-67, Systems Engineering and Analysis Branch, 1967-71, consultant, Systems Engineering, 1971-; member, National Academy of Engineering; president, International Federation of Automatic Control, 1957-59, American Automatic Control Council, 1962-63, Institute of Electrical and Electronics Engineers, 1973; Board of Directors, IEEE, 1967-75; systems engineering.

Margaret B. Hays (materials engineering), 1902; A.B., Oberlin College, 1924; M.S., University of Pittsburgh, 1925; instructor, Hollins College, 1926-27; physics fellow, Bryn Mawr College, 1927-29; textile physics research, U.S. Department of Agriculture, 1929-46; head, Textile Branch, Navy Aero Materials Laboratory, 1946-69; retired; treasurer, Graduate Women in Science, 1966-68; aeronautical textiles.

Section N-Medical Sciences

Council Delegates (five to be elected for 3-year terms).

Martin W. Adler

James A. Bain

Julius Belford

Daniel S. Feldman

Charles W. Gorodetzky

Halsted Holman

Saul Jarcho

Sherman M. Mellinkoff

Frederick Sargent II

Vernon E. Wilson

Martin W. Adler (pharmacology), 1929; B.A., New York University, 1949; B.S., Brooklyn College of Pharmacy, 1953; M.S., Columbia University, 1957; Ph.D., Albert Einstein College of Medicine, 1960; assistant to associate professor, Temple University School of Medicine, 1962-73, professor, 1973-; NATO Research

Award Grant, 1973-75; visiting scientist, Mario Negri Research Institute, Milan, 1973; consultant, Select Committee on Crime, U.S. House of Representatives, 1972-73; chairman, Brain Lesions and Drug Action Group, 1970-; Editorial Board, *Psychopharmacologia*, 1972-; Drug Abuse Review Committee, National Institute on Drug Abuse, 1975-; neuro- and psychopharmacology.

James A. Bain (pharmacology), 1918; B.S., University of Wisconsin, 1940, Ph.D., 1944; research associate, University of Illinois, 1947-50; assistant to associate professor, Emory University, 1950-54, professor, 1954-, department chairman, 1957-62, director, Division of Basic Health Sciences, 1960-, executive associate dean, School of Medicine, 1965-; Rockefeller Foundation fellow, University of Wisconsin, 1946-47; treasurer, American Society for Pharmacology and Experimental Therapeutics, 1962-64, president, 1969; treasurer, Federation of American Societies for Experimental Biology, 1970-74; Pharmacology and Toxicology Review Committee, National Institutes of Health, 1966-71; Drug Research Board, NAS-NRC, 1969-75; Council, AAAS, 1961-62; biochemical pharmacology.

Julius Belford (pharmacology), 1920; B.A., Brooklyn College, 1940; B.S., Long Island University, 1943; Ph.D., Yale University, 1949; assistant to associate professor, State University of New York Downstate Medical Center, 1949-69, professor, 1969-, assistant to the dean, 1958-61, acting chairman, 1971-72; U.S. Public Health Service special research fellow, 1965; visiting exchange professor, St. Mary's Hospital Medical School, London, 1952-53; visiting scientist, Mario Negri Research Institute, Milan, 1965; cardiovascular biochemical pharmacology; medical education.

Daniel S. Feldman (medicine), 1926; A.B., University of Pennsylvania, 1945, M.D., 1949; assistant neurologist, Mt. Sinai Hospital, 1956-59; assistant to associate professor, State University of New York Downstate Medical Center, 1960-72; professor, Medical College of Georgia, 1972-; U.S. Public Health Service postdoctoral fellow, 1953-54; R. S. Clarke Foundation fellow, University of Lund, 1964-65; career scientist, Health Research Council of the City of New York, 1966-72; assistant secretary, Medical Advisory Board, Myasthenia Gravis Foundation; neuromuscular physiology.

Charles W. Gorodetzky (pharmacology), 1937; B.S., Massachusetts Institute of Technology, 1958; M.D., Boston University, 1962; Ph.D., University of Kentucky, 1975; medical officer, Addiction Research Center, National Institute of Mental Health, 1963-65, 1968; chief, Drug Metabolism and Kinetics Section, Addiction Research Center, National Institute on Drug Abuse, 1969-; adjunct faculty, University of Kentucky Medical Center, 1966-71, 1975-; Advisory Committee on Drug Detection, SAODAP, 1972-; metabolism and clinical pharmacology of drugs of abuse.

Halsted Holman (medicine, immunology), 1925; M.D., Yale University, 1949; assistant professor, Rockefeller University, 1958-60; Guggenheim professor, Stanford University, 1960-, department chairman, 1960-71, director, R. W. Johnson Clinical Scholar Training Program, 1972-; president, Western Association of Physicians, 1966-67, American Society of Clinical Investigation, 1970-71; secretary, Association of Professors of Medicine, 1967-70; Bauer Award, Arthritis and Rheumatism Foundation, 1964; Board, Scientist's Institute for Public Information, 1960-63; California Council

for Health Plan Alternatives, 1971-74; Planning Committee, Midpeninsula Cooperative Health Service, 1973-; Council, AAAS, 1974-75; autoimmunity and transplantation immunology.

Saul Jarcho (medicine), 1906; A.B., Harvard University, 1925; M.A., Columbia University, 1926, M.D., 1930; assistant and instructor in pathology, Johns Hopkins University, 1934-36; instructor and associate, Columbia University, 1936-42; adjunct to associate physician, Mt. Sinai Hospital, 1940-; editor-in-chief, *Bulletin of the New York Academy of Medicine*, 1967-; president, American Association for History of Medicine, 1968-70, William Welch Medal, 1963; Jacobi Medal, Mt. Sinai Hospital, 1970; History of Medicine Study Section, National Institutes of Health, 1959-63, 1968-72, chairman, 1960-63, Biomedical Communications Study Section, 1974-; Board of Regents, National Library of Medicine, 1961-65; history of medicine.

Sherman M. Mellinkoff (internal medicine, education), 1920; B.A., Stanford University, 1941, M.D., 1944; resident, assistant professor, Johns Hopkins Hospital, 1950-53; assistant to associate professor, University of California, Los Angeles, 1953-62, professor and dean, School of Medicine, 1962-; chairman, Western Section, American Federation of Clinical Research, 1955-57, Association of American Medical Colleges, 1974-75; Institute of Medicine Membership Committee, National Academy of Sciences, 1974-75; internal medicine (gastroenterology).

Frederick Sargent II (human biology), 1920; S.B., Massachusetts Institute of Technology, 1942; M.D., Boston University, 1947; medical officer, Army Medical Nutrition Laboratory, 1948-50; assistant professor to professor of physiology, University of Illinois, 1950-67; dean, College of Environmental Sciences, University of Wisconsin, 1968-70; provost, Western Washington State College, 1970-72; professor of human ecology, University of Texas School of Public Health, 1972-; Guggenheim fellow, 1957-58; president, International Society for Biometeorology, 1956-66; Award in Bioclimatology, American Meteorological Society, 1960; Executive Committee, U.S. National Committee for International Biological Program, 1968-72; National Air Quality Criteria Advisory Committee, 1968-71; Editorial Board, *Bulletin of Environmental Contamination and Toxicology*, 1969-; Toxicology Information Program Committee, National Research Council, 1972-; human ecology.

Vernon E. Wilson (medical administration), 1915; B.S., University of Illinois, 1950, M.S., 1952; assistant professor and associate dean, University of Kansas, 1953-59; professor, dean, and director, University of Missouri School of Medicine, 1959-67, vice president, Academic Affairs, 1967-70; administrator, Health Sciences and Mental Health Administration, U.S. Department of Health, Education, and Welfare, 1970-73; professor, University of Missouri, 1973-74; vice chancellor, Medical Affairs, Vanderbilt University, 1974-; trustee, Midwest Research Institute; Advisory Council on Health Research Facilities, National Institutes of Health, 1965-69; Governor's Advisory Council on Comprehensive Health Planning, 1967-73; Educational Advisory Committee, Veterans Administration, 1968-73; Council on Medical Education, American Medical Association, 1967-; Executive Council, Association of American Medical Colleges, 1961-67, Steering Committee, Council on Federal Relations, 1968-; pharmacology and administration.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Kenneth M. Brinkhous
Joseph H. Holmes
Harriet M. Maling
Elbert T. Phelps

Kenneth M. Brinkhous (pathology), 1908; A.B., University of Iowa, 1929, M.D., 1932; assistant to associate professor, University of Iowa, 1937-46; professor, University of North Carolina, 1946-61, department chairman, 1946-73, alumni distinguished professor, 1961-; member, National Academy of Sciences; president, Federation of American Societies for Experimental Biology, 1966-67, American Association of Pathologists and Bacteriologists, 1973-74; blood clotting; hemorrhage; thrombosis.

Joseph H. Holmes (internal medicine and clinical pathology), 1909; A.B., Amherst College, 1930; M.D., Western Reserve University, 1934; D.Med.Sc., Columbia University, 1941; instructor to associate professor, Columbia University School of Medicine, 1937-51; professor of medicine, University of Colorado School of Medicine, 1951-; head, Division of Laboratory Medicine and Clinical Pathology, 1953-60, director, School of Medical Technology, 1953-67, head, Division of Renal Disease, 1960-72, professor of radiology and director, Ultrasonic Unit, 1972-; editor, *Journal of Clinical Ultrasound*; past president, American Institute of Ultrasound in Medicine; Council, AAAS, 1962-63; renal function and fluid balance; pesticide toxicity; laboratory medicine and diagnostic ultrasound.

Harriet M. Maling (pharmacology), 1919; A.B., Goucher College, 1940; A.M., Radcliffe College, 1941, Ph.D., 1944; assistant in pharmacology and instructor, Harvard Medical School, 1944-46; assistant professor to assistant research professor, George Washington Medical School, 1951-54; pharmacologist, Laboratory of Chemical Pharmacology, National Heart and Lung Institute, 1954-; head, Section on Physiology, 1962-; Editorial Advisory Board, *Journal of Pharmacology and Experimental Therapeutics*, 1962-65, 1969-; Respiratory and Anesthetic Drugs Advisory Committee, U.S. Food and Drug Administration, 1973-75; pharmacology of autonomic drugs; toxicology.

Elbert T. Phelps (medicine), 1917; A.B., University of Nebraska, 1941, B.Sc., 1944, M.D., 1944; instructor to assistant professor, Georgetown University Medical Center, 1949-70, associate professor, 1970-; director, Out-Patient Department, 1959-; Emergency Room Committee, Sibley Memorial Hospital, 1968-; vice chairman, Medical Staff, 1972-; chairman, Faculty Senate, Georgetown University, 1973-74; internal medicine.

Section Chairman-Elect (one to be elected for a 2-year term).

Robert W. Berliner
Fred W. Ellis

Robert W. Berliner (physiology), 1915; B.S., Yale University, 1936; M.D., Columbia University, 1939; assistant in medicine and instructor, New York University College of Medicine, 1943-47; assistant professor, Columbia University, 1947-50; chief, Laboratory of Kidney and Electrolyte Metabolism, National Heart Institute, 1950-62, director, Intramural Research, 1954-68; director, laboratory and clinics, National Institutes of Health, 1968-69, deputy director of science, 1969-73; dean, Yale University School of Medicine, 1973-; member, Na-

tional Academy of Sciences; president, American Society of Clinical Investigation, 1959, American Physiological Society, 1967, American Society of Nephrology, 1968; Distinguished Service Award, Department of Health, Education, and Welfare, 1962; Homer W. Smith Award, 1965; Research Achievement Award, American Heart Association, 1970; Council, AAAS, 1971-72, 1974-75, chairman, Section on Medical Sciences, 1972, Committee on Council Affairs, 1974-75, AAAS-ABA National Conference on Science, Technology, and the Law, 1974-; renal physiology.

Fred W. Ellis (pharmacology), 1914; B.S., University of South Carolina, 1936; M.S., University of Florida, 1938; Ph.D., University of Maryland, 1941; M.D., Duke University, 1952; associate, Jefferson Medical College, 1942-43; assistant to associate professor, University of North Carolina School of Medicine, 1943-64, professor, 1964-; secretary, Southeastern Section, Society for Experimental Biology and Medicine, 1958-62; Psychopharmacology Study Section, National Institutes of Health, 1958-60; Public Affairs Committee, Federation of American Societies for Experimental Biology, 1971-74; Scientific Advisory Council, Licensed Beverage Industries, Inc., 1973-; Peer Review Board (Research Grants), National Council on Alcoholism, 1974-; studies in animal models of ethanol dependency.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Gertrude D. Maengwyn-Davies
Harold M. Schoolman

Gertrude D. Maengwyn-Davies (biochemistry, pharmacology), 1910; Master of Pharmacy, Vienna University, 1937; Ph.D., Johns Hopkins University, 1952; instructor in ophthalmology to assistant professor, Johns Hopkins University School of Medicine, 1952-55; associate research professor of pharmacology, George Washington University School of Medicine, 1955-56; associate professor, Georgetown University Schools of Medicine and Dentistry, 1955-63, professor, 1963-; guest worker, Laboratory of Clinical Science, National Institute of Mental Health, 1970-; councilor, Society for Experimental Biology and Medicine, 1970-71; Communications Committee, American Society for Pharmacology and Experimental Therapeutics, 1973-; Editorial Board, *Neurosciences Research*, 1970-74; autonomic and biochemical pharmacology of the adrenergic nervous system and interrelation of behavior.

Harold M. Schoolman (medicine), 1924; M.D., University of Illinois, 1950; associate professor, Cook County Graduate School of Medicine, 1954-59; instructor to associate professor, University of Illinois, 1957-67; director, Educational Services, Veterans Administration Central Office, 1967-70; clinical professor, Georgetown University Medical School, 1970; special assistant to the director, Medical Programs for Development and Evaluation, National Library of Medicine, 1970-73, assistant deputy director, 1973-; National Institutes of Health fellow,

London School of Tropical Medicine, 1959-60; research associate, Hektoen Institute for Medical Research, 1954-59; chief, hematology research laboratories, Veterans Administration Hospital, Hines, Illinois, 1960-63, director and biostatistician, Research Support Center, 1963-67; biostatistics.

Section O-Agriculture

Council Delegate (one to be elected for a 3-year term).

James G. Horsfall
Roy L. Loworn

James G. Horsfall (agriculture and biology), 1905; B.S., University of Arkansas, 1925; Ph.D., Cornell University, 1929; assistant professor to professor, New York State Agricultural Experiment Station, Cornell University, 1929-39; department head, Connecticut Agricultural Experiment Station, 1939-47, director, 1948-71, S. W. Johnson distinguished scientist, 1972-; member, National Academy of Sciences; president, American Phytopathological Society, 1950, Award of Distinction, 1973; president, Society for Industrial Microbiology, 1954; Gold Medal, Merit Agricole, France, 1971; Distinguished Service Award, American Institute of Biological Sciences, 1974; chairman, Governor's Committee on Environmental Policy (Connecticut), 1970; Agricultural Board, National Academy of Sciences, 1971-73; Council, AAAS, 1946-47, 1956-59, AAAS-Newcomb Cleveland Prize Committee of Judges, 1955; plant pathology.

Roy L. Loworn (agronomy), 1910; B.S., Auburn University, 1931; A.M., University of Missouri, 1932; Ph.D., University of Wisconsin, 1942; assistant agronomist to professor, North Carolina State University, 1936-50, director of instruction, College of Agriculture, 1953-54, director of research, 1955-69; head, Division of Weed Investigations, U.S. Department of Agriculture, 1950-53, administrator, Cooperative State Research Service, 1969-; Council, AAAS, 1957-60, 1972-75, member-at-large, Section on Agriculture Committee, 1957-60, Section chairman, 1972-73.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Perry L. Adkisson
Edwin A. Crosby
William F. Hueg, Jr.
T. S. Ronningen

Perry L. Adkisson (entomology), 1929; B.S., University of Arkansas, 1950, M.S., 1954; Ph.D., Kansas State University, 1956; assistant professor, University of Missouri, 1956-58; associate professor, Texas A & M University, 1958-63, professor, 1963-, department head, 1967-, Distinguished Faculty Achievement Award, 1965; president, Entomological Society of America, 1974, J. Everett Bussart Memorial Award, 1967, Governing Board, 1971-; UN/FAO Panel of Experts on Integrated Pest Control, 1971-; Executive Committee, Environment Sciences Board Study Group on Problems of Pest Control, National Academy of Sciences-National Academy of Engineering, 1972-; ad hoc Committee on Integrated Pest Management, International Organization for BioControl, 1972-; chairman, Committee on Biology of Pest Species, National Research Council, 1975; physiology of insect diapause; insect photoperiodism.

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with ballot.**

Edwin A. Crosby (horticulture), 1924; B.S., University of Connecticut, 1948; M.S., University of California, 1950, Ph.D., 1954; assistant professor, Rutgers University, and assistant research specialist, New Jersey Agricultural Experiment Station, 1954-55; assistant director to director, Agricultural Division, National Canners Association, 1956-73; director, Agricultural and Environmental Affairs Division, 1973-; vice president, National Canners Association, 1975-; chairman, Section on Canning and Processing, American Society for Horticultural Science, 1964; Board of Directors, Special Industrial Radio Service Association, 1958-74; treasurer, 1965-73; secretary, Agricultural Research Institute, 1968, president, 1971; Board, American Society for Horticultural Science, 1964, 1971-74; Executive Committee, Council for Agricultural Science and Technology, 1973-.

William F. Hueg, Jr. (agriculture), 1924; B.S., Cornell University, 1948; M.S., Michigan State University, 1954, Ph.D., 1959; assistant professor and extension agronomist, University of Minnesota, 1957-59, associate professor, 1959-62, professor and assistant director, Agricultural Experiment Station, 1962-66, director, 1966-75, deputy vice president and dean, Institute of Agriculture, Forestry and Home Economics, 1974-; member and chairman, Committee of Nine, 1968-70; chairman, Legislative Subcommittee, ESCOP, 1969-70; McIntire-Stennis Forestry Advisory Board, 1971-74; forage physiology and management.

T. S. Ronningen (agronomy and crop breeding), 1918; B.S., University of Wisconsin, River Falls, 1939; M.S., University of Wisconsin, Madison, 1947, Ph.D., 1949; chemist, E. I. du Pont de Nemours & Company, 1941-43; assistant agronomist, University of Wisconsin, 1946-49; assistant to associate professor, University of Maryland, 1949-56; principal agronomist, Cooperative State Research Service, U.S. Department of Agriculture, 1956-63, assistant to the administrator to assistant administrator, 1963-73, associate administrator, 1973-; forage breeding and management; micro-climatology.

Section Chairman-Elect (one to be elected for a 2-year term).

John P. Mahlstede
Wendell Roelofs

John P. Mahlstede (horticulture), 1923; B.S., Miami University, 1947; M.S., Michigan State University, 1948, Ph.D., 1951; assistant professor to professor of ornamental horticulture, Iowa State University, 1951-61, professor of horticulture and department head, 1961-65, assistant and acting associate director, Iowa Agriculture and Home Economics Experiment Station, 1965-66, associate director, 1966-; president, International Plant Propagators Society, 1962-63, Research Award, 1967; Board of Directors, American Society for Horticultural Science, 1961-64, president, 1971-72, Council for Agricultural Science and Technology, 1973-; vice president, Agricultural Research Institute, 1974-75; Norman J. Colman Award, American Association of Nurserymen, 1958; vice chairman, National Arboretum Advisory Council, U.S. Department of Agriculture, 1974-75; ornamental plant handling; plant propagation; plant tissue culture.

Wendell Roelofs (chemistry), 1938; A.B., Central College, 1960; Ph.D., Indiana University, 1964; assistant professor, Cornell University, New York State Agricultural Experiment Sta-

tion, 1965-69, associate professor, 1969-; National Institutes of Health postdoctoral fellow, Massachusetts Institute of Technology, 1965; Bussart Memorial Award, Entomological Society of America, 1973; insect sex pheromones.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Wilford R. Gardner
Russell E. Larson

Wilford R. Gardner (physics), 1925; B.S., Utah State University, 1949; M.S., Iowa State University, 1951, Ph.D., 1953; physicist, Salinity Laboratory, U.S. Department of Agriculture, 1953-66; professor of soil physics, University of Wisconsin, 1966-; National Science Foundation senior postdoctoral fellow, University of Cambridge, 1959, University of Wageningen, 1960; Fulbright fellow, University of Ghent, 1971-72, Medal of Honor, 1972; chairman, Division of Soil Physics, Soil Science Society of America, 1962; president, Commission I (Physics), International Soil Science Society, 1968-74; Research Award for Soil Science, American Society of Agronomy, 1962, Board of Directors, 1966-69; Water Ecosystem Committee, Institute of Ecology, 1973-; Joint National Academy of Sciences-Institute of Ecology Panel of Ecosystem Modeling, 1974-; soil physics-biophysics.

Russell E. Larson (horticulture), 1917; B.S., University of Minnesota, 1939, M.S., 1940, Ph.D., 1942; assistant professor, University of Rhode Island, 1941-44; assistant to associate professor, Pennsylvania State University, 1944-47, professor, 1947-, department head, 1952-62, associate dean and director, Cooperative Extension, 1962-63, dean, College of Agriculture, 1963-72, director, Agricultural Experiment Station, 1969-72, Agricultural and Home Economics Extension, 1971-72, provost, 1972-; president, American Society for Horticultural Science, 1963-64; Leonard H. Vaughn Award, 1948; University of Minnesota Outstanding Achievement Award, 1961; New Holland Agriculture Award, 1970; Pennsylvania Plant Food Educational Society Man of the Year Award, 1970; International Affairs Committee, National Association of State Universities and Land Grant Colleges, 1972-; plant breeding and genetics.

Section P-Industrial Science

Council Delegate (one to be elected for a 3-year term).

Alfred Blumstein
Aaron J. Gellman

Alfred Blumstein (operations research), 1930; B.Eng., Cornell University, 1951, Ph.D., 1961; principal operations analyst, Aeronautical Laboratory, Cornell University, 1951-61; systems analyst, Institute for Defense Analyses, 1961-69; professor and director, Urban Systems Institute, Carnegie-Mellon University, 1969-; visiting associate professor, Cornell University, 1963-64; director, Science and Technology Task Force, President's Commission on Law Enforcement and Administration of Justice, 1966-67; president, WORC, 1964-65; Council, Operations Research Society of America; Review Committee for National Bureau of Standards Technical Analysis Division, National Academy of Sciences-National Academy of Engineering-National Research Council; Crime and Delinquency Review Committee, National Institute

of Mental Health; systems analysis on criminal justice, transportation, urban systems.

Aaron J. Gellman (economics), 1930; B.A., University of Virginia, 1950; M.B.A., University of Chicago, 1951; Ph.D., Massachusetts Institute of Technology, 1957; assistant director of research, Transportation Center, Northwestern University, 1957-58; vice president for planning, North American Car Corporation, 1958-67; vice president, Budd Company, 1967-71; president, Gellman Research Associates, Inc., 1972-; adjunct associate professor, Wharton School, University of Pennsylvania, 1968-; corporate director, Chicago & Eastern Illinois Railroad, 1961-67, Railweight, Inc., 1966-; Council, AAAS, 1974-75.

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Daniel Berg
Joseph H. Engel
David A. Katcher
Gordon W. McBride

Daniel Berg (engineering), 1929; B.S., City College of New York, 1950; M.S., Yale University, 1951, Ph.D., 1953; resident physical chemist to division manager, energy systems research, Westinghouse, 1953-; adjunct professor, Graduate School of Industrial Administration, Carnegie-Mellon University; past chairman, Conference on Electrical Insulation and Dielectric Phenomena, National Academy of Sciences-National Research Council, and G-32, Institute of Electrical and Electronics Engineers; former member, Panel on Advanced Energy Conversion, Office of Science and Technology; member, Technology Resources Management Panel, Pennsylvania Governor's Science Advisory Committee.

Joseph H. Engel (systems engineering, education), 1922; B.S., City College of New York, 1942; M.A., University of Wisconsin, 1947, Ph.D., 1949; operations evaluation group, Center for Naval Analyses, 1949-67, director, 1962-65, assistant chief scientist, 1965-67; director, Planning Research and Services, Communications Satellite Corporation, 1967-71; professor and department head, University of Illinois at Chicago Circle, 1971-; president, Operations Research Society of America, 1968-69, 1971; vice president, International Federation of Operational Research Societies, 1974-; chairman, NATO Advisory Panel on Operational Research, 1970-73, NATO Special Programme Panel on Systems Science.

David A. Katcher (physics), 1915; B.A., University of Wisconsin, 1936; technical editor, Naval Ordnance Laboratory, 1941-43; founding editor, *Physics Today*, 1948-51; associate editor, Operations Research Office, Johns Hopkins University, 1951-56; editor, Weapons Systems Evaluation Group, 1956-60; executive secretary, Jason Division, Institute for Defense Analyses, 1960-66; senior staff, Operations Research Group, Arthur D. Little, Inc., 1966-72; senior staff assistant, Secretariat, National Advisory Committee on Oceans and Atmosphere, 1972-; associate editor in founding *Journal of the Operations Research Society of America*, 1952; treasurer, ORSA, 1959-61.

Gordon W. McBride (chemical engineering), 1910; B.S., Yale University, 1931, Ch.E., 1934; chemical engineer, Procter & Gamble Company, 1934-38; consulting chemical engineer, Washington, D.C., 1939-42, 1945-56; section chief, Chemical Division, U.S. Department of Agriculture, 1942-43, principal chemical engineer, Agriculture Research Administration,

1943-45; technical coordinator, Union Carbide Corporation, 1957-65; secretary-treasurer, Industrial Research Institute, Inc., 1965-68, executive director, 1969-; research and technical information; association management.

Section Chairman-Elect (one to be elected for a 2-year term).

Joseph H. Engel
David B. Hertz

Joseph H. Engel (see above, under "Members of the Electorate Nominating Committee").

David B. Hertz (management consultant), 1919; B.A., Columbia University, 1939, B.S., 1940, Ph.D., 1949; M.S., U.S. Navy Postgraduate School, 1944; production engineer, Radio Corporation of America, 1940-41; assistant chief development engineer, Celanese Corporation, 1945-49, director of engineering, 1953-54; assistant to associate professor, Columbia University, 1949-54; assistant to the president, Popular Merchandise Company, 1954-55; president, David B. Hertz Company, 1955-57; principal, Arthur Andersen & Company, 1957-62; director, McKinsey & Company, Inc., 1962-; president, Operations Research Society of America, 1974-75; chairman, Columbia Engineering Council, 1974-; Institute for Applied Technology Evaluation Panel, National Academy of Sciences, 1974-; management science; systems analysis; energy and environmental matters.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Seth Bonder
Nat C. Robertson

Seth Bonder (industrial engineering and operations research), 1932; B.S., University of Maryland, 1960; Ph.D., Ohio State University, 1965; principal investigator, Systems Research Group, Ohio State University, 1962-65; assistant to associate professor, University of Michigan, 1965-72, director, Systems Research Laboratory, 1967-71, adjunct associate professor, 1973-; president and technical director, Vector Research, Inc., 1969-; Westinghouse scholar, 1957; president, Military Operations Research Society, 1969-70; secretary, Operations Research Society of America, 1974-; Highway Research Board, National Academy of Sciences, 1967; Army Scientific Advisory Panel, 1973-; systems, policy, and operations analysis in public and private sectors.

Nat C. Robertson (chemistry), 1919; A.B., Emory University, 1939; Ph.D., Princeton University, 1942; chemist, Standard Oil Company (New Jersey), 1943-47; group leader, Celanese Corporation of America, 1947-51; director, Petrochemicals Department, National Research Corporation, 1951-55; vice president and director of research, Escambia Chemical Corporation, 1955-58; vice president, Spencer Chemical Division, Gulf Oil Corporation, 1958-66; vice president, Air Products and Chemicals, Inc., Allentown, Pennsylvania, 1966-69, senior vice president and director, 1969-; director, Marion Laboratories; trustee, Midwest Research Institute; management of industrial research.

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Section Q-Education

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Ronald D. Anderson
Ronald K. Atwood
Julian R. Brandou
Stephen S. Winter

Ronald D. Anderson (science education, physics), 1937; B.S., University of Wisconsin, 1959, Ph.D., 1964; assistant professor, Kansas State University, 1964-65; assistant to associate professor, University of Colorado, 1965-72, associate dean, 1972-; secretary-treasurer, Association for the Education of Teachers in Science, 1970-71, president, 1972-73; president, National Association for Research in Science Teaching, 1975-76; instructional analysis.

Ronald K. Atwood (science education), 1935; B.S., Murray State University, 1960, M.A., 1962; M.S., New Mexico Highlands University, 1963; Ed.D., Florida State University, 1966; associate professor, Florida A&M University, 1966; assistant professor, University of Kentucky, 1966-70, associate professor, 1970-; chairman, Mid-Atlantic Region, Association for the Education of Teachers in Science, 1972; teacher education.

Julian R. Brandou (science education), 1929; B.S., University of Michigan, 1950, M.A., 1956; Ph.D., Michigan State University, 1963; science teacher, Rogers City, Michigan, 1953-59; traveling teacher, National Science Foundation, 1959-60; instructor to associate professor, Michigan State University, 1961-70, professor, 1970-, director, Science and Mathematics Teaching Center, 1968-; Fulbright lecturer, Philippines, 1970; president, Michigan Science Teachers Association, 1968; Board, National Science Teachers Association, 1969-72; National Assessment Review Committee, State Metric Education and Science Reference Committee (Michigan); curriculum development and implementation in sciences.

Stephen S. Winter (science education), 1926; B.S., Albright College, 1948; Ph.D., Columbia University, 1953; research chemist, Atlas Powder Company, 1952-53; assistant professor, Northeastern University, 1953-57; assistant professor, University of Minnesota, 1958-61; assistant professor to professor, State University of New York, Buffalo, 1961-67, director of teacher education, 1968-71; professor and department chairman, Tufts University, 1971-; National Science Foundation faculty fellow, Harvard University, 1957-58; consultant, Harvard Project Physics, 1964-71, UNESCO, 1969-71; teacher education.

Section Chairman-Elect (one to be elected for a 2-year term).

Donald C. McGuire
Herbert A. Smith

Donald C. McGuire (biology), 1915; B.S., University of Washington, 1946; Ph.D., University of California, 1950; assistant professor to professor, University of Hawaii, 1950-62, chairman, Department of Agriculture, 1956-59, and Department of Tropical Crop Science, 1957-62; associate program director, National Science Foundation, 1962-66, director, Undergraduate Student Program, 1966-69, program manager, Experimental Projects and Developing Programs Group, 1969-; Environmental Education Advisory Committee, Washington Technical Institute, 1973-; undergraduate education of prospective teachers of science.

Herbert A. Smith (science education), 1916;

B.S., M.A., Ph.D., University of Nebraska; assistant to associate professor, University of Nebraska, 1948-53; associate professor to professor and director, Bureau of Educational Research, University of Kansas, 1953-62; head, Section on Mathematics, Science and Foreign Languages, U.S. Office of Education, 1959-60; head, Department of Secondary Education, Pennsylvania State University, 1962-64; director and associate dean for teacher education, Colorado State University, 1964-74, associate dean, College of Professional Studies, 1975-; past president, National Science Teachers Association, National Association for Research in Science Teaching, Association for the Education of Teachers in Science; secretary, Section on Education, AAAS, 1956-63, chairman, 1967, Council, 1956-63, 1967; science teacher preparation; science concepts.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Mary Blatt Harbeck
Herbert S. Zim

Mary Blatt Harbeck (biology, science education), 1924; B.S., Shippensburg State College, 1945; M.Ed., Pennsylvania State University, 1957; public school teacher, 1945-59; visiting professor, Pennsylvania State University, summers, 1959-63; science education adviser, Pennsylvania Department of Public Instruction, 1959-65; staff member, Science Teaching Center, University of Maryland, 1966-67, 1969-71; assistant director, Department of Science, D.C. Public Schools, 1971-; president, Council for Elementary Science International, 1975; Advisory Board, *The Science Teacher and Science and Children*; AAAS writing team, *Science—A Process Approach*, 1964; curriculum development and in-service education for teachers.

Herbert S. Zim (science and environmental education), 1909; B.S., Columbia University, 1933, M.A., 1934, Ph.D., 1940; science instructor, Ethical Culture Schools, New York City, 1932-50; associate professor to professor, University of Illinois, 1950-57; adjunct professor, University of Miami, 1969-75; educational consultant, U.S. Fish and Wildlife Service, 1947-51, Western Publishing Company, 1967-70, American Friends Service Committee, 1968-; educational director, Artists and Writers Press, 1957-69; editor-in-chief, *Our Wonderful World Encyclopedia*, 1952-63; editor, Golden Guide Series, 1947-70; Electorate Nominating Committee, Section on Education, AAAS, 1975-77.

Section R-Dentistry

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Walter E. Brown
Charles R. Jerge
Frederick W. Kraus
Marie U. Nylén

Walter E. Brown (chemical physics), 1918; B.S., University of Washington, 1940, M.S., 1942; Ph.D., Harvard University, 1949; research chemist, B. F. Goodrich Company, 1942-45, Tennessee Valley Authority, 1948-62; American Dental Association research associate, National Bureau of Standards, 1962-68, director, ADA Research Unit, 1968-; Rockefeller Foundation fellow, University of Amsterdam, 1958-59; cochairman, Gordon Research Conference on Dissolution and Precipitation of Calcium Phosphates, 1966 and 1968, International Symposium on Structural Properties of Hydroxy-

apatite and Related Compounds, 1968; Council, AAAS, 1970-73; crystallography and physical chemistry of calcium phosphates.

Charles R. Jerge (health care delivery), 1929; B.S.Ed., State University of New York, 1951; D.D.S., University of Pennsylvania, 1958; Ph.D., 1961; instructor to assistant professor, University of Pennsylvania, 1961-63; associate professor to professor, University of Connecticut, 1963-73, associate dean to dean, School of Dental Medicine, 1967-74; professor, department chairman, and director, Institute for the Future of Dental Care Systems, University of Pennsylvania, 1974-; Alpha Omega Award; Council on Naval Medical Research, National Academy of Sciences, 1968-70; National Institute of Dental Research Training Committee, 1971-; American Association of Medical Clinics Accreditation Commission, 1972-; oral physiology, health care systems.

Frederick W. Kraus (microbiology), 1910; M.D., Charles Ferdinand University, Prague, 1934; D.D.S., State Institute for Dental Surgery, Prague, 1934; D.M.D., Tufts University, 1943; assistant professor to professor of clinical dentistry, microbiology, and dentistry, University of Alabama, 1953-75, senior scientist, Institute of Dental Research, 1967-75, emeritus professor and consultant to the director, Institute of Dental Research, 1975-; chairman, International Symposium on the Immunoglobulin A System, 1973; secretary, Birmingham Section, International Association for Dental Research, 1962-63; secretary, University of Alabama Chapter, American Association of University Professors, 1963-64, treasurer, 1967-69, vice president, 1969; Dental Study Section, National Institutes of Health, 1967-71; oral immunobiology.

Marie U. Nylen (dentistry), 1924; D.D.S., University of Copenhagen, 1947; general practice, 1947-48; instructor, University of Copenhagen, 1948-49; guest worker and postdoctoral fellow, National Institute of Dental Research, 1950-51; assistant professor, University of Copenhagen, 1951-55; visiting scientist, National Institute of Dental Research, 1955-60, biologist, 1960-65, chief, Laboratory of Biological Structure, 1965-; associate editor, *Scandinavian Journal of Dental Research*, 1973-; secretary-treasurer, Washington Section, Electron Microscopy Society, 1962-65; president, Washington Section, International Association for Dental Research, 1971-72; Superior Service Award, U.S. Department of Health, Education, and Welfare, 1969; Advisory Board, *Calcium Tissue Research*, 1973-; Editorial Board, *Acta Odontologica Scandinavica*, 1973-; mineralization.

Section Chairman-Elect (one to be elected for a 2-year term).

Baldev R. Bhussry
Harold M. Fullmer

Baldev R. Bhussry (anatomy), 1928; B.D.S., Sir C. E. M. Dental College and Hospital, India, 1949; M.S., University of Rochester, 1953, Ph.D., 1956; instructor, University of Rochester, 1956-57; assistant to associate professor, Georgetown University, 1957-64, professor and chairman, 1963-; Fulbright scholar, 1950-52; secretary-treasurer, Washington Chapter, International Association for Dental Research, 1962-64, councilor, 1965-66, president, 1966-67; Research Career Development Award, U.S. Public Health Service, 1958-63; Educational Affairs Committee, American Association of Anatomists, 1968-; Dental Education Review Committee, U.S. Department of Health, Educa-

tion, and Welfare, 1968-72; Joint Committee on Dental Research Manpower, National Institute of Dental Research and American Association of Dental Schools, 1971-72; Council, AAAS, 1966-68; connective tissue metabolism and mineralization.

Harold M. Fullmer (dentistry and oral pathology), 1918; B.S., D.D.S., Indiana University, 1944; assistant to associate professor and chairman, Loyola University, 1948-53; principal investigator, National Institute of Dental Research, 1953-64, chief, Section of Histochemistry, 1965-70, and Experimental Pathology Branch, 1968-70; professor, director, Institute of Dental Research, associate dean, School of Dentistry, and senior scientist, Cancer Research and Training Program, University of Alabama, 1970-; Fulbright award, 1961-62; editor-in-chief, *Journal of Oral Pathology*; associate editor, *Journal of Cutaneous Pathology*; vice president, American Association for Dental Research, 1974-75, International Association for Dental Research, 1974-75; Isaac Schour Award, 1973; Dental Caries Advisory Committee, National Institute of Dental Research-National Institutes of Health, 1975-76; Electorate Nominating Committee, Section on Dentistry, AAAS, 1974-75, chairman, 1974.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Arthur N. Bahn
Lois K. Cohen

Arthur N. Bahn (microbiology), 1926; A.B., Boston University, 1949; M.A., University of Kansas, 1952; Ph.D., University of Wisconsin, 1956; instructor, University of Illinois, 1956-58; assistant to associate professor, Northwestern University, 1958-71, lecturer, 1971-; professor and department chairman, Southern Illinois University, 1971-; chairman (1965) and councilor (1966-68), Chicago Section, International Association for Dental Research, councilor, St. Louis Section, 1972-; chairman, Section of Microbiology, American Association of Dental Schools, 1970-71; O.T.C. Oral Cavity Panel, U.S. Food and Drug Administration; American Board of Medical Microbiology, 1971-; oral microbiology and immunology.

Lois K. Cohen (sociology), 1938; B.S., University of Pennsylvania, 1960; M.S., Purdue University, 1961, Ph.D., 1963; social science analyst, Division of Dental Health, U.S. Public Health Service, 1964-70, chief, applied behavioral studies, 1970-71, Office of Social and Behavioral Analysis, 1971-74; acting special assistant to the director, Division of Dentistry, Bureau of Health Resources Development, Health Resources Administration, 1974-; National Science Foundation fellow, Purdue University, 1961, Purdue Research Foundation David Ross fellow, 1961-63; visiting lecturer, Howard University, 1964; president, Behavioral Science Group in Dental Research, International Association for Dental Research, 1971-72, councilor, 1974-75; consultant, Dental Health Unit, World Health Organization, 1970-; Council, AAAS, 1971-72, member-at-large, Section on Dentistry Committee, 1974-75; socio-dental sciences.

Section S-Pharmaceutical Sciences

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

John Autian
Fred M. Eckel
Albert H. Soloway
Michael H. Stolar

John Autian (pharmaceutical sciences), 1924; B.S., Temple University School of Pharmacy, 1950; M.S., University of Maryland, 1952, Ph.D., 1954; assistant professor, Temple University, 1954-55, University of Maryland, 1956-57, University of Michigan, 1957-60; associate professor to professor, University of Texas, 1960-67, founder and director, Drug-Plastic Research Laboratories, 1961-67; professor, University of Tennessee, 1967-, founder and director, Materials Science Toxicology Laboratories, 1967-; Service Award, Temple University, 1964; Public Service Award, University of Tennessee Alumni, 1973; member-at-large, Section on Pharmaceutical Sciences Committee, AAAS, 1959-62, 1964-67, 1969-70, vice president and Section chairman, 1962, Section secretary, 1971-74, Council, 1966-67, 1969-73.

Fred M. Eckel (pharmacy), 1939; B.S., Philadelphia College of Pharmacy and Science, 1961; M.S., Ohio State University, 1963; director, Pharmacy Services, North Carolina Memorial Hospital, 1968-; associate professor, University of North Carolina, Chapel Hill, 1973-; president, Southeastern Society of Hospital Pharmacists, 1971-72; president-elect, American Society of Hospital Pharmacists, 1974-75, chairman, Council on Professional Affairs, 1972-; Hospital Pharmacist Achievement Award, North Carolina Society of Hospital Pharmacists, 1973; Hospital Pharmacy Advisory Board, ICN Pharmaceuticals, 1974-; hospital pharmacy administration.

Albert H. Soloway (medicinal chemistry), 1925; B.S., Worcester Polytechnic Institute, 1948; Ph.D., University of Rochester, 1951; research chemist, Eastman Kodak Company, 1953-56; research associate, Harvard Medical School, 1956-69; associate professor, Northeastern University, 1966-71, professor and department chairman, 1971-, director, Graduate School of Pharmacy and Allied Health Professions, 1973-, acting dean, College of Pharmacy and Allied Health Professions, 1974-; postdoctoral fellow, National Cancer Institute, Sloan-Kettering Institute for Cancer Research, 1951-53; Executive Committee, Medicinal Chemistry Group, Northeast Section, American Chemical Society, 1965-70, chairman, 1968.

Michael H. Stolar (pharmaceutical sciences), 1941; B.S., University of Illinois, 1964, M.S., 1967, Ph.D., 1973; instructor, University of Illinois, 1968-71; director, Professional and Scientific Services, American Society of Hospital Pharmacists, 1971-; quality measurements of pharmacy services.

Section Chairman-Elect (one to be elected for a 2-year term).

Stuart Eriksen
Paul Zanolwiak

Stuart Eriksen (pharmaceutical chemistry), 1930; B.S., University of California School of Pharmacy, 1952, M.S., 1953, Ph.D., 1956; senior scientist, Smith Kline & French Laboratories, 1956-60; assistant to associate professor, University of Wisconsin, 1960-65; director, Allergan Pharmaceuticals, 1965-72, vice president, Research and Development, 1972-; drug research and development.

Paul Zanolwiak (pharmaceutics), 1933; B.S., Rutgers University, 1954, M.S., 1957; Ph.D., University of Florida, 1959; research and development chemist, Noxema Corporation, 1959-64; assistant to associate professor, West Virginia University, 1964-71, professor and department chairman, 1971-, acting dean of pharmacy, 1972-74; Meade Johnson Research Award; Lunsford-Richardson Pharmacy

Award, 1958; Administrative Board, Council for Sections, American Association of Colleges of Pharmacy, Publications Committee, chairman, Section of Teachers of Pharmacy; Executive Council, National Rho Chi; chairman, Tri-Partite Committee for State Board of Pharmacy, Pennsylvania; design of pharmaceutical and cosmetic dosage forms and products.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Muriel C. Vincent
George Zografi

Muriel C. Vincent (pharmacy), 1922; B.S., Oregon State University, 1944; M.S., University of Washington, 1951, Ph.D., 1955; instructor to assistant professor, Oregon State University, 1954-56; assistant to associate professor, North Dakota State University, 1956-58, professor, 1958-, department chairman, 1958-74, assistant dean, 1965-; American Foundation for Pharmaceutical Education fellowship, 1953; chairman, Red River Valley Section, American Chemical Society, 1964; Lambda Kappa Sigma Award of Merit, 1968; Executive Council, Rho Chi, 1971-73; chromatographic analysis of pharmaceuticals.

George Zografi (pharmacy), 1936; B.S., Columbia University, 1956; M.S., University of Michigan, 1958, Ph.D., 1961; assistant professor, Columbia University, 1961-64; assistant to associate professor, University of Michigan, 1964-72; professor, University of Wisconsin, 1972-; Pfeiffer Memorial Research fellow, University of Utrecht, 1970-71; Editorial Board, *Journal of Colloid and Interface Science*, 1971-74; member-at-large, Executive Committee, Academy of Pharmaceutical Sciences, 1973-76; pharmaceuticals; interfacial phenomena.

Section T-Information, Computing, and Communication

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Scott Adams
Douglas E. Berninger
Allen Kent
Henry Kissman

Scott Adams (librarian), 1909; A.B., Yale University, 1930; M.L.S., Columbia University, 1940; department head, Teachers College Library, Columbia University, 1940-42; Providence Public Library, 1943-45; acting librarian, Armed Forces Medical Library, 1946-50; librarian, National Institutes of Health, 1950-59; program director, foreign scientific information, Office of Scientific Information Service, National Science Foundation, 1959-60; deputy director, National Library of Medicine, 1960-70; special assistant for UNISIST, National Academy of Sciences, 1970-71; George Washington University, Biological Sciences Communication Project, 1972-73; University of Louisville, 1973-75; chairman, Committee on International Scientific and Technical Information Programs, National Academy of Sciences; secretary, Section on Information and Communication, AAAS, 1970-73, Council, 1970-73.

Douglas E. Berninger (information science), 1935; B.S., Purdue University, 1958; M.A., American University, 1968, Ph.D., 1975; University of Pittsburgh, Washington, D.C., office, 1960-61; Martin-Marietta Corporation, 1961-63; Jonker Business Machines, Inc., 1963-66; U.S. Office of Education, 1966-73; vice presi-

dent and senior resident consultant, Herner and Company, 1973-; lecturer, George Washington University, 1972-73; information systems planning, design, implementation, and evaluation.

Allen Kent (information science), 1921; B.S., City College of New York, 1942; research chemist, Essex Chemicals, Inc., 1946-47; associate editor, Interscience Publishers, Inc., 1947-51; research associate, Massachusetts Institute of Technology, 1951-53; principal documentation engineer, Battelle Memorial Institute, 1953-55; professor and associate director, Center for Documentation and Communication Research, Western Reserve University, 1955-63; professor and director, Office of Communications Programs, University of Pittsburgh, 1963-; Information Technology Award, Eastman Kodak Company, 1968; chairman, National Advisory Committee on Information Systems, National Institute of Neurological Diseases and Stroke, 1967-70, Board of Trustees, Inter-university Communications Council, Inc., 1971-74; communications in information science.

Henry Kissman (organic chemistry), 1922; B.S., Sterling College, 1944; M.S., University of Cincinnati, 1948; Ph.D., University of Rochester, 1950; Public Health Service, 1950-52; research chemist, Lederle Laboratories, 1952-63, head, Literature Services Department, 1963-67; director, Science Information Facility, U.S. Food and Drug Administration, 1967-70; associate director, Specialized Information Services, National Library of Medicine, 1970-; Superior Service Award, U.S. Department of Health, Education, and Welfare, 1973; chairman, ad hoc Committee to Study Environmental Quality Information Programs in the Federal Government, Office of Science and Technology; chairman, Toxicology Information Subcommittee, USDHEW Committee to Coordinate Toxicology and Related Programs; on-line information programs in toxicology.

Section Chairman-Elect (one to be elected for a 2-year term).

Laurence B. Heilprin
Joseph Kuney

Laurence B. Heilprin (information science), 1906; B.S., University of Pennsylvania, 1928, M.A., 1931; Ph.D., Harvard University, 1941; instructor, Northeastern University, 1935-40; assistant, Harvard University, 1941; assistant to senior physicist, National Bureau of Standards, 1941-51; physicist, Taub Engineering Company, 1952-54; analyst, Operations Evaluation Group, U.S. Navy, Massachusetts Institute of Technology, 1954-56; physicist, Information Systems, Documentation, Inc., 1956-57; staff physicist, Council on Library Resources, Inc., 1958-67; professor, Library School and Computer Center, University of Maryland, 1967-; lecturer, George Washington University, 1959-62, American University, 1965-66; president, American Society for Information Science, 1965; director, American Society for Cybernetics; Electorate Nominating Committee, Section on Information and Communication, AAAS, 1974; theory of information science; application of cybernetics to information systems.

Joseph Kuney, 1917; B.S., University of Chicago, 1945; M.A., American University, 1962; American Chemical Society, 1946-73; manager, Journal and Encyclopedia Department, John Wiley & Sons, Inc., 1973-74; general manager, NASA Scientific and Technical Information Facility, Information Systems Company, 1975-; lecturer, American University, 1967-72; Publications Committee, American Society for Infor-

mation Science, 1965-72; Committee on Chemical Information, NAS-NRC, 1966-; Board of Directors, Documentation Abstracts, Inc., 1966-; Advisory Board, Annual Review of Information Science and Technology, 1969-72; Editorial Board, *American Scientist*, 1971-.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Harold Edward Bamford, Jr.
Phyllis V. Parkins

Harold Edward Bamford, Jr. (psychology), 1927; B.A., University of California, 1949, M.A., 1951, Ph.D., 1953; physicist and experimental psychologist, Air Force Personnel and Research Center, 1953-54; research associate, University of Illinois, 1955-57; senior associate in psychology, Ritchie and Associates, Inc., 1957-59; senior group engineer, Boeing Company, 1959-61; systems engineer, International Telephone and Telegraph, 1961-62; senior scientist, System Development Corporation, 1962-66; program director, Access Improvement Program, Office of Science Information Service, National Science Foundation, 1966-; engineering psychology; research management.

Phyllis V. Parkins (biology and information science), 1908; A.B., Goucher College, 1929; A.M., Syracuse University, 1930; research assistant, Carnegie Institution of Washington, 1931-33; free-lance editor, 1933-42; research assistant, Philadelphia Zoological Garden, 1942-44; instructor, University of Pennsylvania, 1944-47, Bryn Mawr College, 1947-48; free-lance writer, 1948-51; research fellow, University of Pennsylvania School of Medicine, 1951-53; assistant editor to director pro tem, Bio-Sciences Information Service, 1953-65, director, 1965-; director, National Federation of Science Abstracting and Indexing Services, 1964-, president, 1966-67; Executive Committee, International Council of Scientific Unions Abstracting Board, 1968-; Governing Board, American Institute of Biological Sciences, 1968-; secretary, Section on Information and Communication (T), AAAS, 1962-66, Section chairman, 1967, member-at-large, Section T Committee, 1968-71, Council, 1966-73, Board of Directors, 1970-73, Committee on Publications, 1972-74; leukemia; blood preservation; and biological information and communication.

Section U-Statistics

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

Foster B. Cady
Joseph L. Gastwirth
W. Morven Gentleman
Jane Worcester

Foster B. Cady (statistics), 1931; B.S., Cornell University, 1953; M.S., University of Illinois, 1956; Ph.D., North Carolina State University, 1960; assistant to associate professor, Iowa State University, 1960-67; professor, University of Kentucky, 1968-71, Cornell University, 1971-; editor, *Biometrics*, 1975-; secretary-treasurer, Biometric Society, Eastern North American Region, 1971-74, president-elect, 1975; Council, American Statistical Association, 1971-73; design and analysis of experiments.

Joseph L. Gastwirth (statistics), 1938; B.S., Yale University, 1958; Ph.D., Columbia University, 1963; research associate, Stanford University, 1963-64; assistant to associate professor, Johns Hopkins University, 1964-71; professor,

George Washington University, 1972–; visiting lecturer, Harvard University, 1970–71; robust statistical methods; economic statistics.

W. Morven Gentleman (computer science and statistics), 1942; B.Sc., McGill University, 1963; M.A., Princeton University, 1964, Ph.D., 1966; Technical Staff, Bell Telephone Laboratories, 1965–70; assistant to associate professor, University of Waterloo, 1969–74, professor and associate department chairman, 1974–, director, Math Faculty Computing Facility, 1972–; visiting lecturer, Princeton University, 1967; senior research fellow, National Physical Laboratory, Teddington, England, 1968–69; editor, *Journal of Computing*, 1973–74, *Transactions on Mathematical Software*, 1974–; statistical computation.

Jane Worcester (biostatistics and epidemiology), 1910; A.B., Smith College, 1931; Dr.P.H., Harvard University, 1947; instructor to associate professor, Harvard School of Public Health, 1938–62, professor, 1962–, department head, 1973–; Epidemiology and Biometry Advisory Committee, National Heart and Lung Institute, 1971–; chairman, Committee on Admissions and Degrees, Harvard School of Public Health, 1972–; Biometrics and Epidemiological Methodology Advisory Committee, Bureau of Drugs, U.S. Food and Drug Administration, 1974–; complex contingency tables.

Section Chairman-Elect (one to be elected for a 2-year term).

Arthur P. Dempster
John W. Pratt

Arthur P. Dempster (statistics), 1929; B.A., University of Toronto, 1952, M.A., 1953; Ph.D., Princeton University, 1956; lecturer, University of Toronto, 1956–57; member, Technical Staff, Bell Telephone Laboratories, 1957–58; assistant to associate professor, Harvard University, 1958–64, professor, 1965–, department chairman, 1969–; Guggenheim fellow, London, 1967–68; chairman-elect, Section on Statistical Education, American Statistical Association, 1975; theories of statistical inference; multivariate data analysis.

John W. Pratt (statistics), 1931; A.B., Princeton University, 1952; Ph.D., Stanford University, 1956; research associate, University of Chicago, 1955–57; assistant to associate professor of business administration, Harvard Business School, 1957–66, professor, 1966–, department chairman, 1969–; Guggenheim fellow, 1971; visiting research professor, Kyoto University, 1972–73; associate editor to editor, *Journal of the American Statistical Association*, 1960–69; Council, Institute of Mathematical Statistics, 1970–72; director, Social Science Research Council, 1971–, Executive Committee, 1971–74; Census Advisory Committee, American Statistical Association; chairman, Steering Committee, National Research Council Study on Environmental Monitoring; Bayesian inference; decision theory.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Samuel W. Greenhouse
David L. Wallace

Samuel W. Greenhouse (statistics), 1918; B.S., City College of New York, 1938; M.A., George Washington University, 1954, Ph.D., 1959; statistician, National Cancer Institute, National Institutes of Health, 1948–54, chief, Theoretical Statistics and Mathematics Section, National Institute of Mental Health, 1954–66, associate

director, Epidemiology and Biometry, National Institute of Child Health and Human Development, 1966–74; professor, George Washington University, 1974–; visiting professor, Stanford University, 1960–61; president, Washington Statistical Society, 1967–68, Biometric Society, Eastern North American Region, 1969; Superior Service Award, U.S. Department of Health, Education, and Welfare, 1969; chairman, Biometrics and Epidemiological Methodology Committee, U.S. Food and Drug Administration, 1970–74; Electorate Nominating Committee, Section on Statistics, AAAS, 1974; statistical theory and methodology.

David L. Wallace (statistics), 1928; B.S., Carnegie Tech, 1948, M.S., 1949; Ph.D., Princeton University, 1953; assistant to associate professor, University of Chicago, 1954–68, professor, 1968–; fellow, Center for Advanced Study in the Behavioral Sciences, 1960–61; Computer and Biomath Sciences Study Section, National Institutes of Health, 1970–74; theoretical statistics; data analysis.

Section W-Atmospheric and Hydrospheric Sciences

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

L. Dean Bark
Eugene W. Bierly
Edward S. Epstein
William S. Von Arx

L. Dean Bark (meteorology), 1926; B.Sc., University of Chicago, 1948, M.Sc., 1950; Ph.D., Rutgers University, 1954; bioclimatologist, U.S. Weather Bureau, 1955; associate professor, Kansas State University, 1956–67, professor, 1967–; National Weather Service Centennial Medallion, 1970; Policy Committee, Kansas Water Resources Research Institute, 1968–; Kansas Weather Modification Advisory Committee, 1974–; agroclimatology.

Eugene W. Bierly (meteorology), 1931; A.B., University of Pennsylvania, 1953; M.S., University of Michigan, 1957, Ph.D., 1963; lecturer, University of Michigan, 1961–63; meteorologist, U.S. Atomic Energy Commission, 1963–66; program director, Meteorology, National Science Foundation, 1966–71, coordinator, Global Atmospheric Research Program, 1971–74, head, Office for Climate Dynamics, 1974–; congressional fellow, 1970–71; editor, *Meteorological Monographs*, 1973–; councilor, American Meteorological Society, 1974–75; science management; environmental problems; science policy.

Edward S. Epstein (meteorology), 1931; A.B., Harvard University, 1951; M.B.A., Columbia University, 1953; M.S., Pennsylvania State University, 1954, Ph.D., 1960; meteorologist, U.S. Air Force, 1953–57; lecturer to professor, University of Michigan, 1959–73, department chairman, 1971–73; associate administrator, Environmental Monitoring and Prediction, National Oceanic and Atmospheric Administration, 1973–; visiting scientist, University of Stockholm, 1968–69; editor, *Journal of Applied Meteorology*, 1971–73; trustee, University Corporation for Atmospheric Research, 1972–73; councilor, American Meteorological Society, 1974–; Atmospheric Science Advisory Committee, National Science Foundation, 1971–73; meteorology prediction; probability and statistics in atmospheric science.

William S. Von Arx (oceanography), 1916; A.B., Brown University, 1942; Sc.M., Yale Uni-

versity, 1943; Sc.D., Massachusetts Institute of Technology, 1955; instructor, Yale University, 1943–45; physicist, Columbia Radiation Laboratory, 1945; physical oceanographer, Woods Hole Oceanographic Institution, 1945–67, senior scientist, 1967–; lecturer, Harvard University, 1947–48; lecturer, Massachusetts Institute of Technology, 1956, professor, 1957–71; Council, Smithsonian Institution; primary circulations of oceans and atmosphere; heat balance of the earth; energy and the future of man.

Section Chairman-Elect (one to be elected for a 2-year term).

Robert G. Fleagle
Harris B. Stewart, Jr.

Robert G. Fleagle (meteorology), 1918; A.B., Johns Hopkins University, 1940; M.S., New York University, 1944, Ph.D., 1949; assistant to associate professor, University of Washington, 1948–56, professor, 1956–, department chairman, 1967–; National Science Foundation senior postdoctoral fellow, Imperial College, London, 1958–59; technical assistant, Office of Science and Technology, 1963–64; president, Meteorology Section, American Geophysical Union, 1966–69; Meisinger Award, 1959; Cleveland Abbe Award, 1971; Committee on Atmospheric Science, National Academy of Sciences, 1962–, chairman, 1969–73; Panel on Oceanography, President's Science Advisory Committee, 1965–66; trustee, University Corporation for Atmospheric Research, 1971–, chairman, 1975–; physical and dynamical meteorology.

Harris B. Stewart, Jr. (oceanography), 1922; A.B., Princeton University, 1948; M.S., University of California, 1952, Ph.D., 1956; chief oceanographer, U.S. Coast and Geodetic Survey, 1957–65; director, Institute for Oceanography, Environmental Science Services Administration, 1965–70, Atlantic Oceanographic and Meteorological Laboratories, National Oceanic and Atmospheric Administration, 1970–; chairman, Advisory Council, Department of Geological and Geophysical Sciences, Princeton University, 1972–; vice president, Marine Technology Society, 1973–; Council, AAAS, 1973–74, member-at-large, Section on Atmospheric and Hydrospheric Sciences Committee, 1973–76; physical oceanography; marine sedimentation.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

William E. Reifsnyder
Stanley L. Rosenthal

William E. Reifsnyder (biometeorology), 1924; B.S., New York University, 1944; M.S., University of California, 1949; Ph.D., Yale University, 1954; professor, Yale University School of Forestry and Environmental Studies, 1955–; visiting scientist, National Science Foundation-SAF, 1961–70; visiting professor, University of Munich, 1968; chairman, Committee on Biometeorology, American Meteorological Society, 1967–70, Pesticide Advisory Committee, Connecticut Department of Environmental Protection, 1972–73; Task Force on the Effect of Climatic and Weather Patterns in Agricultural and Renewable Resources Productivity, NAS-NRC, 1974–; chairman, Working Group on Application of Meteorology to Forestry, World Meteorological Organization, 1975–; Editorial Boards, *Journal of Forestry*, *Canadian Journal of Forest Research*, *Agricultural Meteorology*; energy budgets of vegetative canopies; forest fire behavior; air pollution meteorology.

Stanley L. Rosenthal (meteorology), 1929; B.S., City College of New York, 1951; M.S., Florida State University, 1953, Ph.D., 1958; staff member, Los Alamos Scientific Laboratory, 1958–59; assistant professor, Florida State University, 1959–65; chief, Theoretical Studies Group, National Hurricane Research Laboratory, 1960–74; supervisor, Modeling Group, National Hurricane and Experimental Meteorology Laboratory, 1975–; adjunct professor, University of Miami, 1963–; U.S. Department of Commerce Gold Medal, 1970; U.S. GATE Advisory Panel, National Academy of Sciences, 1972–.

Section X-General

Members of the Electorate Nominating Committee (two to be elected for 3-year terms).

James J. Gehrig
Thelma C. Heatwole
Anne Keatley
Herman Pollack

James J. Gehrig (generalist), 1921; B.S., University of Wisconsin, 1950; Ballistics Research Laboratories, Aberdeen Proving Ground, 1950–54; Northrop Corporation, 1954–61; professional staff member, Committee on Aeronautical and Space Sciences, U.S. Senate, 1961–.

Thelma C. Heatwole (chemistry), 1905; B.S., Madison College, 1948; chemistry instructor, Virginia public schools, 1927–52; consultant, DuPont, U.S. Atomic Energy Commission, Philip Morris, Inc., 1954–59; patent liaison officer and senior patent and licensing officer, Philip Morris, Inc., 1960–71; director, Public Information, AAAS, 1963–74, Federation of American Societies for Experimental Biology, 1959–; director, Virginia Junior Academy of Science, 1950–60; editor-in-chief, *Les Nouvelles*, 1966–74; president, Virginia Chapter, American Institute of Chemists; Executive Committee, Virginia Section, American Chemical Society.

Anne Keatley (modern China), 1941; B.A., Stetson University, 1963; New Asia Yale-in-China Language Center, Hong Kong, 1968–69; staff director, Committee on Scholarly Communication with the People's Republic of China,

National Academy of Sciences, 1971–; United States–China relations.

Herman Pollack (science administration), 1919; B.S., City College of New York, 1940; M.A., George Washington University, 1964; various assignments, Office of Price Administration, War Shipping Administration, and Foreign Economic Administration, 1941–46; various posts, U.S. Department of State, 1946–74, including deputy assistant secretary for personnel and director, Bureau of International Scientific and Technological Affairs, 1967–74; consultant and research professor, George Washington University, 1974–; United States–U.S.S.R. Commission on Scientific and Technological Cooperation, 1972–74; Board of Governors, United States–Israeli Bi-National Science Foundation, 1973–; international science policy and relations.

Section Chairman-Elect (one to be elected for a 2-year term).

Dennis W. Barnes
Mary Louise Robbins

Dennis W. Barnes (physical chemistry), 1936; B.A., College of Wooster, 1958; M.S., University of Wisconsin, 1960; Ph.D., University of Virginia, 1964; operations analyst, Analytic Services, Inc., 1964–66; assistant to the director, Research Institute for Advanced Studies, 1966–69; associate director, Center for the Study of Science, Technology and Public Policy, University of Virginia, 1970–73, associate professor of environmental sciences, 1971–, associate provost for research, 1971–; president, Sigma Xi, University of Virginia, 1974; deputy director, Governor's Council on the Environment, 1970–72; Regional Programs Advisory Council, Southern Growth Policies Board, 1975–; environmental law and policy.

Mary Louise Robbins (microbiology), 1912; A.B., American University, 1934; M.A., George Washington University, 1940, Ph.D., 1944; instructor to associate professor, George Washington University, 1944–59, professor, 1959–; visiting professor, Baghdad Medical College, 1963; National Institutes of Health visiting scientist, National Institute of Health, Tokyo, and Kyushu University, 1968–69; U.S. Public Health Service special research fellow, 1968–69; president, Washington Academy of Sciences,

1971–72; chairwoman, Committee on the Status of Women Microbiologists, American Society for Microbiology, 1970–; Neurological Disorders Program Project Review Committee, National Institute of Neurological Diseases and Stroke, 1974–; Council, AAAS, 1958–59, 1961–64, 1970–71, 1974, Council Committee on Fellows, 1974; bacterial and animal virology.

Member-at-Large of the Section Committee (one to be elected for a 4-year term).

Thomas F. Jones
Lora M. Shields

Thomas F. Jones (engineering), 1916; B.S., Mississippi State College, 1939; M.S., Massachusetts Institute of Technology, 1940, Sc.D., 1952; L.L.P., The Citadel, 1966; Eng.D., Purdue University, 1971; physicist, Naval Research Laboratory, 1941–47; research associate to associate professor, Massachusetts Institute of Technology, 1947–58; professor and head, School of Electrical Engineering, Purdue University, 1958–62; president, University of South Carolina, 1962–74, distinguished professor, 1974–; visiting professor, Massachusetts Institute of Technology, 1974–75; National Science Board, 1966–72; Ad Hoc Committee on Accreditation, American Society for Engineering Education, 1974; electrical engineering.

Lora M. Shields (biology), 1912; B.S., University of New Mexico, 1940, M.S., 1942; Ph.D., University of Iowa, 1947; instructor to associate professor, New Mexico Highlands University, 1947–51, professor and department chairman, 1951–71, director, Environmental Health Division and Allied Health Programs, 1971–; editor, *Bulletin*, New Mexico Academy of Science, 1972–, secretary-treasurer, 1951–54, president, 1954–55, treasurer, 1972–, Scientist of the Year, 1965; vice president, Ecological Society of America, 1962–63; president-elect, Association of Academies of Science, 1975; president, Southwestern and Rocky Mountain Division, AAAS, 1959–60, Council, 1960–73, Committee on Nominations and Elections, 1972–73, Commission on Science Education, 1973–74, Committee on Arid Lands, 1974–77; adaptations of desert plants; algae in desert soils; serum lipids in Spanish- and Anglo-Americans; bilingual education.