

To advance the understanding of nervous systems, including the part they play in determining behavior, by bringing together scientists of various backgrounds, and by facilitating the integration of research at all levels of biological organization.

The elucidation of the structure and function of the human nervous system in health and disease is one of our primary goals.

The ANNUAL MEETING, which facilitates scientific interchange and education, is the chief activity of the Society. Since the Society was formed in 1969, the following meetings have been held:

1971, Washington, D.C.	1,396 registrants
1972, Houston	1,229 registrants
1973, San Diego	2,268 registrants
1974, St. Louis	2,331 registrants
1975, New York City	3,775 registrants
1976, Toronto	3,970 registrants
1977, Anaheim	4,230 registrants
1978, St. Louis	4,693 registrants
1979, Atlanta	5,511 registrants
1980, Cincinnati	5,820 registrants
1981, Los Angeles	5,620 registrants
1982, Minneapolis	5,923 registrants
1983, Boston	8,610 registrants
1984, Anaheim	7,035 registrants
1985, Dallas	7,646 registrants
1986, Washington, D.C.	10,470 registrants

Registration figures reflect scientific registration. For future meetings, see back cover.

The Annual Meeting consists of symposia, workshops, and volunteer papers in platform and poster presentations. Special features include invited lectures by world-renowned scientists, Short Courses focused on technological advances in basic research, and a Neurobiology of Disease Workshop designed to teach young investigators the potential clinical applications of their work.

Exhibitors are welcome at these meetings. One hundred and eighty-eight organizations reserved booths in Dallas, including publishing houses, pharmaceutical firms, instrument companies, and voluntary and government health agencies.

A professionally run placement service is also available.

...at the local level. The program, formed at their own initiative, encompass over 40 states, Puerto Rico, Canada, and Mexico. Autonomously determined activities include scientific and social meetings, formation of interdisciplinary and interinstitutional neuroscience training programs, and various public services. In 1973 The Grass Foundation began funding a Traveling Scientist Program, which by 1985 had provided over 300 lecture-visits to chapters by eminent neuroscientists.

To promote education in the neurosciences

NEUROSCIENCE TRAINING PROGRAMS IN NORTH AMERICA is a biennial handbook used not only by students and their advisors, but also by institutes planning to initiate neuroscience programs and by government agencies and other offices that seek to chart the growth of the field in an effort to maximize the efficiency of future planning. This handbook is, to our knowledge, the single most complete source of information about neuroscience training in North America.

The **SHORT COURSES** offered mid-year and at each Annual Meeting instruct hundreds of registrants in newly developed research techniques or strategies applicable in a wide range of fields.

The **NEUROBIOLOGY OF DISEASE WORKSHOP** teaches young scientists that basic research can lead to an understanding of neurological disorders when the scientists engaged in that research have some knowledge of the diseases of the nervous system. Among the diseases addressed are myasthenia gravis, multiple sclerosis, muscular dystrophy, Huntington's and Parkinson's disease, epilepsy, and AIDS.

The **NEUROSCIENCE NEWSLETTER** keeps the membership informed of activities within the Society and within the field of neuroscience in general. This bimonthly publication provides a forum for views on various issues and brings readers up to date on public affairs relevant to neuroscience.

To inform the general public on the results and implications of current research in the neurosciences

about neuroscience. The Society has striven to assure accurate and responsible reportage by holding biennial Science Writers Seminars, by establishing a media referral service, by encouraging members to interact freely with representatives of the media, and by arranging for writers and scientists to make contact in the Press Room at each Annual Meeting.

A **PUBLIC LECTURE** is offered at each Meeting and widely publicized to attract as large an audience of nonprofessionals as possible. The Society's involvement in public affairs is rapidly increasing and the Society is fast becoming recognized as an information resource. It is frequently asked to send representatives to a variety of public functions, and members have testified at Congressional appropriations hearings and served in advisory capacities for federal and private health agencies. Many voluntary agencies are concerned with disorders whose present clinical treatment and eventual cure are dependent on basic neuroscientific research. The Society is extending its contact with these groups to unite the efforts of research scientists, clinicians, and lay people.

MEMBERSHIP CATEGORIES

Regular

Any scientist residing in Canada, Mexico, or the United States who has done meritorious research relating to the nervous system.

Foreign

Any scientist residing outside of Canada, Mexico, or the United States who has done meritorious research relating to the nervous system.

Student

Predoctoral candidates at degree-granting institutions.

Affiliate

All persons or organizations interested in the Society's objectives but not eligible for Regular or Student membership.

Emeritus

Retired Regular Members.

Honorary

Distinguished scientists or other persons who have contributed significantly to the Society or to the field of neuroscience.

Sustaining Associate

Any person or organization willing to contribute unrestricted funds to the general operating budget of the Society.

the neurosciences

are . . . a multilevel, interdisciplinary cluster of research strategies that seek to understand the structure and function of the brain. The field is *multilevel* because the research strategies stem from biophysical research through molecular, cellular, multicellular, and behavioral research. It is *interdisciplinary* because the research combines the methods of chemistry (especially biochemistry), biology (especially anatomy, embryology, and physiology), and psychology (especially experimental and developmental). This body of research,

therefore, represents the fundamental base on which rest the medical fields of neurology, psychiatry, neurosurgery, anesthesiology, ophthalmology, and others.

Despite the enormous complexity of the brain, the past two or three decades have seen impressive conceptual and technical advances in our understanding of its structure and function and in the development of new therapies to alleviate certain of its disorders. The control of Parkinson's disease is a good example of the progression from basic science discoveries in the laboratory to the alleviation of a serious clinical condition. Just ten years elapsed from the discovery in the early 1950's that the neurotransmitter dopamine is present in large amounts in the basal ganglia of normal brains and in

had suffered from Parkinson's disease, to the development of an appropriate replacement therapy. Similarly, many of the drugs now being used in psychiatry are based on the finding that dopamine and other catecholamines serve as neurotransmitters, and with the discovery almost every year of new transmitters, there is every prospect for improvement in the treatment of pain and spasticity and in the prevention of convulsions. The development of effective antipolio vaccines dramatically affected the lives of almost everyone by eliminating the scourge of poliomyelitis.

These are but a few of the many examples to be cited of the way in which fundamental neuroscience has contributed to its related clinical disciplines. However, many major clinical problems remain to be solved. The cause and treatment of undifferentiated mental retardation are virtually unknown. Stroke, dementia, and the neurological effects of senility place a tremendous burden on our public institutions and limit the lives of millions of people. We are virtually helpless in promoting regeneration of the nervous system in patients with trauma to the brain or spinal cord. The cause and treatment of most brain tumors remain almost a total mystery, and multiple sclerosis and other degenerative diseases have no immediate prospect of being effectively halted or reversed. The complexity of modern science is such that we cannot realistically stake our hopes on scientific miracles or fortuitous breakthroughs. There is no substitute for the steady, patient, dedicated, and intelligent exploration of the unknowns of neuroscience by men and women, trained to challenge the complexity of the brain, and the careful application of their findings to the distressing clinical problems which beset the lives of so many.

of the most challenging in all of biomedical research. This was clearly recognized by the President's Biomedical Research Panel, which singled out brain research as one of the fields most deserving of active support during the next decade:

"Perhaps the ultimate challenge to biomedical research, representing the very pinnacle of our understanding of the human organism, lies in neurobiology: how the brain and nervous system develop, how they function in health and disease, how thought occurs, how memory is stored, how we reason, how we are motivated, and how we interact with our physical and social environment. . . . the study of brain and mind deserves greatly increased attention . . . from the many different disciplines of biomedical and behavioral science, as well as such fields as mathematics, linguistics, and the communicative sciences. This Panel commends neurobiology as a compelling long-range interest worthy of national attention."

the society for neuroscience

is . . . the brain child of a 1969 National Research Council study, which indicated that scientists working on the nervous system felt the need for an interdisciplinary organization to enhance information exchange. It is now one of the fastest-growing professional scientific organizations in North America. It began with 500 charter members in 1969, and now has over 11,000 members, including clinicians, research scientists, and students drawn from a wide range of disciplines—biochemistry, neurochemistry, neurology, physiology, anatomy, neurosurgery, psychiatry, ophthalmology, speech pathology, and many others.

future meetings

1988	November 13-18	Toronto
1989	October 29-November 3	Phoenix
1990	October 28-November 2	St. Louis
1991	November 17-22	New Orleans
1992	October 25-30	Anaheim

publications

Membership Directory
Neuroscience Training Programs in North America
Annual Meeting Program
Annual Meeting Abstracts Volume
Short Course Syllabi
The Journal of Neuroscience
Neuroscience Newsletter
Symposia Volumes

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society for neuroscience