

THE PHYSIOLOGIST



A Publication of the American Physiological Society

Volume 29, Number 5

October 1986

EDITORIAL

Lend a Helping Hand

The recent gathering of physiologists in Vancouver for the XXX International Congress of Physiological Sciences demonstrated once again that an essential element in the continued vitality of science is interaction at the international level. Physiologists from industrialized democracies, developing countries, and Communist countries gathered enthusiastically for direct and fruitful exchange among colleagues. Whether in one on one situations or large lecture halls, physiological understanding was enhanced and each participant gained new insights.

For scientists from the United States and other industrialized democracies, the opportunities for exchange at national and/or international meetings are numerous. Fortunately, the research support structure in countries like the United States facilitates and encourages scientists to share ideas at scientific meetings. The concept of scientific exchange remains despite the current period of fiscal conservatism associated with Gramm-Rudman-Hollings.

Scientists from developing countries also have ample opportunities for exchange. However, the lack of "hard currency" makes it difficult, if not impossible, to participate. The limited resources available to scientists in developing countries make it necessary for them to be extremely selective when identifying a meeting to attend. As a result, international congresses and their associated satellite symposia are often the meeting of choice for investigators from developing countries.

During the Vancouver meeting, I had the opportunity to talk with Renato Albertini, President of the Latin American Asso-

(Continued on p. 190)

Open Letter to All APS Members from Franklyn G. Knox, President

Dear APS Member:

The Council of The American Physiological Society met on Friday, August 22, 1986, to consider a proposal for restructuring the governance of the Society. The recommendation for governance that emerged from that meeting was approved by Council for consideration by the membership of the Society. We solicit your reaction to the proposal by open discussion at the business meeting of the Society to be held in New Orleans October 8, 1986, and by mail if you are unable to attend the meeting. Following the Fall meeting of the Society, Council will consider all of the input from the membership and finalize a proposal for publication in *The Physiologist* and subsequent action at the Spring meeting of the Society in Washington in 1987 (the Centennial celebration).

The proposal represents the input from the Long Range Planning Committee, the Section Advisory Committee, and the Council. The basic goal of the restructuring of the governance of the Society is to increase the representation by the Sections of the Society. As a natural outgrowth of the explosion of physiologic knowledge, specialization of interests has occurred. The recognition of this specialization through the creation of Sections and sectionalization of the journals allows for communication among those with specialized interests and yet, at the same time, the umbrella of the Society as a whole recognizes the integrative function of our discipline. The new governance structure recognizes the importance of having sectional input to the governance of the Society as a whole.

To accomplish these ends, the proposal recommends that the size of Council be

increased. The Council shall consist of six Council members plus the President, President-elect, and Past President. Two new Council members shall be elected each year for a three-year term.

For the purposes of governance, a clear identification of the makeup of Sections becomes necessary. The proposal recommends that a Section consist of any group of 100 regular members of the Society who express a primary affiliation and whose statement of organization and procedures have been approved by Council. Each Section shall elect one of its members to serve on the Section Advisory Committee for a term of three years. The Section Advisory Committee shall elect a chairperson from the Committee to serve for a three-year term. The chairperson of the Section Advisory Committee shall be an ex-officio member of the Council.

To accomplish a balanced representation over time for the various Sections of the Society, a Nominating Committee is recommended by the governance proposal. The Nominating Committee shall consist of the immediate Past President, who will serve as chairman, and six members elected from the Section Advisory Committee. The elected members will serve for two-year terms, with three being elected each year. The chairpersons of the Program Executive Committee and the Publications Committee shall be ex-officio members without vote. The Nominating Committee shall solicit candidates from the Society membership by mail, and shall select a slate of candidates from those nominated by the Society membership. The slate presented by the Nominating Committee shall be such that no more than

(Continued on p. 198)

CONTENTS

EDITORIAL

Lend a Helping Hand

M. Frank 189

LETTER TO MEMBERS

Open Letter to All APS Members

F. G. Knox 189

OFFICE OF NAVAL RESEARCH

Management of the Physiology Program of the Office of Naval Research

F. G. Hempel 191

PUBLIC AFFAIRS

Federal Appeals Court Rules on Question of Standing

192

Resolution Honoring American Physiologists Introduced in Congress by Rep. Walgren

W. M. Samuels 192

APS NEWS

Centennial Update

194

News from Senior Physiologists

195

Federation Proceedings: New Editorial Policy

195

Cardiovascular Section Report

195

Section Advisory Committee Report

196

Hymen Samuel Mayerson (1900-1985)

197

Restoration of Stephen Hales' Grave, Teddington, London

198

Ohio State Science Fair

199

IUPS NEWS

General Assembly

199

Finnish Physiological Society to Host XXXI International Congress

199

ANNOUNCEMENTS

200

OPINION

To the Editor. S. R. Cohen

201

PEOPLE AND PLACES

201

BOOKS RECEIVED

201

EDITORIAL

(Continued from p. 189)

ciation of Physiological Sciences (ALACF), about the opportunities for research in Latin America. According to Dr. Albertini, countries in Latin America often have a corps of highly qualified scientists in specific areas of physiology. For the ALACF countries the areas of excellence include hypertension, neurophysiology, and reproductive physiology. Despite strength in these areas, progress is slow because of the lack of adequate research equipment, chemicals, and scientific journals.

The enhancement of research in developing countries has often been a result of scientist exchanges, sabbatical opportunities, and postdoctoral training. Unfortunately, these opportunities depend on resources available from granting agencies in developing countries. In the United States, many of these programs have been early victims of the budget knife. For physiology to prosper in developing countries, individual physiologists and professional scientific organizations must become more actively involved.

Most of us have had opportunities to meet scientists from developing countries and discuss their problems. In the future, let these discussions be the start of scientist-to-scientist cooperation in which a colleague is provided with a textbook or journal. To enhance self-sufficiency it is important for developed countries to initiate staff exchange programs, visiting lectureships, equipment and textbook donations, and financial assistance. Even the provision of three-month-old copies of *Current Contents* can open up a whole new world of scientific discovery.

Professional organizations such as APS can provide some of the impetus for enhancing the research ability of scientists in developing countries. Occasionally, com-

plementary or subsidized copies of the journals and books can be provided. Professional associations can also help identify foundations and other philanthropic agencies willing to support programs for developing countries under the auspices of the association.

For APS, our interactions with physiologists in developing countries have previously been through their national physiological societies. Within the Americas, these interactions have resulted in the participation of Latin American physiologists in several of our meetings, including the forthcoming 1987 San Diego meeting in which the ALACF will be a conjoining society. The hand of friendship is also being extended through the pending bylaw change that will make physiologists in "all the Americas" Regular members of APS, a change that has been warmly received by physiologists in South America.

However, these activities are minor contributions to the development of self-sufficiency in Third World countries. The APS and other associations should serve as "matchmakers," coordinating activities between scientists and identifying resources to facilitate the exchange of information, equipment, or personnel. Perhaps the role of APS should be to assist strong departments of physiology to "adopt a department" in a developing country. Such activities can only serve to advance science, increase awareness, and contribute to international amity.

It is important to remember that one individual can play a significant role in helping a Third World country achieve self-sufficiency. Four years ago, through the College of Agriculture at Michigan State University, Harvey Sparks, Jr., APS President-Elect, became aware of the University of Zimbabwe's desire to expand their exchange program into the biomedical sciences. Through his initiative, students from Zimbabwe began arriving in East Lansing and physiology faculty visited the University of Zimbabwe. As part of his forthcoming sabbatical, Dr. Sparks will be working in Zimbabwe to help strengthen their physiology programs and develop independent investigators.

In the future, *The Physiologist* will carry more information about physiological research and teaching in developing countries. If you have ideas or are willing to "lend a helping hand," please let us know.

Martin Frank

The Physiologist

Published bimonthly and distributed by

The American Physiological Society
9650 Rockville Pike
Bethesda, Maryland 20814

ISSN 0031-9376

Martin Frank, Editor
and

Executive Secretary-Treasurer

Franklyn G. Knox, President

Howard E. Morgan, Past President

Harvey V. Sparks, Jr., President-Elect

Shu Chien, Jay A. Nadel, Norman C.

Staub, and Aubrey E. Taylor, Councillors

Publications Committee: *Chairman*, P. C. Johnson; *Members*, John S. Cook, William F. Ganong, Leonard R. Johnson, and Jean McE. Marshall. *Publications Manager and Executive Editor*, Stephen R. Geiger; *Production Manager*, Brenda B. Rauner; *Editorial Staff*, Laura North and Lorraine Tucker.

Subscriptions: Distributed to members as part of their membership; nonmembers and institutions, \$60.00 per year in the United States; elsewhere \$75.00. Single copies and back issues, including Fall Abstracts issue, when available, \$15.00 each. In 1986 subscribers to *The Physiologist* will receive it, the abstracts of the Fall Meeting of the American Physiological Society, and *News in Physiological Sciences*. The American Physiological Society assumes no responsibility for the statements and opinions advanced by contributors to *The Physiologist*.

Deadline for submission of material for publication: Dec. 5, February issue; Feb. 5, April issue; April 5, June issue; June 5, August issue, Aug. 5, October issue; Oct. 5, December issue. If you change your address or telephone number, please notify the central office as soon as possible.

Management of the Physiology Program of the Office of Naval Research

Franklin G. Hempel
Research and Laboratory Management, Office of Naval Research

The origin of the Office of Naval Research can be traced to the final months of World War II and the phaseout of the Office of Scientific Research and Development (OSRD), which had coordinated science research for the federal government. The navy responded to the OSRD termination by creating in May 1945 an Office of Research and Inventions (ORI) to oversee all research, experimental, test, and developmental activities underway for the U.S. Navy. The wartime Office of Patents and Inventions and the navy's Office of Research and Development were soon combined with the ORI, which now became the focal group for planning a newer organization that would, in time, supervise navy research and development as well as contract for science projects in nonmilitary institutions. The ORI did not have the authority, however, to issue contracts. Meanwhile, Congress passed legislation that created an Office of Naval Research (ONR) "to plan, foster and encourage scientific research in recognition of its paramount importance as related to the maintenance of future naval power and the preservation of national security." In August 1946 the ORI became the ONR, and thus was formed the first federal agency with a mission to support basic research in universities and other nonprofit organizations. Within six years, the Atomic Energy Commission, the National Institutes of Health, the National Science Foundation, and the sister military agencies, the Army Research Office and the Air Force Office of Scientific Research, followed. Each of these agencies adopted what was then an unorthodox approach to funding research, i.e., by awarding contracts that would take into account the unpredictable outcomes inherent in basic research and would allow the research investigator the flexibility needed for submitting ideas through an unsolicited proposal.

The ONR reached its 40th anniversary in August 1986; this fundamental method of awarding contracts continues, with modest changes, to function successfully. The most recent federal legislation pertinent to this is the Competition in Contracting Act of 1984. In accordance with this Act, the service agencies have published "Broad Agency Announcements" in the *Commerce*

Business Daily, which define agency programs and restate the principle that unsolicited basic research proposals function as competitively solicited for the purposes of legally awarding contracts.

Since the beginning of the ONR, physiological research has been a major program area because the health and performance of military personnel have traditionally been challenged by unusual operational or environmental conditions. Consequently the Physiology Program was directed largely toward operational and stress physiology, especially during the first decade, 1946–1956. At that time, physiologists addressed the practical and applied problems of heat stress, cold, anoxia, battle fatigue, thermal injury, exposure to radar, sleep deprivation, extreme exertion, and head injury. The goals were, to a great extent, to define the limits of human tolerance to these battlefield conditions. Recently hyperbaric physiology was a significant part of this program, responding to requirements of navy divers and submariners. Along with this were traditional physiology projects in areas as diverse as thermoregulation, biodynamics, and magnetoencephalography. However, trends have moved toward the neurosciences, and greater emphasis has been placed on the molecular level of biological activity. Systems and organ levels of research are no longer as actively sponsored in the ONR Physiology Program. Today, scientists are asked to use techniques of molecular biology to understand the physiological and biochemical mechanisms involved in neurotransmission, neuromodulation, neural plasticity, and cell-to-cell communication.

The review procedures leading to funding of contracts by the ONR are essentially the same for all of the science and engineering directorates. In the Physiology Program, a research contract is usually initiated by contact directly with a Scientific Officer. If, after discussion of the proposed research, a fit is found with program goals, the investigator is asked to submit a preliminary proposal of two to three pages, wherein the research objectives and hypotheses involved are outlined. A curriculum vitae is often included. These preproposals are read usually by three or more Scientific Officers, and a decision is

reached on whether submission of a full proposal is to be encouraged. If affirmative, guidelines for the preparation of the formal proposal are sent to the investigator. The formal proposal, when received, is reviewed again by those same Scientific Officers and ad hoc reviewers, if needed. Frequently, the scientific merit of the proposal is readily apparent and the funding documents can be prepared. Other cases require additional opinions, solicited by mail, either directly from the Scientific Officer or through contractual arrangements with organizations such as the Federation of American Societies for Experimental Biology or the American Institute of Biological Sciences. The reports from the outside reviewers are considered advisory rather than decisive, and no priority scores are assigned. Reviewers' comments are seldom sent to applicants, and any questions raised about funding decisions or scientific merit are usually communicated by telephone. The final determinants for any proposal are, as always, availability of funds, the scientific merit, and the programmatic relevance of the research project. After the concurrence is obtained from the Division Head, Associate Director of Research, and Director of Research, a research contract is negotiated.

Funding awards from the ONR are made as contracts for basic research or as grants for symposia and foreign institutions. In general usage "contract" implies the acquisition of property or services for the direct benefit of the federal government, and the contract requires substantial federal involvement during performance of the contemplated activity. In practice, however, the research grants written by other funding agencies and the contracts written by ONR for research function in similar ways, and it appears, in fact, that most agencies developed a grant format modeled after contract provisions and clauses.

The question may be raised whether the selection procedures for contracts, without the use of study sections or open discussion by assembled experts and without assignment of priority scores, can be effective and unbiased. In reply, the experience

(Continued on p. 198)

Federal Appeals Court Rules on Question of Standing

A federal court of appeals has ruled that animal rights supporters and organizations do not have the right to file civil suits on behalf of animals.

A three-judge panel at the US Court of Appeals in Richmond, VA, upheld a federal district court ruling that neither animal rights groups nor individuals have been granted standing by the courts. Without standing an organization or an individual cannot initiate a civil suit.

However, the 5-year quest for standing by animal rights advocates is expected to be continued by an appeal to the US Supreme Court.

The issue began in September 1981 when county police confiscated 17 monkeys from a Silver Spring, MD, research facility after having charged a research scientist with animal cruelty. Animal rights advocates filed in federal district court a civil suit seeking custody of the monkeys, which were being maintained by the National Institutes of Health (NIH) under an order from a Maryland court.

A federal magistrate reviewing the suit recommended that it be dismissed because the courts had not granted standing to animal rights advocates. The magistrate's recommendation was upheld by the federal district court judge.

Standing, in general terms, is the recognition granted by a court to private citizens and organizations as plaintiffs with legally protectable and tangible interests at stake in litigation.

The plaintiffs—International Primate Protection League, Animal Law Enforcement Association, People for the Ethical Treatment of Animals, and six individuals—appealed the decision on the grounds that they were entitled to standing because a bonding relationship with the monkeys had been established as a result of the plaintiffs' weekly visit with monkeys, providing them with fresh fruit, toys, and a television set.

The granting of standing to animal rights supporters and organizations is a significant issue, inasmuch as it is a legal recognition that animal rights advocates have a guardian relationship with laboratory animals. One of the consequences could be in terms of the number of suits that could be filed against individuals and institutions for alleged animal abuse in educational and research programs.

The defendants in the case, the Institute for Behavioral Research and NIH, were joined in the appeal by 69 scientific societies and educational associations, which filed jointly an *amicus curiae* brief.

Included in the 69 organizations were APS, which was a member of the steering committee, the Association of Chairmen of Departments of Physiology, and FASEB. The other members of the steering committee in addition to APS were the American Psychological Association, the Association of American Medical Colleges, the National Association for Biomedical Research, the National Association of State Colleges and Land Grant Universities, Pharmaceutical Manufacturers Association, and the Society for Neuroscience.

While the scientific and educational communities were providing support for the defendants, two congressional supporters of the animal rights movement pushed for legislative support for the plaintiffs.

Rep. Charlie Rose (D-NC) proposed an amendment to the Animal Welfare Act (HR 4535) that would give standing to any person wanting to file a civil suit against the federal government on his own behalf or on behalf of any animal if it is believed that a federal agency has failed to enforce fully the provisions of the act regarding the care and treatment of animals.

The enactment of this bill would effectively bypass the judgment of the court and would open the doors to civil actions against any federal agency that is believed to have failed to enforce the standards of care for animals used by universities, research facilities, or other institutions covered by the act.

Rep. Robert C. Smith (R-NH) and Sen. Alan Cranston (D-CA) introduced congressional resolutions calling for NIH to release the monkeys to PETA. The resolutions were introduced after more than 155 representatives and 55 senators signed a letter to the director of NIH requesting that the monkeys be released. PETA proposed to place the monkeys in a refuge near San Antonio, TX.

The congressional pressure on NIH was heightened by an around-the-clock vigil on the NIH campus that was started in late April. Animal rights demonstrators erected a tent along the highway fronting the campus and placed billboards on both sides of

the thoroughfare, generating both public and media attention to the issue of the monkeys.

The activists also initiated a national letter-writing campaign to the Congress. Legislators reported that they were receiving more than 300 letters demanding the release of the monkeys from constituents for every letter they received from the scientific and education communities.

Resolution Honoring American Physiologists Introduced in Congress by Rep. Walgren

A resolution has been introduced in the Congress calling upon President Ronald Reagan to issue a proclamation honoring American physiologists.

The resolution was introduced by Rep. Doug Walgren of Pittsburgh in recognition of the American Physiological Society's 1987 Centennial Year and the Founders Week scientific program in Washington, DC, March 29–April 3, 1987.

Enactment of H. J. Res. 677, "American Physiologists Week," requires that a majority of the members of both houses join as cosponsors of the resolution. Thus, all APS members and their colleagues should contact their state's delegation and request that each member of the delegation cosponsor H. J. Res. 677, which has been referred to the Committee on Post Office and Civil Service.

The need to request Congressional representatives at this time to cosponsor the resolution is vital, as enactment must be accomplished during this session of the 99th Congress, which is expected to adjourn before December.

In introducing the resolution Walgren told his colleagues:

"I introduce today a joint resolution to designate the week beginning March 29, 1987, as 'American Physiologists Week' to make the 100th anniversary of the founding of the American Physiological Society. This Society and the work of physiologists have contributed immensely to the cure, treatment, and understanding of many diseases.

"Just two of the areas in which physiology plays a crucial role are the fields of biomedical and behavioral research. Along with many other fields of study, the advances that have come in these two areas of medical care have resulted directly from the study of physiology and continue to be fields of incredible potential for dramatic breakthroughs that would improve the health of humankind.

(Continued on p. 198)

To designate the week beginning March 29, 1987, as "American Physiologists Week".

IN THE HOUSE OF REPRESENTATIVES

JULY 17, 1986

Mr. WALGREN introduced the following joint resolution; which was referred to the Committee on Post Office and Civil Service

JOINT RESOLUTION

To designate the week beginning March 29, 1987, as
"American Physiologists Week".

Whereas 1987 marks the one-hundredth anniversary of the founding of the American Physiological Society;

Whereas physiology is the taproot for all of the life sciences;

Whereas early findings by physiologists resulted in the development of blood transfusions and modern anesthesia, eradication of many diseases, and the discovery of antibiotics;

Whereas physiology continues to be the fountainhead from which life science research enriches the health and longevity of humans and animals;

Whereas internationally renowned physiologists from every continent are coming to the District of Columbia to engage in scientific and educational dialogue with the American Physiological Society during its Centennial Week celebration of a century of progress in physiology: Now, therefore, be it

- 1 *Resolved by the Senate and House of Representatives*
- 2 *of the United States of America in Congress assembled,*
- 3 That the week beginning March 29, 1987, is designated as
- 4 "American Physiologists Week". The President is requested
- 5 to issue a proclamation calling on the people of the United
- 6 States to observe such week with appropriate ceremonies and
- 7 activities.

APS NEWS

Centennial Update

Many threads that form the fabric of the APS Centennial Celebration in Washington, DC, March 29–April 3, 1987, are coming together. The week-long celebration of "A Century of Progress in Physiology" will be addressed through a series of symposia, special lectures, and penetrating reviews designed to examine the growth of ideas and development of new techniques. To help in the celebration, distinguished physiologists from North America and abroad have been invited to participate in the symposia program.

The intersociety program of the 1987 FASEB Meeting will be directed to a single theme, "A Century of Progress." This theme was chosen to highlight the progress achieved in the last century by examination of the present leading edges and growth points in fields representative of the FASEB membership. To support this objective, a novel and exciting format has been developed for presentation of the thematic program. The program will include two related components. First, distinguished investigators acknowledged as leaders in their fields, nominated by the FASEB member societies, will present their perceptions of critical problems in a series of plenary lectures. Second, the topics addressed in the plenary lectures have been used to define a series of special topic categories for the solicitation of abstracts, and the papers contributed in these topic categories will be arranged into minisymposia and poster sessions that further explore the areas defined in the plenary lectures.

In addition to the scientific meeting, the proceedings will include an opening lec-

ture and reception for APS and FASEB members at the Washington Hilton. On Wednesday morning, April 1, APS will have a plenary session during which Dr. Karl Ullrich, a distinguished physiologist, will present the Physiology in Perspective, Walter B. Cannon Lecture. The plenary lecture will be followed by the APS business meeting. The USNC/IUPS is sponsoring a special lecture and closing reception at the National Academy of Sciences for APS members on Thursday, April 2. During the

week, special events will be available for participants, including an evening at the Kennedy Center for the Performing Arts and tours of Washington landmarks.

We look forward to your participation in this very special meeting in which past and present will be woven into the fabric that constitutes experimental biology.

Plenary lectures and topic categories for contributed papers with chairperson and society responsible for theme component are shown below.

Plenary Lectures

David Baltimore (Whitehead Institute of Biomedical Research), Developmental Regulation of Mammalian Genes, 11:30 A.M., March 30, 1987.

Floyd E. Bloom (Scripps Clinic and Research Institute), Neurotransmitters: Past, Present, and Future, 12:30 P.M., March 30, 1987.

Hector F. DeLuca (University of Wisconsin-Madison), The Vitamin D Story: A Success of Basic Science in the Treatment of Disease, 11:30 A.M., March 31, 1987.

Roger Guillemin (Salk Institute for Biological Studies), Endocrine Regulation: The Case of the Control of Pituitary Functions, 12:30 P.M., March 31, 1987.

Philip Leder (Harvard University), Replacing Oncogenes: Studies Using Transgenic Mice, 12:30 P.M., April 1, 1987.

Solomon H. Snyder (Johns Hopkins University), Neural Receptors, 11:30 A.M., April 2, 1987.

Sir John Vane (St. Bartholomew's Hospital Medical College), Inflammation and the Mechanism of Action of Anti-inflammatory Drugs, 12:30 P.M., April 2, 1987.

Contributed Paper Topic Categories

Development Regulation of Mammalian Genes (A. Ault, American Association of Immunologists), 8:30 A.M., March 30, 1987.

Neurotransmitters (Anthony Angel, American Physiological Society), 1:45 P.M., March 30, 1987.

Vitamin D (Connie M. Weaver and Robert P. Heaney, American Institute of Nutrition), 8:30 A.M., March 31, 1987.

Endocrine Regulation (Howard E. Morgan, American Physiological Society), 1:45 P.M., March 31, 1987.

Oncogene Expression (Harold E. Varmus, American Association of Pathologists), 1:45 P.M., April 1, 1987.

Neural Receptors (Horace Loh, American Society for Pharmacology and Experimental Therapeutics), 8:30 A.M., April 2, 1987.

Inflammation and the Mechanism of Action of Anti-inflammatory Drugs (Peter A. Ward, American Association of Pathologists), 1:45 P.M., April 2, 1987.

THE FASEB '87 ABSTRACT RECEIPT DEADLINE IS NOVEMBER 19, 1986

Future Meetings

1987

* FASEB Annual Meeting
APS Fall Meeting

March 29–April 3, Washington, DC
October 11–16, San Diego

1988

FASEB Annual Meeting
Joint APS/ASPET Fall Meeting

May 1–6, Las Vegas
October 9–14, Montreal

1989

FASEB Annual Meeting
APS Fall Meeting

March 19–24, New Orleans, LA
October 15–19, Rochester, MN

* APS Centennial Celebration

News From Senior Physiologists

Letter to E. B. Brown:

Adolph Surtshin is in private medical practice, a member of the Voluntary Faculty of the California College of Medicine, University of California at Irvine. Though he no longer engages in scientific research or writing, his background in physiology has been serving as a basis for his teaching activities with resident physicians at the Northridge Hospital Medical Center in Northridge, California since 1976.

Letter to Arthur Otis:

William J. Whalen is still involved in research, primarily as a consultant with Dr. Nair at Louisiana Tech on the mechanism of chemoreception in the cat carotid body. Since retiring in 1980 from Case-Western Reserve he has "had a ball" golfing (and making golf bags), precious-metal plating, playing bridge, gardening, fishing, and politicking for liberal candidates. He writes: "I miss seeing old friends at meetings but good memories of them remain."

Letter to Roy Greep:

Lorin A. Riggs, retired officially from Brown University in 1977, writes that he is now "happily cutting back." He is down to one graduate student, a small space in the lab, and no more grant applications. He notes that several APS members, among them Lloyd Beidler, Hal Davis, Dan Kenshalo, Carl Pfaffman, and himself, have written autobiographical chapters on their specialty for *Founders of Sensory Science*, edited by APS member Bill Dawson and by Jay Enoch and published by Springer-Verlag in 1984.

Federation Proceedings: New Editorial Policy

In 1987, *Federation Proceedings* will institute a policy of publishing two new types of article:

1) Brief, definitive, and essentially final research communications of unusually broad interest that are considered to warrant prompt publication; and

2) State-of-the-art reviews, drawn, as far as possible, from the topics of the FASEB symposia.

These developments are described in more detail in *Federation Proceedings*. Manuscripts containing original communications, or proposals for reviews, should be sent to the Editor-in-Chief, Dr. W. J. Whelan, *Federation Proceedings*, P.O. Box 016129, Miami, FL 33101, USA.

Section Report

Cardiovascular

The Cardiovascular Section sponsored four symposia at the 1985 Fall Meeting in Niagara Falls, NY: Theme Symposium I: Neuro Humoral Regulation of Water and Electrolyte Balance Session I—Neuropeptides: Angiotensin and Vasopressin; Theme Symposium I: Neuro Humoral Regulation of Water and Electrolyte Balance Session II—Neural and Humoral Control of Kidney Functions; Theme Symposium I: Neuro Humoral Regulation of Water and Electrolyte Balance Session III—Neural Humoral Regulation of Electrolytes and Water Balance at the Microcirculation; and Theme Symposium I: Neuro Humoral Regulation of Water and Electrolyte Balance Session IV—Neural Humoral Mechanisms of Thirst and Salt Appetite.

The annual dinner and business meeting of the Cardiovascular Section was held on Tuesday, April 15, 1986, at the Missouri Athletic Club. Two hundred fifty members attended the dinner. The annual Carl Wiggers award was presented to Dr. Kiichi Sagawa, Department of Biomedical Engineering, Johns Hopkins University, Baltimore, MD. Dr. Sagawa presented an after-dinner lecture entitled: "Observing Cardiac Contraction Through the Pressure-Volume Window."

The annual Lampert Award was presented to Dr. Ann Baldwin, Department of Physiology, The University of Arizona Health Sciences Center, College of Medicine, Tucson, AZ on April 15, 1986, at the banquet. Dr. Baldwin received a certificate of award and a check for \$200.00 from the Cardiovascular Section.

Eight new members were elected to Fellowship in the Cardiovascular Section. In addition to regular membership in this

Section, which is open to any APS member, the Cardiovascular Section elects Fellows. The total number is not to exceed 5% of the total number of regular Section members. Nominations for new Fellows are offered by existing Fellows; these nominations are voted on by the Steering Committee. Fellows must be regular members of the APS and must have published meritorious research in cardiovascular physiology. In 1986, the following members were elected to Fellowship: Roger A. Norman, Jr., Frank Chi-Pong Yin, Nick Tripodo, William S. Spiellman, R. Davis Manning, Martin Lew Winter, Raymond Koehler, and Eric Hoffman.

The following symposia were sponsored or cosponsored by the Cardiovascular Section of the APS at the 1986 Annual FASEB Meetings: Myosin Polymorphism in Striated Muscle I and II—cosponsored with the Muscle Group, Cell and General Physiology; Chair: M. Kushmerick, S. Wiengrad, R. L. Moss; Control of Coronary Circulation and Myocardial Function; Chair: G. Kaley; Vasomotor Control—Functional Hyperemia and Beyond; Chair: B. Duling; Granulocytes and Oxidative Injury in Myocardial Ischemia and Reperfusion Injury; Chair: R. L. Engler and B. R. Lucchesi; and Update in Cardiovascular Neurobiology: The Neurobiology of Arterial and Cardiac Baroreceptor Afferents—cosponsored with APS Nervous System; Chair: C. M. Ferrario and V. Bishop.

Three new members were elected to the Nominating Committee: Hermes Kontos, Carl Rothe, and James Covell.

Loring B. Rowell, Chairman

APS Plenary Session Physiology in Perspective Walter B. Cannon Memorial Lecture Wednesday, April 1, 1987

9:00 A.M. Analysis of the Transport Processes in the Proximal Renal Tubule: Contraluminal Secretory Mechanisms

Karl Ullrich, Professor
Max-Planck-Institut für Biophysik
Frankfurt, West Germany

10:00 A.M. APS Business Meeting
Franklyn G. Knox, President
American Physiological Society

Committee Report

Section Advisory

I. Approval of Minutes

The minutes of the October 13, 1985, meeting of the SAC were approved as distributed.

II. Report by the Chair on the Meeting of the Long-Range Planning Committee

In answer to the charge of Council, the LRPC met on Saturday, April 12, 1986, to discuss issues related to the organization of the Sections and the SAC. The Chair of SAC attended this meeting. The LRPC made the following recommendations to Council:

A. Organization of Membership

1. **Sections:** a group of more than 100 Regular members of the Society encompassing an area of scientific investigation of physiological mechanisms. Sub-sections representing areas of special interests within the general domain of interest of the section may be formed, with no limit on membership.

2. **Groups:** a significant fraction of the membership sharing common interests that encompass an area of physiology of sufficient breadth extending beyond a single section, and possibly overlapping the interests of multiple sections.

Every member of APS is encouraged to choose a Section with which they want PRIMARY affiliation. This does NOT preclude membership in any Group. All voting and governance matters would be conducted through the Sections. That is, Groups would not have representation on the SAC. However, representation on the Program Advisory Committee would include Sections as well as Groups.

B. Consolidation of Sections

The suggestion was made that there is a need to consolidate sections where there is considerable overlap of disciplines.

C. Section Governance

There is a need to tailor the structure and operation of Sections to assure democratic procedures. If Sections are to play a role in governance then the democratic input of the membership is mandatory, and mechanisms not already in place must be implemented toward this end. Emphasis was placed on the need for business meetings and strong lines of communication with the membership.

D. Section Representation on SAC

The term of a representative on the SAC is three years, a period that does not now match the term of Chair of any of the

Sections. The LRPC suggested that in addition to the regular officers, each Section elect a representative to SAC just as they do for the Program Advisory Committee.

III. Responses of the SAC to the LRPC Recommendations

A. There was general agreement that there was undue rigidity in the organizational practices recommended by the LRPC with respect to the operation of Sections. Some Sections found that communication with the membership by mail (i.e., newsletters) was very effective and prefer this to formal business meetings. Others felt that there was no need for business meetings where present operating procedures was satisfactory.

B. Many Sections supported the idea that the Chair of each Section should serve as representative to the SAC. Under the present governing bylaws, it would be nearly impossible to accomplish this. It was decided, therefore, that the Section members would be consulted regarding the merit of having Section Chairs serve a three-year term, with the President-elect attending the SAC meetings as observer in the third year to ensure continuity. These details would be worked out by the Sections. At the present time, there seemed to be no strenuous objection to having a Section Chair serve for an extended time, in contrast to the view of the LRPC.

C. With respect to the suggested need to consolidate Sections, the members felt that any action on this item at this time would be premature, because the final tallies are not complete on Section affiliations. A follow-up on the questionnaire sent to the APS membership is requested from the APS office.

Further, it was generally agreed that the Sections, as they currently exist, appear to satisfy the needs and scientific interests of the constituents. There appears to be no reason to arbitrarily force the combination of Sections using Section titles that would appear to encompass common interests of two populations that in reality are dissimilar.

(Note: these ideas were conveyed to Council by the SAC Chairperson during her report to Council on April 16, 1986.)

IV. Reports on Section Activities

According to the Operational Guide of the APS, the existence of a Section is subject to review every five years. As part of the review process, each Section must submit a written report on its operation and activities to Council and its representative must appear before Council to discuss the report.

This week, reports were submitted from the Sections on (1) The Nervous System, (2) Environmental, Thermal and Exercise Physiology, and (3) Renal Physiology. The Chair informed the three Section representatives that their sections received five-year approval. In the Fall 1986, the Respiratory, Endocrinology and Metabolism, and Cardiovascular Sections will be asked to report to Council. All remaining Sections will be reviewed within the next year and one-half.

One of the major concerns expressed by Council after hearing the reports was that the Sections were not operating in full compliance with their bylaws. The Chair recommended that it would be prudent to make clear in future reports the full extent of Section activities and its specific governance practices, and cautioned Sections to implement the latter, if not already done.

It was also noted that there was no standard format for such reports and that it is difficult to anticipate the expectations of Council. (The Chair of SAC requested that Council provide this during her report to them on April 16, 1986.)

V. Discussion With Dr. Knox (President-Elect)

Dr. Knox was invited to join the Committee and presented a brief outline on some of the suggested plans of governance.

The SAC unanimously requests that Council provide it a copy of its governance proposal for review PRIOR to its discussion at a JOINT meeting of the SAC and Council and PRIOR to its presentation to the membership.

The SAC unanimously agreed that it could serve the Society well as a nominating body for the election of Society officers. (These points were reported to Council by the SAC Chairperson on April 16, 1986.)

VI. SAC Plan for Governance of Sections

Several members of the SAC indicated that it was important for the SAC to have input regarding the guidelines for the organization and governance of the Sections, and a task force for this purpose was organized by the Chair. The members of the task force are Drs. Blake Reeves (Chairperson), Larry Sullivan, Norman Weisbrodt, and Loring Rowell.

VII. Election of SAC Chair

This is deferred until the October 1986 meeting.

Marion Siegman, Chair

35TH PRESIDENT

Hymen Samuel Mayerson (1900–1985)

Hymen S. Mayerson, former President of the American Physiological Society, died on September 30, 1985, in New Orleans, soon after celebrating his 85th birthday. He was born on September 10, 1900, in Providence, Rhode Island, of immigrant parents from central Europe. He had his primary and secondary education in Providence and then entered Brown University to study biology. After receiving his Bachelor's degree from Brown, he started graduate work in physiology at Yale. Hy received his Ph.D. degree in 1925. Henry Laurens, one of the more senior department members, was invited to take the Chair of Physiology at Tulane one year later, and he invited young Mayerson to accompany him as a member of the department. In New Orleans, Hy met his wife, Caroline, with whom he had two children, Peter and Mary.

Hy became Chairman of the Department of Physiology at Tulane University School of Medicine in 1945 and continued in that position until 1965 when, at the age of 65, he retired. He was a stabilizing factor on the Tulane faculty. In 1951, the New Orleans Item published a profile of Hy Mayerson as an educator. In the opening paragraph, it stated, "When Tulane University establishes an award for the 'most cooperative member of the Tulane faculty' there is little doubt that the first recipient will be Hymen Samuel Mayerson, Ph.D." Yes, when a cool head was needed to resolve a serious problem, the Dean called on Hy. The hottest issue of the mid-1950s at Tulane was the planned new building to allow the basic science departments of the Medical School, then housed on the uptown campus in the Richardson building, to move downtown with the rest of the Medical School. Hy was put in charge of the building committee and in this way made one of his more lasting contributions to Tulane.

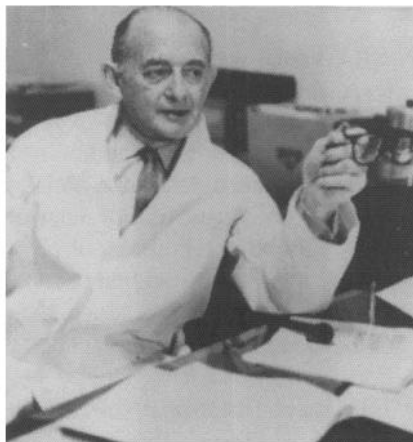
Hy's research interests were in circulatory physiology, and he had particular interest in blood volume regulation. It was under Hy Mayerson's tutelage and guidance that work on using lymphatics to study capillary permeability was started in the Physiology Department of Tulane. By using appropriately labeled macromolecules and studying the kinetics of their disappearance from blood and appearance in lymph, a new understanding of the role of lymphatic and interstitial albumin and



globulin turnover and their relationship to plasma proteins leaked from the circulation emanated.

After Hy retired as Chairman of the Physiology Department, he took a full-time position as associate director in charge of research and education at Touro Infirmary, the second largest hospital in New Orleans. He continued in this position for 10 years, when he again retired. However, Hy continued to work on a voluntary basis on the Board of Trustees of Dominican College in New Orleans for several years and served as the chairman of the committee that recruited its president. He was awarded its Gold Medal of Service in 1980. Hy also continued to work on the Senior Physiologists' Committee with Bruce Dill, generating correspondence with retired physiologists, which made interesting reading in *The Physiologist*.

Hy received many honors during his long and illustrious career including election to the Presidency of the American Physiological Society (1962), honorary



Doctor of Science degree from Brown University (1962), President of the Federation of American Societies for Experimental Biology (1963), and election to membership in the National Academy of Science (1963). He served on the editorial boards of both the American Physiological Society and American Heart Association. He was a member of the Board of Directors of both the American Heart Association and American Cancer Society. Hy gave generously of his time to volunteer agencies.

In the last six to seven years of his life, Hy became quite limited from a series of cardiovascular problems while retaining clear mental faculties to the end. He had fairly extensive peripheral vascular disease, causing him to become physically limited in walking and in gardening, which he enjoyed doing. In August 1985 he had a myocardial infarction and presumably again on the night of this death. In his last year Hy confided in his son Peter that he wasn't afraid of dying and, in his characteristically calm and philosophical manner, said that he felt that it was fitting that he would probably die of failure of his circulatory system—the system that he had known and studied so well for most of his professional life—"much better that, than a stranger like cancer."

Hy was a warm and gentle person. He was a marvelous teacher and provided the major component of the teaching in physiology at Tulane for about 20 years. He was a master in the use of demonstrations for teaching. Whether the results turned out "according to the books" or catastrophe struck from a loose cannulation, he made his teaching points while also being entertaining. Thus he is remembered well by many medical students and graduate physicians, who often returned to Tulane for Hy's postgraduate course in circulatory physiology. Undergraduate and postgraduate students as well as his faculty recognized him as a wise man to whom one could turn to discuss both personal problems and those relating to science. It is this characteristic for which this physiologist and gentle man was especially admired and respected.

In recognition of the trust that people had in him to perform excellently for the well-being of his family, friends, school, and professional societies, he was asked to perform service and give advice for many purposes. His legacy to the American Physiological Society was his good judgment at the times when important decisions needed to be made and the gentle but firm direction which he provided. Hy is survived by Caroline, Peter, and Mary.

Karlman Wasserman

APS MEMBERS

(Continued from p. 189)

one of the six Councillors shall be from the same institution, and no more than two of the six shall have primary affiliation with the same Section.

The proposal recommends a simplification of the voting process. Voting will be by mail ballot where each regular member shall mark an "x" for each open office with no ranking required. In a typical ballot, there will be five candidates for Councillor (vote for two), and two candidates for President-Elect (vote for one).

It is important to note that special interest groups (without qualifications or interest in Section status) will continue to be encouraged and have input to programming.

We would be most pleased to receive comments and suggestions concerning this proposal for restructuring APS governance. At each step of the way, the proposal has been strengthened by the careful consideration of those that have reviewed it, and we look forward to the input from the membership at large. As I stated in the editorial in the August issue of *The Physiologist*, if approved by membership, we will adopt the new governance plan at the Centennial meeting, hopefully an appropriate birthday present for the Society.

Thanks very much for your help.

PUBLIC AFFAIRS

(Continued from p. 192)

"Past research by physiologists has led to new procedures in blood transfusions; modern anesthesia; treatments for rabies and small pox; vaccines for tetanus, polio, and measles; and the discovery of antibiotics and penicillin. More recently, the understanding of physiology has made essential contributions to the development of organ transplants, procedures for artificial heart implantation, and the discovery of DNA.

"During the week of March 29, 1987, the American Physiological Society will sponsor a scientific and educational convocation in Washington, DC, that will be attended by internationally renowned physiologists, including Nobel laureates. I hope that my colleagues will join with me in sponsoring this resolution to give proper recognition and encouragement to those involved in such an important area of knowledge and research as physiology."

William M. Samuels, CAE

ONR

(Continued from p. 191)

in this program has been positive and reassuring. Basic research projects that have a reasonably high risk for success often stimulate considerable excitement. The principal investigator can be more speculative, and the monitoring by a single Scientific Officer of progress on a contract can provide valuable feedback for planning and funding future experiments. In addition, it is an operating procedure in the ONR that the Scientific Officers maintain their personal expertise in science. To that end, most individuals have adjunct faculty appointments or similar arrangements that permit them to conduct, at a reduced scale, ongoing laboratory research projects and to continue to publish. This is expected to contribute to their ability to administer science research.

In summary, the preproposal screening mechanism greatly reduces the time and effort spent writing unsuccessful full-length applications. Formal proposals, submitted with or without a preproposal, are reviewed for responsiveness to program goals of the navy as well as for merit. Because of this, the ONR normally does not raise many of the funding priority issues found in federal agencies that are required to consider any and all applications for research support.

Finally, as the ONR celebrates its 40th anniversary and the American Physiological Society approaches its 100th year of activity, it is appropriate to acknowledge the support for physiology research provided by the ONR since its founding in 1946. This agency has earned a special place in the history of our interesting science. ☛

Restoration of Stephen Hales' Grave, Teddington, London

Stephen Hales (1677-1761) was an eminent English physiologist of the early eighteenth century. He is best known for making the first measurement of blood pressure, but he also made important contributions to respiratory and plant physiology. He was the minister of St. Mary's Church in Teddington, near London, for over 50 years and is buried under the tower that he built. Recently, his grave fell into disrepair and a worldwide appeal was launched for funds to refurbish it. The American Physiological Society made a modest contribution, and a ceremony marking the restoration of the grave was held at the church on June 22, 1986. The church is well worth a visit and is easily reached by suburban train. It remains much as it was in Hales' time and has a fine stained glass window commemorating its famous minister as well as parish records in Hales' hand. ☛

Conference on Laboratory Animals

A conference provisionally entitled "Animal Pain: Its Recognition, Alleviation, and Avoidance" will be held June 5-6, 1987, in Chicago. It is jointly sponsored by the Scientists Center for Animal Welfare and the University of Chicago. Practical, ethical, and philosophical issues of animal research that involve pain will be addressed. Information: Dr. F. Barbara Orlans, Director, Scientists Center for Animal Welfare, 4805 St. Elmo Avenue, Bethesda, MD 20814; phone: (301) 654-6390; or Dr. Lee Cera, Director of Animal Care, the University of Chicago, 5801 Ellis Avenue, Chicago, IL 60637; phone: (312) 962-9361.

Call for Historic Films

It has been suggested by Dr. A. P. Fishman, Chairman of the Centennial Committee, that at the APS Centennial Meeting in 1987 there be a continuous showing of historic films in physiology. A few such films are already available to APS. For example, a film taken at the International Physiological Congress in Boston, 1929, has recently been donated. A film on Pavlov has been offered, and APS already has a copy of the classic film of August Krogh on microcirculation in the frog. Other films illustrating the history of physiology are desired. If you know of a film of historic interest that can be borrowed for the Centennial—either a film that traces a historical development, such as the well-known film on Harvey and the circulation of the blood, or an old film, such as the Krogh film mentioned above, which by its association with a famous physiologist has become historic—please write to Dr. Toby Appel, Historian/Archivist, American Physiological Society.

IUPS NEWS

General Assembly

The General Assembly of IUPS met on the campus of the University of British Columbia in Vancouver July 13, 1986. One of the major decisions made by the delegates was the approval of a new constitution and bylaws of the IUPS, which will move the international congresses and the meetings of the General Assembly to a quadrennial cycle after 1989.

Other items discussed and approved by the delegates were the locations of future congresses. The invitation by the Finnish Physiological Society to host the XXXI International Congress in Helsinki July 9-15, 1989, was confirmed. The invitation of The Physiological Society was accepted subject to confirmation at Helsinki.

The new members elected to the IUPS Council for the period 1986-1989 are President, A. Huxley (United Kingdom); Vice-President, D. Denton (Australia); Vice-President, C. Crone (Denmark); Secretary (until 12-31-86), J. Scherrer (France); Secretary (after 1-1-87), R. Naquet (France); Treasurer, H. Valtin (United States); X. Aubert (Belgium); R. Berne (United States); T. P. Feng (China); E. Fromter (West Germany); M. Gerova (Czechoslovakia); M. Ito (Japan); P. Kostyuk (U.S.S.R.); K. Krnjevic (Canada); R. Rahamimoff (Israel); R. Rodriguez (Argentina).

Finnish Physiological Society to Host XXXI International Congress

The Finnish Physiological Society, Societas Physiologica Finlandiae, invites world physiologists to a centennial meeting in the XXXI International Congress of Physiological Sciences, July 9-15, 1989, in Helsinki.

The program of the Congress under planning will consist of a number of invited Centennial Frontier Lectures to review the achievements in various areas of physiology. Two other components of the Congress will be symposia and oral as well as poster communications. Communications can be submitted either to complement symposia or included in special free poster sessions. The main aim of the congress is to encourage free dissemination and exchange of information.

During the Congress, time is also devoted to examine the challenges presented

by our current society to physiologists. This calls for discussions on postgraduate education and training of physiologists.

It is in the interest of the organizers to host a special course for physiologists from the developing countries to promote the use of applications of present knowledge to serve these nations.

A number of satellite symposia are expected to take place in Finland and neighboring countries within the framework of the Congress.

The organizing Committee will collect suggestions for the scientific program of

Congress and satellites from the National Societies of Physiology and corresponding organizations as well as from the IUPS Commissions.


Secretaries of the National Physiological Societies and corresponding organizations as well as those of IUPS commissions will be kept informed about the progress of the Congress arrangements.

For further information write to Professor Osmo Hänninen, Secretary General, P.O. Box 722, 00101 HELSINKI, Finland, Telex 122529 trex sf.

The Ohio State Science Fair

The vitality of our research endeavor depends on our ability to stimulate young minds to pursue research careers. To interest young scientists in physiological research, students must be exposed to opportunities in which they view physiology as a stimulating science. To assist in the stimulation of young minds, the American Physiological Society sponsored several awards at high school science fairs. The first of these awards were given at the Ohio State Science Fair, which was held on April 19, 1986, at Ohio Wesleyan University in Delaware, Ohio. The APS joined approximately 40 other associations, institutions, and societies in sponsoring awards for the State Science Day sponsored by the Ohio Academy of Science. The APS sponsored first- and second-place awards for grades 7-9 and 10-12. Each of the awardees received a certificate in recognition of their

achievement in the physiological sciences. The first-place awardees also received a copy of the book *Circulation of the Blood. Men and Ideas*, by A. P. Fishman and D. W. Richards. The APS judges for the event were Charles W. Smith and K. M. Hanson, members of the Department of Physiology, Ohio State University.

The APS hopes to sponsor future awards at the Ohio State Science Fair and would be pleased to sponsor similar awards at State Science Fairs in other states. Individuals who are actively involved with the event in their states should contact Martin Frank, Executive Secretary-Treasurer, APS, to discuss mechanisms by which the APS can undertake activities in those states. It is hoped that such activities will provide a stimulus to young minds interested in pursuing careers in physiological research. 



Second row, left to right: C. W. Smith, Daniel Gruenstein, K. M. Hanson, and Jeff Warner.
Front row, left to right: Carolee Nigh and Tracy Arbogast.

ANNOUNCEMENTS

Biotechnology in Clinical Medicine

The International Symposium BIOTECH RIA 87 on Biotechnology in Clinical Medicine will be held in Rome, Italy, at the Hotel Cavalieri Hilton International on April 13-15, 1987. Topics include Biotechnology in Cardiovascular Diseases, Towards New Vaccines and Immunodiagnosics, Bioactive Carriers, and Current Trends in Biotechnology.

Information: Organizing Secretariat Fondazione Giovanni Lorenzini, Via Monte Napoleone, 23, 20121 Milan, Italy. Phone: (02) 70.22.67/78.38.68.

Douglass Project for Rutgers Women in Math and Science

Douglass College, the women's undergraduate unit of Rutgers—The State University of New Jersey, announces a new endeavor to encourage young women to persist in math and science fields: the Project for Rutgers Women in Math and Science.

Douglass has been awarded a three-year grant from the New Jersey State Department of Higher Education's Fund for the Improvement of Collegiate Education. The project is multifaceted and will include a Summer Science Institute for high school students, orientation programs for newly admitted students to the undergraduate colleges at Rutgers—New Brunswick, peer study sessions, support groups, career workshops offering job survival skills and specific information about career options, special seminars to discuss ongoing work and social issues of women in science, courses in the Women's Studies program for mathematics and science students, advising geared specifically toward careers for women in industry, government, and academia, and coordination of internship and externship placement information. An important part of our intervention will be to have mentors available to students and also to present students with role models of women achievers in math and science.

Information on being speakers, mentors, and role models: Director Dr. Ellen F. Mappen, Women's Studies, Douglass College, New Brunswick, NJ 08903. Phone: (201) 932-9197.

AAALAC Appoints Executive Director

The American Association for Accreditation of Laboratory Animal Care announces the appointment of Albert E. New, D.V.M., as Executive Director of AAALAC, effective October 1, 1986. Plans for the Association to move to the headquarters building of the Federation of American Societies for Experimental Biology, 9650 Rockville Pike, Bethesda, MD, are underway, and Dr. New will be in residence there.

USOC Conference on Sports Medicine/Science for Disabled Athletes

The U.S. Olympic Committee's Committee on Sports for the Disabled has announced plans to hold a conference on sports medicine and sports science for disabled athletes on March 26-28, 1987, in the Mt. Washington Valley Resort Area, New Hampshire, adjacent to the National Handicapped Sport and Recreation Association's National Championships. The conference is intended to educate those who work with disabled persons about recreational and competitive sports opportunities for disabled persons and to provide information about significant sports medicine and science practices and concepts and their application to athletes with a wide range of disabilities. A call for papers has been issued; deadline for receipt of abstracts is December 1, 1986. Information: Mary Margaret Newsom, U.S. Olympic Committee, Department of Education Services, 1750 East Boulder Street, Colorado Springs, CO 80909-5760. Phone: (303) 578-4546.

Availability of Request for Applications

The Division of Lung Diseases of the National Heart, Lung, and Blood Institute invites grant applications for a single competition for support of research on the role of neurochemicals in the control of respiration in health and disease.

The main purpose of this special grant program is to stimulate new and innovative basic research directed at identifying the endogenous neurochemicals and hormones that act to control breathing, mapping their cellular networks, elucidating their actions, and the mechanisms by which they work. Among the disciplines and expertise that may be appropriate for this research program are respiratory physiology, neurobiology, molecular biology, neuroanatomy, biochemistry, endocrinology, and pharmacology.

A letter of intent is requested by December 15, 1986; the deadline for receipt of applications is March 16, 1987. Awards in connection with this announcement will be made to foreign institutions only for research of very unusual merit, need, and promise, and in accordance with Public Health Service policy governing such awards.

Requests for copies of this RFA should be addressed to James P. Kiley, Ph.D., Structure and Function Branch, Division of Lung Diseases, NHLBI, 5333 Westbard Avenue, Room 6A07, Bethesda, MD 20892. Phone: (301) 496-7171.

Cerebral Hypoxia and Stroke

A satellite symposium on Cerebral Hypoxia and Stroke: Reversible and Irreversible Effects and Their Prevention is planned for August 1987 in Budapest, Hungary after the 2nd World Congress of Neuroscience. Information: G. Somjen, Dept. of Physiology, Duke University Medical Center, Durham, NC 27710.

Joint Meeting on Cellular Dynamics

The European Club for Muscle and Motility and the European Cytoskeletal Club will hold a joint meeting on Cellular Dynamics on August 30-September 2, 1987, at Kibbutz Ayelet Hashahar, Galilee, Israel. Tentative topics to be discussed include the molecular basis for mechanochemical processes in living cells, the assembly and interactions of cytoskeletal and contractile systems, molecular and structural dynamics of the cytoskeleton (cell cycle, cell communication, intracellular transport), muscle contraction and its regulation, genetic and developmental aspects of cytoskeletal and contractile elements, and pathological modulation of contractile and cytoskeletal systems. Information: A. Oplatka, Dept. of Polymer Research, The Weizmann Institute of Science, Rehovot, Israel. Telex: 361900. Phone: 08-483362.

Conference on Noise in Physical Systems

The Ninth International Conference on Noise in Physical Systems is planned for May 25-29, 1987, at the Université de Montréal. The conference will include fluctuations in biological systems and membranes and will be the 5th in the series of conferences on 1/f noise. The fundamental aspects of noise, such as physical and biological transport problems, links to statistical mechanics and stochastic processes, as well as the important implications of noise in modern electronic devices and other physical systems, will be considered. Papers are being requested; extended abstracts must be received by January 10, 1987. Information: Dr. Carolyn Van Vliet, 9th International Conference on Noise in Physical Systems, Centre de Recherches Mathématiques, Université de Montréal, C.P. 6128, Succ. "A", Montréal (Québec) Canada H3C 3J7.

LSRO Releases Report on Neurotoxicity and Behavioral Dysfunction

Under the terms of a contract with the Food and Drug Administration (FDA), the Life Sciences Research Office (LSRO), Federation of American Societies for Experimental Biology (FASEB) has completed a study examining the scientific issues related to neurotoxicity and behavioral dysfunction. The LSRO report entitled "Predicting Neurotoxicity and Behavioral Dysfunction from Preclinical Toxicologic Data" presents seven commissioned symposium papers and the views and opinions of an LSRO ad hoc expert panel. It reviews the availability of neurotoxicity data from conventional applied toxicology testing and identifies additional screening and research needs for improving the reliability and comprehensiveness of the prediction of such effects in humans. Copies of the report may be purchased (\$25 per copy postpaid) from the FASEB Special Publications Office, 9650 Rockville Pike, Bethesda, MD 20814.

PEOPLE AND PLACES . . .

R. Kent Hermismeyer, Ph.D., Professor of Pharmacology, University of Iowa, has been appointed Chair of the Department of Physiology, University of Nevada. An APS member since 1972, Dr. Hermismeyer was awarded the Bowditch Lecture in 1982.

APS member **Roger A. Davis**, Ph.D., Professor of Physiology at Louisiana State University, has been appointed Professor of Medicine and Physiology at the University of Colorado.

C. Kern Wildenthal, M.D., Ph.D., has been named President of the University of Texas Health Science Center at Dallas. Dr. Wildenthal, formerly Dean of the Southwestern Medical School, University of Texas at Dallas, has been a member of the Society since 1971.

APS member **Edward H. Blaine**, Ph.D., has moved from Merck Institute for Therapeutic Research to Searle Research and Development Division of G. D. Searle & Co. as Director of Cardiovascular Pharmacology. A member since 1975, Dr. Blaine has been very active in Society activities.

Harvey Sybers, M.D., Ph.D., Professor of Pathology and Laboratory Medicine at the University of Texas Medical School at Houston, is the recipient of the 1986 John Freeman Faculty Teaching Award, which is given annually to the outstanding basic science faculty member by the senior class. Dr. Sybers was elected to APS membership in 1973.

M. Elizabeth Tidball, Professor of Physiology at the George Washington University Medical Center, was recently awarded her


15th honorary degree, a Doctor of Science, from St. Mary-of-the-Woods College in Indiana. An APS member since 1962, she chaired the Task Force on Women in Physiology.



Juha P. Kokko, M.D., Ph.D., has been named Chair of the Department of Medicine, Emory University, effective September 1. Dr. Kokko, Former Professor of Internal Medicine and Chief of Nephrology at the University of Texas Health Science Center at Dallas, has been a member since 1973.

Edward Taub, APS member since 1971, has accepted a position as Professor of Psychology at the University of Alabama, Birmingham.

David H. Cohen assumed the post of Vice President for Research and Dean of the Graduate School at Northwestern University, effective September 1. He will also hold professorships in the Department of Neurobiology and Physiology in the College of Arts and Sciences and in the Department of Physiology in the School of Medicine. Dr. Cohen was elected to Society membership in 1969.

APS member **Francis J. Klocke**, Professor of Medicine at the State University of New York at Buffalo, has been named President-elect of the American College of Cardiology. 

OPINION

To the Editor

The many recent articles and editorials in *The Physiologist* [most recently *The Physiologist* 29(3): 43-44, 1986], FASEB newsletters, *Federation Proceedings*, and elsewhere on the animal rights movement have been largely concerned with the threat this movement poses to research in the biological sciences. This is important, but insufficient by itself. Many laymen are hostile or indifferent to science. Others believe, beyond all arguments to the contrary, that computers can replace animals. I propose the following two additional measures against the animal rights movement—one a most reasonable proposal, one an argument.

We should propose that laws prohibiting pounds from releasing animals for any purpose other than pet adoption should also prohibit pounds from killing animals in their possession. Many laymen do not know that unplaced animals are routinely destroyed. They support these laws because they are against killing animals (read dogs and cats), not because they are opposed to research. Those animal rights advocates, who are not so much for animals as against science, as shown by their willingness to allow pounds to destroy unwanted animals, will be given the choice of revealing their true purpose by opposing this restriction while still favoring such laws, of abandoning their advocacy of such laws, or of accepting the overcrowded pounds and shortage of facilities for stray pets that will follow passage of laws with this restriction.

We should emphasize the need for animals in the education of physicians and surgeons. The animal rights advocate, who blithely proclaims that the use of animals is unnecessary and immoral, may be silenced by the prospect of being operated on by a surgeon with no prior experience with living tissue.

Stephen R. Cohen
New York State
Institute for Basic Research

BOOKS RECEIVED

Acid-Base Regulation in Animals. N. Heisler (Editor). Amsterdam: Elsevier, 1986, 492 pp., illus., index, \$129.75.

Diabetes and Pregnancy. Teratology, Toxicity and Treatment. L. Jovanovic, C. M. Peterson, and K. Fuhrmann (Editors). New York: Praeger, 1986, 440 pp. illus., index, \$72.50.

Diagnostic Microbiology. S. M. Finegold and E. J. Baron. St. Louis, MO: Mosby, 1986, 914 pp., illus., index.

Digestion and the Structure and Function of the Gut. D. F. Magee and A. F. Dalley II. Basel: Karger, 1986, 359 pp., illus., index, \$63.00.

Embryogenesis in Angiosperms. A Developmental and Experimental Study. V. Raghavan. New York: Cambridge University Press, 1986, 303 pp., illus., index, \$39.50.


Exercise and Sport Sciences Reviews. Volume 14. K. B. Pandolf (Editor). New York: Macmillan, 1986, 457 pp., illus., index, \$39.95.

Feedback and Motor Control in Invertebrates and Vertebrates. W. J. P. Barnes and M. H. Gladden (Editors). New Hampshire: Croom Helm, 1986, 496 pp., illus., index, \$69.00.

Molecular Cell Biology. J. Darnell, H. Lodish, and D. Baltimore. New York: Freeman, 1986, 1187 pp., illus., index, \$42.95.

Neuromethods. 4. Receptor Binding. A. A. Boulton, G. B. Baker, and P. D. Hrdina (Editors). Clifton, New Jersey: Humana, 1986, 576 pp., illus., index, \$64.50.

Recent Achievements in Restorative Neurology. 2. Progressive Neuromuscular Diseases. M. R. Dimitrijevic, B. A. Kakulas, and G. Vrbova (Editors). Basel: Karger, 1986, 360 pp., illus., index, \$155.00.

Stress and Anxiety, Vol. 10. A Sourcebook of Theory and Research. C. D. Spielberger and I. G. Sarason (Editors). New York: Hemisphere, 1986, 494 pp., illus., index. 

This publication is available
in microform from University
Microfilms International.

Call toll-free 800-521-3044. Or mail inquiry to:
University Microfilms International, 300 North
Zeeb Road, Ann Arbor, MI 48106.



1887-1987

Centennial Update

By now, nearly everyone knows that the highlight of the APS Centennial year will be the celebration in Washington, DC, March 29 to April 3, 1987. The Federation of American Societies for Experimental Biology (FASEB), which is also celebrating a birthday in 1987—its 75th, is lending a large hand in making the Centennial a success. One of FASEB's contributions has been the adoption of the American Physiological Society's theme for the week-long meeting: A Century of Progress. Symposia and special lectures will develop this theme; penetrating reviews will examine the growth of ideas and techniques and the new horizons in physiology will be explored. Exhibits and demonstrations will round out the picture. The constituent societies of the Federation will also reflect on their own origins as offshoots of the American Physiological Society, emphasizing the shared underpinnings of the biological sciences and the continuing interplay of the societies.

In honor of the founders of the American Physiological Society, the week in Washington has been designated as Founders Week. In recognition of the fact that the celebration was dedicated not only to a look backward but to a look ahead, a Second Century Founders Program has been created. Funds contributed to this program will be devoted primarily to support the educational and scientific programs planned as part of the Centennial Celebration. In the brief period since this program was launched, members have contributed more than \$24,000 to the fund.

Memorabilia are an essential part of a centennial celebration. A Centennial medallion has been cast. One side features the faces of the five founders; the other carries the Centennial logo. The medallion is very attractive and has already generated great interest among collectors and those interested in a souvenir of the Centennial Celebration. Other memorabilia are

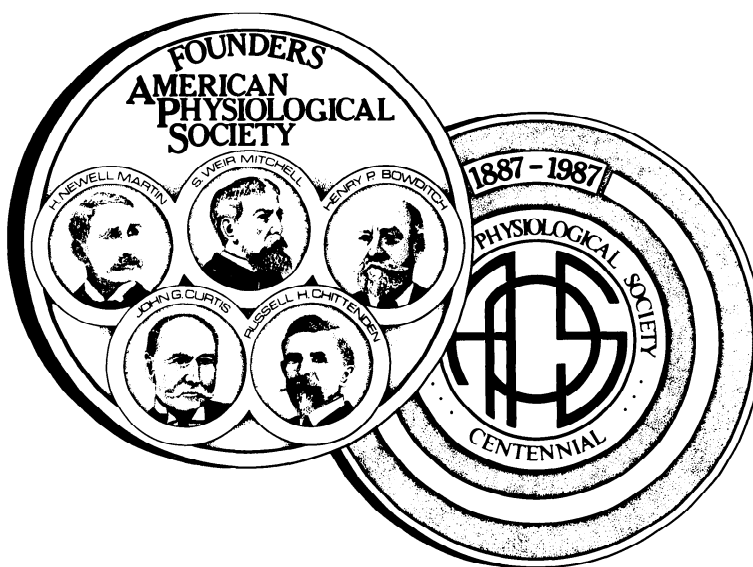
being produced. Among these are a plate, cup, and a tile with the logo. The prices of these items will be modest.

All members of the American Physiological Society will receive a copy of the Society's Centennial history, edited by John Brobeck and Orr Reynolds. In addition, the Society will offer for sale an historical volume, edited by Gerald Geison, on physiology in the American context, 1850-1940, based on a workshop sponsored by the American Physiological Society and held at the National Library of Medicine in January 1986. Finally, FASEB and each of its constituent societies are cooperating with the American Physiological Society to produce a 32-page illustrated publication on the founding of the American Physiological Society, the Federation societies, and the Federation. FASEB plans to publish this material in *Federation Proceedings* immediately before the meeting and a free reprint will be made available to everyone attending the Founders Week meeting in Washington.

It is anticipated that several scholarly, governmental, and industrial organizations will join in honoring the birth of the American Physiological Society through exhibits at the meeting. One notable exhibit in the National Library of Medicine will depict 100 years of physiology.

The many threads that form the fabric of the Centennial Celebration in Washington are coming together. The few loose ends seem to be manageable. The Centennial Committee urges you to mark your calendar so that you may share in this unique occasion.

Please feel free to offer advice or to request clarification by writing to Dr. Alfred P. Fishman, Centennial Celebration Committee, The American Physiological Society, 9650 Rockville Pike, Bethesda, MD 20814.



Know Your Sustaining Associates

American College of Surgeons

The American College of Surgeons is an association of surgeons organized for the primary purpose of improving the quality of care for the surgical patient by elevating the standards of surgical education and practice. In the pursuit of its goals for seven decades, it has profoundly influenced the course of scientific surgery in America.

The College has been a pioneer in establishing a nationwide program for hospital accreditation, in developing standards for the training of surgical residents, in setting guidelines for a high level of pre-operative and postoperative care, and in organizing the resources of surgery in a major effort to improve the care of the critically injured accident victim and the patient with cancer.

Moreover, since its founding in 1913 the college has continuously and publicly denounced fee splitting, unjustified operations, itinerant surgery, and other practices detrimental to the welfare of patients and the public and has made adherence to its principles of surgical ethics a condition for obtaining and maintaining Fellowship.

The American Medical Association

The American Medical Association promotes the art and science of medicine and the betterment of public health. The AMA accomplishes this mission by advancing standards of medical education, promoting support for biomedical research, representing the medical profession, providing information about medical matters, and upholding professional conduct and performance.

Coulbourn Instruments

Coulbourn Instruments, Inc. manufactures electronic instruments for in vivo life science applications. Products include the LabLinc Modular Instrument System for physiological signal conditioning, experiment control, and data acquisition, featuring over 100 modules, including computer interface ports, signal conditioning and processing, and counting and timing modules for chart and computer-based polygraphs.

The company also produces transducers, biotelemetry, signal processors, stimulators, and auditory and animal behavior test equipment.

Major markets include pharmaceutical, chemical, and biotechnological firms, universities, research hospitals, and government laboratories.

Dagan Corporation

Dagan Corporation manufactures electronic instruments used in electrophysiology. Dagan offers a full line of analog and digital products, including preamplifiers for use in intracellular and extracellular recording, single and two electrode voltage/current clamps, patch clamps/whole-cell clamps, signal averagers, programmable multichannel stimulators, and iontophoresis generators.

Harvard Apparatus

Harvard Apparatus, since its inception in 1904 at the Harvard Medical School, continues to design, develop, and study the unique apparatus that has shaped the development of teaching and research in physiology and allied science, including syringe peristaltic and respiration pumps, recording systems, and research accessories.

Medtronic

Medtronic, for a quarter century the world's leading implantable medical device company, today serves a broad cardiovascular marketplace. Growing capabilities in screening, diagnosis, and follow-up care now complement established therapeutics businesses such as heart pacemakers and valves. Also, for over a decade Medtronic has applied expertise in the electrical functions of the body to neurological stimulation products.

Merrell Dow Research Institute

Merrell Dow Research Institute, with centers in four countries and headquarters in Cincinnati, OH, is an interdisciplinary institution engaged in both basic and applied biomedical research. The institute identifies new targets and molecules that may be suitable for pharmacological intervention with an ultimate goal of developing new therapeutic agents.

Narco Bio-Systems

Narco Bio-Systems designs, manufactures, and distributes the Physiograph® physiological recording systems for use in clinical, research, and teaching applications. A selection of multichannel chart recorders are available with a complete line of modular input preamplifiers, signal conditioners, transducers, and accessories. This allows maximum flexibility to design your own system for recording physiological functions.

Schering-Plough

Born out of a 1971 consolidation of two companies—Plough, Inc. and the Schering Corporation—Schering-Plough is dedicated to the discovery, development, and marketing of novel therapeutic entities. The company focused its research in the fields of anti-inflammatory, antiallergic, cardiovascular, and anti-infective disorders. The company has also attained a leading position in immunology and recombinant DNA technology.

Stuart Pharmaceuticals

Stuart Pharmaceuticals, division of ICI Americas, Inc., is one of the youngest research-based companies, founded in Pasadena, CA, in 1941.

Now headquartered in Wilmington, Delaware, Stuart is linked to the worldwide pharmaceutical research efforts of Imperial Chemical Industries, PLC, of London, with which it merged in 1972. These efforts have produced some of today's most important therapeutic agents such as the principal β -blocker for cardiovascular disease, the most widely prescribed single agent for breast cancer, and the leading antiseptic used in hospitals.

Current research promises to yield innovative products for infectious disease, anesthesia, heart disease, cancer, and diabetes.

The Upjohn Company

The Upjohn Company, a multinational corporation headquartered in Kalamazoo, MI, is celebrating its centennial year as a maker of fine pharmaceuticals. It is one of the 15 largest research-based pharmaceutical manufacturers in the world. It has research, production, and warehousing facilities in more than 45 countries and its products are sold in more than 150 countries.

Upjohn has long been committed to the research, development, manufacture, and marketing of pharmaceuticals. Human health care is the heart of Upjohn's endeavors.

Waverly Press, Inc.

Waverly Press, Inc., are printers of magazines and journals for the association marketplace.

Committed to servicing their customers through sharing knowledge, providing the best in modern technology, and establishing mutual respect, they offer full-range publishing services including design, editorial,

(Continued on p. 204)

APS Sustaining Associate Members

The Society gratefully acknowledges the contributions received from Sustaining Associate Members in support of the Society's goals and objectives.



Abbott Laboratories
American College of Surgeons
American Critical Care
American Medical Association
Boehringer Ingelheim
Burroughs Wellcome Company
Ciba-Geigy Corporation
Coulbourn Instruments, Inc.
Dagan Corporation
E. I. du Pont de Nemours
& Company
Grass Instrument Company

Harvard Apparatus
Hoechst-Roussel Pharmaceuticals, Inc.
* Hoffman-La Roche, Inc.
Lederle Laboratories
Lilly Research Laboratories
Marion Laboratories, Inc.
McNeil Laboratories
Merrell Dow Industries
* Merck & Co., Inc.
Medtronic, Inc.
Miles Institute for Preclinical
Pharmacology

NARCO Bio-Systems
Pfizer, Inc.
Revlon Health Care Group
Pillsbury Corporation
A. H. Robins Company
Sandoz, Inc.
* Schering Corporation
G. D. Searle and Company
* Squibb Corporation
Stuart Pharmaceuticals
* The Upjohn Company
Waverly Press, Inc.
Wyeth Laboratories

* Second Century Corporate Founders

KNOW YOUR SUSTAINING ASSOCIATES

(Continued from p. 203)

torial, composition, printing, binding, mailing, warehousing, subscription fulfillment, and ad sales.

Waverly practices team-concept management. Both client and staff are part of the team. Through this management concept each publication receives close personal attention.

Striving for excellence in the graphic arts industry is traditional at Waverly—one that continues. They believe in quality product and service through quality people. ☛

Positions Available

There is a \$25 charge per issue for each position listed. A check or money order payable to the American Physiological Society must accompany the copy. Purchase orders will not be accepted unless accompanied by payment. Ads not prepaid will not be printed. Copy must be typed double-spaced and limited to 150 words. All copy is subject to the editorial policy of *The Physiologist*. EOAAE indicates Equal Opportunity/Affirmative Action Employer and appears only where given on original copy. Copy deadline: copy must reach the APS office before the 15th of the month, 2 months preceding the month of issue (e.g., before December 15 for the February 1986 issue). Mail copy to APS, 9650 Rockville, Pike, Bethesda, MD 20814.

Second-Century Corporate Founders

As it enters its second century, the American Physiological Society is in the process of raising an endowment fund for scientific program development designed to foster vigorous and varied interactions between research scientists in the industrial sphere and those in academic institutions. Since 1887, when the Society was founded, APS has been devoted to fostering basic and applied scientific research, to education, and to the dissemination of scientific information. For APS to continue these activities into its second century, Norman Marshall, Chairman of the Liaison with Industry Committee, developed the concept of the endowment fund. After extensive discussion, the Society recruited a steering committee consisting of Theodore Cooper, Philip Felig, Robert Furman, Charles Sanders, Howard Morgan, Norman Marshall, and Martin Frank. The steering committee's charge has been to raise the first \$250,000 of a projected \$1,000,000 endowment fund.

The endowment fund provides the mechanism for the equitable distribution of resources to symposia organizers. Currently, the Society is unable to allocate sufficient resources to meet the needs of the program organizers seeking to attract prominent and key scientists as participants in their symposia. Thanks to the creativity of our symposia organizers and the generosity of corporations, the Society has been able to develop and program many outstanding symposia. However, repeated requests to corporations for contributions is frustrating to all parties. Thus, the pur-

pose of the APS Program Endowment Fund is to raise sufficient resources from corporate and industrial sources, with matching funds from APS, to stabilize the Society's program activities and limit the need for numerous yearly requests to the same corporations to fund multiple symposia.

To convince corporations that their contribution to the endowment fund would eliminate multiple requests for symposia support, the Society has guaranteed companies making a significant contribution that no further requests would be authorized by APS. This has been accomplished by requesting that all symposia organizers work directly with the Executive Secretary-Treasurer to coordinate fund-raising activities.

The Society is pleased to announce that the concept of an endowment fund has been favorably received by a number of corporations. Corporations making significant contributions to the endowment fund will be identified as Second Century Corporate Founders in the box listing APS Sustaining Associates and duly recognized at the Centennial Meeting. To date, the Society is pleased to thank Hoffman-La Roche, Inc., Merck and Co., Inc., Schering Corporation, Squibb Corporation, and Upjohn Company for their contributions to the Second-Century Corporate Founders Program Endowment Fund. Their support of the endowment fund will assist the Society in its efforts to maintain a vigorous scientific program during its "second century of progress."