

standing of science.

AAAS members in the greater San Francisco Bay area will receive a \$5 discount on individual and family membership at The Exploratorium, a museum of science, art, and human perception that has attained an international reputation for its unusual exhibits. Membership includes free admission, a subscription to the award-winning *Exploratorium Quarterly* magazine, discounts on purchases at the Exploratorium Store, free admission to 60 science museums around the country and overseas, and reserved hours and discounted admission for the famous *Tactile Dome*, a dark labyrinth of adventure where only your sense of touch guides you.

AAAS members in the greater Philadelphia area will receive a 15 percent discount on membership at The Franklin Institute, the nation's first science museum, which is still new and changing. The Franklin Institute offers four floors of exhibits, including new exhibits on mechanics, optics, aviation, and computers, as well as a planetarium which is one of the most advanced facilities in the country. Membership includes unlimited free admission to the museum and planetarium; subscription to two publications, *Events* and *The Franklin Institute News*; discounts on workshops, computer courses, and Museum Store purchases; reciprocal free admission to other outstanding science museums across the na-

tion; invitations to special lectures, trips, previews, and more.

The Pacific Science Center is offering a 10 percent discount to AAAS members in the Pacific Northwest. This six-building complex, originally designed as the U.S. Pavillion for the 1962 World's Fair, includes more than 50,000 square feet of exhibition space containing more than 200 "hands-on" exhibits that stimulate the senses, mind, and imagination. Membership includes a full year of unlimited admission, guest privileges, free passes to each new IMAX feature film, and many other benefits including travel opportunities, a monthly newsletter, and exclusive member events.

Chicago area members continue to receive a 10 percent discount on membership at The Chicago Museum of Science and Industry, one of the nation's oldest and largest science museums. Membership includes free admission to all the special exhibits; vouchers for each Omnimax Theatre presentation; discounts on educational programs and Museum Store purchases; special invitations to previews and events; and a subscription to the museum's *Progress* magazine.

Members in all of these cities should be on the lookout for more information coming in the mail this month. Or, contact the Membership Department at your local science museum for further details.

AAAS is working to extend

this new museum benefit to many other science and technology centers around the nation. Watch "AAAS News" for further announcements.

MARLENE ZENDELL
Membership Office

Call for Nominations, 1988 General Election

The Committee on Nominations will meet this fall to select candidates for the 1988 election. The Committee invites AAAS members to submit nominations, including self-nominations, for the positions of President-Elect and members of the Board of Directors.

Current Board members are listed on the contents page of *Science*. Candidates for terms to start on 16 February 1988 are listed in the 5 June 1987 issue.

Nominations should be sent to Marge White at the AAAS Executive Office no later than 2 October 1987. Each nomination must be accompanied by a curriculum vitae of the proposed candidate.

Science and Art Program—An Update

The AAAS Science and Art Program was established in 1985 when the Association moved to its new headquarters building. The program is dedi-

cated to presenting to the AAAS community and the general public science-related art of all kinds. Its goal is to display work that reflects the interaction of science and art in both contemporary art and historical materials.

Currently on display at AAAS (15 July to 12 September) is a photography collection entitled "Faces of Our People: Nicaragua and West Virginia." The show, by photographer Ric MacDowell, features photographs of the peoples of West Virginia and Nicaragua. Also at AAAS (from 6 August to 30 October) is an exhibition of scientific illustrations. This is the second year that AAAS has shown works by members of the Guild of Natural Science Illustrators. Subjects range from fossil remains to the frontiers of space.

A recent exhibit was "The Sculpture of Dickson Carroll," (19 May to 10 July). Carroll's show ranged from sculptural furniture and architectural models for fantasy structures to a wall mobile alluding to the world of music.

Coming later this month (22 September to 1 December) will be "The Layering of Elements: Sculpture in Stone and Glass by Jerry Carter." Working with the materials of the traditional mosaicist, Carter creates modern sculpture that is concerned with 20th-century concepts. In his three-dimensional works, undulating surfaces and glass tesserae

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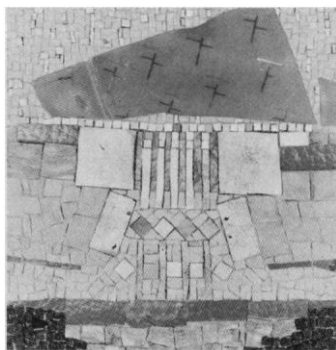
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For more information about the activities and publications described in "AAAS News," write to the appropriate office, AAAS, 1333 H Street, NW, Washington, D.C. 20005, unless otherwise indicated.



"Amun" by Jerry Carter. Carter's work will be on display at the AAAS from 22 September to 1 December 1987.

are used to create optical effects. Light is reflected and refracted by metallic and glass surfaces creating a rich tapestry of myriad appearances.

Exhibitions at the AAAS are open to the public during business hours, Monday through Friday. AAAS members especially are encouraged to stop by the Association headquarters and participate in the Science and Art Program. If you would like more information about the program, contact Virginia W. Stern, Science and Art Program, at the AAAS address.

New Frontiers of Science Lecture Series Announced

Deciphering the code for human life . . . creating machines that read, speak, and think . . . unlocking the mysteries of the brain . . . developing the technology for levitating trains and superspeed computers . . . unearthing the origins of humankind . . . building a tunnel the size of the Capital Beltway to better understand the creation of the universe.

Six leading scientists will report on some of the most exciting and significant areas of current research in a lecture series on *New Frontiers of Science*, organized by AAAS and offered in cooperation with the Smithsonian Institution Resident Asso-

ciate Program. The lecture series is being offered at a discount to AAAS members.

The lectures will be held on Thursdays, 22 October through 3 December 1987, 6:00 to 7:30 p.m. at the Smithsonian Institution in Washington, D.C.

Speakers and their topics are:

■ 22 October. *Mapping and Sequencing the Human Genome*—Walter Gilbert, Nobel laureate, molecular biologist, Harvard University, discusses how new technologies are making it possible to decipher and literally write out the directions for human life contained in every cell, and the massive implications of undertaking this project.

■ 29 October. *Early Humans: Evolution or Revolution*—Alan Walker, paleoanthropologist, Johns Hopkins University, discusses recent human fossil discoveries that could lead to a new view of the pattern of human evolution.

■ 5 November. *Superconductors*—IBM physicist Paul Grant describes fast-breaking advances in superconductors, new materials that could change our world.

■ 12 November. *Chemical Basis of Behavior*—Candace Pert, neuroscientist, National Institute of Mental Health, and discoverer of peptide T, explains how this and other brain chemicals are allowing scientists to track the origins of some of our most basic drives and behaviors.

■ 19 November. *What Is the Universe Made of?*—Leon M. Lederman, director, Fermi National Accelerator Laboratory, describes how new advances in high-energy physics are helping to explain how the universe works and considers the impact of the proposed Superconducting Super Collider (SSC) on this work.

■ 3 December. *The Future of Intelligence: Can Computers Think?*—Marvin Minsky, professor, Massachusetts Institute of Technology, and a leading expert in computers, robotics, and artificial intelligence, explores the world of artificial in-

telligence—if computers can handle complex, specialized problems, why can't they solve simple, everyday problems?

Alvin W. Trivelpiece, AAAS Executive Officer, will introduce the lecture series, which was developed with the assistance of David Challinor, assistant secretary for research, Smithsonian Institution; Mary E. Clutter, senior science adviser, National Science Foundation and AAAS Board member; Carol L. Rogers, head, AAAS Office of Communications and Membership; Rolf Sinclair, program director, Atomic, Molecular, and Plasma Physics, National Science Foundation, and secretary, Section B (Physics), AAAS; and Albert H. Teich, head, AAAS Office of Public Sector Programs.

The registration fee for the series is \$62 for AAAS members and Smithsonian Institution Resident Associate Program members, \$92 for nonmembers. AAAS members wishing to attend should call the Smithsonian Institution Resident Associate Program at 202-357-3030 by 1 October 1987. Be sure to identify yourself as a AAAS member.

Symposium to Address Expected Shortfall of Scientists and Engineers

A symposium on the "Competition for Human Resources in Science and Engineering in 1990–95" will examine the likelihood of a "critical shortage" of quality scientists and engineers, as well as of science, mathematics, and engineering teachers and faculty in the mid-1990s. The symposium, organized by the Commission on Professionals in Science and Technology (CPST), will be held 11 and 12 October 1987 at the Washington Hilton Hotel in Washington, D.C.

The symptoms of the problem are evident already. At least a third of all high school science

and math classes in the United States are now staffed by teachers unqualified in these fields.

Half of all engineering faculty under the age of 35 in U.S. universities are foreign nationals, and a fourth of them are on temporary visas. Nearly half of all U.S. doctoral engineering faculty members are over the age of 50.

The demand for top quality professionals by all employment sectors is expected to continue to expand in the 1990s, while the supply is moving downward. The CPST symposium will examine what, if anything, can be done to avert a serious imbalance.

Noted scholar and demographer Harold Hodgkinson of the American Council on Education will be the keynote speaker at the symposium addressing "Demographic Imperatives for Science" on Sunday evening, 11 October.

On 12 October, a morning session will address the threatened shortfall in the quality and quantity of science and engineering professionals, teachers, and faculty. Panelists representing all levels of education, from precollege to graduate, will discuss the training of scientists and engineers, while representatives from industry and defense will provide a preview of what promises to be a highly competitive job market for these people.

An afternoon panel will attempt to reconcile the competing supply-demand forces, seeking an agenda for action now.

The cost of the symposium for those who preregister is \$120 for Commission members and \$185 for nonmembers. Registration forms and further information is available from CPST at 1500 Massachusetts Avenue, NW, Suite 831, Washington, D.C. 20005, or call 202-223-6995. CPST is a participating organization of AAAS.

ELEANOR L. BABCO
BETTY M. VETTER
*Commission on Professionals in
Science and Technology*