

Asia-Pacific Leaders Seek S&T Unity

In a private meeting last month with AAAS officials and scientific leaders from Asia-Pacific countries, Chinese Premier Li Peng stressed the importance of science and technology (S&T) in solving problems his country is facing during rapid economic growth. Noting that China's economy is expected to grow at a rate of 7 to 8% a year into the next century, Li said the biggest issue now is how to feed 22% of the world's population with only 7% of the total arable land.

The dialogue with Li was led by AAAS Board Chair Rita Colwell, who was in Beijing as cochair of a regional conference of 35 science and technology leaders from industry, academia, and government, held 22 to 24 April. She and Richard Getzinger, head of the AAAS Directorate for International Programs, summarized

the meeting with Li in an interim conference report.

According to the report, other areas of advanced technology that Li cited as critical to progress in China were modern telecommunications, information networks, and methods for better prediction of natural disasters such as flooding and typhoons. He ended the 45-min meeting by calling for "increased regional cooperation on science and technology issues on the basis of equality and mutual respect."

Getzinger said initial cooperative S&T efforts in the region are likely to be in three areas identified by the conferees: the environment, sustainable development, and hazard mitigation; agriculture, population, and health; and information technology and communications, and technology transfer.

The participants unanimously proposed the creation of a non-governmental organization to coordinate regional S&T activities. The China Association for Science and Technology (CAST), which cosponsored the conference with AAAS, was asked to set up an interim Secretariat. "The principal feeling was this should not be a one-time event but should be a continuing forum to help governments understand what things need to be done," Getzinger said. It

was suggested the group could serve as advisers to Asia-Pacific Economic Conference (APEC) ministers on S&T issues, he added.

Countries attending were Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Russia (Far East), Singapore,

the United States, and Vietnam. Follow-up sessions are planned.

For more information, call 202-326-6650 or send a message to rgetzing@aaas.org.

(The text of Li's remarks is available on the AAAS Web site at <http://www.aaas.org/international/lipeng.htm>.)

Sparking a Thirst for Science

In an innovative summer program now in its 10th year, thousands of children in the greater Philadelphia area will soon flock to neighborhood libraries to discover the excitement of doing science experiments using sophisticated microscopes and other real lab equipment.

The program, "Science in the Summer," is sponsored by the SmithKline Beecham Foundation, which has formed an alliance with AAAS to administer the program. Yolanda George, deputy director of the AAAS Directorate for Education and Human Resources Programs, said it fits well with a host of AAAS community-based science education programs. "Our nation's libraries are a vital community resource that is greatly underutilized as a creative setting for providing children with opportunities for learning science," she said.

"Science in the Summer" was conceived and developed by chemist Virginia L. Cunningham of SmithKline Beecham, a leading health care company. In June and July, the popular program will reach 5000 children at 98 libraries. "What I find so astounding," Cunningham said, "is that it's not a lot of exposure—only 45 minutes four times a week—but it seems to satisfy their thirst and open doors. Maybe because it's in a setting that's less intimidating than school, and the kids bring a whole different attitude to it."

The children don gloves, safety glasses, and lab aprons for experiments that include preparing slides and observing fossils or cells under a microscope. "There are no labs

for grade school science, yet that's what makes science so much fun, and compensates for the grunt



GEORGE TATE

Library learning. "Science in the Summer" exposes thousands of children to Science experiments.

work in the textbooks," said Cunningham, a director in SmithKline Beecham's Corporate Environment and Safety Department.



Virginia Cunningham

Children can choose from five courses in bioscience, physical science/electricity, oceanography, paleontology, and "dream machines" (covering gears, levers, gravity, and inertia). The courses, designed for students entering grades 2 and 3 and grades 4 to 6, are taught by certified science teachers.

Cunningham said the idea for "Science in the Summer" came during a 1986 conversation with a community librarian "who was looking for creative programming ideas." SmithKline Beecham, which was seeking ways of nurturing interest in science and engineering among students, especially girls and minorities, funded the pilot program.

For information, contact program manager Stephanie Jensen at 202-326-6681 or send a message to sjensen@aaas.org.



Talks in Beijing. Zhuang Fenggan, CAST vice president, and Rita Colwell, AAAS Board chair, met with Chinese Premier Li Peng.

Call for Papers on Health Care Errors

A coalition of AAAS and several partner groups is seeking proposals for oral presentations and sessions for a conference next fall on errors in health care and how to prevent them.

The conference, set for 13 to 15 October in Rancho Mirage, California, is being organized by AAAS, the American Medical Association, the Joint Commission on Accreditation of Healthcare Organizations, and the Annenberg Center for Health Sciences. Cosponsors are the American Hospital Association and The Robert Wood Johnson Foundation.

Topics will include diagnosing and measuring errors, identifying factors that contribute to them, and strategies for prevention. Proposals must include: i) a summary (up to 1,000 words) of the proposed discussion or session, with bibliographic references and ii) a brief resume or biographical sketch. Applications are due 1 July. Successful applicants will be notified by 16 August, and expenses to attend the conference will be paid. Send proposals by fax to 202-289-4950; by e-mail to drunkle@aaas.org; or by mail to Deborah Runkle, AAAS, 1200 New York Avenue, NW, Washington, DC 20005.

AAAS Launches On-Line Service for Research News

AAAS last week unveiled a Web site designed to provide "one-stop shopping" for research news from around the world. Called EurekAlert!, it was developed by the News and Information Office as a way to use cyberspace in support of the Association's mission of furthering public understanding of science.

After registering, universities, corporations, and nonprofit organizations can post news releases announcing scientific discoveries and research advances. EurekAlert! organizes the material and provides links to the full text, which is housed at the institutions' own Web sites. There are links to other resources, such as the on-line science and technology pages of newspapers and broadcast services.

The primary audiences for EurekAlert!, according to its creators, are science journalists, the research community, and the public. Access is free to any Internet user through a home page (<http://www.eurekalert.org>), but institutions will be charged a fee for posting information.

Richard S. Nicholson, executive director of AAAS and the publisher of *Science*, said EurekAlert! will be a valuable dissemination tool for the scientific community and a major resource

for the media and the public. "It organizes an enormous amount of information that's been scattered in the past, and offers a cost-effective way of reaching new and wider audiences," he said.

Public-Service Aim

Nan Broadbent, the project manager for EurekAlert! and director of the News and Information Office, said posting fees, which go into effect in October, will fund operating costs. The rates have not been set, she said, but "our intent is to keep fees modest, in line with the nonprofit status of AAAS and our goal of making the information widely available."

Initial support for the project came from AAAS and charter sponsors Genentech, Inc., and Monsanto. Sun Microsystems donated equipment for the technical operations, which are based at Stanford University. Tim Torgren, who heads Stanford's Distributed Computing Group, is the chief technical adviser (torg@stanford.edu). AAAS communications officer Lisa Schmeiser is the Webmaster (webmaster@eurekalert.org).

EurekAlert! was designed with the guidance of a 20-member advisory committee of science journalists and public information officers (PIOs) from research or-

ganizations. Also involved early in the planning was the 1800-member National Association of Science Writers.

EurekAlert! has two separate domains: a public-access section and a password-protected area for science journalists containing "embargoed" pre-publication research news. A number of peer-reviewed journals, including *Science*, supply advance information to reporters under embargo policies designed to allow extra time for researching and writing often complex scientific stories. *Astrophysical Journals*, *Proceedings of the National Academy of Sciences*, and *Science* are the first journals offering their advance media material to reporters through EurekAlert!.

The idea behind EurekAlert! was proposed to Broadbent a year ago by Dennis Meredith, head of the Office of Research Communications at Duke University, and David Salisbury, a science writer at the Stanford University News Service. Meredith said it grew out of informal discussions at AAAS annual meetings, when PIOs talked about creating a cooperative electronic service to counter the rising costs of commercial providers and the growing fragmentation of science news.

A "Home" at AAAS

The Internet offered a mechanism for broad dissemination, but access restrictions were needed to maintain the embargo system, which, according to Meredith, many people believe has contributed to an improvement in the overall quality of science reporting. Advances in computer technology made the dual-domain EurekAlert! system feasible.

"AAAS seemed to be the natural home for this service because one of its main missions is

improving the public's understanding of science," Meredith said. "It was also critical that it be done by a nonprofit association, to make it more credible and more affordable," he added.

That credibility is important to both reporters and research universities, noted Earle Holland, associate executive director of communications at Ohio State University. The large volume of science information distributed today by mail, fax, and electronic services, he said, forces reporters to be highly selective—which in turn raises the standards that the information providers must meet.

And EurekAlert! "offers a single location where reporters can go with the assurance of knowing the material meets the criteria they prefer." Holland said the new AAAS service won't replace all other forms of science news delivery for most major research universities, but will become a "primary dissemination point."

Cautioning that the information in EurekAlert! could "metastasize" to a volume that would diminish the system's convenience and usefulness, science reporter Charles Petit of *The San Francisco Chronicle* said limiting the content mainly to up-to-date research advances "will help reduce the amount of junk in the system."

As the use of EurekAlert! grows, many other audiences, such as educators and students, will benefit, Meredith said. He added: "I'm excited most by enormous synergies that are possible. The media, universities, and the public will be able to use the information in ways we can't begin to predict."

For more information, contact Broadbent by phone at 202-326-6440 or by e-mail at nbroadbe@aaas.org.



EurekAlert!

The screenshot shows a web browser window with the URL <http://www.eurekalert.org/E-tert/ourent/mainpage.shtml>. The page features a navigation bar with icons for Back, Forward, Home, Reload, Images, Open, Print, Find, and Stop. Below the navigation bar are several menu items: What's New?, What's Cool?, Handbook, Net Search, Net Directory, and Newsgroups. The main content area is titled "EurekAlert! contents" and includes sections for "Sponsored by:" (listing AAAS, Monsanto, and Stanford University), "Hot News" with a "Disclaimer" link, "News Releases" (organized chronologically or by topic/organization), "Archives" (news releases more than two weeks old), "Search" (search news releases and archives by topic, institution, or date), "Bench Notes" (available only to pre-registered reporters), and "Resource Directory" (listing Journals, Institutions, and Science Media).

Report on 1996 Council Meeting

The following reports were presented at the AAAS Council meeting on 11 February in Baltimore:

Report on Board Actions

AAAS President Rita Colwell presented highlights of Board actions in the past year. She noted that the Board had selected Floyd Bloom as the new editor-in-chief of *Science* and that his vision for electronic enhancements would help to lead the journal into the future.

Colwell talked about AAAS concerns regarding decreased federal funding for science and technology and the Board-initiated resolution in support of continued strong funding for science and technology. She noted that the resolution was approved by AAAS affiliates and forwarded to the President and Congress. Colwell said that the Science and Policy Directorate was playing an important role in providing up-to-date analyses of budget information and in hosting several briefings on the budget actions by Congress.

Colwell reported that the Board had approved an initiative for young scientists and that "*Science's Next Wave*," an on-line journal that addresses the career concerns of the next generation of scientists, had been launched.

Finally, she indicated that the Board had been very involved in decisions relating to building the new AAAS headquarters, scheduled for completion in spring 1996.

Report of Executive Officer

AAAS Executive Officer Richard S. Nicholson said the Association continued to be in sound financial health. He said *Science* advertising was the largest single source of revenue for the AAAS, with grants, membership dues, and institutional subscriptions being the other major sources.

Nicholson noted that the organization had finished the year with an operating surplus and that the Board thought it was important to build up the reserves of AAAS.

Nicholson said 1996 would be a transition year for AAAS because of delays in accrual of income generated by subleases and the slow start of the capital campaign,

whose funds were to help cover the costs of the two floors of public space in the new building.

These delays combined with revenue projections showing no growth meant that to have a surplus, it was necessary to reduce expenses by about \$1 million. This was accomplished by relatively small reductions in staff and AAAS funds devoted to programs.

Nicholson described the new building as a very striking piece of architecture designed by Harry Cobb of Pei Cobb Freed & Partners. He added that it was coming in on time and on budget. He said credit for the successful handling of this very complex project should go to Carl Amthor, AAAS's chief financial and administrative officer.

Report of the Committee on Sections

Jane Lubchenco, who chairs the Council's Committee on Sections, reported on the group's activities. She reminded the group that this was a new committee, formed at last year's meeting as a result of a recommendation by the Section Task Force. She said the group was focusing on issues related to section budgets, fellowship procedures, and improved communications.

Lubchenco noted that the group was serving an important purpose as a forum for discussion of section-related matters, and said the committee welcomed input from Council members and section officers.

Report on Science

Ellis Rubinstein, editor of *Science*, reported on new initiatives. He spoke about efforts to increase the international dimensions of the journal, in both news coverage and solicitation of high-quality manuscripts. He noted the creation of a *Science* office in Cambridge, the hiring of more international correspondents, and the use of more international scientists as reviewers and members of the Board of Reviewing Editors.

Rubinstein introduced the recent AAAS experiments in electronic publishing. He noted that the electronic components of the

magazine, called "*Science On-Line*," were being produced in cooperation with HighWire Press of Stanford University.

Rubinstein reviewed the on-line features, which include "This Week in Science," the "Table of Contents," summaries of news stories, on-line forums, and "Beyond the Printed Page." He also discussed experimental plans for future special features, including an electronically enhanced "Perspectives" section with hyperlinks to research citations.

Rubinstein also described "*Science's Next Wave*," created to deal with career concerns of the next generation of scientists. Among the features he described were essays on alternate career options, on-line forums and discussion groups, and a global network of young scientist correspondents.

Overview of AAAS Activities Related to Federal Budget

Nan Broadbent, director of the AAAS News and Information Office, and Al Teich, director of the AAAS Science and Policy Directorate, spoke about AAAS's efforts to keep the science and engineering community informed about the impact of proposed federal budget reductions and out-year projections during protracted budget process.

Resolution on Government Shutdown

Whereas the strength of U.S. science and engineering contributes greatly to the nation's well-being and its international leadership; and

Whereas appropriations-related closures in the operation of federal agencies that support and conduct scientific and engineering research caused significant disruptions in programs for science and engineering research and education, including seasonal, longitudinal, and time-dependent studies;

Whereas such interruptions not only caused delays but risked permanent damage to the value to society of these research studies and loss of the taxpayers' investment in producing such knowledge;

Therefore be it resolved, that the American Association for the Advancement of Science deplores the interruption of normal government functions in support of science and engineering research and education and calls upon Congress to abjure any further use of tactics that interrupt them; and

Further be it resolved, that the Association calls upon the Congress and the President to complete promptly appropriations legislation that funds scientific and engineering research and education programs on their merits and without extraneous conditions.

These activities included widespread distribution of information provided by AAAS's analysis and continuing update of the available R&D budget projections as the budget worked its way through the House and the Senate. The AAAS Web site contained a continually updated analysis of current projections, and the information was quoted frequently by members of both the executive and legislative branches of government.

Teich reported on the status of the budget negotiations and said AAAS would continue to monitor these actions and provide timely analysis.

Council Actions

The following actions were taken by the Council:

■ Approved requests for affiliation by the Council for Chemical Research and the American Agricultural Economics Association.

■ Approved termination of affiliation with the Institute of Environmental Sciences, the National Institute of Science, and the American Society for Biochemistry and Molecular Biology for noncompliance with AAAS bylaws requiring the appointment of representatives.

■ Approved a resolution related to the federal government shutdown and its impact on research and education. —Gretchen Seiler