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#### AISLE Conference Aids Massachusetts

#### Lawmakers

In a report just released, Massachusetts State Legislature leaders stated that the AISLE (An Intersociety Liaison Committee) conference on "Lawmaking, Technology, and Quality Growth" held in Boston last June has resulted in establishing "a powerful base of mutual understanding and concern regarding the solution of urgent public problems."

The conference was the second of what may become a national series of experimental interactions between legislative and technical professional communities. The conference also strengthened components of the developing science resource system of the Massachusetts Legislature. AISLE consists of representatives of more than 30 professional societies spanning engineering, science, and several other areas. AAAS has been one of the most active societies and has served as an administrative base for the AISLE conferences.

The Massachusetts conference involved more than 135 persons, including 38 elected members of the Legislature and representatives from 35 professional societies, according to the report's authors R. H. Bolt, M. S. Doeble, D. P. Richtmann, and C. H. Stevens. These four scientists in collaboration with 20 other professional society representatives, state legislators, and legislative staff planned and managed the conference. Legislative leaders included Representative Thomas H.

D. Mahoney and Senator Robert E. McCarthy, cochairmen of the Science Resource Committee of the State Legislature.

During the 3-day meeting, speakers addressed such topics as "The Legislator's Need for Science and Technology;" "Massachusetts in the National Economy;" and "Federal, State, and Local Relationships in Science and Technology." Workshops for the participants were held on economic opportunities and incentives; energy alternatives; environmental responsibilities; manpower development; and societal problems and legislative issues, among other subjects.

According to Mahoney and McCarthy, besides benefiting the resource system already in the Massachusetts Legislature, the conference led to the preparation of a 2-day session on economic forecasting for the Northeast; the development of a dialogue on federal R & D support opportunities for the region; and the convening of a series of dialogues for the Legislature's new Joint Standing Committee on Energy, "the creation of which," say the legislators, "was influenced significantly by results of the June conference." They also cite advances sparked by the meeting in an inventory of data bases on the local economy.

Mahoney and McCarthy estimate that the meeting already has benefited some 40 or 50 pieces of legislation. "Whatever this first half-year after the conference may have shown in the way of legislative value," they conclude, "we believe that the future will bring continuing benefit from this conference and the communication process it has put into motion."

The Intergovernmental Science Division of NSF/RANN and the Massachusetts Legislature supported the conference.

The full report of the AISLE conference is available from the Science Resource Network, Massachusetts Legislature, Room 34, State House, Boston, Massachusetts 02133.

RICHARD A. SCRIBNER Manager, Office of Special Programs

## Conference on American Indian Science

### and Health Education

The Conference on Health and Science Education in American Indian Post-Secondary Institutions was convened by the AAAS Project on Native Americans in Science, with support from the Division of Research Resources, National Institutes of Health (NIH), 17–19 February in Denver. Following is a report of and commentary on the conference proceedings by Rayna Green, director of the Project, and Janet Welsh Brown, head of the AAAS Office of Opportunities in Science (OOS).

Thirty-nine American Indian post-secondary institutions exist in the United States, varying in age, facilities, support, and function, but sharing a common goal of providing education to meet needs as Indians themselves have defined them. The predominantly Indian colleges have begun to develop educational programs to meet tribal needs-for Indians based both on and off reservations—in fields such as natural resources, energy, health care delivery, and technological/engineering sciences. Recognition of the potential of these institutions for improving the general health and science literacy of Indian people, for broadening health and science-related career options for Indian students, and for supplying Indian human resources in technical fields, led the AAAS Office of Opportunities in Science

## Subcommittee on Infringements of Scientific Freedom

The AAAS Committee on Scientific Freedom and Responsibility has appointed a Subcommittee on Infringements of Scientific Freedom in the United States. Scientists or engineers who believe that their scientific freedom has been infringed are invited to send summaries of their complaints to the Subcommittee c/o AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036. Cases involving important and timely issues may be referred to AAAS-affiliated societies or indirectly reviewed by the Subcommittee.

H. BENTLEY GLASS, Chairman

AAAS Committee on Scientific Freedom and Responsibility

46 SCIENCE, VOL. 196

to initiate work with the institutions. To bring key personnel together to discuss requirements and design strategies, the Office's Project on Native Americans in Science called the Conference on Health and Science Education in American Indian Post-Secondary Institutions.

Faculty members and administrators from 21 of the Indian institutions participated in the conference, along with several distinguished American Indian scientists-Frank Dukepoo (Hopi) of California State University at San Diego; Clifton Poodry (Tonawanda Seneca) of the University of California at Santa Cruz; Jack Ridley (Western Shoshone) of the University of Idaho; and Albert Snow (Caughnawaga Mohawk) of the Eastchester, New York, Public Schools-and two science educators, James Rutherford of New York University and Robert Tinker of Springfield, Massachusetts, Technical College.

Also participating were staff members from the conference's co-hosts, the American Indian Higher Education Consortium and the Division of Planning Resources in Minority Education, Western Interstate Commission on Higher Education. Thomas Bowery, director of the Division of Research Resources at NIH, and Ciriaco Gonzales, director of the Division's Minority Biomedical Support Program, also attended. It was their interest in the Indian colleges as potential sites for biomedical research and for the training of Indian biomedical personnel that made this initial conference possible.



Photograph by Martha Ross Redden Conference participant Frank Dukepoo of San Diego State University shares a light moment with AAAS Office of Opportunities in Science

head Janet Welsh Brown.



Photograph by Martha Ross Redden

Conversing over dinner during the Conference on Health and Science Education in American Indian Post-Secondary Institutions are Thomas Bowery (left), head of the Division of Research Resources, NIH, and James Tutt, director of the Shiprock Branch of Navajo Community College.

An overview of health and science education at Indian post-secondary institutions is complicated by the significant differences among them. (Perhaps their only common characteristic is that, with one exception, they are all 2-year schools.) They are spread from North Carolina to Alaska. Three are federal (Bureau of Indian Affairs) institutions: two are churchrelated schools; some few are satellite campuses of state college systems; and one is a unique Indian-Hispanic college. However, the largest and fastest growing number are tribally chartered institutions, mostly reservation-based and serving specific tribal populations. Of these schools, several have sought and secured affiliations with state community college systems and work in various ways with other educational agencies in and out of state.

The type and amounts of financial support—state, federal, and private—vary as much as the institutions' purposes and emphases. Thus, health and science programs range from traditional basic science and math courses typical of many junior colleges, to specific programs such as licensed practical nursing and single courses such as range management, field biology, or emergency medical techniques. Most schools have few or inadequate facilities for basic science programming, and few have special funding for such offerings. Most have difficulty obtaining faculty for health, science, and mathematics programs, and Indian teachers are rare in such fields. Yet several institutions have sought and obtained outside funding from the National Science Foundation and NIH. They have planned programs, adapted old facilities, secured faculty, and are busy preparing students in these crucial fields.

One priority need reflected in programming at these institutions and stressed by participants at the conference is for an educational program based on the resources of the Indian community, respectful and inclusive of Indian scientific systems of inquiry. Arctic biology, mathematics for daily reservation life, forestry based on traditional systems, and pharmacy courses which utilize knowledge about Indian medicines were projected as possibilities for these Indian college courses. It is expected that health and science programming will reflect tribal and regional differences as the schools grow and serve Indian peoples.

The AAAS Project on Native Americans in Science will compile information on the health and science programs in American Indian post-secondary institutions, and will work cooperatively with the federal and private agencies and schools to facilitate information interchange to support the kinds of strategies the institutions require. For further information, write to Rayna Green, Director of the Project on Native Americans in Science, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.

# Theme of Indian Science Congress

Glen V. Berg of the University of Michigan (Ann Arbor) and Cyril Ponnamperuma of the University of Maryland (College Park) attended the 64th annual meeting of the Indian Science Congress Association, 3–7 January in Bhubaneswar, India. Following is their report on the proceedings of the congress.

Few are the cities more delightful than Bhubaneswar in January. A treasure chest of Hindu architecture and culture, the city's Vani Vihar campus of Utkal University also provided the site of the 64th annual meeting of the Indian Science Congress Association, 3–7 January 1977. Fifty-one foreign scientists and more than 2500 Indian delegates assembled there to participate in the congress. The theme set for the meeting was the survey, conservation, and utilization of resources.

1 APRIL 1977 47