CSFR Begins Project on Secrecy and Openness in Technical Communication

In recent years, the traditional concept of scientific ideas and information as a public good, freely available to professional colleagues as well as the general public, has come under closer scrutiny. The post–World War II increase in the economic, political, and military value of scientific and technical information has fostered various private and public proposals to restrict open communication in university teaching and research activities. These proposals have cited many justifications, including national security interests, economic competition, patent protections, and quality control, as the basis for limiting access to new and important research data in selected fields.

Conflicts over secrecy and openness in science are essentially conflicts over values. In order to explore the fundamental values which promote the need for secrecy or openness in science, the AAAS has initiated a new project through the office of the Committee on Scientific Freedom and Responsibility (CSFR). The project, titled "Secrecy and Openness in Scientific and Technical Communication," is being funded through the Program on Ethics and Values in Science and Technology (EVIST) in the National Science Foundation and the Humanities, Science and Technology Program in the National Endowment for the Humanities. Rosemary Chalk, CSFR program head, is project director.

The tradition of openness in basic research is the foundation for objectivity in science. It is through the free exchange of information and data that new ideas and experimental results are subjected to the rigorous test of peer review and verification. The origins of openness, however, have their roots in a period when science was essentially a private intellectual activity. Also, many scientists are not completely "open" in their exchange of data and information. Self-imposed restrictions on the release of new but unconfirmed theories or preliminary experimental data are quite common in traditional scientific work.

In modern times, government, industrial, and university groups have increasingly recognized the importance of applying scientific and technical resources to selected public and private objectives. Access to new information, including basic research, has emerged as a source of competitive advantage in the pursuit of various social, military, and economic goals. As a result, the concept of intellectual property has expanded in the post–World War II period to justify occasional controls on the disclosure of basic research findings supported by public or private funds.

These public and private pressures foster secrecy in science. Such restrictions on communication often serve legitimate and important social purposes. But they may, at times, also result in arbitrary or abusive practices or promote bias and the loss of objectivity in research.

Although there is reason to believe that secrecy is increasing in science, and that it may affect values other than openness, very little is known about the ways in which secrecy or openness influence the conduct of scientific research. It is the purpose of this project to encourage attention to such relationships and the values which affect professional behavior and education.

The project will consist of a series of background papers and regional seminars to be organized in 1984. Ten background papers will be commissioned through the project. Five project seminars will be held in Boston, and one each will be held in Chicago, Nashville, San Diego, and Washington, D.C. A project symposium also will be held as part of the 1984 AAAS Annual Meeting in New York.

In addition to the AAAS Committee on Scientific Freedom and Responsibility, other cosponsoring institutions are the Center for the Study of Ethics in the Professions, Illinois Institute of Technology (CSEP/IIT); Management of Technology Program, Vanderbilt University; Program in Science, Technology and Society, Massachusetts Institute of Technology (MIT); Science Technology and Public Affairs Program, University of California, San Diego (UCSD); and the journal *Science, Technology and Human Values* (MIT).

Regional hosts for the project are: Rosemary Chalk, project director; Robert House, director, Management of Technology Program, Vanderbilt University; Marcel La Follette, editor, *Science, Technology and Human Values*, MIT; Sanford Lakoff, professor of political science, UCSD; and Vivien Weil, senior research associate, CSEP/IIT.

Advisory committee members guiding the development of the project are: Loren Graham, professor of the history of science, MIT; Harold P. Green, professor of law, George Washington University; Lee Grodzins, professor of physics, MIT; Louis Menand, senior lecturer in political science and special assistant to the provost, MIT; and Eugene Skolnikoff, director of MIT Center for International Studies.

For further information about the project, contact Rosemary Chalk at 1515 Massachusetts Avenue, NW, Washington, D.C. 20005, or call 202-467-5238.

ROSEMARY CHALK
Committee on Scientific Freedom and Responsibility

Science Communication Course Directory Published

The 1983 edition of the *Directory of Science Communication Courses, Programs, and Faculty* is now available.

The *Directory* lists 127 courses and 43 programs which focus on the communication of science, health, environment, and technology to general audiences, often via the mass media. Course offerings at 67 colleges and universities are covered. The *Directory* includes faculty names, addresses, and telephone numbers; required textbooks; and financial assistance information.

The *Directory of Science Communication Courses, Programs, and Faculty* is published by the Department of Chemistry, State University of New York (SUNY) at Binghamton, in cooperation with the AAAS Office of Communica-

List of Women's Groups to Be Revised

With support from the National Science Foundation, the AAAS Office of Opportunities in Science will update and expand its list of women's science committees, organizations, and caucuses. The list will include names of officers, addresses, and brief descriptions of the groups.

The previous version, issued in 1980, contained information on about 50 groups, and these will be canvassed for up-to-date listings. In addition, a search will be made for other groups which should be added.

The Opportunities staff would appreciate suggestions on groups which should be included so that the new list is as complete as possible. Please send names and addresses of persons to contact to Michele Aldrich, Office of Opportunities in Science, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.

tions and the Council for the Advancement of Science Writing. Lawrence P. Verbit of SUNY Binghamton is editor.

Copies of the *Directory* are available for $5.95 ($6.95 outside the United States, Canada, and Mexico). Checks made out to *Science Communication Directory #356* must accompany order and should be sent to: Science Communication Directory, Department of Chemistry, SUNY Binghamton, Binghamton, New York 13901.

AAAS/CAST Symposium Focuses on Ruminants

As part of an exchange agreement now in its fifth year, a delegation visited China in September to participate in a symposium on ruminant productivity, cosponsored by the AAAS and the China Association for Science and Technology (CAST).

The delegation was selected in response to topics suggested by the Chinese and in consultation with three AAAS affiliate societies—the American Dairy Science Association, the American Society of Animal Science, and the Society for Range Management.

Delegation members were: Gerald M. Ward, head, professor of animal sciences, Colorado State University (ruminant nutrition research); Charles A. Kiddy, national program leader, Dairy Production, U.S. Department of Agriculture (ruminant milk production and reproduction); Cyrus M. McKell, vice president for research, Native Plants, Inc., and adjunct professor of range science, Utah State University (rehabilitation of disturbed arid lands to sustain livestock grazing); Robert R. Oltjen, director, Roman L. Hruska U.S. Meat Animal Research Center, and president, American Society of Animal Science (demography of ruminant production); Rex D. Pieper, professor of range science, New Mexico State University (impacts of stocking on rangelands and grazing as a process); and Lisbeth A. Levey, staff escort, coordinator, AAAS China exchange program.

The conference, which was held in Beijing, 8–11 September, was attended by approximately 20 Chinese scientists representing universities and institutes in Beijing and six areas where animal husbandry is an important part of the economy: Shanxi, Shaanxi, Xinjiang, Gansu, Guizhou, and Guangdong. Research covered in the Chinese papers included dairy and beef production, breeding, and nutrition; sheep and goat production; and seasonal animal production on China's rangelands.

A CAST affiliate, the Chinese Society of Animal Husbandry and Veterinary Medicine, was founded in 1950 and currently has a national membership of some 3000.

Upon conclusion of the conference, delegation members gave lectures in Harbin, Inner Mongolia, and Tianjin, and visited state farms, communes, universities, and institutes in these locations.

A trip report will be available in December by writing to Lisbeth A. Levey, Executive Office, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.

Galápagos Evolution Described

Patterns of Evolution in Galápagos Organisms, just published by the AAAS Pacific Division, contains 13 papers ranging from the "Ages of the Galápagos Islands" and "The thermal springs of the Galápagos Rift" to "Evolution of song in Darwin's finches" and "Are the Galápagos iguanas older than the Galápagos?"

Authors include P. Dee Boersma, Robert Bowman, John Corliss, Allan Cox, Thomas Fritts, Peter Grant, Mark Hafner, Nancy Jo, James Patton, Neil Polans, Charles Rick, Vincent Sarich, John Wright, and Jeff Wyles. Editors are Robert I. Bowman (San Francisco State University) and Margaret Berson and Alan E. Leviton (Pacific Division AAAS and California Academy of Sciences).

The book, 568 pages hardcover, may be obtained for $32.50 (payment must accompany order; California residents, please add sales tax) from the Pacific Division AAAS, c/o California Academy of Sciences, San Francisco, California 94118.

Obituaries

Raymond P. Ahlquist, Charbonnier Professor of Pharmacology, Medical College of Georgia, member since 1980, 15 April 1983.

Gordon L. Barclay, consultant, New York State Department of Mental Hygiene, member of Section J since 1968, 27 May 1983.

Frank A. Brown, Jr., former Morrisson Professor of Biology, Northwestern University, member of Section G since 1934, 19 May 1983.

W. Duane Brown, professor, Institute of Marine Resources, University of California, Davis, member of Section C since 1957, 6 May 1983.

Leonard Capling of Maplewood, New Jersey, member of Section M since 1966, 16 April 1983.

William M. Clay of Jeffersonville, Indiana, member of Section G since 1958, 1 April 1983.

Milton Cobin of Sarasota, Florida, member since 1975, 24 March 1983.

Leonard J. Deysach of Milwaukee, Wisconsin, member of Section N since 1939, 10 May 1983.

William Joseph Fretague of Summit, New Jersey, member of Section M since 1967, 7 May 1983.

Wilson H. Hunter of Wellington, Ohio, member of Section E since 1967, 10 April 1983.

Robert K. Maurmeyer, professor emeritus of chemistry, City University of New York, member of Section C since 1940, 4 May 1983.

Joseph C. Street, Department of Animal Science, Utah State University, member of Section C since 1973, 22 May 1983.

Philip J. White of Encinitas, California, member since 1976, 25 April 1983.