State has helped support Science, Engi-

neering, and Diplomacy Fellows select-

ed by the AAAS. This year, the AAAS

will place one Fellow in the Department

of State's Bureau of Oceans and Interna-

tional Environmental and Scientific Af-

fairs (OES) and one in the Agency for

AAAS Fellows for 1982-1983

1982-1983) began work in congressional

and governmental offices. They are:

This month five AAAS Fellows (for

William "Jamie" Cromartie (AAAS

Congressional Science and Engineering

Fellow) is the director for the Center for

Environmental Research at Stockton

State College. This past summer, he was

a AAAS Environmental Science and En-

International Development.

Ten Years of Congressional Fellows

Issues of national concern, such as arms control, environmental hazards, energy, education, and medical care, involve science and technology. Yet, very few legislators have a background in science. To help bring together science and the legislative system, 10 years ago this coming spring, the AAAS Congressional Science and Engineering Fellowship Program (CSEFP) was founded. The Program involves young to midcareer scientists in public policy-making and demonstrates the value of such science-government interaction. Each September, Fellows begin a year-long stint as special legislative assistants on the staff of a senator, representative, or congressional committee.

More than 30 scientists go to work for

William Cromartie

Miriam Davis

policy-makers each year. They are selected and sponsored by about 20 scientific and professional societies which conform to a set of guidelines to assure the Program's quality and consistency. The AAAS coordinates the Program, runs an intensive 2-week orientation, gives placement guidance, helps new Fellows contact past Fellows, and holds two seminars a month for Fellows throughout the year.

In addition, the AAAS has recently become involved in two new types of 1year fellowships. With support from the Congressional Research Service (CRS) of the U.S. Library of Congress, the AAAS selects and sponsors one or two Environmental Health Policy Fellows. For the past 2 years, the Department of



Robert Kainz

John F. Cahill

gineering Fellow, spending 10 weeks as a research consultant at the Environmental Protection Agency on a project involving low-level ecosystems. Cromartie earned the Ph.D. in ecology and evolutionary biology from Cornell University.

Miriam Davis (AAAS/CRS Environmental Health Fellow) recently received her Ph.D. degree in biology from Princeton University. She has studied the response of the nervous system to injury, and the effects of radioactive iodine gas on the thyroid, to try to establish standards for thyroid protection.

Robert Kainz (AAAS/CRS Environmental Health Fellow) is on leave as director for Environmental Ouality Technology of the U.S. Army Medical Bioengineering Research and Development Laboratory. As special representative to the Surgeon General of the Army, he conducted an award-winning evaluation of occupational and environmental hazards in the Army food service industry. He holds the Ph.D. in occupational health from the School of Public Health and Tropical Medicine of Tulane University.

John F. Cahill (AAAS Science, Engineering, and Diplomacy Fellow) will work in the Oceans Division of the OES. He previously worked in the toxic substances division of the Environmental Protection Agency, and was science representative to the Environmental Policy Commission of Alexandria, Virginia. He holds an M.S. in microbiology from the University of Virginia, and expects to receive a J.D. from Georgetown University Law Center in January.

Ford Runge (AAAS Science, Engineering, and Diplomacy Fellow) will work in the Agency for International Development. He is interested in how increasing technological sophistication in developing countries affects U.S. policy. Runge is an assistant professor of political science at the University of North Carolina, Chapel Hill. His Ph.D. from the University of Wisconsin is in international agricultural development.

Looking Back with Former Fellows

Fellows have come from a broad spectrum of academic, industrial, and governmental institutions. In a series of telephone interviews, several "graduates" of the Fellows Program talked about their fellowships and what they have been doing since.

Thomas H. Moss (American Physical Society Congressional Science Fellow, 1974-1975) was on the staff of Representative George E. Brown, Jr. (D-Calif.) as a Fellow. Shortly after his fellowship ended, Moss returned to the Hill as staff director and science adviser to Brown. After some 6 years on the congressional staff, most recently as staff director of the House Subcommittee on Science, Research, and Technology, he left this August to become director of Research Administration at Case Western Reserve University with an adjunct faculty position in physics.

Moss says that his experience as a Fellow convinced him that scientists must try to "build up public understanding of science, they should not expect the government to do it for them." Through networks in professional societies, he notes, scientists could work in their local communities. He suggests that scientists help public education groups with materials and by volunteering to do some teaching. "The time and effort would be well worth it," he says, "because the public understanding of science is a priceless thing."

Gary Ritchie (AAAS Congressional Science and Engineering Fellow, 1976– 1977) worked for Senator Pete V. Domenici (R–N.M.). He was involved with bills concerning water resources development in the West, Indian affairs, and new agricultural crops. After his fellowship Ritchie returned to his position as a researcher for the Weyerhaeuser Company. His fellowship affected him most by giving him "a whole new perspective to . . . my understanding of the processes that go on in policymaking."

Fred Bernthal (American Physical Society Congressional Science Fellow, 1978-1979) served on Senator Howard H. Baker, Jr.'s (R-Tenn.), staff. He is now Baker's chief legislative assistant. Bernthal points to a "broadening" that takes place when other professionals work with members of Congress. He affirms that it is very valuable to bring professionals to the Hill from many different fields, including the humanities. Although "detailed scientific knowledge is not as important as perspective," says Bernthal, "scientists are also useful on the Hill when they apply their analytical skills to issues."

Ann Cohn (AAAS/Society for Research in Child Development Congressional Science and Engineering Fellow, 1978-1979), whose specialty is public health, is now director of the National Committee for the Prevention of Child Abuse. After her AAAS fellowship in the office of Congressman Albert Gore, Jr. (D-Tenn.), she was selected as a White House Fellow and served as an assistant to then Secretary of Health and Human Services Patricia R. Harris. She says she. discovered that, like most scientists, public health researchers "don't take their findings to policy-makers, so that policy is sometimes made in a vacuum." She claims her fellowship was "an absolutely superb education."

J. McIver Weatherford (AAAS/Society for Research in Child Development, 1978–1979) worked for Senator John H. Glenn (D–Ohio). Glenn was cosponsor of a bill to create the U.S. Department of Education, and Weatherford spent most of his time working on that issue. After his fellowship, Weatherford wrote *Tribes* 10 SEPTEMBER 1982 on the Hill: An Investigation into the Rituals and Realities of an Endangered Species—The Congress of the United States. He used his background as an anthropologist to discuss the roles of kinship, clanishness, rituals, and myths in Congress.

Connie Kagan (American Philosophical Association, 1981-1982) is a philosopher, a discipline recently added to the CSEFP. She is interested in animal protection and applies epistemology (the theory of knowledge) to determine whether or not animals are able to feel pain. Kagan found a direct application for these studies while working in Representative Dave McCurdy's (D-Okla.) office on a bill to insure that laboratory animals are not mistreated. She believes her philosophical background helped her to understand that the scientists and the animal protectionists were often using different language to express very similar ideas.

Enthusiastic support for the CSEFP comes from others as well. Each year a larger number of members of Congress respond favorably to having a Fellow on their staff (some 85 positions were offered in 1981). The Program continues to grow and, with the inclusion of social scientists, philosophers, and historians, the AAAS feels that the CSEFP has been greatly enriched.

The AAAS Congressional Science and Engineering Fellows Program is administered by the Office of Public Sector Programs; Richard A. Scribner serves as program manager.

> ESTHER PHILLIPS, intern Office of Communications

International Conference to Focus on World Food Problems

Increasing global population, especially in Third World countries, is straining the world's abilities to feed the hungry. In response to a growing concern about world food supplies, internationally renowned leaders in government, industry, and academia will meet to review the contributions research can make to help eliminate world hunger and malnutrition. They will participate in CHEMRAWN II, the International Conference on Chemistry and World Food Supplies— The New Frontiers, to be held in Manila, Philippines, 6–10 December 1982.

The Conference is being cosponsored by the International Union of Pure and Applied Chemistry (IUPAC) and the International Rice Research Institute (IRRI). It is the second in a series of international meetings developed by IU-PAC to "identify and address world needs amenable to solutions through chemistry."

Meeting participants will explore ways in which recent developments in chemistry, biochemistry, and microbiology can be used to improve agricultural production and food processing.

The objectives of CHEMRAWN II are to identify those areas of research and development having the greatest potential to significantly increase food production and improve food storage and processing; to help strengthen scientific research in developing nations; and to accelerate this research by fostering cooperation among governments, industries, and universities.

Bryant W. Rossiter, director, Chemistry Division, Eastman Kodak Company, is the general chairman. Carol L. Rogers, head of the AAAS Office of Communications and Membership, is a member of the organizing committee and is serving as CHEMRAWN II publicity committee chair.

The 5-day gathering will begin with a series of keynote addresses given by a number of world leaders. Topics will cover a variety of chemistry's uses and constraints in handling food production. Ferdinand E. Marcos, President of the Republic of the Philippines, will give the welcome address.

Six simultaneous sessions dealing with the role of chemistry and biochemistry in improving agricultural productivity and in the preparation, processing, and storage of food will be held the second day. A plenary session entitled "The Forward Edge" scheduled for the third and fourth days will focus on new technologies and their potential for satisfying world hunger and malnutrition. Some of the presentations will discuss genetic engineering, germ plasm resources, and growth regulators and hormones.

The highlight of day 4 will be a special lecture "Food and Energy: Interdependent World Needs" to be given by Nobel Laureate Sir George Porter, The Royal Institution, London, England.

The final day features a closing presentation by Nobel Laureate Norman E. Borlaug, International Maize and Wheat Improvement Center (CIMMYT), Londres, Mexico. In addition, chairs of the several technical sessions held the previous days will submit reports which will include a summary and recommendations for consideration by world policy leaders in confronting the global hunger problem.