Programs Provide a History Lesson—Blacks and Women in Science

Some of the pioneers—those who pursued careers in science despite barriers—were featured in two recent AAAS programs, "Black Americans in Science" and "Women in Science: Historical Perspectives."

Six black scientists who earned their doctorates during the 1930's and 1940's came to Washington, D.C., in late February to provide oral biographical essays. They discussed their education and careers and described how they had overcome obstacles they encountered.

All of the participants in the "Black Americans in Science" program pointed to early support from family, friends, and teachers. Clarence F. Stephens (Ph.D., mathematics, University of Michigan, 1943), now professor of mathematics, State University of New York College at Potsdam, said his professors encouraged him at each step in his education. Stephens told how faculty members assumed he would go on to the next level in graduate school—and got him to do so—even when he had originally not aspired to an advanced degree.

Support also came from each other. Herman Branson (Ph.D., physics, University of Cincinnati, 1939), now president of Lincoln University, gave Marie Maynard Daly (Ph.D., chemistry, Columbia University, 1947) her first job. Daly is currently associate professor at Albert Einstein College of Medicine.

Participants told of their childhood fascination with science. For Daly, detective stories and science fiction were early favorites. Lloyd N. Ferguson (Ph.D., chemistry, University of California, Berkeley, 1943), professor of chemistry at California State University, Los Angeles, however, was able to make a profit on his childhood interest in chemistry. He produced and sold "Lem-O," a lemonade mix; "Moth-O," a moth repellant; and "Clean-O," a cleanser.

While many doors were closed to black scientists in the 1930's and 1940's, panelists remembered that time as being one of excitement. They did not regard it as a handicap to move from a research position at a majority institution to a black university, where traditionally a great emphasis is placed on teaching responsibilities.

Paleontology field trip, Mount Holyoke College, 1890's. [Mount Holyoke College Library/Archives]

Branson recalled going from the University of Cincinnati to Howard University. He regarded his extra teaching duties there as a challenge that did not preclude his doing research as well.

W. Montague Cobb (M.D., Howard University, 1929; Ph.D., anatomy, Western Reserve University, 1932), Distinguished Professor Emeritus of anatomy at Howard University, reiterated this general enthusiasm and said he always felt it was brainpower—both at majority and at black institutions—that would get him ahead.

But while each of the panelists has been able to pursue a full and rich career in science, each could relate stories of unfairness and discrimination.

While chairman of the Department of Chemistry at Langston University, Samuel P. Massie (Ph.D., chemistry, Iowa State University, 1946), now professor of chemistry at the U.S. Naval Academy, relied upon white colleagues to bring him books since he, as a black researcher, was not allowed access to the library stacks at the University of Oklahoma. Ferguson completed his Ph.D. at the University of California, Berkeley, and spent the war years working on the National Defense Research Committee Project at the University of California. But after the war, Ferguson's advisers told him not to bother trying to find a teaching position at a majority institution in the state. Ferguson taught at North Carolina Agricultural and Technical College, an historically black college, for a year before moving to Howard University.

Participants in the "Black Americans in Science" program were, however, able to relay these stories with humor. Cobb told how it was widely reported that blacks had longer heel bones than whites, therefore enabling Jesse Owens to best white runners in the 1936 Olympics. A young doctor at the time, Cobb got Owens to submit to a demonstration. Cobb's results showed that Owens' heel bones were actually shorter than those of the average of the white men that Cobb had measured.

Noting that there continue to be many obstacles and diversions for young people to overcome while pursuing their education, panelists still called on today's youth to realize that they can do anything. Massie noted the "ten most important two-letter words in anyone's

vocabulary—'If it is to be, it is up to me'. "

"Black Americans in Science" was cosponsored, along with AAAS, by the National Museum of American History of the Smithsonian Institution, and the National Science Foundation (NSF). The panel was cochaired by Cora Bagley Marrett, professor of sociology, University of Wisconsin, and chair, Committee on Equal Opportunity in Science and Technology, NSF, and Shirley Mahaley Malcom, program head, AAAS Office of Opportunities in Science.

Science historian Margaret Rossiter, author of *Women Scientists in America: Struggles and Strategies to 1940* (see *Science*, 24 December 1982, pages 1299 and 1300), conducted a lively seminar at the AAAS on the history of women in science. Rossiter is a program officer in history and philosophy of science at the NSF.

She described the slow progress made by women in the 19th century. In 1800 the general belief was that woman's role as wife and mother required little or no education. Eventually, the idea of educating women, since they prepared their sons for citizenship, gained favor and public schools, academies, and colleges began opening their doors to women. Responding to pressure from women, around 1890 the University of Chicago, Yale University, and Stanford University, among a few others, began granting Ph.D. degrees to women, and by 1900 many universities granted doctorates to women.

Having achieved access to higher education, women scientists began the long—and many would say as yet uncompleted—fight for equal employment. Many highly qualified women spent entire careers in the "laboratory assistant" category because the institutions at which they worked refused to make them professors or senior research scientists.

Women have always been eligible for membership in the AAAS, though in the early years their numbers were small. Rossiter told of finding newspaper accounts describing the "Women at the AAAS" as part of the press coverage of the Association's national meetings.

It was not until 1969, however, that a woman, mathematician Mina Rees, was elected to the AAAS presidency. In 1973 anthropologist Margaret Mead was elected AAAS president. Currently, astronomer E. Margaret Burbidge is AAAS president and chemist Anna J. Harrison is president-elect.

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Cross-Cultural Comparison of "Self" Wins AAAS Prize

Richard A. Shweder of the University of Chicago and Edmund J. Bourne of California State University at Long Beach have won the 1982 AAAS Socio-Psychological Prize. The $1000 prize will be awarded to Shweder and Bourne on 29 May at the Annual Meeting in Detroit.

Shweder and Bourne's prizewinning paper, "Does the concept of the person vary cross-culturally?," takes a look at how different people describe themselves and others—and how those beliefs and concepts affect their way of thinking. A number of experiments which called for participants to describe themselves and other people were conducted in Orissa, India, and in the United States. The authors also discuss how innate beliefs about "self" color much social science research.

Richard A. Shweder, a psychological and cultural anthropologist and behavioral scientist, received the Ph.D. degree in social relations and social anthropology from Harvard University in 1972.

Shweder is an associate professor in the Department of Behavioral Sciences at the University of Chicago. He is currently conducting research on moral development in Bhubaneswar, Orissa, India, as part of a 3-year project funded by the National Institute of Child Health and Human Development. While in India, he is affiliated with the Department of Psychology, Utkal University.

Prior to joining the faculty of the University of Chicago, Shweder taught for 1 year in the Department of Sociology at the University of Nairobi, Kenya.

Edmund J. Bourne received the Ph.D. degree in psychology from the University of Chicago in 1976. During the subsequent year he was involved in research on adolescent development at the Michael Reese Medical Center in Chicago under a National Institute of Mental Health postdoctoral fellowship.

Bourne is currently a faculty member in the Department of Psychology at California State University at Long Beach. His research interests are in health psychology and behavioral medicine.

The AAAS Socio-Psychological Prize is awarded annually for a meritorious essay that furthers the understanding of the psychological-social-cultural behavior of human beings. It is intended to encourage social inquiry into the development and application of the kind of methodology that has proved so fruitful in the natural sciences.

70th Indian Science Congress Held in Tirupati

In her inaugural address to the Indian Science Congress, Prime Minister Indira Gandhi announced a new government technology policy. Among the aims of the policy are for India to attain technological competence and self-reliance, provide the maximum gainful employment to all, and develop technologies which are internationally competitive and have an export potential.

Professor B. Ramachandra Rao, president of the Indian Science Congress As-

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Martha Ross Redden, director, AAAS Project on the Handicapped in Science and the Association will receive the 1983 Exemplary Service Award of the American Coalition for Citizens with Disabilities.

The AAAS is being recognized "for their commitment to persons with disabilities through the development and maintenance of the Project on the Handicapped in Science." The award also acknowledges Redden's "commitment over the years to insuring that persons with disabilities receive equal opportunities in the field of science."

The award will be presented at the annual meeting of the Coalition, 26 May in Oklahoma City.