

"The NIEHS collaboration provides an opportunity for physicians and patients at the universities to work side by side with some of the country's finest environmental health scientists. Medicine is only beginning to understand the magnitude of the impact environment has on health. This collaboration will allow Duke physicians and researchers from our many medical disciplines to interact with top bench scientists to promote patient care."

Nuclear Site Training

The cleanup of the United States' nuclear weapons complex will be the largest and most costly environmental remediation effort ever undertaken. Estimates are that cleanup in 13 states will take more than 30 years and cost more than \$100 billion. To train workers who will be doing the cleanup, NIEHS has made seven supplemental awards totaling \$10 million to current awardees of the NIEHS Worker Education and Training Program. These awardees are already engaged in training hazardous waste site workers, and they will now broaden their curricula to train those who clean up nuclear waste sites.

The awards are the product of an NIEHS and U.S. Department of Energy interagency agreement to develop model worker safety and health training programs for people involved in waste cleanup activities at facilities in the nuclear weapons complex. Congress authorized and appropriated \$10 million for nuclear site worker training.

This new NIEHS training initiative "will improve efforts to prevent work-related illnesses and injuries, increase the effectiveness of environmental restoration efforts, and complement other programs to protect communities which surround the facilities that make up the nation's nuclear weapons complex," said Kenneth Olden, director of NIEHS.

A DOE suitability study, which was requested by Congress in 1991, found that worker health and safety training under the NIEHS program meets DOE needs, is cost effective, and provides specialized training to meet specific segments of the DOE workforce. Further information about the program can be obtained from NIEHS Worker Education and Training Program at (919)-541-0752.

Silbergeld Receives MacArthur Foundation Grant

A substantial annual salary to pursue the research of your choice is a daydream for most scientists, but for recipients of the MacArthur Foundation "genius" grants, it is a reality. Ellen K. Silbergeld, professor in the

Department of Epidemiology and Preventive Medicine at the University of Maryland Medical School in Baltimore, recently received a five-year MacArthur Foundation grant. Silbergeld has served as an advisor to NIEHS and NTP on numerous scientific policy issues and just completed a four-year term on the National Toxicology Program Board of Scientific Counselors and the NTP Technical Report Review Subcommittee.

The John D. and Catherine T. MacArthur Foundation grants are awarded for a five-year period in a wide range of professional areas including science, the arts, scholarship, and public policy. The foundation makes the awards on the basis of its own research: it is not possible to apply or "campaign" for them. The amounts of the grants vary based on the career level of the recipient; Silbergeld's grant is \$290,000.

Silbergeld's career has been pursued along two parallel tracks, as she has published extensively in scientific journals and has been equally active in policy and environmental advocacy causes. From 1982 until 1991, Silbergeld served as chief toxicologist and director of the Toxic Chemicals Program at the Environmental Defense Fund in Washington, DC.

Silbergeld's research interests include development of a test for lead levels now being patented by the University of Maryland; studies of dioxin as a hormone; studies of fetal brain cells showing that lead levels in males may affect their offspring; studies showing lead stored in women's bones reenters the bloodstream during menopause, and studies investigating the long-term effect of lead on the brain.

Among the advocacy and policy causes she has championed are the phase-out of lead in gasoline; resistance to loosening regulations on carcinogens; incorporating health provisions in Superfund legislation; opposition to the use of mercury to extract gold from the Amazon river; and encouraging a major fast-food chain to switch to paper wrappers from foam containers.

How will Silbergeld direct her considerable talents now that she has a great deal of freedom? "The interests that I will be



Ellen K. Silbergeld—Will use prize to extend scientific research beyond cancer.

pursuing under the MacArthur Foundation grant are the same ones that I was moderately successful in advancing while on the NTP Board," she said recently from her University of Maryland office. "They are to broaden the range of scientific research, testing, and public health concerns beyond cancer. Among these broader concerns are health effects that have critical windows, especially those related to human development, including neurotoxicity and

reproductive effects. Another major concern is with conditions related to the environment that are overly prevalent among disadvantaged populations—conditions which include low birth weight and asthma."

TUFTS Management Fellow Interns at NIEHS

Enhanced prenatal care as a means of preventing or intervening in lead toxicity at the fetal and early childhood stages will be the focus of a year-long fellowship for Marlene Cain Richardson, a graduate student at Tufts University's Department of Civil and Environmental Engineering.



Marlene Cain Richardson—Will focus on prenatal prevention/intervention of lead poisoning.

Kenneth Olden, director of NIEHS, is Richardson's mentor in her program as an environmental science and management fellow of the National Urban Fellows, Inc. A major portion of this graduate program for mid-career professionals is to work with a mentor from senior administration at a major environmental organization and to produce a master's thesis from the assignment.

Richardson brings a breadth of experience from her 20 years in management, including six years as an environmental regulator for the government of the District of Columbia. She served as training coordinator for the U.S. Environmental Protection Agency and the U.S. Fish and Wildlife Service. She also worked in public affairs and as a program manager for a major research foundation.

Richardson is especially interested in bridging the gap between scientific knowledge about the environment and human behavioral responses. "Applying scientific knowledge to public policy decisions is one of my career aspirations," she said.