

RADIATION BIOLOGY

NAS to Lose Contract for A-Bomb Study

Just months shy of the 50th anniversary of the atomic bombing of Hiroshima and Nagasaki, the U.S. Department of Energy (DOE) has upset radiation biologists studying its lingering effects. DOE has decided to remove the National Academy of Sciences (NAS) as co-administrator of the Radiation Effects Research Foundation (RERF), the body funded jointly by the United States and Japan that has been conducting long-term studies of atomic-bomb survivors. The move has prompted concern about the future of a collaborative research effort into the health effects of radiation that has lasted more than 40 years.

Columbia University is expected to take over the U.S. portion of scientific management of RERF, which was created in 1975 as the successor to the U.S.-run Atomic Bomb Casualty Commission and has monitored the health of 120,000 people who survived the blasts. DOE itself is expected to assume financial management of the \$18 million U.S. share of RERF's running costs, which previously was given to NAS to administer. A proposal from Columbia has completed a series of departmental reviews and is awaiting the signature of Tara O'Toole, DOE's assistant secretary for environment, safety, and health.

RERF scientists were informed about DOE's plans in the past 2 weeks. Last weekend, during a stormy meeting at the organization's headquarters in Hiroshima with Harry Pettingill, director of DOE's Office of International Health Studies, many of the foundation's American and Japanese staff scientists expressed concern about the move. They argued that if DOE plays a greater role in RERF's management, the foundation's scientific independence and credibility could be damaged.

In an interview with *Science*, Pettingill said that the department's decision was motivated by two main concerns: the need to reduce what DOE viewed as NAS's high overhead costs in running RERF, and a desire to "expand the scientific capability of RERF" by turning it into a "center of excellence" closely aligned with American universities. "The academy wasn't equipped to do this kind of thing," Pettingill says. "Maybe someone [else] could do a different job."

John Zimbrick, the NAS official directly responsible for RERF matters, takes exception to this rationale. "We could have put together an excellent program," he says. And in an exchange of letters between DOE Assistant Secretary O'Toole and NAS Presi-

dent Bruce Alberts in December and January, which *Science* has obtained, Alberts offered a point-by-point refutation of the department's arguments for ending the academy's 48-year role in RERF. Neverthe-



New P.I. Geoffrey Howe.

less, NAS officials insist that they will do nothing to hinder a smooth transition to Columbia University, which is slated to take over this fall.

NAS officials are openly disappointed by DOE's decision, however. "We believe that we remain uniquely qualified to oversee the RERF," says Paul Gilman, executive director of the academy's commission on life sciences. And a number of radiation experts told *Science* that they share the worries of their colleagues in Japan about compromising RERF's ongoing scientific work. "I am very concerned because the [atomic-bomb survivor study] is the major radiation study in the world today," says epidemiologist Elaine Ron of the National Cancer Institute. "The NAS has brought integrity to RERF, because most people think of the NAS as a high-quality organization without any political aspects." Warren Sinclair, past president of the National Council on Radiation Protection, adds that he "would not have personally contemplated what DOE is doing," adding that NAS has been a "good scientific buffer"

between RERF and the U.S. government.

According to epidemiologist Itsuzo Shigematsu, chair of RERF, this buffer effect has been critical in gaining the trust and cooperation of the atomic-bomb survivors. "They can cooperate with the NAS because it has a peaceful purpose," he says. If DOE takes a greater role, Shigematsu adds, "they will never cooperate in the same way." Or, as one NAS official put it privately, the academy's involvement has "protected the Japanese people from the idea that they are being investigated by the successor to the agency that bombed them."

University of Toronto epidemiologist Geoffrey Howe, who is moving to Columbia and will be principal investigator on the RERF project, says that Columbia—which was chosen in part because of its strong reputation in radiobiology—will continue to play the role of "buffer between the DOE and RERF." Howe, who all parties to the dispute agree is a highly qualified and respected scientist, says that "if DOE said we had to do this research and that research, I wouldn't take the contract."

One large unknown remains, however: the reaction of the Japanese. As *Science* went to press, Shigematsu was writing to the Japanese Ministry of Health and Welfare requesting an inquiry into whether DOE's action violates the U.S.-Japan agreement for administering the foundation. Says Sinclair: "Changing this arrangement after more than 40 years is certainly going to upset the Japanese side."

—Michael Balter

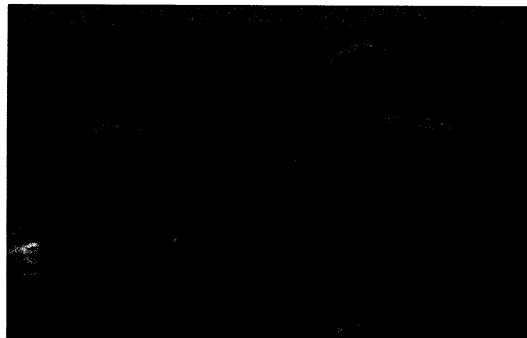
ECOLOGY

Fishermen Threaten Galápagos

Early in the afternoon on 3 January, several fishermen armed with clubs and machetes took researchers and their families hostage at Darwin Research Station, a small laboratory on Santa Cruz Island in the Galápagos. The *pepineros*—who fish for sea cucumbers, or *pepinos*, that lie in beds off the Ecuadorian coast—said they were desperate: The government of Ecuador had just prohibited them from fishing off the Galápagos, in response to protests from scientists and tour operators who claimed the *pepineros* were harming one of the world's most fragile, and famous, ecosystems. Carmen Angermeyer, a resident of Santa Cruz, the main Galápagos island, recalls that Ecuadorian TV broadcast a chilling interview with a man in a mask, who "said if they did not get what they wanted, blood would flow."

Bloodletting, at least from humans, was avoided when troops arrived to free the hostages and remove the *pepineros* from the area. But sea cu-

cumber beds are dangerously overfished, scientists say. And several Galápagos tortoises and sea lions were reportedly killed or mutilated prior to the occupation, according to Macarena Green, a biologist based in Quito, Ecuador, whose account of the events was forwarded to scientists over the Internet last week. Many researchers reading the dispatch now worry that the flotilla of fishermen an-



Innocent bystanders. Local fishing activity may harm habitats of Galápagos animals such as these tortoises.

LA CONSERVACIÓN DE GALÁPAGOS