ECOLOGY

Savannah River Lab Faces Budget Ax

A 54-year-old University of Georgia ecology lab funded primarily by the Department of Energy (DOE) is fighting for its life.

Located on a 780-square-kilometer nuclear industrial site in southwest South Carolina that is off-limits to development, the Savannah River Ecology Laboratory (SREL) is well respected for its expertise in subjects including the movement of pollutants in streams and the effect of radiation on reptiles. Two years ago, however, DOE moved the lab from its office for cleanup projects to one that focuses on the science of remediation and asked it to focus on issues such as the migration of radionuclides to deep aquifers. Now President George W. Bush has proposed eliminating the lab’s budget in 2006.

Last fall an outside review said that SREL was making progress toward its new subterranean emphasis, although it urged DOE to make use of the lab’s “unique” capabilities. Independent science advisers to DOE have also repeatedly urged the agency to nurture its ground-level ecology science. Yet despite that advice and the lab’s efforts at refocusing its work, the president’s budget request put a priority on subsurface capabilities.

Research on radioecology and surface science and high-level radioactive waste. DOE cleanup sites in Tennessee and Colorado will require an understanding of the movement of radioisotopes on the surface that SREL scientists already possess. Indeed, a 1994 decision by DOE not to drain a lake at the Savannah site and remove contaminated sediment, he says, was based on SREL research that suggested the habitat could survive with the sediment intact. Experts believe the decision has saved billions of dollars in cleanup costs (Science, 12 March 2004, p. 1615). “For an $8 million organization, we’ve had a huge impact,” says Bertsch.

Patrinos says that SREL scientists are being encouraged to seek support from other federal agencies. But he concedes that the lab “will most likely have to shut down” at some point if Congress accepts the 2006 budget proposal. The University of Georgia, Athens, which provides about $1 million a year, will be hard pressed to make up the difference. “We have our own budget problems,” says Gordhan Patel, the university’s vice president for research.

Ecologists say that much will be lost if the lab is closed. “SREL has been without a doubt the most productive and significant organization in herpetological ecology for the last 25 years,” says ecologist David Wake of the University of California, Berkeley, who notes that the lab has taken advantage of the size and undisturbed nature of the site. That advantage could disappear unless lab officials can escape the president’s budget ax.

PROPOSITION 71

Proposed Legislation Threatens to Slow California Stem Cell Rush

Although California voters last November approved a proposition that promises to push the state to the forefront of embryonic stem (ES) cell research, legislation introduced in the state senate last week may significantly constrain the way that the new California Institute for Regenerative Medicine (CIRM) conducts business.

Proposition 71 created CIRM to award up to $3 billion over the next decade to academic and industry researchers working in the state on stem cell projects that are ineligible for federal funds because of restrictions on human embryonic research. One far-reaching new measure introduced on 17 March aims to amend the state constitution to redefine CIRM. It would increase scrutiny of potential conflicts of interest, require more open meetings, and guarantee that products or treatments derived from this research are both affordable to low-income residents and pay increased royalty or licensing fees to the state.

Zach Hall, CIRM’s interim president, takes issue with several concerns raised by the legislators. “It really does seem to be a gap between two cultures,” says Hall, a neuroscientist who once headed the National Institute of Neurological Disorders and Stroke in Bethesda, Maryland. One point of contention: whether the working groups that evaluate grants can hold closed-door meetings. “This is the gold standard of peer review, and scientists in public won’t speak openly and frankly,” says Hall. He similarly wonders how the state will determine what is “affordable” and cautions that industry will shy away from collaborations that have such limits.

California state senators Deborah Ortiz (D) and George Runner (R), who introduced the measure, also co-authored a separate bill that calls for a 3-year moratorium on using state funds to pay for hyperovulation of women and retrieval of multiple eggs, which they contend may cause harm. Many researchers hope to create ES cells through somatic cell nuclear transfer (SCNT), which requires human eggs. SCNT uses a hollowed-out egg to “reprogram” cells to their embryonic state. ES cell lines derived from SCNT may enable scientists to study pathogenesis, test drugs, and even treat people directly.

Nobel laureate Paul Berg of Stanford University, an influential backer of Proposition 71, is surprised that Ortiz, who pioneered legislation encouraging ES cell research, is pushing for these changes. “Ortiz supported the thing all the way through,” he says. R. Alta Charo, a lawyer and bioethicist at the University of Wisconsin, Madison, says she is “dismayed” by the idea of an egg-donation moratorium, which she asserts violates a woman’s right to choose and could effectively halt SCNT research.

Ortiz insists she is merely fine-tuning Proposition 71. She adds that the egg-donation moratorium does not prevent researchers from using private funds to obtain eggs.

The egg-donation moratorium requires a majority vote in the legislature. The proposed constitutional amendment, however, would need the support of two-thirds of the legislature, which would then place the issue before the voters in November.

—Jon Cohen

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