Virginia OKs Rabies Vaccine Test

On 5 July, the Virginia Department of Health announced it has granted approval to the Wistar Institute of Anatomy and Biology to test an antirabies vaccine on an island off its coast. Only 2 weeks previously, South Carolina officials turned down a similar proposal by Wistar to field-test the vaccine in their state (*Science*, 30 June, p. 1535).

Before it can proceed in Virginia, however, Wistar needs approval from one more party: the Nature Conservancy, which owns Parramore Island, the proposed site of the test. Wistar wants to test the vaccine this fall on the island's raccoons by planting the vaccine in fish bait.

Wistar official Warren Cheston says that the only remaining "minor" issue to be resolved with the conservation group is that Wistar provide adequate liability coverage in case the organization is sued. But John Hall of the Nature Conservancy said that insurance "is not the only concern. There are scientific concerns." He declined to specify what these were. "We are going to take a hard look at this before we make a decision," Hall said. He noted that the organization may also need legal permission from a local hunt club to conduct the experiment. The hunt club owned the island before selling it to the Nature Conservancy and has retained some rights to it, Hall said.

Cheston, asked why he thought Virginia officials approved the project while South Carolina officials would not, could only say that the institute is "dealing with different people." The South Carolina health department has asked for more evidence that the vaccinia virus, into which a gene from the rabies virus has been spliced, is safe to humans. It had also raised questions about the adequacy of Wistar's liability coverage.

This delay means that Wistar's virus probably will not become the first outdoor experiment of a genetically engineered virus in the United States. That distinction is now expected to go to the Boyce Thompson Institute for Plant Research at Cornell University. The institute received permission in June from the Environmental Protection Agency to test a genetically engineered insect virus at the New York State Agricultural Experiment Station in Geneva.

The virus has been modified by deletion of a gene to weaken its ability to survive. In this test, which is expected to take place later this month, the virus will contain no new genetic material, but it may eventually be used as a vector for genes that code for substances toxic to insects, such as a toxin gene in *Bacillus thuringiensis*. The virus is *Autographa california* and belongs to a group of baculoviruses that causes epidemics among insect pests that damage crops and forests. The virus does not harm mammals, according to institute scientists.

M.S.

Bionet Bites the Dust

Bionet, a computer network for molecular biologists and biochemists, is shutting down at the end of September. A decision by the National Institutes of Health not to renew the grant that has supported the service for the past 5 years prompted the planned shutdown, which will leave an estimated 3000 users in the lurch. According to Bionet manager David Kristofferson, NIH decided to pull the plug after a special study section concluded that the service had not achieved a strong research program.

Bionet is run by IntelliGenetics, Inc., of Mountain View, California, as a nonprofit resource for the scientific community. Funding so far has totaled \$3.5 million, according to NIH's James Cassatt.

By the original conditions of the NIH grant, the company was supposed to do molecular biology research—applying its computer system to performing evolutionary comparisons of DNA or protein sequences, for example—in addition to providing computer services for researchers who subscribed to the service. Kristofferson concedes that the conclusion of the study section about the Bionet research program may have been technically correct. But he maintains, "We were up to our ears handling the demands the users were putting on our system."

The principal demand is for performing DNA or protein sequence comparisons. The first thing molecular biologists want to do when they sequence a new protein or nucleic acid is to see if it resembles other known sequences. Bionet is about the only place where all the protein and DNA databases are available in one place with the necessary software for doing the comparisons, Kristofferson explains.

The service, which costs a flat fee of \$400 per year, also gives biologists access to several computer "bulletin boards" for exchanging information—although not for long

When Bionet disappears this fall, it will be missed most by researchers at smaller institutions lacking strong computer facilities of their own. "There is a need for a central computing facility for people at small colleges," says Dan Davison of Los Alamos National Laboratory, who is trying to enlist support for a continuation of Bionet in some form. "I'm doing it not so much for me as the people I've met from coast to coast who barely know how to turn on their PCs."

Meanwhile, NIH's Cassatt agrees that some of the functions performed by Bionet are valuable and says that NIH is currently examining the options available for maintaining those functions. But for now, biologists can count the days to log-off.

■ J.L.M.

New Support for Women Scientists

The creation of a \$70-million fund to increase the opportunities for women scientists in higher education was announced on 29 June by the Henry Luce Foundation in New York.

Called by the foundation "the largest private resource ever established to aid women in science," the fund was established in accordance with a bequest by the late ambassador and writer Clare Boothe Luce.

The fund will provide for professorships, fellowships, and scholarships for women in fields where Luce felt the need was greatest: physics, chemistry, biology, meteorology, computer sciences, mathematics, and engineering. Eight women have already been selected to receive Clare Boothe Luce professorships this year. Yale University will get its first woman physicist and Princeton and Holy Cross will get their first chemists of the fair sex.

Fourteen private colleges and universities designated by Luce will each receive \$3 million, the income from which will be used to support women students and faculty members. The remaining \$28 million will be disbursed as grants to other selected institutions

The New York Times quotes Luce's stepson, Henry Luce 3d, as saying that although Mrs. Luce had wide-ranging accomplishments, she was not particularly interested in the sciences.