SCIENCESCOPE

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DOE Research Urged to Focus on Environment

David Galas has earned high marks for his 3-year stint as head of the Department of Energy's (DOE) Office of Health and Environmental Research (OHER). But as Galas leaves DOE next week to join a biotech firm (*Science*, 25 June, p. 1867), he bequeaths a tough task to his successor: widen the scope of DOE's environmental research.

As Cold Spring Harbor director James Watson says, Galas' exit creates "a vacuum that we don't know how to fill." But Watson is referring only to DOE's health related research, geared mainly toward gene mapping and sequencing. The next director of OHER, yet to be named, should not only maintain the genome program's momentum but also develop a research program that better supports DOE's restoration efforts, several outside experts told *Science*. "OHER's environmental programs need a stronger push," says Charles DeLisi, dean of engineering at Boston University and a former OHER director.

DOE

Research hole. To help clean up nuclear waste at weapons labs such as Hanford, experts urge DOE to conduct more basic research on environmental restoration.

Galas agrees. "I can't point to a strong working relationship between basic science and the cleanup side of DOE," he says. The problem, says former DOE research director William Happer, Galas' former boss, is that the restoration division, pressured by environmentalists to start the cleanup of DOE's weapons labs—a job expected to last decades and cost as much as $100 billion—has overlooked basic research in favor of quick fixes.

Despite the immensity of the cleanup, DOE is due to spend just $40 million in 1993 on nonclimate related environmental research. But Galas has laid the foundations for a more "directed" effort. This fall OHER plans to break ground on a $218 million environmental and molecular sciences lab at Battelle Pacific Northwest Laboratories in Richland, Washington. The lab's primary goal? Find ways to detoxify DOE's Hanford lab near Richland.

HHS Fumbles Ball on AIDS Vaccine Trial

It may not be football season yet, but you can watch a new version of the sport as the Department of Defense (DOD) and the Department of Health and Human Services (HHS) punt a $20 million public health project back and forth without gaining yardage. Since last fall, the two agencies have been trying to decide how to proceed with a congressionally mandated clinical trial of a therapeutic AIDS vaccine. After protracted negotiations, DOD decided in April to pass the money to HHS. But now, after first demanding the money, HHS has decided not to take it after all.

The game started last October, when Congress bypassed the peer-review process and earmarked $20 million to DOD to test a therapeutic AIDS vaccine being developed by Connecticut's MicroGeneSys Inc. This spring, a blue-ribbon panel convened by the National Institutes of Health (NIH) decided that the money would best be spent comparing several vaccines. Thus on 7 April, DOD agreed to give HHS (NIH's parent) the money for such a trial.

HHS, however, appears to have fumbled, turning the funds back to DOD. Why? HHS policy forbids the agency from paying for experimental products. But as HHS general counsel Harriet Rabb wrote to a DOD lawyer on 21 June, "a high-level member of HHS's staff" had tried—but failed—to "persuade" MicroGeneSys to donate vaccine. "This department is not in a position to go forward with a multivaccine test unless and until that situation changes," Rabb concluded. MicroGeneSys could not be reached for comment.

Now that DOD has the ball, it appears unwilling to advance it: *The Washington Post* reported that DOD will not proceed with a trial unless MicroGeneSys donates vaccine. If the firm refuses, the $20 million would flow into DOD's AIDS general research budget.

FDA to Rescue Russian Vaccine Program

To many Americans, polio conjures up images of the past—Franklin Delano Roosevelt wearing leg braces, children in iron lungs—but for the average Russian the disease may not seem so remote. In the past few years polio epidemics have plagued the former Soviet Union, because, Russian officials suspect, of mishandling of the fragile polio vaccine. To counter the threat, Russia has vowed to improve vaccine regulations, and it has gone so far as to turn to a new ally—the U.S. Food and Drug Administration (FDA).

The FDA has begun supplying resources and advice to help reform outdated Russian vaccine standards. One big change will be an overhaul of Russia's biologics inspection system, says FDA deputy commissioner Mary Pendergast. (Former Soviet states for the most part still rely on Russian vaccines.) Currently, inspectors test batches of biologics, from vaccines to cytokines, for efficacy and stability only after the manufacturer has shipped them out for use. But Russian health officials now intend to test each batch before it leaves the factory—a change that requires new regulations and procedures, says Pendergast. "We're trying to teach them to do all those things," she says.

Aside from expertise, the FDA is providing subscriptions to journals and $100,000 worth of reagents, refrigerators, and other supplies. Though just begun, the collaboration has already reached a milestone. In May, Pendergast and other FDA officials held a workshop in Moscow on vaccine quality control—the first of its kind in Russia, claims Pendergast.

NOAA Makes Water Plan a High Priority

As heavy rains led to widespread flooding and crop damage in the midwestern United States last week, a system to manage water resources better has begun to receive high priority at the National Oceanic and Atmospheric Administration (NOAA).

The consequences of floods and droughts are straightforward—they can devastate agriculture and drain municipal water supplies. To address these problems, in 1985 scientists at NOAA's National Weather Service (NWS) proposed a Water Resources Forecasting System (WARFS) that would use computer forecasting models, satellite data, and hydrological survey data to better predict shifts in water levels. WARFS would be cheap—NWS hydrologist Earl Laws says it would cost about $5 million a year to run in the western United States, where it would be needed most. And he estimates it could save at least $120 million a year in water-related costs.

Until recently, however, WARFS languished as a low-priority item in NOAA's budget. But promising results from a test run in Denver appear to have won supporters among top NOAA officials. Laws, for one, is hopeful to see the 8-year odyssey to fund WARFS come to an end. "Things are finally starting to look good for the initiative," he says.