630 Hepatitis B vaccine under fire

634 Turning a sphere inside out

635 Rep. Ehlers speaks out on science

ing it's Africa, Asia, and Turkey—these are basically trial balloons being floated." The tracks of the great ape ancestry are still faint.

–ANN GIBBONS

NOMINATIONS

Clinton's R&D Chiefs Waiting on Sidelines

With the November congressional elections approaching, Senate Republicans are in no mood to rubber-stamp President Bill Clinton's choices for senior Administration posts. That was clear last week at a hearing on the nomination of U.N. envoy Bill Richardson to head the Department of Energy (DOE), as Republican senators blasted Clinton's handling of nuclear waste, the nuclear stockpile, and global climate change issues.

Richardson is the latest high-level Administration R&D nominee being held hostage to partisan wrangling between Congress and the White House over issues not related to their qualifications for the job. Science advocates worry that the delays could jeopardize R&D programs as the Administration begins work on the 2000 budget.

Perhaps the most frustrated of the science officials–in-waiting is one who has already been confirmed: microbiologist Rita Colwell, who was approved on 22 May as director of the National Science Foundation (NSF). The problem is that her predecessor, Neal Lane, is still awaiting confirmation as director of the White House Office of Science and Technology Policy and, thus, has not officially vacated his NSF post. Neither appointment is controversial; Lane won plaudits from Republican and Democratic senators at his confirmation hearing, and lawmakers dispensed with a hearing for Colwell altogether. Rather, the delays are due both to White House tardiness in completing paperwork and to an election-year reluctance by Republicans to help Clinton rebuild his team.

DOUG MILLS/AP

Holdup? The U.S. Senate may delay its approval of Bill Richardson as secretary of energy.

The partisanship was on display last week during a 4-hour grilling of Richardson, a former Democratic member of Congress from New Mexico, by the Senate Energy and Natural Resources Committee. The sternest words came from Senator Larry Craig (R–ID), who warned that he is prepared to oppose Richardson's confirmation until the White House lays out a clear plan to store spent nuclear fuel from commercial reactors. Under Senate rules, the objections of a single senator can delay a floor vote once the committee acts.

DOE is legally bound to store the waste, but the long-term storage facility at Yucca Mountain in Nevada will not be ready until well into the next century. Some lawmakers want an interim facility, but the White House opposes this option because it could divert money and attention from the long-term solution. Craig complained that the White House has not allowed previous energy secretaries to negotiate an interim plan with Congress. But Richardson, who insisted that decisions about nuclear waste disposal "will be based on science and not politics," reminded legislators that "I can't deal with these issues until you confirm me."

Republican lawmakers also questioned the Administration's efforts aimed at ameliorating global climate change despite stiff congressional opposition to the Kyoto treaty negotiated last December and blasted its oil and gas policies, which they maintain are hurting domestic producers. And some, such as Senator Jesse Helms (R–NC), argued that the department should be abolished, although the idea has garnered little real political support in either the House or Senate.

At the same time, many senators said that holding up the confirmation would be counterproductive. "DOE needs a leader, a Cabinet officer, as quickly as possible," said Senator Pete Domenici (R–NM), who chairs the panel that appropriates DOE funding. Former DOE secretary Federico Peña left last month to join Vestar Capital Partners, a New York investment firm, leaving Deputy Secretary Betsy Moler as acting chief. Moler is expected to resign once a new secretary is confirmed; Administration officials say a leading candidate to succeed her is T. J. Glauthier, who now oversees energy, space, and science issues at the Office of Management and Budget.

Administration officials hope all of the R&D nominees will be confirmed before Congress leaves in early August for a month-long recess. That would let them play a role in developing agency requests for the 2000 budget, which are submitted in the fall. Science advocates fear that the absence of senior officials like Richardson and Lane could hurt R&D programs. But given the Senate's backlog of some 140 nominees, a stack of other pressing business, and continuing partisan tensions, the would-be R&D chiefs may be forced to cool their heels for a while longer.

–ANDREW LAWLER

ECOLOGY

U.S., Ukraine Launch New Chernobyl Lab

Every summer for the past 6 years, U.S. ecologist Ron Chesser dons his moonsuit and respirator and prowls the marshes near the Chernobyl nuclear power plant. The site is not on any travel agent's list of popular destinations, but it does offer Chesser exactly what he wants—a supply of voles, striped field mice, and other small mammals that are markers for the ecological health of a region 12 years after the world's worst nuclear accident. At the end of every field season, however, Chesser must leave behind certain samples, such as highly radioactive biological tissue or soil, that cannot be taken out of the country and transported to his lab at the Savannah River Ecology Laboratory in Aiken, South Carolina. "It's been pretty limiting," he admits.

But things are about to get a bit easier for Chesser and other researchers who venture into Chernobyl's forbidden zone. Last week, Vice President Al Gore and Ukraine President Leonid Kuchma unveiled plans for an International Radioecology Laboratory at Chernobyl, funded jointly by the U.S. and Ukrainian governments. The lab, which will study everything from genetic mutations in local wildlife to radionuclide movement and cleanup technologies, should be up and running by next summer. "We place great hopes in this new facility," says Anatoly Nosovsky, director of the Slavutych Laboratory of International Research and Technology, a nearby research center devoted to nuclear safety and cleanup technologies.

When the Chernobyl power plant's reactor number 4 exploded on 26 April 1986, it

released into the air as much as 150 million curies of radiation, much of which settled onto nearby land. Authorities created a 30-kilometer "exclusion zone" around the nuclear plant, evicting more than 135,000 people and limiting access mostly to plant workers, cleanup crews, and scientists. As a result, the exclusion zone has become a unique ecological laboratory in the shadows of the still-operating power plant.

But what little money the Ukrainian government spends for research in the exclusion zone goes mostly to study hazards from the nuclear fuel remaining in the burned-out reactor core and the weakening sarcophagus that covers it (*Science*, 19 April 1996, p. 352). "There are not enough experts in radio ecology" in the zone now, says geologist Valentin Radchuk, who heads the Department of Scientific Programs for Ukraine's Cabinet of Ministers. Foreign ecologists can stay only for short stints, and they often must tailor their research to fit whatever analyses can be done on equipment at Chernobyl or nearby Kiev. The new lab will be able to tackle many problems, including contaminated groundwater and wind-borne radioactive dust.

Recognizing a compelling need for the lab, officials from various Ukrainian Ministries and the U.S. Department of Energy last October began hammering out the details. The $1.3 million agreement, signed at the second meeting of the U.S.–Ukraine Joint Commission in Kiev, calls for Ukraine to house the facility and pay its utility bills, and for the United States to

ROBERT BAKER

Hot research field. Ron Chesser (right) and Ukrainian colleagues sample mice in Chernobyl's forbidden zone.

furnish it with top-of-the-line instruments for separating radionuclides and carrying out other analyses. The lab should also help cut through red tape that stymies work in the most dangerous areas in the exclusion zone. "The greatest contribution of the new lab," says Robert Baker of Texas Tech University in Lubbock, who collaborates with Chesser at Chernobyl, is that "we'll be more likely to get permission to work in areas most in need of research." Scientists from the United States and Ukraine will meet in Chernobyl next month to draw up a list of necessary equipment and discuss their research strategy.

In the meantime, Ukrainian officials are searching for a suitable home for the lab. The leading candidate is an unfinished building intended as a hotel-resort in the ghost town of Pripyat, situated across a lake from the nuclear plant. Such a setting would also serve as a constant reminder of the accident. "It's very sobering," says Chesser. "You never get complacent."

–RICHARD STONE

SCIENCE POLICY

Outside Insider Named to Head EPA Research

FLORIDA INSTITUTE OF TECHNOLOGY

Norine Noonan

The White House this week tapped a veteran Washington insider for the top research post at the Environmental Protection Agency (EPA), a job vacant for over a year. The choice of Norine Noonan, a biologist-turned-bureaucrat without previous ties to EPA, is raising eyebrows. But some observers say Noonan's expertise as a scientist who knows the ropes in Washington—she spent a decade on Capitol Hill and at the White House before becoming vice president for research and dean of the graduate school of Florida Institute of Technology in Melbourne—will stand her in good stead in defending the $500 million research budget at EPA, an agency often accused of giving science short shrift. "I think that's what they need in that job," says Howard University toxicologist Bailus Walker.

The previous chief at EPA's Office of Research and Development, marine ecologist Bob Huggett, presided over a sometimes painful overhaul of EPA science launched in 1994 that includes shifting research dollars from agency staff to outside scientists and forcing EPA researchers and risk managers to work more closely together (*Science*, 21 January 1994, p. 312). Huggett left in June 1997 to become research vice president at Michigan State University in East Lansing.

Noonan earned a Ph.D. at Princeton University in biochemistry and cell biology in 1976 but soon moved on to a congressional science fellowship and then to the White House Office of Management and Budget (OMB), where she oversaw budgets for the National Science Foundation and NASA. "She was very professional, very hard-nosed,

ScienceScope

GREEN LIGHT FOR ANTISENSE DRUG

After a decade of fencing with skeptics, drug developers soon hope to celebrate the launch of the first "antisense" DNA drug to hit the market.

Retina with fungus

Called fomivirsen, the compound deploys a mirror-image copy of viral DNA to block replication of cytomegalovirus. The virus causes retinitis, an eye infection leading to blindness that mainly afflicts AIDS patients. The drug won a thumbs-up last week from a Food and Drug Administration advisory committee, and the way is now clear for FDA approval. Although fomivirsen (or Vitravene) must be injected directly into the eye, its developer, Isis Pharmaceuticals of Carlsbad, California, says it has a big advantage over some antiviral drugs: Targeted locally, it causes only mild side effects such as increased pressure and inflammation.

ISIS PHARMACEUTICALS

Even antisense critic Arthur Krieg of the University of Iowa, Iowa City, calls the FDA panel vote "a landmark event." Five years ago, "the conventional wisdom was that antisense was a fraud," he says. "Isis deserves a tremendous amount of credit for bringing sense to the antisense field."

REFORM FOR ITALIAN CONCORSI

Observers are eager to see how Italian universities adapt to new rules for recruiting professors that eliminate a notorious system widely viewed as not only inefficient but rife with cronyism and nepotism.

Under the old "megaconcorsi," thousands of applications for academic posts landed at the Science Ministry in Rome every few years, taking years to process. The system "represented the Kafkaesque culmination of the triumph of bureaucracy," says astronomer Margherita Hack of Rome's Accademia dei Lincei.

Under the measure approved by the Senate on 1 July, each university will run its own concorsi. Critics say the reform is far from ideal: Although university panels must be dominated by outsiders, their selection "remains fully exposed to systematic manipulation by the academic superpower groups," asserts Aldo Massullo, a member of the Senate's Education Commission. Massullo notes that the reform also fails to address an underlying problem: An Italian academic post means tenure for life, with no standards for quality or productivity.