

lines is not equivalent to reproductive cloning." Berg, who appeared at the press conference, calls the episode "bizarre. ... You have an audience [that] seems not to have been on this planet for the last 2 years."

Stanford's plans are consistent with a state law passed in September that endorses both stem cell and therapeutic cloning research (*Science*, 27 September, p. 2185), although Berg says that the new center "was in the works long before that." The University of California, San Francisco (UCSF), sponsored such work before researcher Roger Pedersen moved from there to the U.K.'s Cambridge University last year, and UCSF may revive it as part of another privately funded stem cell initiative launched earlier this year (*Science*, 16 August, p. 1107). Another boost may come from Massachusetts: Legislators there introduced a bill this month that would create a state fund for ES cell research.

Researchers applaud the Stanford initiative, which they see as necessary in light of the current prohibition on federal funding for research with human ES cells derived after 9 August 2001. MIT stem cell researcher George Daley says he hopes it is "just one of the first of what should be many privately funded institutes to take up the slack." The biggest one to date is the Institute for Cell Engineering at Johns Hopkins University, formed last year with an anonymous donation of \$58.5 million. UCSF is currently focused on distributing its two lines of presidentially approved stem cells to the 40 groups that have requested them.

—CONSTANCE HOLDEN

RESEARCH FUNDING

Italian Researchers Facing Lean Times

NAPLES—Italian researchers are distraught this week after legislators approved a 2003 budget that could shutter some national facilities and threaten Italy's contributions to major international research centers. "It is the worst situation in research in Italy since [World War II]," says legal historian Luigi Capogrossi Colognesi, a member of the governing council of the National Research Council (CNR), the country's largest research organization.

The parliamentary vote came after days of heated debate in the Senate, punctuated by outraged researchers demonstrating noisily outside and a mass resignation by university rectors, who say that a written commitment to adequate funding is the only thing that will bring them back. The chamber of deputies

was preparing this week to rubber-stamp the budget decision by the upper house.

The Senate budget contained \$1.6 billion for public research organizations, a cut of 1.6%, and level funding of \$6.3 billion for universities. Fixed costs such as salaries and operating expenses consume most of the budget, leaving ongoing research projects most



vulnerable to cuts, says Rino Falcone, an artificial-intelligence researcher at CNR.

It is not just the level of funding that has angered researchers. They are also incensed that the Ministry of Finance has proposed raising additional funds for universities by increasing the state tax on cigarettes. "I don't agree with people smoking to finance my research," says oncologist Alfredo Budillon of the University of Naples. Scientists are also galled by a government proposal to create a \$98 million special science fund distributed at the personal discretion of Prime Minister Silvio Berlusconi. "This is a new attack on the autonomy of the scientific community and its institutions," says Falcone. Parliament was expected to vote this week on both proposals.

CNR, with about 100 research centers throughout Italy, will receive \$477 million, about 2.5% less than in 2002, says Capogrossi Colognesi. But the actual impact on science will be greater because its shrunken budget must cover raises written into existing labor agreements. CNR recently announced that it might have to rescind its membership in the European Science Foundation, and other international collaborations might also be sacrificed.

The government gave no explanation for why some organizations were hit much harder than others. "It is very hard to understand what the original motivations for these moves are, apart from trying to cut budgets across

the board," says physicist Alfonso Franciosi, chair of the National Committee for Synchrotron Radiation Research at the National Institute for the Physics of Matter (INFM). Facing a 30% cut, INFM will be forced to slash its contribution to the Elettra x-ray synchrotron in Trieste, which each year hosts 800 researchers from across Europe. Elettra could be shut down temporarily as early as next month. INFM officials are also wondering how to meet their \$11-million-a-year obligation to other European x-ray and neutron projects, among them the European Synchrotron Radiation Facility, the Institute Laue-Langevin neutron source, both in Grenoble, and the future European Spallation Source.

The National Institute for Nuclear Physics says it will be able to maintain its subscription to major facilities such as the CERN particle physics lab near Geneva, despite a 10% cut. But it will have to reduce its contribution to the building of several detectors for the Large Hadron Collider there, reports physicist Carlo Bernardini of the University of Rome.

Researchers say that the new cuts only underscore the country's status as the stepchild of European research. Italy spends less than 1% of its gross national product on research, about half the European average. Nobelist Carlo Rubbia, whose National Agency for New Technologies, Energy, and the Environment faces a 15% cut, says that Italy is "marginal both in Europe and in the world in the field of science."

—ALEXANDER HELLEMANS

Alexander Hellemans is a writer in Naples, Italy.

2004 BUDGET

No Holiday Cheer For NIH, NSF

When is a budget increase not really a budget increase? When President George W. Bush prepares a 2004 request to Congress before legislators have completed work on this year's budget.

Although the president's request for the next fiscal year won't become public until early February, *Science* has learned that the White House has settled on a 9% increase for the National Science Foundation (NSF), to roughly \$5.4 billion. That sounds like a hefty increase for a domestic research agency when the economy is in a slump, a war against Iraq looms, and the budget deficit is growing. But it might be no more than Congress gives NSF this year. The \$23.3 billion National Institutes of Health (NIH) has received similarly Scrooge-like news for the holidays: The White House has offered less than a 1% hike, and Department of Health and Human Services (HHS) officials are appealing.

The NSF request is less generous than it

ILLUSTRATION: TIM SMITH

seems for two reasons. First, it's based on the president's 2003 request for a 5% hike, a number that Congress is almost certain to surpass when it finishes work next month on the budget for the fiscal year that began 1 October. (The House has already approved a 13% increase, and a Senate panel has endorsed a 12% hike.) Second, before calculating the 9% increase, budget officials subtracted \$76 million from a dead-on-arrival proposed transfer of funds to NSF from three other agencies. The result is a presidential request of roughly \$600 million over 2002 levels, which exactly splits the difference between the \$633 million hike for 2003 approved by the House and the \$564 million added by the Senate panel.

There's no sugar coating on the NIH request, which sources say is a mere \$50 million over the expected 2003 total of \$27.3 billion. HHS Secretary Tommy Thompson is pushing for his original 5% request. But NIH watchers are dubious of anything more than the 2% that the White House has projected for future years. And unlike previous years, nobody is counting on Congress to come to NIH's rescue.

—JEFFREY MERVIS AND JOCELYN KAISER

HIGH-ENERGY PHYSICS

CERN Council Chooses ITER's Head as Chief

Europe's premier accelerator laboratory has elected a director general without training in particle physics but skilled in managing large projects. That's no accident: CERN's governing council made it clear last week that building the Large Hadron Collider (LHC) on time and within budget is the lab's top priority, with everything else—including a streamlined research portfolio—taking a back seat.

The new leader is Robert Aymar, a 66-year-old French plasma physicist who currently directs the International Thermonuclear Experimental Reactor (ITER). A multibillion-dollar international tokamak project, ITER has survived a downsizing of its original design and the withdrawal of the United States before regaining its momentum; the partners are now in the final stages of selecting a site (*Science*, 20 September, p. 1977). That performance under fire was not lost on the CERN council. "For the time being,

CERN's activities are centered about building the LHC and not exploiting the science, and [Aymar] has long-standing experience," says Jean-Pierre Ruder, the Swiss delegate to the CERN council. The outgoing director-general of CERN, Luciano Maiani, agrees: "I find that Aymar is very well qualified, even though he's not a particle physicist."

Aymar, who will begin his 5-year term in January 2004, is best known for directing the Tore Supra project, which used a large magnetic bottle called a tokamak to study very hot plasmas. But he also has had a lot of exposure to particle physicists. During the 1990s, he oversaw particle-physics experiments as head of the Sciences of Matter directorate of France's atomic energy lab, CEA. He also helped design the LHC and chaired the LHC external review committee when the project ran into budgetary problems (*Science*, 5 October 2001, p. 29). "I was involved in the decisions about the LHC at all levels," says Aymar. "The big challenge [now] is to make sure that the LHC is achieved correctly. The timing should be controlled by technology concerns, not financial ones."

Financial concerns have dominated CERN for more than a year. A 30% cost overrun in the LHC's \$1.6 billion budget has forced the council to shut down several key experiments in 2005 and pare research and development projects to a bare minimum. Although the council's acceptance of the cuts last week was no surprise—the details had been announced earlier this year (*Science*, 29 March, p. 2341)—physicists remain concerned about the impact of the cuts. "It leaves very little scope for preparing for the long-term future," says

Phil Allport, a physicist at Liverpool University in the U.K. and adviser to CERN. "There's pain in the lost physics programs, but more pain in the strategic R&D that underpins CERN's future post-LHC." According to Aymar, the damage can be mitigated by a closer collaboration between



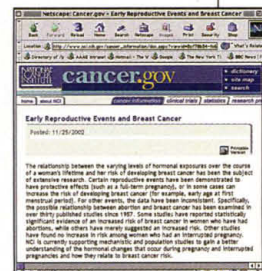
New boss. Robert Aymar (top) joins CERN as devices such as the Super Proton Synchrotron (bottom) face temporary shutdowns.

ScienceScope

Facts in Flux The National Cancer Institute's (NCI's) views on whether abortion raises a woman's risk of breast cancer continue to evolve. And researchers are hoping that the next iteration reflects good science rather than politics.

In March, NCI officials put out a fact sheet, updated with recent studies, that concluded abortion wasn't a risk factor. In June, new NCI director Andrew von Eschenbach ordered his staff to pull the fact sheet after 28 abortion opponents in Congress disputed NCI's conclusions (*Science*, 12 July, p. 171). Last month, however, NCI announced on its Web site that the evidence is "inconsistent." It plans to hold a workshop to explore the molecular mechanisms by which hormonal changes during pregnancy protect against breast cancer.

NCI epidemiologist Robert Hoover welcomes the workshop, tentatively slated for February, saying that he has wanted to convene experts on this broader topic for years. But attendees will be asked to do more than just talk science, says NCI spokesperson Mike Miller. The institute is looking for a "statement" on what its abortion fact sheet should say.



Opening Up in Japan Japanese legislators have endorsed the drive to give research institutions a freer hand in managing their affairs, passing a package of laws that will allow several government corporations to become independent agencies.

The changes, approved last week, should let institutions adopt personnel policies that deviate from national regulations. They also allow agencies to hold over excess cash from year to year, helping stabilize long-term projects. The laws affect the Institute of Physical and Chemical Research (RIKEN), the National Space Development Agency, the grant-giving Japan Science and Technology Corporation, and a handful of other science-related organs.

"We're not expecting major changes," says RIKEN president Shun-ichi Kobayashi. But there is uncertainty about the future. One issue: the relationship that a new government panel created to evaluate RIKEN's performance will have to RIKEN's long-standing external review committee. The changes go into effect next fall.

Contributors: Charles Seife, Eliot Marshall, Jocelyn Kaiser, Dennis Normile