

Office of Science programs was “the wrong question.” The choice, he said, should be either achieving energy independence or spending money on the Star Wars missile defense program and continuing to cut taxes.

Although most of the committee members are strong advocates of using science and technology to move beyond the current energy infrastructure, the ARPA-E proposal remains in limbo. Science committee staff said some version of a new energy research agency would likely be proposed in mid-June, probably with a lower price tag than the \$1 billion for ARPA-E recommended in the *Gathering Storm* report.

Jim Dawson

Korea sends Laughlin packing

Robert Laughlin's stint as president of the Korea Advanced Institute of Science and Technology in Daejeon, South Korea, comes to an end next month. The Ministry of Science and Technology decided in April not to renew his two-year contract after some 90% of KAIST professors gave him a vote of no-confidence

and nearly all deans and department chairs quit their administrative posts to protest his continuing in the job.

In naming the physics Nobel laureate president in 2004, the ministry apparently hoped to



Laughlin

raise the international visibility and stature of KAIST. As a foreigner, Laughlin was at an advantage for introducing change, says KAIST vice president Sang Soo Kim.

Some of Laughlin's ideas were good, Kim says. “But he failed to build mutual trust between him and the professors.” Also working against Laughlin, Kim adds, “were his lack of experience running a university and his confrontational style of management.”

Others on the KAIST faculty are harsher in their criticism of Laughlin. “Professors are disappointed in him because of his lack of vision and lack of passion for KAIST,” says Yong Hee Lee, chair of the physics department. “Also, in other places, he said KAIST is not up to par. As a president he was degrading his own institution.”

For his part, Laughlin insists that the clash at KAIST was cultural and politi-

cal and that his “personality and policies had nothing to do with it.” To start with, he says, “I was hired by the ministry. I have legitimacy from the government, but no legitimacy from the troops.” And, he adds, “I got orders from the ministry not to build up mutual trust with the professors. I got orders from them to do stuff the professors would not accept.”

Among his achievements at KAIST, Laughlin counts a \$20 million a year hike in the institute's budget and, most important, he “managed to put the reform agenda in writing and get it into the public eye. That's 90% of the battle. Now the monkey is on the back of whoever takes the reins.” The reform will include tying salaries to merit.

The faculty rebellion against Laughlin has brought unwanted attention to Korean science, which already had its tail between its legs in the wake of Hwang Woo Suk's fraudulent claims of cloning. Duke University physicist Moo Young Han, editor of the online newsletter *Korean-American Science and Technology News*, calls both affairs symptoms of “Nobel disease”—referring to the immense pressure in Korea to land a Nobel science prize. Laughlin's tenure at KAIST, Han adds, “was destined for failure, albeit not as spectacularly as happened.”

In July, Laughlin heads back to Stanford University, where he plans to teach, research, and write “anything that brings income.”

Toni Feder

news notes

Scientists protest Guantánamo. In a 30 April letter in the *New York Times*, 19 members of the National Academy of Sciences accused the Bush administration of showing disdain for international law and crossing the limits of acceptable practices in the treatment of prisoners at Guantánamo Bay, Cuba. Physicists Freeman Dyson, David Gross, Walter Kohn, Leonard Susskind, Frank Wilczek, and Edward Witten were among the letter's signers.

Physicists have long been involved in promoting democracy and human rights, sometimes at the cost of their personal freedom, says Susskind. This interest makes many physicists especially sensitive about illegal imprisonment and other abuses of power, he adds.

“I don't deceive myself into thinking that the letter will, by itself, change things,” says Susskind. “But perhaps it will add a tiny bit to a growing feeling that we are moving into dangerous territory.”

PKG

Hydrogen, the contest. First there was Charles Lindbergh, who in 1927 won a \$25 000 French prize for the first solo, nonstop transatlantic flight. Then in 2004 Burt Rutan picked up the \$10 million Ansari X Prize for getting a manned, reusable craft up into space and back again. But the Lindbergh and Rutan awards would pale in comparison to the \$100 million-plus “H Prize” that US Representative Bob Inglis (R-SC), chair of the House Committee on Science research subcommittee, is proposing as “the most nongovernmental way to break through to a hydrogen economy.”

His legislation, known as the “H-Prize Act,” would grant four \$1 million prizes annually for technology development involving hydrogen storage, production, distribution, and utilization. There would be a \$4 million prize given every two years for hydrogen vehicle prototypes. But the big prize, \$100 million—\$10 million in cash and up to \$90 million in private capital matching funds—would be awarded for “changes in hydrogen technologies that meet or exceed objective criteria in production and distribution to the consumer.”

Some Democrats suggested during a hearing that the millions of dollars would be better spent directly supporting hydrogen research. But the committee moved the bill to the House floor for a vote, with science committee chairman Sherwood Boehlert (R-NY) noting that “we are pretty far away from knowing how to create, store, distribute, and use hydrogen cleanly and efficiently. We need . . . all the ingenuity we can muster to attack this problem.”

The House overwhelmingly passed the bill 416 to 6 on 10 May with Inglis saying, “This is no science project. A hydrogen future is closer than we think.”

JLD

ESO expands. Three countries are at various stages of joining the European Southern Observatory. Spain will become a member on 1 July, and the Czech Republic and Austria hope to follow suit soon. With all three, ESO's ranks would grow to 14 countries.

Member countries pay an annual fee and an entry fee based on gross domestic product. Spain's fees total around €10 million (\$12.8 million) annually plus more than €60 million to join. A quarter of the entry fee will be paid in software development and in use of the country's 10.4-m segmented Gran Telescopio Canarias—which will see first light later this year—both for science and for testing technologies for a future 30- to 100-m Extremely Large Telescope (ELT).

The Czech Republic will pay around €1.2 million a year plus about €10 million, and Austria's dues will be about €2.5 million a year plus €20 million, according to sources in those countries. Astronomers in Austria recently won their government's support after trying for many years to join ESO.

For astronomers in all three countries, joining ESO means gaining access to the Very Large Telescope in Chile and to the planning process for the ELT and other future facilities. Says the University of Innsbruck's Sabine Schindler, president of Austria's society for astronomy and astrophysics, "It's not just about access to telescopes. It's also about politics and being part of the international community." **TF**

NASA lacks money for science. Facing pressure to implement President Bush's 2004 directive to send manned spacecraft to the Moon and, eventually, to Mars, NASA administrator Michael Griffin has finally said straight out what space scientists have been claiming for months: The space agency will have to

cut science programs to support the development of manned missions. The short-term goals of NASA's manned space program include completion of the International Space Station and development of a new crew exploration vehicle to replace the aging space shuttle fleet. Those projects set the stage for a more ambitious program to return to the Moon.

In testimony before the Senate in late April, Griffin said, "I believe that fulfilling our commitments on the [space station] and bringing the crew exploration vehicle on line in a timely manner, not later than 2014 and possibly sooner, is a higher priority than these science missions."

Soon after Griffin testified, the National Research Council issued a report that stated, "NASA does not have the resources necessary to maintain a vigorous science program." The committee that wrote the report concluded that NASA's plans for the next five years for research in astrophysics, heliophysics, planetary science, astrobiology, Earth science, and several other programs are "not sustainable" and are "not properly balanced to support a healthy mix of small, moderate-sized, and large mis-

sions." Griffin has asked a NASA committee to meet with scientists and get a list of science mission priorities, but he cautioned that no more money can be spent on science. **JLD**

Iraqi virtual library operating. Some 800 students and scientists at seven Iraqi universities now have access to more than 17 000 science, engineering, and computer science journals, thanks to the recent startup of the Iraqi Virtual Science Library. The library, an idea first put forward 16 months ago by several scientists working as federal government fellows for the American Association for the Advancement of Science, is intended to reconnect Iraq's scientific and university communities to the rest of the world after decades of neglect, said physicist Barrett Ripin, a senior science diplomacy officer at the US Department of State (see *PHYSICS TODAY*, November 2005, page 24). "Iraq began with nothing," Ripin said in a press conference announcing that the library had gone online. "Not only were there decades of very limited access to journals [under Saddam Hussein], but what the scientists did have was destroyed in the war, so they are starting from scratch."

Several publishers, including the American Institute of Physics, are providing access to their scientific journals at highly discounted rates or for free. Sun Microsystems has donated several servers and technical help to get the library connected and operational. The initial costs of the project are being paid

with \$460 000 in funding from the US Department of Defense. In addition to journal articles, the library includes training classes, links to many US government research agencies, and e-mail links to scientists outside Iraq. **JLD**

Louisiana physics institute. In a state that is still recovering from the battering last year by Hurricanes Katrina and Rita, the formation of the new Horace Hearne Jr Institute for Theoretical Physics at Louisiana State University in Baton Rouge takes on special meaning. "It's encouraging that things are moving ahead at LSU," says institute co-director Jorge Pullin. LSU was relatively unharmed by the hurricanes, he says, but the state as a whole suffered, and the university's budget was cut by 5%.

Research at the institute focuses on gravitational physics and quantum technologies such as quantum computing and quantum optics. Some 14 faculty researchers belong to the institute; 4 are in new positions. "The institute brings a new level of international activity and prominence to LSU physics," says Pullin. Among other activities, the institute will host seminars and conferences and will foster international collaborations.

Hearne, an LSU alumnus with a bachelor's degree in physics, willed nearly \$1.3 million for the establishment of the institute that bears his name. The state provided an additional \$800 000. **TF ■**



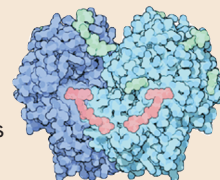
Griffin

web watch

To suggest topics or sites for Web Watch, please visit <http://www.physicstoday.org/suggestwebwatch.html>. Compiled and edited by Charles Day

<http://biocurious.com>

Two physics graduate students, André Brown and Philip Johnson, run **BioCurious**, a blog devoted to biology and its relationship with physics. Their inaugural post, "What Is Systems Biology?" appeared in February 2005. Since then, Brown and Johnson have ranged over such topics as open access publishing, atomic force microscopy, and the potential pitfalls of naming one's own yeast strain.



<http://www.droidlogic.com>



Walking is easy for humans but hard for robots. On his website **Droid Logic**, computer scientist Eric Vaughan describes and illustrates his research into evolving circuitry and grid computing to develop walking machines.

<http://www.npl.co.uk/thelearningroom>

The UK's National Physical Laboratory conducts research into measurement standards. Like NIST, its US equivalent, NPL also supports physics education. NPL's **Learning Room** features experiments, tutorials, and other resources for physics teachers and their students.

