

child is receiving chemotherapy.

Few gene-therapy researchers were available to comment on the case at press time. But Jennifer Puck, a leader of the planned SCID therapy trial at NIH, knows of four other groups that are using or were planning to use similar gene-therapy techniques. At the moment, she says, "we don't know whether the risks [of insertional mutagenesis] are one in 80 or one in 10 million."

U.S. regulatory officials declined to comment on the case. But NIH's Recombinant DNA Advisory Committee is reported to be preparing a broad review of the case at its next meeting, scheduled tentatively for 4 to 6 December.

—ELIOT MARSHALL

## SCIENCE TEACHING

### Georgia County Opens Door to Creationism

The forces of creationism gained ground in Georgia last week when a local school board unanimously adopted a policy that opens the door to creationist-inspired critiques of evolution in biology classes. The policy follows the board's decision in March to insert "disclaimers" into new elementary and high school biology textbooks saying that evolution is only a "theory." The action directly affects only 95,000 students in Cobb County, a suburb of Atlanta and the 28th largest school district in the country. But many science educators say it is part of a national campaign to teach creationist ideas alongside evolution for the sake of "balance."

The new policy, approved 27 September by a 7-0 vote, asserts that "discussion of disputed views of academic subjects is a necessary element of providing a balanced education, including the study of the origin of the species." It goes on to say that the policy is intended "to foster critical thinking among students [and not] to restrict the teaching of evolution [or] to promote or require the teaching of creationism." It supersedes a 1995 policy stating that instruction relating to the origin of life should be conducted with "respect" for the "family teachings" of Cobb County citizens.

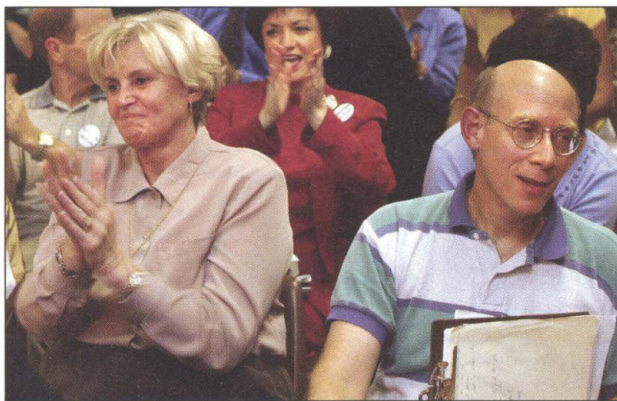
The vote was preceded by an intense publicity and lobbying blitz from scientists, including a letter from National Academy of Sciences president Bruce Alberts urging the academy's Georgia members to speak out against the measure. Scientists from most of the state's colleges and universities

also submitted petitions. The Seattle-based Discovery Institute, creationism's main think tank, has been recirculating a year-old statement signed by 130 scientists nationwide, as well as a new one signed by 28 Georgia scientists, expressing "skepticism toward the Darwinian claim that 'random mutation and natural selection account for the complexity of life.'"

It's not clear what the practical impact of the new policy will be. School board chairperson Curtis Johnston Jr. could not be reached for comment, but last month he told the *Atlanta Journal-Constitution* that the board proposed a revision to "clarify things" for teachers who are "nervous about what they can talk about." Cobb County's high school science supervisor George Stickel is even more opaque. Until school officials draw up regulations to implement the new policy, he says, "your guess is as good as mine" about how it will affect students. But he hopes that teachers will use the issue as "an educative moment."

Those who oppose the new policy see it as a signal to district parents who are sympathetic to creationism or "intelligent design." Ronald Matson, a biologist at Kennesaw State University in Marietta, says that the resolution "fails to discriminate between science and nonsense ways of knowing ... [thus] opening the doors to those with a creationist view to demand equal time." Wes McCoy, a science teacher at North Cobb High School, says that many regard it as a "nod" to creationists, one that says, "even though we cannot teach it, we kind of wish we could."

The Supreme Court ruled in 1987 that creationism has no place in science classes; since then, evolution foes have taken the tack that students need to be informed of the "scientific" controversies surrounding evolution. Jeffrey Selman, a Cobb County parent who is challenging the board's textbook disclaimers as a violation of the constitutional separation of church and state, says that he plans to add the new policy to his



**Going critical.** Jeffrey Selman, who has sued the board for adding disclaimers to textbooks, refrains from joining applause for the board's latest attempt to provide a "balanced education."

## ScienceScope

**Good Librations** Advocates for human space flight have bickered for decades—mostly among themselves—over whether people should return to the moon or go directly to Mars. Now some NASA officials are urging a middle path: Create a small human and advanced robotics outpost at the point where the gravity of Earth and the moon cancel each other out.

An outpost at that stable "libration point"—just 100,000 kilometers from the lunar surface—could serve as a "gateway" for robotic and eventually human missions to the moon and Mars, says Harley Thronson, NASA's chief of space science technology and co-author of a paper to be presented next week in Houston, Texas. More immediately, the outpost could fine-tune or fix instruments—such as a planned new telescope—that will hover just beyond Earth's orbit.

NASA is funding a \$5 million study to flesh out future uses of such human and robotic platforms. An informal planning effort begun under the Clinton Administration has already borne fruit: It helped launch the space agency's push for 2003 funding for nuclear propulsion and electric technologies. Now, insiders predict that NASA's next budget request will include support for other new technologies, as a way to build up NASA's technical arsenal.



**Strike Three?** France is once again on the warpath against U.S. firm Myriad Genetics, based in Salt Lake City, Utah. The Institut Curie in Paris, along with other institutes from 12 European countries, is asking the European Patent Office (EPO) to overturn a third Myriad patent on the *BRCA1* gene, which is used to test for a predisposition to breast and ovarian cancer. Some of the same groups have already challenged two other related Myriad patents (*Science*, 14 September 2001, p. 1971); they say the claims are part of Myriad's plan for a monopoly on the tests.

EPO is unlikely to rule before 2005, says a spokesperson. Opponents of the patent feel they need help from the European Commission in Brussels. "Being numerous doesn't necessarily mean we will win," says Claude Huriot, Institut Curie's president. Myriad officials have consistently defended the patents as valid.

**Contributors:** Pallava Bagla, Richard Stone, Andrew Lawler, Barbara Casassus



federal suit, filed 21 August.

Meanwhile, conflicts over evolution are simmering on other fronts. An Ohio committee developing new science teaching standards is also being asked to allow teachers to "teach the controversy." The panel meets 14 to 15 October to prepare a recommendation to the state board of education. And in Kansas, two moderates lost their primary bids this summer to remain on the state board of education, improving the chances that conservatives could capture half of the seats in the November general election. The board attracted national attention in 1999 after taking a pro-intelligent design stance that was rescinded by the current board.

—CONSTANCE HOLDEN

## WOMEN IN SCIENCE

### Japanese Societies Tackle Gender Issues

**TOKYO**—Next week some 30 national academic societies will meet here to tackle a subject they have been slow to examine: the dearth of women in the scientific and engineering work force. The meeting marks the debut of a coalition on gender issues that could be a powerful force for change, say advocates, if it's willing to address tough issues such as sexual harassment and a glass ceiling for managers.

The nascent organization, which doesn't have an English name yet, represents more than 100,000 working scientists in disciplines from basic physics to mechanical engineering to architecture. "Given the size of their memberships, they should be able to produce results," says Mariko Kato, an astrophysicist at Keio University in Yokohama and a longtime activist in the effort to improve conditions for women scientists. "But I'm waiting to see what they do next."

The new focus on gender issues in science in Japan traces its origins to a committee of the Japan Society of Applied Physics (JSAP), which last fall surveyed its 23,000 members about working conditions, job sat-

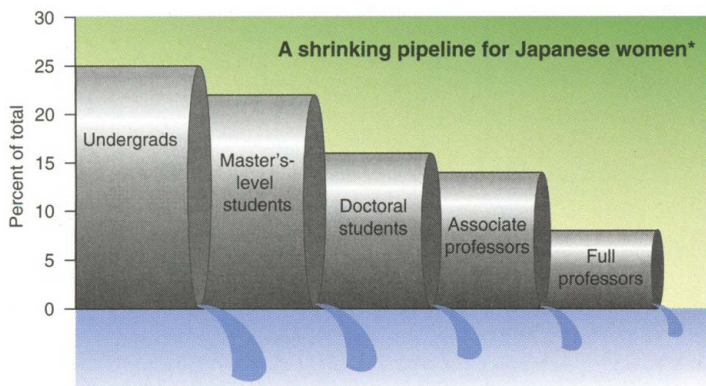
isfaction, and balancing career and family responsibilities. The survey confirmed a lot of common suspicions: Men climb career ladders faster and go higher than women (see graph). Men spend more time on the job and do less housework, particularly during their 30s and 40s. Male researchers in their 40s and 50s are more likely to be married and have more children than their female counterparts, suggesting that women tend either to drop out of the work force to raise families or to eschew a family to focus on their career. Both men and women overwhelmingly want a better balance between work and family responsibilities.

Subsequent discussions within the committee and at small symposia have focused on issues raised previously by other groups (*Science*, 2 February 2001, p. 817; 20 April 2001, p. 416). They include the need to examine regulations and unwritten customs that make it difficult for women to reenter the scientific work force after having children, the value of child care leaves for men, and the importance of having women on research teams and as managers of large projects.

The JSAP committee decided that there was strength in numbers. "We realized there is no point in each society pursuing such activities on its own," says Kashiko Kodate, a physicist at Japan Women's University in Tokyo, who chairs the committee. JSAP contacted the Physical Society of Japan, the Chemical Society of Japan, and several other academic groups, which drew up plans for next week's formation of a liaison council. Their combined membership has caught the eye of a long list of politicians and government officials, who will offer statements of support. Participants are expected to adopt a resolution calling on government, industry, and academia to address gender-equity issues.

Kazuo Kitahara, a physicist at International Christian University in Tokyo and current president of the Physical Society, admits that the group's goals and how to pursue them "are still under development." But he agrees that it needs to move toward framing concrete proposals. "If the liaison council could produce some definitive resolutions, that would have a big impact on the Ministry of Education and also the national universities," he says. "I think the council should move in that direction; otherwise it will just be [another group] holding meetings."

—DENNIS NORMILE



\* Student percentages refer to the natural sciences; faculty numbers cover all disciplines.

## BIOMEDICAL APPOINTMENTS

### White House Adviser Tapped to Head FDA

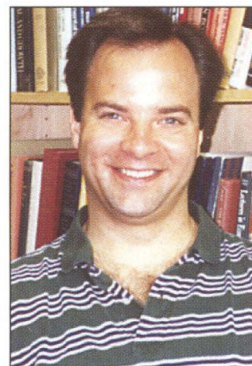
After 20 months without one, the U.S. Food and Drug Administration (FDA) might soon have a new boss. Last week, President George W. Bush announced

his choice for the next commissioner: Mark McClellan, a 39-year-old economist, physician, and current White House adviser. McClellan has impressive bipartisan credentials—he comes from a prominent Texas Republican family and has occupied posts in both the Clinton and Bush Administrations—but he has never run anything like the 10,000-person FDA, which governs everything from pharmaceutical products to genetically modified food.

The FDA appointment has been mired in politics since President Bush took office. Democrats such as Senator Edward Kennedy (D-MA), chair of the panel that screens the nomination for Senate confirmation, let it be known that they would oppose any candidate with close ties to the pharmaceutical industry. At the same time, some conservatives reportedly were looking for a nominee who would halt sales of the "abortion pill," RU-486.

McClellan apparently has no industry ties, and it's not known how he will respond to the RU-486 controversy, but friends and co-workers say they can't imagine a more able candidate. "One of the things he'll bring [to FDA] is a great sense of fairness and pragmatism," says Alan Garber, director of the Center for Health Policy at Stanford University, where McClellan worked for several years. "He's not an ideologue by any means." McClellan declined to comment before being confirmed.

McClellan's career has crossed many boundaries. He studied economics at the Massachusetts Institute of Technology (MIT) while enrolled in a joint Harvard-MIT medical training program. After a medical residency in Boston, he relocated to Stanford University, where he treated patients, advised medical school students, and conducted research on a favorite subject: the economics of medical technology. In 1998, he was appointed deputy assistant secretary for economic policy at the U.S. Treasury under then-President Bill Clinton, where he spent much



**New prescription.** Mark McClellan is an economist and physician.

CREDITS: (TOP TO BOTTOM) MARK MCCLELLAN; SOURCE: JAPAN MINISTRY OF EDUCATION