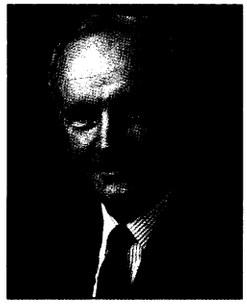
UNIVERSITIES

Furor Over Minnesota Tenure Proposals

The University of Minnesota has been in turmoil for the last 2 weeks over a proposal by the Board of Regents to revise the university's tenure code. Faculty members, including the university's president, have argued that the proposal will effectively destroy the tenure system, and they have even taken the first steps toward forming a union—a move that has temporarily headed off a regents' vote on the proposal, scheduled for 10 October. "This is probably the most serious crisis in the history of the university," says a source close to the university who asked not to be identified. "This is not just another flap."



UNIVERSITY OF MINNESOTA

Tenure defender. Minnesota President Nils Hasselmo.

The tenure crisis came to a head on 5 September, when the regents unveiled proposals that they had developed to counter a revised tenure code approved in June by the Faculty Senate. The changes include more flexible criteria for firing tenured faculty and reducing base pay. According to a letter distributed over the Internet by chairs of several Faculty Senate committees, they "would effectively eliminate tenure." One provision the letter cites would allow professors to be fired if a program is "restructured"; another would allow them to be disciplined for failure to maintain "a proper attitude of industry and cooperation."

The proposed revisions, the letter states, "are drastically outside the norms of ... leading research universities [and would] quickly and inevitably destroy our reputation, our competitive position, and our abilities to serve the citizens of Minnesota." Says law professor Fred Morrison, a member of the Faculty Senate tenure committee, "I have not heard a single person state anything except outrage."

To some regents, the faculty members are overreacting to what regent Patricia Spence characterizes as "suggestions," designed to give administrators "flexibility as resources are shrinking." Spence acknowledges that one has to "expect things to get very passionate" when the subject of tenure comes up, and she insists, "We don't want to hamper academic freedom." Management consultant and regent Jean Keffeler adds: "We've taken pains to indicate that none of the ideas necessarily have the majority support of the board. ... I'm sure that the board will want to discard some of the revisions."

According to political scientist Ed Fogelman, the roots of the furor go back several years, when the Minnesota state legislature told the university's Academic Health Center, which includes the medical school and several colleges, that it would not release certain funds until the center tightened up its tenure rules and other practices. The tenure changes at the health center led the regents and the university's president, Nils Hasselmo, to push for a university-wide reconsideration of tenure.

By last spring, the faculty had come up with a revision of tenure rules that included innovations such as periodic posttenure reviews. The regents, however, did not think the faculty proposal was adequate. They hired a consultant and the Washington, D.C., law firm of Hogan and Hartson to craft a counterproposal, which sparked general alarm when it was presented to the faculty for comment 2 weeks ago.

Outraged faculty members began a letter-writing campaign to try to sway the regents and enlist support. On 10 September, the university's 23 regents' professors sent a letter to their colleagues criticizing the proposal and warning that it would drive away the "strongest professors." Hasselmo himself urged the regents to accept the earlier faculty proposal. And an editorial in the 12 September Minneapolis *Star Tribune* warned that if the regents don't stop "playing pioneer on tenure ... the best friend the Minnesota economy ever had could be crippled for years to come."

The most effective faculty tactic, however, has turned out to be the threat of unionizing. By 13 September, 30% of the faculty had signed union "authorization" cards, paving the way for a referendum on unionizing. That triggered a restraining order from the Minnesota Bureau of Mediation Services delaying any action until the faculty holds a union vote, which may not take place until early next year. Minnesota law forbids any changes in employment policy while a unionization referendum is pending.

But the faculty victory may turn out to be a mixed one. Unionization of university faculty is very rare in the United States. And while some professors at Minnesota do want a union, says Fogelman, "in general faculty don't regard themselves as employees, who have to be unionized. ... Many signed [the union cards] because it was the only recourse." Adds one observer, "It reminds me of Chinese peasants who flooded their fields to keep the Japanese from occupying them."

The restraining order may also remove any hope of a compromise in the near future because it could prohibit the regents from negotiating with faculty representatives until after the union vote. At press time, both sides were trying to determine whether they are forbidden from talking. If so, that would be unfortunate, say some faculty members. The regents need to be told just how drastically their proposals threaten long-standing academic policies, say Morrison and Fogelman. As another observer puts it: "You can't say casually at a Vatican conference, 'Let's make abortions legal.' "

–Constance Holden

PLANETARY SCIENCE

Mars Meteorite Quest Goes Global

An international effort is under way to verify or disprove the dramatic claim that an ancient Martian meteorite contains evidence of fossilized life. Last week NASA officials told a congressional panel that they expect research teams in Britain, Japan, and the United States to generate a definitive answer within 2 years to the report last month that life may once have existed on Mars (*Science*, 16 August, pp. 864 and 924). They also sketched out plans to expand that cooperation into space with a joint U.S.–Russian mission in 2001, part of a series of Mars missions to search for more fossil-laden rocks.

BILL WOOD/*SPACE NEWS*

Tales of wonder. NASA's McKay briefs Congress on search for ancient life on Mars.

The first order of business, NASA space science chief Wes Huntress told a House Science Committee panel on 12 September, is to focus on the dozen Martian rocks at the agency's Johnson Space Center in Houston and at the Smithsonian Institution in Washington, D.C. The oldest of that batch is ALH84001, which was analyzed by a team led by NASA geologist David McKay. The other rocks have not yielded fossil evidence, but researchers intend to examine them more closely in coming months.

To find definitive evidence that ALH84001 contained life, McKay says his group will use a tiny needle to pluck the possible nanofossils off the surface of the sliced meteorite. "We will embed them in epoxy, slice them, and get a corner of the

little critters," he told *Science*. Structural and carbon analyses of those pieces are expected to provide a better indication of whether the formations in the rock are indeed a record of past life or are of geochemical origin.

Other teams will be deploying different techniques to get at the same answers. At the University of Portsmouth in Britain, researchers will make use of an atomic force microscope that can examine tiny bacteria in great detail. And scientists at the Mitsubishi-Kasei Institute of Life Sciences in Tokyo will use a microfluorescence technique able to highlight any organic material. "What we really need are additional kinds of data," says McKay, such as evidence of cell walls. "For a very small amount of money we will be able to analyze these meteorites" in much greater detail, he adds.

These teams won't be the only ones with a piece of the rock. NASA intends to give out $1 million and will solicit proposals in November. The National Science Foundation, which sponsored the team that found the meteorites in Antarctica in 1984, may kick in another $1 million, according to Administration officials. If all goes as planned, the winners could receive their money early next year. NASA Administrator Daniel Goldin has promised that many scientists will have an opportunity to take part in the studies, and other NASA officials say that they hope micropaleontologists, microbiologists, and researchers from other disciplines will apply for funding.

But cutting-edge equipment, plenty of money, and an interdisciplinary team of researchers may not be enough to settle the debate over whether life once existed on Mars. "That's a lot to ask from something the size of a potato," says Michael Meyer, NASA's exobiology program manager, about the 1.9-kilogram chunk of rock. "I don't think you can have definitive proof because of the sample size," he adds.

NASA isn't putting all its eggs in one meteoric basket. If the data from ALH84001 prove inconclusive, says McKay, then "we'll just have to wait until we get [more] Mars rocks back here." Huntress told the panel that evidence of possible life changes the complexion of the planned Martian research program: "Now we don't just want any sample; we want a sample with the right stuff."

NASA plans a sample-return mission to Mars as early as 2003, but the expense associated with such exploration prompted members of the House panel to urge stronger international cooperation. "This is an opportunity to weld a coalition that goes beyond a bilateral agreement with Russia," says Representative Robert Walker (R–PA), retiring House Science Committee chair. The U.S. spacecraft are intended to include some foreign experiments, but Huntress says "we need to change that."

The degree of international participation will depend on what those partners can afford, however. Financial constraints are likely to limit the amount of Russian participation in a joint venture planned for 2001, say U.S. officials. Japan will launch a Mars probe in 1998, while the European Space Agency has put on hold any plans to send exploratory spacecraft.

Several lawmakers at the hearing warned NASA not to misread their enthusiasm about the findings as a green light for a bigger budget. "You're really dealing with circumstantial evidence," Representative Ralph Hall (D–TX) told the NASA team. "And I've had letters ... from some who have said not to spend a dollar on this as long as we have a baby's bottle empty in this country." The funding outlook could change, however, if the new studies provide incontestable evidence that life existed on the Red Planet.

–Andrew Lawler

U.K. SCIENCE POLICY

Labour Promises Key Role for Science

LONDON—Statements from Britain's Labour Party are being taken seriously these days: With a lead of 15% in the opinion polls and a general election due before next summer, today's pronouncements could be tomorrow's policies. Britain's scientific community is therefore paying close attention to a document Labour published last week laying out its science policy. It includes promises to bolster flagging morale among researchers and elevate science in government decision-making. According to Adam Ingram, Labour's science spokesperson, "Under Labour there will be a change of ethos and culture in the way that government approaches science policy."

Changing ethos. Labour's Adam Ingram.

The statement comes at a time when the Conservative government's popularity among researchers has taken a dive. In 1992 it won wide praise from the research community with the launch of a science and technology white paper, a new Office of Science and Technology (OST), and a Cabinet minister for science for the first time in more than 30 years. But changes since then have not been so welcome: Last year the OST was shifted into the Department of Trade and Industry, blunting its ability to coordinate science policy across government departments; there have been deep cuts in university funding; a series of reviews has marked a number of government research establishments for privatization (*Science*, 31 May, p. 1254); and the new advisory Council for Science and Technology established by the white paper was expected to make its advice public, but none has yet been revealed.

The Labour Party statement promises to reverse some of these actions, starting with the lab reviews. The laboratories are a "major national resource and a source of crucial research expertise," says Ingram, and the reviews would be halted. The statement also promises to strengthen the post of chief scientific adviser, currently held by Sir Robert May, but it makes no commitment to restore the OST to its former position in the Cabinet Office. "Another process of rapid change would not necessarily be in the best interests of the scientific community," the document says. Many researchers have expressed concern about the way science policy is developed, and "we want to examine the problems," says Ingram.

Labour's plans have drawn a sharp response from the government. Science Minister Ian Taylor told *Science* that the policies are disappointingly devoid of substance and that the plans to halt the lab reviews are "fundamentally irresponsible." About 20% of government spending on science goes through these laboratories, and it is essential to match facilities to needs as requirements change, he says. He also argues that the advisory council's advice should remain mostly confidential. "Publication would often be a mistake and ensure we wouldn't get the best advice," he says.

Before it issued its science policy statement, the Labour Party established a corporate tax review to see if it will be able to encourage companies to invest more in research and development and to promote high-technology industries. Apart from this, there is no indication in the statement of how a Labour government would pay for new initiatives—or how much it would spend on science. "We're not making funding commitments in any area before the general election. Promises would be the wrong approach," says Ingram. With the emphasis on a changing ethos, Ingram says he "wants to see science at the heart of an incoming Labour government." Physicist John Mulvey, spokesperson for the lobby group Save British Science, says "There's much to welcome in the spirit, general ideas, and intentions." But, he adds, "in government, actions would be required by Labour to match the rhetoric."

–Nigel Williams