

edited by CONSTANCE HOLDEN

## Needleman Case Still Simmers

Last month, University of Pittsburgh lead researcher Herbert Needleman took on the U.S. government's Office of Research Integrity (ORI), which is expected shortly to respond to a University of Pittsburgh report that exonerates him from scientific misconduct. Needleman sued government and university officials to get the investigation thrown out last February, arguing that his rights had been violated. Now he's added a new argument to get the case dismissed: He contends that ORI, a division of the Department of Health and Human Services created last spring, is not properly authorized to perform the functions of its recently abolished predecessor, the Office of Scientific Integrity (OSI), to which the case was originally referred.

The Needleman controversy has its origins in the early 1980s when two psychologists, Claire Ernhart of Case Western Reserve University and Sandra Scarr of the University of Virginia, challenged his conclusion that low levels of lead in the blood significantly lower children's IQs. They claimed that his methodology was seriously flawed by his subject selection criteria and inadequate control for confounding variables.

The situation heated up in 1991 when Scarr and Ernhart took their criticisms to OSI. There they alleged that Needleman had engaged in scientific misconduct a decade before (*Science*, 23 August 1991, p. 843). OSI asked the University of Pittsburgh to determine whether a formal investigation was needed. The university subsequently produced a report exonerating Needleman from any misconduct, albeit questioning some of his methodology (*Science*, 5 June, p. 1389). That report was sent to ORI in September.

Needleman has decided not to trust that ORI will eventually "do the right thing"—which for him would be to throw out even

the criticisms of his work. In his suit, Needleman claims the Pittsburgh report "viciously and gratuitously scored [me] for allegedly making deliberate misrepresentations." Worse, he says his reputation has been damaged: He is no longer being invited to testify at congressional hearings on lead; he was up for an occupational safety prize and then heard no more about it; and his nomination to the Environmental Protection Agency's Science Advisory Board has not been processed.

Even if Needleman's suit were

successful, says Washington, D.C. attorney Robert Charrow, the government would be under no obligation to apply the decision to other misconduct cases. But whatever happens, there are no signs that the controversy will abate. Indeed, a new skirmish is already in the making in the pages of the journal *Pediatrics*. Next month Needleman will defend himself in an article titled "Salem Comes to the National Institutes of Health," and Scarr is fighting back with the submission of "A Whistleblower's Perspective on the Needleman Case."

## French Public Goes for Blood

Since the conviction last month of three French government physicians for failing to halt the distribution of HIV-infected clotting factors to hemophiliacs in 1985 (*Science*, 30 October, p. 735), attempts to press similar charges against three ministers who were in office at the time have been gathering pace.

When the physicians' trial ended, lawyers for the HIV-infected hemophiliacs were angry that former Prime Minister Laurent Fabius, his health minister Edmond Hervé, and Georgina Dufoix, his minister for social affairs, hadn't also been brought to trial. This was because the French constitution says that cases involving the official actions of ministers can be heard only by the High Court—a political tribunal that is convened if the French Senate and National Assembly agree that there is a case to be answered.

Before last month's verdicts, the hemophiliacs had been unsuccessful in their attempts to win a High Court hearing. But now, following the public storm whipped up by the three physicians' convictions, the Senate has decided the former ministers should be charged. Several obstacles remain to be hurdled before the case is heard, but even President François Mitterrand now seems to support the hemophiliacs. In a television interview last week, he promised constitutional reform that would allow ministers to be tried in a lower court—but implied that any case against Fabius, Hervé, and Dufoix shouldn't await adoption of those reforms. Says Jean Peron-Garvanoff, president of a lobby group called the Association of the Polytransfused: "[Mitterrand] has taken a 180 degree turn."

## Tooze's Future Comes Clearer

John Tooze, the driving force behind the Heidelberg-based European Molecular Biology Organization (EMBO) since taking over as its executive secretary in 1973, has been looking for a way to get

## No End in Sight to R&D Slump

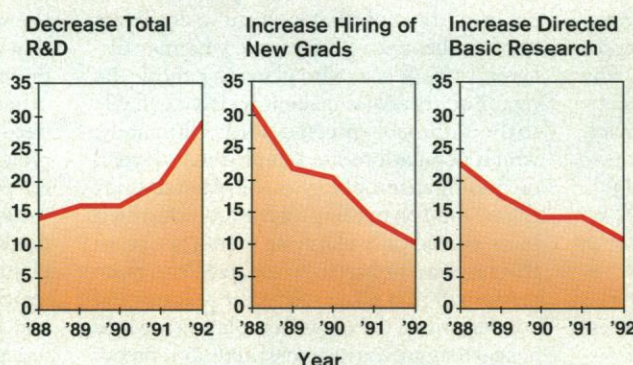
Some recent economic indicators hint that the U.S. economy is slowly dragging itself out of a long recession. But for industrial R&D, there's little sign of recovery. A survey of company spending plans for 1993, conducted by the Industrial Research Institute (IRI) in Washington, D.C., has found that more companies expect to cut R&D outlays than increase them next year.\* As a result, total R&D spending by U.S. companies is likely to drop from 3.4% to 3.3% of annual sales, concludes IRI.

Conducted in August, IRI's survey was published last week and indicates that basic research will be particularly hard hit. Some 31% of the 141 corporate officials who responded to the survey reported plans to decrease basic research spending, while only 11% said they expect an increase. The companies that participated in the survey account for about half the total industrial R&D spending in the United States, according to IRI estimates.

These trends have grim implications for college seniors majoring in science and engineering and graduate students who will be entering the job market next year with freshly minted M.S. and Ph.D. degrees: 40% of the respondents said they expect to hire fewer new graduates in 1993 than they hired this year, while only 10% said they anticipate hiring more.

\*Annual R&D Trends Survey, Industrial Research Institute, 1550 M St., N.W. Washington, D.C. 20005.

### PERCENTAGE OF COMPANIES THAT SAY THEY WILL...



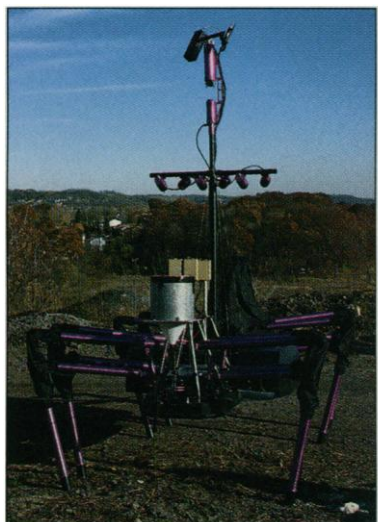
back to his native Britain (*Science*, 18 September, p. 1627). Now he's found it: a top job at the Imperial Cancer Research Fund (ICRF) in London, one of Europe's largest medical research charities.

The details remain to be worked out. Tooze plans to move to London late next year, but he won't be severing his links with EMBO, which provides traveling postdoc fellowships, runs workshops, and publishes the *EMBO Journal*. In 1994, EMBO has to bid for continued funding from its 18 nation members, and Tooze intends to help his (yet to be named) successor put together the document on which its future will depend.

### A Bad Break for Dante

Its descendants may rove the surface of Mars one day, but even before its maiden voyage back here on Earth, the robot explorer named Dante has stumbled. In its final test run early this month, the NASA-Carnegie-Mellon brainchild, which was to probe the heart of an Antarctic volcano as a dry run for the Red planet, broke two of its eight legs. That leaves Carnegie-Mellon researchers and NASA engineers scrambling to make the necessary fixes before this year's Antarctic stormy season closes in.

Misfortune struck on 4 November at 4:30 a.m. Bleary-eyed Carnegie-Mellon and NASA team



MARY JO DOWLING/CARNEGIE-MELLON

members had been working around the clock to push the robot through the final phases of its readiness review. They had been in crash-program mode ever since January as they faced a 12 November shipping date. That was the day Dante was to head south to retrieve samples from one of the most desolate and Mars-like environments on Earth: the central crater of Antarctica's Mount Erebus. Erebus is an active volcano that geologists would love to know more about, but it has been far too dangerous for human exploration.

A key test for Dante was to see if it could climb up a steep slag heap outside Pittsburgh. Trouble was, the minute the purple-legged, 3-meter-long, cockroach-like robot set foot on the slope, two legs

**Break a leg.** Dante before collapsing on Pittsburgh slag heap.

### Vindication for Galileo

Talk about delayed justice: On 31 October, more than 300 years after the Catholic Church condemned Galileo Galilei for heresy because he insisted that the earth revolves around the sun, Pope John Paul II announced that the church had wrongly accused the Italian astronomer for his defense of celestial mechanics.

The pontiff's explanation of how the mistake could have happened? "Tragic mutual comprehension," the pope said, laying the blame mostly with 17th-century ecclesiastical authorities who he said interpreted the Bible too literally. But the pontiff also criticized Galileo for insisting that the Copernican model he defended represented the absolute truth, rather than a working hypothesis, noting that no one at the time had laid out "irrefutable proof" in its favor.

Now that the papacy has accepted the proof of Galileo's assertion, its wheels of justice have turned—but they didn't turn rapidly: The current review of the Galileo case began back in 1981, when the pope appointed a study commission of church and lay experts to consider the matter and to help reconcile science with Christian faith.



THE GRANGER COLLECTION

### AAUP Goes to Bat for Faculty Underclass

The number of faculty members at U.S. colleges and universities has grown steadily over the past decade or so, but the number in tenure-track positions has remained stagnant. And that spells trouble, says the American Association of University Professors (AAUP) in a new report decrying the growth of a "large but poorly paid 'underclass'" of part-time faculty.

The AAUP says that almost 40% of faculty in higher education are part time—a trend primarily owing to the desire for "budgetary flexibility." Part-timers are particularly prevalent at junior colleges and nonresearch institutions, teaching basic courses including math. That makes for throngs of faculty who are underpaid and lacking in fringe benefits or job security. What's more, they have "no way to influence the curriculum or continue their professional development," said AAUP president Linda Ray Pratt at a press conference announcing the report.

The AAUP calls on institutions to draw up long-term plans to reduce reliance on part-timers, who, it suggests, should make up no more than 15% of faculties. Pratt said the "most controversial" of its recommendations is one that "opens the door to tenure"—that part-timers should be given consideration when part-time positions are converted to full-time, tenure-track positions. The AAUP also proposes that part tilters—who are disproportionately female—be made eligible for pay increases, promotions, fringe benefits, and inclusion in institutional governance.

Part-timers are getting "increasingly restive," warned Pratt, who said that by failing to treat them with the same professional commitment accorded full-timers, "institutions are running serious political and public risk." She added: "If institutions don't take the initiative in containing the use of part-time faculty, I think the public will."

cracked. "It was a real heartbreak," says NASA telerobotics manager David Lavery. "A lot of people had put in a lot of time on this project, so it was an emotional moment." (Not to mention the \$2 million NASA had invested in the beast thus far.)

Fortunately, the problem proved to be bad welding and not a design flaw. So new legs are now being fabricated, and Dante's departure to Antarctica has been rescheduled for mid-December. There will be no time for technical glitches: It's spring now in Antarctica, but the weather around Mount Erebus will start closing in by January. Yet Lavery, for one, is confident: "In the context of a 1-year crash project and an extremely limited budget, it's amazing what they've put together," he says. "The system is solid. I'm very satisfied it can do the job."