# Briefings

*edited by CONSTANCE HOLDEN*

## Cold Unit Takes a Powder

One of Britain's least known vacation destinations closed its doors for the last time a week ago: the Medical Research Council's Common Cold Unit is no more. Since 1946 more than 20,000 volunteers have visited the unit in Salisbury, near Stonehenge, each spending about 10 days there. It wasn't lavish, but it was a rest—if you didn't mind the risk of catching a cold.

Such holidays have provided scientists with vast amounts of information. "Our basic understanding of the cold has been transformed beyond all recognition," says David Tyrrell, retiring director of the unit. But he admits, "we still can't do much about it."

When the unit opened, its first task was to establish just what causes a cold. "People still weren't convinced it was a virus," Tyrrell says. Volunteers, inoculated with filtered nose washings, helped nail down the virus theory. Later, by sitting around in damp clothes before the inoculation, they disproved the conventional wisdom that getting chilled gives you a cold.

The unit also showed that many viruses can cause colds. First to be fingered, in the 1950s, were the rhinoviruses. The '60s saw the coronaviruses, later followed by other culprits, all with somewhat different symptoms.

What about a cure? Tyrrell says his unit did try for a vaccine, but realized there were too many viruses involved. The first trials of genetically engineered interferon—showing that it did prevent colds—were carried out at the Common Cold Unit. Since then, working with pharmaceutical companies around the world, the unit has identified other compounds—some work by blocking the activity of a virus and others by preventing the onset of symptoms. But, Tyrrell says, you have to take them before the first sniffle. "None is powerful enough to prevent a cold once it has started."

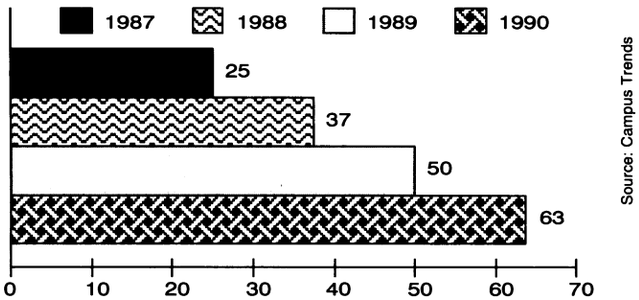
So why has the MRC decided to close the unit? Its aging buildings are in a sorry state and the MRC, with its shrinking budget, prefers to support new fields of research. "The only way they can do that is by closing units," says Tyrrell, "and the least unpleasant time to do so is when the director retires."

## Sellers' Market Looms for Professors

Early signs of the long-heralded faculty crunch are now upon us, according to the American Council on Education's latest report on "Campus Trends."*

Concern over faculty staffing has "risen dramatically" among the 364 colleges and universities in the survey and is now second only to money worries, according to the ACE. Almost two-thirds of the institutions reported it is taking longer to find qualified people to fill openings, although "as of now, problems are still mainly confined to certain high-demand fields."

Many institutions are responding to the problem by raising salaries, offering job assistance to spouses, and moving part-time faculty to full-time positions. "The outlook is that future competititon for faculty appointments will be a significant, continuing source of financial pressure on colleges and universities."




* Copies are available from the Division of Policy Analysis and Research, ACE, 1 Dupont Circle NW, Washington, DC 20036–1193, at $10 for members, $13 for non-members.

## Good Times for Santa Fe Think Tank

The study of complex phenomena ranging from the weather to the nuclear family has gotten a boost with two recent grants to the Santa Fe Institute in New Mexico, a private organization that aspires to the cutting edge of interdisciplinary research and education on "complex systems."

This month SFI received a 3-year grant of $1.5 million from the John D. and Catherine T. MacArthur Foundation to support faculty salaries and the development of nationwide research networks in diverse areas including theoretical immunology and the global economy.

The institute has also received a grant of $300,000 from the Maxwell Foundation in London to establish a "Robert Maxwell Professorship in the Sciences of Complexity." Maxwell is a flamboyant and aggressive multimillionaire—known in the publishing world as "the bouncing Czech"—who runs Maxwell Communications Corp., which owns Macmillan and Pergamon Press. The first occupants of his chair will be Nobel Laureate Murray Gell-Mann, professor of physics at the California Institute of Technology, and John Holland, University of Michigan professor of computer science and psychology, who will occupy the chair on a rotating basis during the next academic year.

SFI, founded in 1984 by Los Alamos chemist George A. Cowan, has a budget of $2 million and a small in-house staff, as well as an international "external faculty" of about 30 scientists.

## DOE Delays Reporting the Cost of the SSC

The Department of Energy is having trouble coming up with a new cost estimate for the Superconducting Super Collider. It had planned to release its "hard numbers" estimate last Friday (*Science*, 17 August, p. 731), but suddenly begged off on Thursday afternoon and scheduled a new estimate for 7 September. One reason: DOE officials have been busy dealing with oil price fluctuations since the Iraqi invasion of Kuwait. But the department is also apparently having difficulty reconciling cost estimates from four different panels. Three estimates are clustered between $7.8 billion and $8.9 billion, but DOE's Independent Cost Estimating group is reported to have come up with a figure of $11.7 billion.

Before the ICE estimate came in, DOE officials said the varying estimates differed only in contingency fees, not in the cost of the collider's equipment. Now, however, spokesmen are mum about the implications of the ICE figure—and, for that matter, the ICE figure itself. For now, their only advice is: wait and see.

## Harvard Trades Debt for Scholars

You've heard of debt-for-nature swaps. Now, thanks to the perversities of international finance, both Ecuador and Harvard University stand to benefit from a new twist on the old concept—a debt-for-scholarship swap.

The agreement between the university and the newly estab-

lished Fundación Capacitar in Ecuador will establish a fund to enable Ecuadorian students to study at Harvard and to allow Harvard scholars to study and do research in Ecuador.

Here's how the plan works. According to Harvard lawyer Frank Connors, the university will pay a group of U.S. banks $750,000 to become proud owners of about $5 million in outstanding Ecuadorian bonds. Because these banks don't believe they'll ever be repaid, they're happy to sell the bonds at 15% of their face value. And Harvard is happy to make the three quarter of a million dollar investment because of the outcome of the next intricate swap: the university will return those bonds to the Ecuadorian government through the Fundación Capacitar, relieving the nation of its outstanding debt. In exchange, the government will give the foundation entirely new "stabilization bonds" with a face value of $2.5 million.

Eighty-five percent of that money will be converted back into dollars to finance Ecuadorians' Harvard study. The remainder will be used to support 70 Harvardians in Ecuador over the next decade. It's a deal worthy of Catch-22's Yossarian that could become a model for more science-for-debt swaps with other needy nations.

## Lizzie, Queen of Scots

Just in the nick of time, Lizzie, the oldest fossil reptile in the world, seems to have been rescued from sale into foreign hands. If so, she will rest in peace in her native country at the National Museums of Scotland in Edinburgh. But the price of her ransom was a high one. Belying their reputation for penuriousness, the Scots have had to stump up £195,000 ($350,000) to hold on to the 340-million-year-old lump of rock bearing Lizzie's remains.

The fossil was found in 1988 among stones in a farm wall near Edinburgh—its discoverer, professional fossil hunter Stan Wood (see *Science*, 12 January, p. 160), had agreed to sell it to the Natural History Museum in Stuttgart for about £205,000, but the subsequent public outcry resulted in an appeal to raise the bawbees to keep Lizzie at home.

The Curry Fund of Britain's Geologists' Association donated £10,500, a figure Wood matched by dropping his asking price. Further donations from other funds and the public were substantial but not quite enough until the West Lothian District Council, the local government, found £20,000 just in time to meet the 31 July deadline.

With Lizzie's home assured, the task of giving her a scientific name can begin. Frontrunner is ***Westlothiana curryi***, which will commemorate both her birthplace and her benefactors.

## Economist to Head IIASA

Economist Peter E. de Janosi has become the first social scientist to be appointed director of the International Institute for Applied Systems Analysis (IIASA), succeeding physicist Robert H. Pry. De Janosi, 62, has been vice president of the Russell Sage Foundation in New York since 1980. He led IIASA's System and Decision Sciences Program for 2 years in the '70s.

The institute, which has gotten about half its $11 million budget from the United States and the Soviet Union, suffered a blow in 1982 when the Reagan Administration stopped government contributions. Now, says de Janosi, the institute has gotten "two shots in the arm." One is from the Bush Administration, which reinstated U.S. funding last fall ($2 million for 1991). The other is the new interest in environmental, policy, and economic questions on the part of the Soviet Union and Eastern Europe. The Soviets are now hungry for policy analysis, says de Janosi, and late last year they asked IIASA to hold a series of workshops on their economic reform plans. These will bring together Soviet and western economists under the direction of Gorbachev's economic adviser Stanislav Shatalin and M.J. Peck of Yale University.

**Peter de Janosi**

De Janosi says, "The institute and its members want IIASA to become more policy-oriented." That will include more attention to economic and human considerations in the "flagship" environmental program.

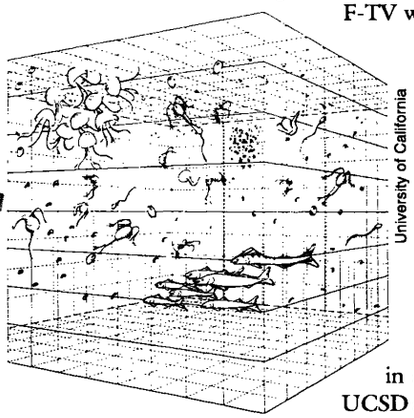
De Janosi starts work this month at IIASA, which is located in Laxenburg, Austria.

## Ocean Video

Unlike MTV (music television), F-TV (fish television) won't be there for your kids. But it will be there for your favorite oceanographer—thanks to Jules Jaffe.

An oceanographer at the University of California at San Diego, Jaffe has gotten $483,000 from the National Science Foundation to create a computer that will map the movement of fish and other sealife—anything larger than half an inch—into a three-dimensional, moving image of the marine community. It will consist of 16 high-frequency sonar units. Their signals, once processed, should produce a computer image that can be electronically rotated to create a three-dimensional display of fish going about their business—kind of like an underwater C-SPAN.

**Mapping the depths.** *Jaffe with sonar array; artist's conception of the F-TV display.*



University of California

Until now, biologists have lacked sophisticated instruments for mapping ocean fish populations. They have had to rely on "towing nets around," says Jaffe, a technique that only reveals the amount of biomass in a given volume of ocean water. In contrast, F-TV will allow marine biologists for the first time to view the ocean "as scientists view land with a pair of binoculars."

Eventually, Jaffe hopes F-TV will help marine researchers understand how pollution and natural environmental changes alter the dynamics of marine populations. He's developed a prototype system in a 5000-gallon fish tank at UCSD and hopes within 2 years to deploy and test the system at sea.