# Briefings

*edited by CONSTANCE HOLDEN*

## Deforestation: Brazil's Surprise Role

Long criticized for its exploitation of the world's largest rain forest, Brazil is showing an increased interest in technical forecasts about the fate of this tropical resource. As part of the International Space Year program, Brazil is joining with Italy to direct the world's "first collective assessment of global deforestation."

Brazil was picked for this leadership role after several of its scientists got government permission to join 25 other nations in doing a comprehensive study of rain forests. Roberto Pereira da Cunha, director of remote sensing at Brazil's space agency, says the study will enable researchers from around the world to tackle the subject for the first time with uniform procedures.

Ichtiaque Rasool, chief scientist for global change at NASA, who helped negotiate the pact, says the project will help researchers resolve conflicts in earlier deforestation studies. To date, he notes, "everyone has been getting different numbers using different techniques."

Researchers are to gather in San Jose dos Campos, Brazil, later this month to develop a model that incorporates data bases from around the world. Observations from the U.S. Landsat system, a Brazilian satellite, the French SPOT satellite, and from ground-based stations will be incorporated into a digital data set to create a "Geographic Information System."

The assessment is to include rain forests in Thailand, Nepal, Africa, and other regions, producing the first results next year.

## Lobbying for an Environmental NIH

Assuming that the health of the earth is at least as important as that of its inhabitants, a group of scientists recently met to begin campaigning for a National Institute for the Environment, modeled on the National Institutes of Health.

"I had the idea many years ago," says Henry Howell, a biologist at the University of Illinois at Chicago. The leading organizer is a friend, biologist Stephen Hubble of Princeton. "He and I have worked together on this since we were together years ago at the University of Iowa," says Howell.

In December, the two assembled an "informal workshop" in Washington attended by 20 academics and 24 observers, including lobbyists from professional societies and officials from the Environmental Protection Agency and the National Science Foundation.

A draft paper has been circulated, and "we are still at the preliminary stage," Howell says. He won't go into the details but says the general aim is to create an administrative structure that can run a system of competitive grants for research on the biotic, social, and economic dimensions of environmental change. The physical sciences are already pretty well covered by other agencies, he thinks.

A campaign to win congressional approval for the new institute will begin later this year.

## New Science-Minded Leadership in Romania

Romania's hoped-for entry into the modern world may be helped by the fact that its new prime minister, Petre Roman, is a European-trained engineer.

What's more, Roman and Romania's new president Ion Iliescu have been participating in an informal scientific discussion group created a few years ago by mathematician and sociologist Mihai Draganescu. The group met biweekly to talk about advances in science and technology in a nonpolitical atmosphere, according to the *New York Times*.

The 43-year-old Roman, said to be a cultivated and rather aristocratic individual, was educated at the University of Toulouse in France. He holds a professorship in hydrologic engineering at Bucharest's Polytechnic University. Reportedly, he has recently developed an interest in environmental issues.

Wide World

**President Iliescu** *(left)* **and Prime Minister Roman** *(right)*.

## Rogue AIDS Disk Alarms Researchers

Researchers at NIH and other public health centers received a warning over electronic networks just before Christmas about a dangerous new computer program designed to attack the unwary and scramble their data. The hostile program is concealed in a packet that claims to have been assembled by the "PC Cyborg Corporation" of Panama. It includes a slick flyer and a free offer: "AIDS Information—An Introductory Diskette."

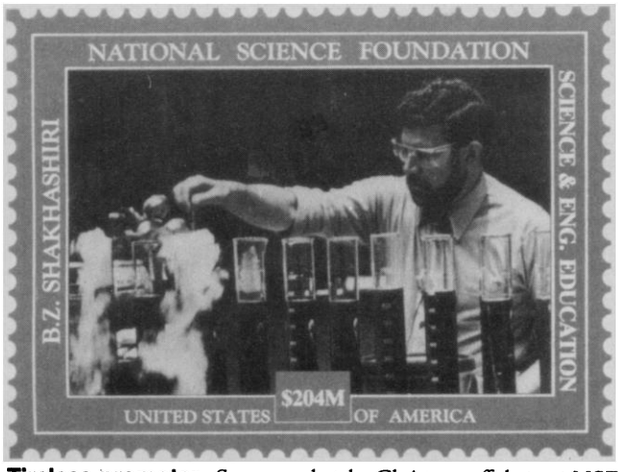
According to an alarm that originated in London—where the diskette first appeared in mid-December—this "Trojan horse" asks and answers basic questions about the risk of becoming infected with AIDS. After it has been run a number of times, a hidden program on the diskette encrypts all preexisting files it can reach.

By one estimate, at least 7000 copies of the packet were sent out to names on several mailing lists, including one sold by *PC Business World*, published in the United Kingdom. The prank cost someone tens of thousands of dollars to carry out. Thus far Scotland Yard has been unable to track the mailing to its source.

Meanwhile, NIH's computer virus eradicator Jim Del Priore reports that no infestation has appeared at NIH or anywhere else in the country. "It's fairly dastardly," says Del Priore,"so let's hope it doesn't turn up."

## NSF to Spell Out Priorities

Without enough money to support every worthy project, how does the National Science Foundation decide who gets it and who doesn't? The House Committee on Science, Space and Technology expects an answer. It has directed NSF to prepare a report by 31 January 1990 describing how budget priorities are set, both within




**Tireless promoter.** *Some people take Christmas off, but not NSF education chief Bassam Shakhashiri who sent this as his seasonal greeting.*

scientific disciplines and on a Foundation-wide basis.

The committee has a few other questions. What can astronomers expect in the way of new facilities? Why isn't the Foundation doing more for behavioral sciences? Two reports due 31 January 1990. What is NSF doing to improve science and engineering education? Report due 30 September 1990. What are the Foundation's long-range plans for improving scientific facilities nationwide? Report due 15 December 1990.

These reports will form the basis for hearings, which will no doubt form the basis for new reports.

## Shockley Shocker

Could William Shockley's unpopular ideas about race and IQ have been the result of a blow to the head?

Last fall, *Nature* ran an obituary of William B. Shockley, co-inventor of the transistor, who died last August at 79. The article dwelt mainly on the exceedingly controversial theory that Shockley developed late in life, which posited that the IQs of blacks go up in proportion to their Caucasian blood.

Frederick Seitz, president emeritus of Rockefeller University, has risen in defense of the man if not the theory. In a 30 November letter in *Nature*, Seitz notes that Shockley's "intense and (to my mind) ill-conceived concentration on socio-genetic matters occurred after a head-on automobile collision in which he was almost killed." In Seitz's opinion, "the residual effects" of the accident "cannot be ignored in evaluating his activity in later years."

## The Big Sleep

Falling asleep at the wheel causes about 6,500 traffic deaths annually and may cause up to 400,000 accidents a year, according to a University of Michigan sleep researcher. "That makes snoozing second only to boozing" as a traffic menace, says the American Sleep Disorders Association.

Neurologist Michael Aldrich has reported in the journal *Sleep* that people with various sleep disorders—who may compose up to 25% of the population—are those most likely to drowse at the wheel. A comparison of 424 people with sleep disorders and 70 normal sleepers showed that 80% of the patients suffered from excessive daytime sleepiness and got into sleep-related accidents about three times as often as the controls. The majority had sleep apnea, where breathing stops many times during the night and leaves people feeling wiped out the next day.

The highest number of accidents was reported by those with narcolepsy, who not only have sleep "attacks" but may also suffer from cataplexy, a sudden loss of motor control.

Aldrich says all this raises the question of whether the sleep-disorderd should have their driving privileges restricted.

## Americans Capture More Math Degrees

Although foreign students continue to earn the majority of advanced mathematics degrees awarded by U.S. institutions, the trend could be bottoming out—thanks to America's women.

The results of the latest survey conducted by the American Mathematical Society show that although the percentage of American doctoral winners has not gone up, the numbers have. In 1989, U.S. institutions awarded 904 Ph.D. degrees in mathematics, of which 411 went to Americans—compared to 363 of the 804 total in 1988.

Women accounted for almost half the increase in Ph.D.'s for U.S. residents in 1989—accounting for 24% of the domestic total as compared with 21% in 1988. "We should encourage this trend and dispel the notion once and for all that mathematics is a man's game," says Edward Connors, a University of Massachusetts professor who reports on the survey's findings in the November issue of *Notices of the American Mathematical Society*.

## Will John Deutch or Dr. X Lead MIT?

The most talked about topic at the Massachusetts Institute of Technology these days is who will succeed Paul Gray as president. The board of directors has to decide within 3 months who will lead MIT into the 21st century. (Past presidents' terms have generally exceeded a decade.)

The heir apparent is physicist John M. Deutch, who has been provost since 1985. But Deutch is resented by many faculty and students who find his management style abrasive. "Fire, aim, ready," is the way one senior professor has characterized it. Deutch won few friends in 1987 when he abruptly shut down the Applied Biology Science Department in what was perceived as a pretty much unilateral decision. And lately, his extensive corporate consulting practice, which yields more than his $168,000 MIT salary, has drawn criticism from student groups.

Calvin Campbell/MIT

Deutch, nevertheless, remains a top contender for the post. Other faculty members mentioned as possible candidates are Lester C. Thurow, head of the Sloane School of Management; Robert J. Birgeneau, chairman of the Department of Physics; and Sheila Widnall, professor of aeronautics and astrophysics.

But there is thought to be a good chance that MIT's executive board could, for the first time in 50 years, turn to an outsider. Some of the names under discussion are Dean Eastman, a vice president for research at International Business Machines; James F. Gibbons, dean of the School of Engineering at Stanford University; Donald Kennedy, president of Stanford; and Thomas E. Everhart of the California Institute of Applied Technology. Also mentioned is Nobelist Arno A. Penzias, head of research at AT&T Bell Laboratories.