RANDOM SAMPLES

edited by CONSTANCE HOLDEN

Prizes Offered for Medical Cures

When the pace of biomedical research is being outstripped by medical problems, a huge prize might speed things up. That seems to be what two foundations believe—the Rockefeller Foundation in New York, which has offered $1 million to anyone who can develop an early diagnostic test for gonorrhea and chlamydia, and the Prostate Cancer Cure Foundation in Zurich, which will award $2 million for making that cure a reality.

The Rockefeller award is intended to spur development of a cheap, fast, and simple test that can diagnose the two sexually transmitted diseases, which can cause irreversible damage before symptoms appear. Both are extremely common in poor countries; in addition to causing medical and reproductive problems, they are conducive to transmission of HIV.

Rockefeller spokesman Seth Berkley says the foundation thinks a prize is a proven way to attract brand-new ideas. "We really have to break the technological envelope here. This can't work by tweaking existing technology," he says. The "STD Diagnostics Challenge" opened on 7 February and entries will be accepted for the next 5 years or until a winner is named. A committee chaired by science historian Harry Woolf of the Institute for Advanced Study in Princeton, New Jersey, will judge entries.

The Swiss foundation hopes that its prize will trigger a rush of gene and immune therapy research into prostate cancer cures, or the development of a genetically engineered vaccine. The foundation will also consider giving money for studies that "open new perspectives in the field." Judging the work will be an international panel that includes Steven Rosenberg of the U.S. National Cancer Institute and William Fair of Memorial Sloan-Kettering Cancer Center in New York.

JIM PRISCHING/CHICAGO TRIBUNE

Fast Food. Eagle swoops down to Mississippi near Keokuk, Iowa, to pluck fish out of water.

Eagle Population Soars

For much of the late 20th century, the American bald eagle has been a remote and endangered figure, a high-flying inhabitant of lakes and seashores whose life was threatened by abundant pesticide use. But now the bird, the symbol of the United States, is coming back. "The number of American bald eagles has surpassed original recovery goals," says wildlife ecologist Stanley Temple of the University of Wisconsin.

The evidence is especially dramatic this winter in the Midwest, where unusually large flocks have been sighted along major rivers, and hundreds of eagles have been roosting near dam sites along the Mississippi, where ice-free waters below dams allow them to fish in open waters.

Temple says that the return of the eagles and other raptors, including peregrine falcons and ospreys, "is due almost wholly to the ban on chlorinated hydrocarbon pesticides." The ban of the number one offender, DDT, took effect in 1972, eliminating a group of pesticides that thinned eggshells, causing the birds' reproductive rates to plummet. The bald eagle population had been on the skids in the '60s: in 1963, the first formal survey of nesting pairs counted only 417 in the lower 48 states. Now, the eagle recovery is winging along so well that the U.S. Fish and Wildlife Service is considering changing the birds' status from endangered to merely threatened. After going up to 791 nesting pairs in 1974, 2 years after the ban, the total crept to 1757 in 1984 and reached 3747 by 1992.

Times Corrects Scientist's Obit

Harvard molecular biologist Bernard Davis only died once, on 14 January, but has been accorded two obituaries in the *New York Times*. Why? The first obit managed to ignore almost all of Davis' career—igniting a storm of protest from former colleagues who badgered the newspaper until it agreed to do the story over.

The first obituary, published on 17 January, was a short item that highlighted a 1976 controversy in which Davis expressed worries that affirmative action efforts were lowering academic standards at some medical schools. It made no mention of his scientific accomplishments, including pioneering work in bacterial genetics, his involvement in issues relating to science and society, and his numerous honors and publications.

Davis' former colleagues were appalled. "Inadequate and mean and distorted," is what Stanford Nobelist Arthur Kornberg called the obit; an example of the press zeroing in on "a trivial political incident at the expense of one of the finest scientific careers in America," said rheumatologist Gerald Weissmann of New York University Medical Center.

In response to a storm of letters from scientists, the newspaper quickly capitulated, and on 3 February it ran a longer story with a note observing that the first one was "incomplete." Davis' friends are happy. "We were so pleased we got a retraction, as it were," says Weissmann, who authored one of the letters along with 12 colleagues.

Obituary editor Harold Gal acknowledges the first obit was an "unfortunate occurrence," saying that the reporter relied heavily on old clips. Will the *Times* be more careful in the future? "We're always careful," says Gal.

Cannibal Film in Poor Taste?

The practice of cannibalism has long been politically incorrect. But has talk about cannibalism joined the long list of sensitive topics? Perhaps—earlier this month the Smithsonian Institution asked a cable TV channel to delay showing a film that deals with cannibalism in New Guinea.

The documentary, showing the research of Smithsonian anthropologist Paul Taylor, is one of a series of three films on "Smithsonian Expeditions," to be shown by the Arts and Entertainment channel. It was tentatively scheduled to air later this month—a few weeks before congressional hearings on the Smithsonian's budget. But now, the film probably won't appear until next fall.

Smithsonian spokeswoman Linda St. Thomas says they asked that the New Guinea film, the first of the series (which has no Smithsonian funding), be rescheduled so it wouldn't "look like it's a series on cannibalism." But the film's producer Judy Hallet says Smithsonian officials told her that undersecretary Constance Newman had a different concern: offending Congress, especially the Black Caucus.

How so? Newman could not be reached for comment, and, as Taylor observes, it would take many "layers of deconstruction" to argue that a film on New Guinea tribesmen should be offensive to African Americans. But the Smithsonian may have been a little uptight about cannibalism since it was criticized 2 years ago for an exhibit in its African Hall which suggested—wrongly—that a tribe in Zaire practiced cannibalism. Some people, including Black Caucus members, complained that the exhibit was misleading about Af-

rica. The 40-year-old exhibit was subsequently closed for updating.

Taylor says about 25% of his film deals with cannibalism, in the context of the Korowai tribe's criminal justice system where it is used as capital punishment. There is no evidence that it is currently practiced, but young adults gave him highly detailed accounts of how people found guilty of murder, wife stealing, or food theft had been ritualistically killed, cooked, and eaten.

Mathematicians Losing Numbers

Faced with a continuing shortage of jobs for mathematics Ph.D.s, the American Mathematics Society (AMS) last week issued a statement chewing out university math departments for exacerbating the problem by hiring part-time faculty.

Unemployment rates for new mathematics Ph.D.s have shot up from an average of 5% during the 1980s to 12.4% in 1993, according to the latest AMS survey. And cash-strapped universities have been increasingly hiring Ph.D.s as part-timers, by the course, or for short appointments. The survey found that 53% of new doctorates with jobs in academia were not eligible for tenure, and more than a third of those held posts lasting no more than a year.

"Unemployment is almost at an all-time high," says Salah Baouendi of the University of California, San Diego, who chairs the AMS committee on profession. "We know there are money pressures, but we'd like to see more understanding and caring by math departments."

At UC Irvine, math department chairman Peter Li is one who has been forced by budget cuts and increasing enrollments to hire more 1- and 2-year faculty. "We just can't afford enough [full-time] faculty," he says, noting in the department's defense that the short-termers are paid properly and are allowed time for research. The real problem for young Ph.D.s, he says, is the recent influx of mathematicians from China and Eastern Europe who are willing to accept low wages. This tends to depress salaries, he says, forcing mathematicians to be "slave laborers."

The AMS calls on mathematics departments to:

- Warn graduate students about "realities of the job market" and "encourage them to prepare" for non-academic jobs.
- Avoid 1-year appointments, which force people to "begin again searching for a job almost immediately after settling in."
- Avoid "the systematic hiring of unemployed Ph.D.s part-time at substandard salaries." Such a practice is "reprehensible and exploitative...[and] demeans the profession," says the AMS.

Venuses Reappear

Venus—seven Venuses, to be precise—has been rediscovered. The so-called "Venus figurines" are a small and distinct family of finger-length statues of women carved from soapstone and other substances across Europe during the Ice Age.

Fifteen of the statues were found in the 1880s at the so-called Grimaldi site, a cave on the French riviera, but half the cache disappeared when their finder, amateur archeologist Louis Jullien, emigrated to Canada in 1883. They re-emerged a few months ago when a Quebec artist, who had purchased them from an antique store, showed them to McGill University archeologist Michael Bisson. Scientists waited to tell the world until an agreement was reached on their transfer to a Paris museum.

The reappearance has sent ripples of excitement through the archeological community. Anthropologist Randall White of New York University, who is examining the figures with Bisson, says these Venuses, unlike the rest of the Grimaldi group, which are at the Musée des Antiquitées Nationales near Paris, have never been properly cleaned. So scientists will be able tell their age from the sediment—which is between 18,000 and 25,000 years old.

No one is quite sure of the purpose of the little sculptures, about 200 of which are known. Some scientists have speculated that they are fertility figures. But anthropologist Patricia White of West Virginia University says that many are not pregnant and none has a baby, casting doubt on that idea. White says they may have a "mythological" role—that is, a role in explaining "how things came to be the way they are." That seems likely for at least one of the newly rediscovered figures, a woman back-to-back with a wolf-like creature, which, he says, is "virtually unique" for this type of artifact.

Berkeley anthropologist Margaret Conkey says that some Victorian anthropologists used the Venuses to bolster theories about the existence of prehistoric matriarchal societies where females were worshipped as benevolent goddesses. Although mainstream scientists now reject such ideas, they have been embraced by various New Age movements, says Conkey.

But goddesses the Venuses definitely are not, says White: "Gods usually come about after people settle down," start tilling crops, and develop hierarchical social structures. None of that happened until about 10,000 years after these figurines were made.

Mystery women. Pregnant female at upper left is of green serpentine; the one above is carved from mammoth tusk. Both have holes suggesting they were used as pendants.

Nobelist Gives It Away

Michael Smith, co-winner of the 1993 Nobel Prize in Chemistry, is giving away his entire $500,000 prize. Half will go for research on schizophrenia; the other half will go to science outreach programs and the encouragement of women in the sciences.

Smith, director of the Biotechnology Laboratory at the University of British Columbia, was honored for developing site-directed mutagenesis, a method for reprogramming a cell's DNA (*Science*, 22 October 1993, p. 507). He says he resolved to part with his money "fairly soon" after getting the prize, although "your mind is in such a bewildered state after you've won the Nobel Prize that it's hard to remember" what you did when.

When he calmed down, he decided to donate half the money to the Schizophrenia Society of Canada. Research on the disease "is clearly underfinanced" in comparison to other devastating conditions, it "doesn't have good advocacy," and it stands to benefit greatly from molecular genetics and biotechnology, he says. The rest of the prize will be equally divided between the 12-year-old Society for Canadian Women in Science and Technology and a program to extend resources and training to rural science teachers.

The government of British Columbia has agreed to supplement Smith's largesse with a matching $1 million, split the same way as the prize money. And there's more: The Medical Research Council of Canada has promised to fund "in perpetuity" a $50,000-a-year prize for research, plus several research fellowships, in schizophrenia.

Smith did keep $25,000 of the Nobel money—to pay for taking guests to Stockholm for the December awards ceremony.