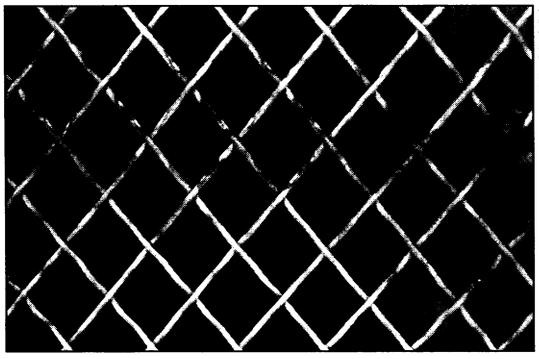
PRIMATE RESEARCH

Chimp Colony Offered for Quick Sale

Scientists working on an AIDS vaccine and other biomedical projects in New Mexico were surprised 2 weeks ago to learn that their lab—which houses the largest chimpanzee colony in the United States—may soon be sold out from under them. The reason: The owner, New Mexico State University (NMSU), says it can't afford the upkeep any longer. The possible sale has already inspired several rescue proposals, including one by Senator Jeff Bingaman (D–NM), who has written to Donna Shalala, the secretary of Health and Human Services, urging the U.S. government to buy the facility.



JOEL SALCIDO

Any bids? New Mexico Regional Primate Research Lab has the largest chimp colony in the United States.

The flurry of activity centers on the New Mexico Regional Primate Research Laboratory (PRL), which has been in the news over the past few years for its chronic budget and personnel problems (*Science*, 2 November 1990, p. 614 and 5 April 1991, p. 24). PRL houses 335 chimps and 800 macaque monkeys on the grounds of Holloman Air Force Base, and, with a new $10 million chimp facility, aims to become one of the country's premier AIDS research centers. But NMSU, an agricultural school, has often been at odds with its primate center, and when the federal government last year cut indirect cost reimbursements to PRL from 73.6% to 55.1%, the situation turned dire. NMSU, which has owned PRL for 13 years, decided to sell.

PRL's director, AIDS vaccine researcher Preston Marx, supports the idea of removing the center from NMSU. But he objects to the way it is being done. The Request for Proposals (RFP) that NMSU issued on 22 February had what Marx and others thought was an impossible deadline—18 March. "After over a decade of running such a facility, they need to get rid of it in 3 weeks?" asks Marx. Although Marx says he has been instructed to keep quiet, citing "academic freedom," he agreed to speak with *Science*. "As a result of indirect costs," he says, "they're dumping a major research facility."

Marx suspects that PRL already has a buyer lined up: White Sands Research Center, a privately run primate facility also in New Mexico. And Marx, one of the world's top specialists in mucosal immunity and HIV, worries that White Sands will not continue to support the basic research done at PRL, which receives 80% of its funding from the U.S. Public Health Service. If White Sands is the buyer, he adds, "I'd view it as similar to a hostile takeover."

No one at White Sands could be reached for comment. However, Averell Tombes, vice president for research and economic development at NMSU, dismisses fears about a sellout. As for White Sands having an inside track, Tombes says, "I don't think that's the case." He adds that "several people have called" about the sale. Tombes says NMSU also believes that "any organization interested in turning in a proposal would have adequate time" to make an offer, and he says the school will consider requests for extensions. Tombes, a biology professor, says he shares Marx's concern about PRL's basic research not being scuttled.

Though the RFP does state that NMSU "wishes" to have a relationship with the buyer that "must" include access to research animals and facilities, "if available," this language is too flimsy for Marx. "I've had no assurances that AIDS research would be protected," he says.

Ronald Desrosiers of Harvard's New England Regional Primate Research Center, a member of PRL's advisory council, is also alarmed by the RFP. "There's no way anyone's going to make a bid on an organization that big in 3 weeks time," says Desrosiers. "I'm concerned with the health of those chimps, their continued breeding, and that reasonable numbers continue to be made available to researchers."

Marx wrote National Cancer Institute (NCI) director Samuel Broder on 28 February about this "crisis" and asked that NCI attempt to cancel the RFP. NCI wrote back on 4 March that "it would not be appropriate for NCI to attempt to influence the business decisions and activities" of NMSU. Congress, on the other hand, is not bound by the same rules, and Bingaman has written to Shalala suggesting that the federal government run PRL. "I recommend that the facility be transferred to the National Institutes of Health ...beginning in fiscal year 1994," he wrote. Marx thinks that's a fine idea. "It's way past time," he says. But so far, neither Shalala nor NIH has expressed any interest.

–Jon Cohen

SCIENTIFIC PUBLISHING

Fallout From Paper on Working Mothers

Rarely has an article in a scientific journal managed to upset so many people, in so many different ways, for so long. Two and a half years after the *Canadian Journal of Physics* (*CJP*) published what purported to be a scientific study blaming the decline of Western civilization on working mothers, expressions of outrage are still reverberating through the Canadian scientific community. Last month, the reverberations were heard loud and clear at a conference sponsored by the National Research Council (NRC), the journal's publisher, which was supposed to help undo damage caused by the publication. Ironically, at the conference, titled "The Ethics of Scholarly Publishing: A Symposium," NRC vice president Clive Willis, far from undoing the damage, managed to fan the flames further by announcing that the council was not, after all, going to deliver on another fence-mending promise: to publish a special issue of the *CJP* containing critical reviews of the offending article.

The object of the furor, an article by University of Alberta chemist Gordon Freeman in the September 1990 *CJP*, reads like a spoof of scientific publishing. Called "Kinetics of Nonhomogeneous Processes in Human Society: Unethical Behavior and Societal Chaos," it is filled with scientific-sounding jargon and based on bogus scientific methodology ("data" came partly from Freeman's informal chats with students). In the article, Freeman purports to demonstrate that mothers who work inflict "serious psychological damage" on their offspring, giving rise to teenage sex, drug use, insider trading, corrupt political practices, and other social ills.

But the article wasn't a spoof. Freeman, a physical chemist who has expounded similar views in newspaper articles and radio and TV interviews, was the organizer of a conference on chaos theory and guest editor of a special issue of *CJP* containing the conference proceedings. Though his paper was not presented at the conference, Freeman included it among a batch of conference proceedings he sent to then *CJP* editor Ralph Nicholls, a physics professor at York University in Ontario. Nicholls sent Freeman's piece out for peer review. When the review came back positive, Nicholls published it.

The outrage that greeted the publication intensified when the NRC dawdled and then took what many Canadian researchers saw as minimal corrective action. A brief retraction

was published 9 months later, but it was printed on unnumbered pages and hence was difficult to tie to the original article in databases. Furthermore, the retraction did not repudiate the article's contents and failed to explain how Freeman's piece had appeared in the *CJP* to begin with. In January 1992, York University faculty members, led by cell biologist Selma Zimmerman, submitted a petition to the NRC asking it to republish the entire September 1990 issue of the *CJP* without Freeman's article. They received no response, until the affair was reported in the 28 February issue of *Science* (page 1065). At that point, Morris Wolfe of the *Toronto Globe and Mail* told last month's conference, "The Freeman affair became an international story. It was now clear, even to the NRC, that something had to be done."

But what? NRC's Willis told *Science*, "I was stunned by the diversity of the suggestions....Reactions we received ranged from do nothing to find each issue and burn it." In mid-March, Willis invited Zimmerman and Rose Sheinin, vice rector, academic, of Concordia University in Montreal and chair of the Women in Scholarship Committee of the Royal Society of Canada, to discuss possible responses. In April, the two met with Willis and two other NRC officials. Two ideas emerged from the meeting. One was the recent conference. The other was a special issue of the *CJP* including letters about Freeman's article, critical reviews by three social scientists, and a statement by the NRC. Willis had promised that the special volume would be on the registration desk at the ethics conference.

But conference attendees were startled to find that no such issue was available. When the absence was questioned, Willis came to the microphone to explain that, while the retraction would be reprinted on a numbered page, there would be no special issue. Charges flew that political pressures had been brought to bear on the NRC; that the NRC was afraid of legal action; and that the organization was continuing its insensitivity to the issues affecting working women and female scientists generally. Willis denies political pressure was a factor but acknowledges concern over possible lawsuits. "We wanted to take a responsible position," he says. "But yes, we wanted to be careful that our legal i's were dotted and t's crossed. That process," he says, "took much longer than we anticipated." Since the issue was keyed to the conference, he adds, when it couldn't be produced in time "the idea of going ahead with its publication as conceived didn't make a lot of sense." (The conference proceedings are, however, scheduled to be published in the July issue of *Scholarly Publishing*, published by the University of Toronto Press.)

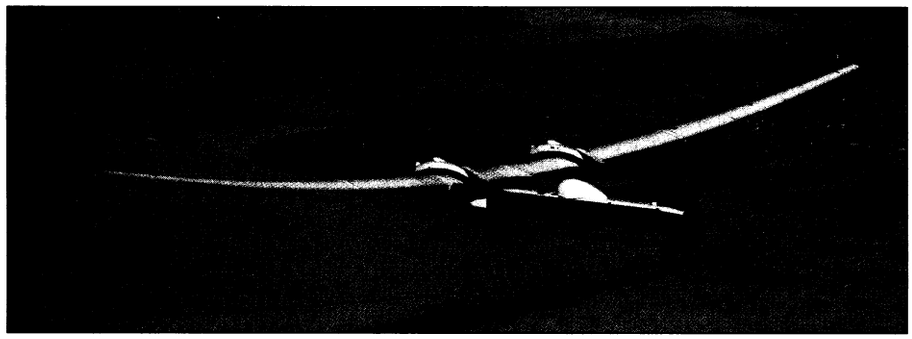
The meeting itself produced an outpouring of criticism of virtually everybody involved in the affair. Even *Science*'s 28 February 1992 article was deconstructed for alleged sexist bias. Mary Guinan, assistant director for evaluation at the Centers for Disease Control and Prevention in Atlanta, examined the verb use of the article, observing that *Science* had written that Freeman's article had "slipped" into the *CJP*—a verb that suggests "naughtiness rather than error." She said this reflected a "light tone" in covering the story, "trivializing" it and making *Science* an implicit collaborator in the perpetuation of sexist practices, and possibly guilty of misconduct in publishing.

By now, Freeman's article is probably the most widely read paper the *CJP* has ever published. Freeman himself continues to propound his views wherever he can, and most recently was invited to address an interfaith religious symposium on family models. Utterly unfazed by the controversy, he calls the paper "one of my best." But nearly everyone else has been quite discomfited by the interplay of ethical, institutional, scientific, political, gender, and career-related motives in the Freeman case. As Guinan says, "I think a little soul-searching is required here."

–Robert Crease

ATMOSPHERIC RESEARCH

Mourning the Plight of the Condor



BOEING

Endangered species. The big bird's one prototype in an early test flight.

Like everyone else, atmospheric scientists know they can't always get what they want. Now they are learning that they can't even get it when it already exists and no one else wants it. The object of their unrequited desire is the aptly named Condor, an unmanned reconnaissance plane that was developed for the Department of Defense (DOD) at a cost of $400 million in the 1980s and is now in danger of going extinct within the month.

The Condor has a 200-foot wingspan, a ceiling of 73,000 feet, and a range of 19,000 nautical miles. DOD mothballed the single prototype in November 1989, but researchers at the National Oceanic and Atmospheric Administration (NOAA) have no trouble picturing new uses for it—studying ozone depletion in the Antarctic, for example. The Condor could take off from New Zealand carrying an instrument package weighing more than 1000 kilograms and criss-cross the ozone hole for 5 days before returning. As former NOAA administrator John Knauss wrote in late January, the plane has a "unique capability" for investigating atmospheric processes and "offers the possibility for large advances in environmental understanding." But DOD is eager to begin dismantling it to save the $150,000 a month it costs to store and maintain the craft.

Atmospheric researchers' hopes had been raised last October, when Congress asked DOD, with NOAA and the National Aeronautics and Space Administration's help, to explore the feasibility of using the Condor for atmospheric research. NOAA's response—which included Knauss' letter—was enthusiastic about the plane's potential. But there was a catch: NOAA and Boeing, the plane's builder, estimated it would cost $70 million to $80 million to refurbish the Condor for atmospheric studies. "Certainly NOAA is not funded to undertake anything like that," says Roger Morris, who is on NOAA's program development and coordination staff. NOAA asked for more time to study the cost-effectiveness of refurbishing the plane.

Meanwhile, DOD's congressional overseers agreed that the plane should be disposed of. According to a Boeing spokesman, DOD is set to begin destroying data systems for the Condor early this month.

As Adrian Tuck, head of NOAA's aeronomy lab, told *Science*, researchers now have only a few weeks to see if the Condor can be saved. He hopes a recent flurry of publicity, including a story in *The New York Times*, will rally supporters. "All sorts of researchers are interested in what this thing can do," he says. "It would be an act of criminal vandalism to saw that thing up, when there's so clearly a scientific need for it."

–Gary Taubes