were drafted without their input. "I was not consulted by the minister … we didn't receive any formal information," says Lucio Bianco, CNR's president, adding that he first learned about the decree's contents in the newspaper. "If the description of the document is true, it cannot be acceptable to the researchers of the CNR."

Bianco says that he hopes to discuss the reforms with Moratti "in an open way" after the government returns from vacation in September. In the meantime, scientists are planning to stage a public protest and will discuss the government's proposal at a meeting on 10 September in Rome organized by Italy's Association of Ph.D.s and other groups. Few scientists contacted by *Science* believe that the reform measures will survive in their current version.

–ALEXANDER HELLEMANS

Alexander Hellemans is a science writer in Naples.

ANIMAL BEHAVIOR

Birds Spy on Neighbors To Choose Nest Sites

Information is power, even for birds. Faced with tough choices, animals that know how others have fared in comparable situations can make better decisions. On page 1168, researchers report that collared flycatchers decide where to nest and whether to return the next year based in part on knowledge of their neighbors' reproductive success. "How individuals collect this information is enigmatic," says Tomas Pärt, an evolutionary ecologist at the Swedish University of Agricultural Sciences at Uppsala. "This result suggests that the cues used may be unexpectedly fine."

Choosing a good breeding site may mean the difference between begetting many offspring or none at all. Previous work on group-nesting seabirds, such as cormorants and kittiwakes, had turned up observational evidence that birds monitor the success of their fellows in assessing breeding sites. A team led by Blandine Doligez, then at France's National Center for Scientific Research (CNRS) in Paris and Uppsala University, tested experimentally to what extent birds make use of information gleaned by watching their neighbors, which ecologists call "public information."

Doligez, now at the University of Bern, Switzerland, worked at a long-term research site at Gotland, Sweden, where collared flycatchers sport identifying color-coded leg bands. Researchers there had noticed flycatchers peering into the nest boxes of other birds. "No one really focused on this behavior, [but] I thought, that's really a sign" they're gathering information, she says.

To manipulate such information, the researchers took nestlings from some nests and added them to others, creating some plots of woodland with supersized broods and others with measly numbers of young. The team then monitored these plots and two types of control areas for 3 years.

The manipulation had a marked effect. Outsiders preferentially moved to plots augmented with nestlings, apparently judging these plots to be productive. But having extra mouths to feed forced parents to spread food more thinly, so youngsters on these plots were smaller. Emigrants picked up on both cues—and viewed the cup as half-empty rather than half-full. They fled both treatment plots at equally high rates, responding negatively to lowered quantity or quality of young. Emigrating birds "know what's going on in their own area," Doligez explains. Immigrants, however, are at a disadvantage and may be unable to pick up on relatively subtle clues, she says.

Nosy. Collared flycatchers peer into neighbors' nests when prospecting for breeding sites.

The birds also appear to be using information from their own breeding experience when making dispersal decisions. Parents of experimentally reduced nests were more likely to fly the coop than birds with unmanipulated nests, whereas the nestling recipients were more likely to stay put.

Such findings highlight the importance of animal behavior to population biology, notes conservation biologist J. Michael Reed of Tufts University in Medford, Massachusetts. "Dispersal is often treated as diffusion in population models even though for many species it is a result of a series of behavioral

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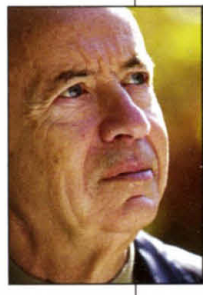
ScienceScope

Stem Cells by Intel The University of California, San Francisco (UCSF), last week announced a $5 million gift toward a $20 million fund that will allow its researchers to expand their work on embryonic stem cells.

Intel chair Andrew Grove (below) said that he would match every gift between $50,000 and $500,000, up to $5 million, to help the university set up the Stem Cell Discovery Fund and a research program to cultivate and study newly derived cell lines. UCSF is one of two U.S. universities to produce human embryonic stem cell lines listed in NIH's Stem Cell Registry, but the new fund will let its researchers go beyond those derived before President George W. Bush's deadline of 9 August 2001.



New Path for Ph.D.s A National Research Council (NRC) report has proposed a fellowship program for newly minted Ph.D.s who want to work with kids. The program would provide schools with expertise that's hard to come by and young scientists with an alternative career path.

The 2-year, $35,000-a-year fellowships would train scientists to use their skills in the classroom, at science museums, or in other education settings. "They probably won't be teaching fourth-grade math, but they could be a tremendous resource specialist for an elementary school," says panel member Margaret Cozzens, vice chancellor at the University of Colorado, Denver. "We think there'll be a big demand," says panel chair Patricia Morse, a marine biologist at the University of Washington, Seattle.

The report, *Attracting Science Ph.D.s to K–12 Education*, estimates it would cost $2.5 million a year to support 30 fellows.

Big Green Donation An international fund to protect the global environment won a $700 million boost last week after the United States agreed to increase its contribution. The agreement comes days before the World Summit on Sustainable Development in Johannesburg, South Africa.

After months of negotiations (*Science*, 31 May, p. 1596), the donor countries of the Global Environment Facility approved a $2.92 billion budget for the next 4 years. CEO Mohammed T. El-Ashry says the money will support continuing efforts to protect biodiversity and mitigate climate change as well as new work on combating persistent organic pollutants and desertification. Some $70 million of the $500 million U.S. contribution will be tied to the fund's performance.

view board, Kulynych says, adding that the result may not be any faster.

But the department feels that the new rules should appease scientists who worried that health care providers wouldn't share data. "We worked very hard with the research community to take care of what they feared would be the most chilling aspects of the rule," says an HHS official. The rule goes into effect April 2003. –JOCELYN KAISER

ALTERNATIVE MEDICINE

NIH Trial to Test Chelation Therapy

The National Institutes of Health (NIH) is putting $30 million into a major clinical trial of a cardiovascular therapy that skeptics say has no scientific rationale. Even supporters of the trial acknowledge that they aren't sure how the therapy might work and that a successful trial will leave them no closer to understanding its mechanism.

Last week the National Heart, Lung, and Blood Institute (NHLBI) and the National Center for Complementary and Alternative Medicine (NCCAM) announced joint funding of a 5-year study into whether chelation therapy can help sufferers from heart disease. Chelation, whose active ingredient is a synthetic amino acid called EDTA, binds with minerals in the body and has long been an established treatment for heavy-metal poisoning. In the past 2 decades, it has also become a widely used "alternative" treatment for arterial plaque through its purported ability to draw off calcium.

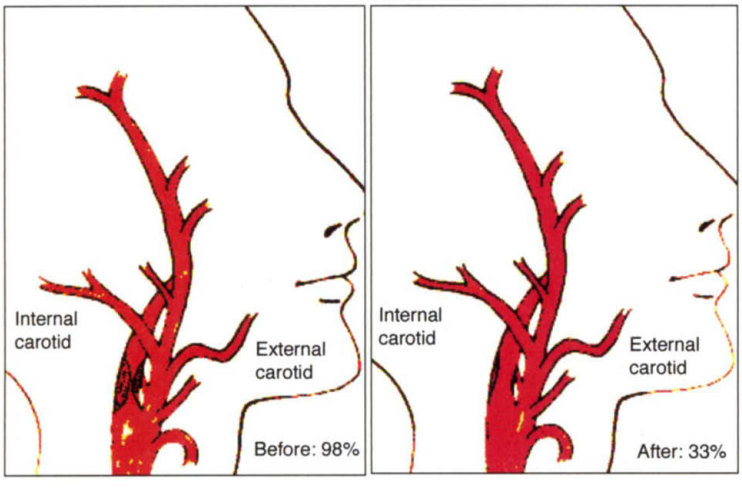
Skeptics say that the method is scientifically implausible and that the only supporting evidence is anecdotal. "The people at NIH are doing it out of political fear," says quackery battler Saul Green of New York City, a biochemist and former cancer researcher. In addition, critics believe that no amount of negative data will persuade supporters to abandon faith in the procedure. But the heart institute's Claude Lenfant says his agency is "enthusiastic" about the project. "Only a large clinical trial can definitively answer the question of whether chelation treatment is truly safe and effective," he says.

NIH has been under continuing pressure from Congress to support such research. There have been several small controlled trials that detected no benefit from the treatment, and 3 years ago Lenfant told legislators that he'd love to support a big one if he received the right proposal. The study, headed by Gervasio Lamas, director of cardiovascular research and academic affairs at Mount Sinai Medical Center and Miami Heart Institute in Miami Beach, Florida, will enroll 2300 patients at 100 sites.

Supporters of chelation offer two major theories for its action. One has it sucking the calcium from plaques and facilitating their dissolution, whereas the other involves EDTA's role as a powerful antioxidant. Lamas says that the calcium idea is "probably not a reasonable hypothesis" because, for one thing, EDTA is water soluble and therefore could not penetrate fatty membranes and affect plaque. He prefers the notion that EDTA acts primarily by decreasing oxidation of plaque-forming cholesterol.

Green and Wallace Sampson, a retired Stanford oncologist and hematologist, ridicule both theories. Calcium plays little role in plaque, they say, and chelation may actually promote rather than reduce oxidation. "When you chelate iron, you increase its ability to produce free radicals," says Green. Lamas says that it's "quite a stretch" to extrapolate from basic science and that a clinical trial offers the last word. But he doesn't promise patients a miracle: At best, he says, chelation may only stem further deterioration of blood vessels.

If the trial does show a benefit, researchers still won't know the active ingredients. The usual solution actually has 10 different components, including vitamins and minerals. But NCCAM director Stephen Straus says his primary goal is to test its efficacy. If the answer is yes, he says, "then there will be time to look at mechanisms." –CONSTANCE HOLDEN



Clear path? One case study claims that ultrasound imaging showed a two-thirds reduction in plaque in a woman's carotid artery. But experts say imaging can't tell the difference between plaque and some other type of obstruction.

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ScienceScope

Pleading His Innocence A former government scientist says that he's being made "the designated fall guy" for the FBI's failure to find a suspect in last fall's anthrax mailings that killed five people.

Speaking last weekend at his lawyer's office in Alexandria, Virginia, Steven J. Hatfill, a virologist at the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) from 1997 to 1999, said he "never, ever worked with anthrax in my life." Hatfill has not been named a suspect, but the FBI has searched his home twice and the media and Internet sites are full of speculation about his role in the attacks.

Hatfill is on paid leave from his current position as an associate director of the National Center for Biomedical Research and Training at Louisiana State University, Baton Rouge, after being laid off in April from his job at Science Applications International Corp. He complained that the authorities and the media have turned his life into "a wasteland."

Biodefense Buzz U.S. labs are positioning themselves to compete for the lavish sums available for bioterrorism research next year. At a meeting in Gaithersburg, Maryland, last week, National Institute of Allergy and Infectious Diseases (NIAID) officials revealed details of its plan to cover the country with some 10 "regional centers of excellence" to conduct basic and clinical research, train the next generation of biodefense scientists, and help out in case of a new attack.

The centers—the first four to be picked next May—will serve as "beehives of activity," program director Rona Hirschberg told more than 300 eager scientists and administrators. Each center will get $4 million to $6 million a year, but researchers expect that their special status will help them rake in additional funds, including hundreds of millions of dollars in regular NIAID grants. "It's a tremendous opportunity," says microbiologist Joel Baseman of the University of Texas Health Science Center in San Antonio, part of a Texas consortium that plans to apply by the 15 January deadline.

NIAID also plans to spend $450 million over the next 2 years to build and operate half a dozen new regional high-level biocontainment facilities that will be associated with the new centers.

Contributors: Constance Holden, Jeffrey Mervis, Adam Bostanci, Martin Enserink