RANDOM SAMPLES

edited by CONSTANCE HOLDEN

Cold Fusion Gets Drubbing in Italian Court

The court of scientific opinion passed harsh judgment on cold fusion years ago. Last month an Italian court weighed in as well, rejecting a libel claim by fusion researchers Stanley Pons, Martin Fleischmann, and three Italian scientists against the Italian magazine *La Repubblica*. The plaintiffs were also ordered to pay the magazine's 28.5 million lire (about $20,000) court costs.

The 8 billion lire (then $5 million) suit followed a 1991 review of Alexander Kohn's book *False Prophets*, in which *La Repubblica* journalist Giovanni Pace approvingly repeated Kohn's comparison of Pons and Fleischmann to "fornicating priests," and referred to cold fusion as "scientific fraud."

Serving as the magazine's expert witness at the trial was Douglas Morrison of CERN, the European Center for Particle Physics in Geneva. "Martin Fleischmann gave a marvelous talk at CERN a week after their 1989 press conference, and I was hopefully in favor," says Morrison, "but after a few days realized that there was nothing in it." The court's 14-page ruling noted that there has been little progress in cold fusion research since 1991, that most scientists have abandoned the subject, and that Pons and Fleischmann themselves had presented the court with inconsistent data. It concluded that the two scientists' claims were "separated from reality," and that Pace's comments were not libelous.

Fleischmann, who with Pons is now based at a research institute, IMRA Europe, near Nice, France, says he has not read the court ruling. However, he asserts that journalistic integrity was clearly "violated" by Pace's article. As for the validity of his research, he says "I don't think you can use this [court case] as a vehicle for saying cold fusion is right or wrong. ... The jury is out on that."

Clotting Gene Tied to Heart Attacks

When the cholesterol-filled plaques that grow on the walls of coronary arteries crack open or ulcerate, releasing clotting factors, blood platelets do what comes naturally, sticking together around the apparent injury to form a clot. The result is often a heart attack—especially, according to a study in this week's *New England Journal of Medicine*, if the victim carries a genetic mutation that seems to make platelets even stickier than usual.

About 20% of the population carries the genetic quirk, which results in a polymorphism, a slightly altered version of a platelet surface protein called GPIIb-IIIa, according to Johns Hopkins University cardiologist and study author Pascal Goldschmidt-Clermont. Called PI^{A2}, it may change the shape of the protein, enhancing its ability to bind to clot-promoting agents such as fibrinogen. But this enhancement may double a person's risk of heart attack: The researchers found that it was present in 28 (39.4%) of 71 subjects who had been admitted to the university hospital with severe heart attacks or angina.

This increased heart-attack risk was "at least equal" to that from smoking or high cholesterol, says Goldschmidt-Clermont. Garret FitzGerald, director of the Center for Experimental Therapeutics at the University of Pennsylvania Medical Center, says the results offer "the first inkling of an association of a modification in a platelet target protein with cardiovascular risk."

Studies are under way to see if patients with less severe heart disease are also more likely to have the altered gene. If they do, says Edgar Haber, director of the cardiovascular biology lab at Harvard School of Public Health, blood tests for PI^{A2} could become a new weapon against heart disease. "Being told you have one of these polymorphisms may be a motivating factor to change your lifestyle and reduce other risks," he says.

Fairchild Garden Rehabilitated

When Hurricane Andrew hit South Florida in August 1992, it ripped through Fairchild Tropical Garden in Miami, one of the world's preeminent research facilities on tropical and subtropical plants. It mangled or destroyed at least 60% of the garden's collection, including a rare and valuable selection of palms and cycads, primitive trees with palm-like foliage. The bill for restoration has topped $2 million.

CHARLES E. HUBBUCH/FAIRCHILD TROPICAL GARDEN

Risen again. Rare palms flourish in newly built conservatory.

Fairchild is now back in business, and last month saw the opening of a garden centerpiece: its newly built 1505-square-meter conservatory, one of the handful of facilities in the world dedicated to the study and display of tropical plant species rarely found in captivity. The garden has also taken advantage of new research opportunities created by Andrew: Wood anatomists have recently published the results of the "once-in-a-lifetime" opportunity to study the physiology of valuable palms downed by the hurricane, says biologist Scott Zona. Fairchild scientists have also been studying the effects of the population explosion of bark beetles that occurred thanks to the sudden abundance of decaying plant material, and which threatened to kill off the Dade County Pine, a coveted wood for construction.

Boyer

Cohen

DNA Pioneers Honored

Stanley Cohen and Herbert Boyer—the biologists behind some of the basic tools of recombinant DNA research—pleaded with Congress in the 1970s not to pass laws that would restrict their field, and now they can celebrate the fruits of their labor. On 11 April they shared the $500,000 Lemelson-MIT prize.

Established in 1994 by inventor Jerome Lemelson and administered by the Massachusetts Institute of Technology, the prize goes to "outstanding contemporary American inventors and innovators." This year also featured a (cashless) "lifetime achievement award" for independent researcher Wilson Greatbatch of Clarence, New York, inventor of the implantable pacemaker.

Boyer, a University of California, San Francisco, biologist expert in DNA-snipping restriction enzymes, began a collaboration with Cohen, a Stanford medical school professor, in 1972. It was a high-risk endeavor, Cohen said on accepting his prize, not the sort that would be looked upon kindly by grant-givers these days. "There was no assurance that transplanted genes could in fact be propagated in a foreign host, and ... friends and colleagues offered many cogent reasons why success was improbable." But the work led to the development of enzymes and plasmids that made possible the biotech revolution.

In 1976, Boyer co-founded Genentech, the biotechnology company that is now worth about $2 billion. Cohen never joined the biotech boom—he says he wanted to remain free of any taint of financial self-interest when testifying against measures to limit research.