

# RANDOM SAMPLES

edited by LISA SEACHRIST

## Allergy Gene Nothing to Sneeze at

Two years ago when a *Sunday Times* of London headline about asthma genetics announced "British Breakthrough Likely to End Asthma Suffering," the Oxford researchers who made the breakthrough thought the newspaper was jumping the gun. The results were still quite preliminary. However, in the June issue of *Nature Genetics*, the Oxford team announces that a maternally-inherited defect in a key immune component could predispose one to allergic reactions like asthma.

Geneticist William Cookson of the John Radcliffe Hospital and respiratory physician Julian Hopkin of the Churchill Hospital in Oxford, along with Japanese collaborators, identified a gene on chromosome 11 linked to familial atopy—a condition involving elevated antibodies in the blood thought to cause the allergic reactions that result in asthma, hay fever, and eczema. Out of 60 asthmatic families, 10 (17%) had a single mutation on chromosome 11 in the gene coding for the immunoglobulin E (IgE) receptor. For people with allergies, these receptors are activated by IgE molecules covered with allergens like pollen grains. The receptors then trigger a massive release of inflammatory compounds, causing itching, wheezing, and sneezing.

Exactly how the mutation—which causes an alteration in a single amino acid—might influence allergic reactions is unknown. Nevertheless, molecular biologist Hannah Gould of King's College London says the finding will help scientists determine how the receptor functions. Gould also sees a day when children could be screened for susceptibility to allergies. David Marsh of Johns Hopkins Medical School is interested in the finding, but warns that the cause of atopy is likely to be very complex. That perspective, however, is unlikely to fire the imagination of headline writers.

## FRESHMAN ENGINEERING ENROLLMENT

	1992-3	1993-4	% decline
Blacks	8922	8271	7.3
Hispanics	5624	5509	2.0
American Indians	633	607	4.1

Source: NACME

## Engineering Spurned by Minorities

Enrollment by underrepresented minorities in freshman engineering courses at U.S. universities has taken a downturn after steadily increasing since 1986, according to the National Action Council for Minorities in Engineering (NACME). Total enrollment dropped by 5.2% this

academic year—with blacks showing the biggest drop-off (see chart). Minorities are joining the trend set by nonminority students, whose enrollment dropped from 103,085 in 1982 to 73,743 this year.

But they're making a mistake in doing so, claims physicist George Campbell, president of NACME, who says minorities are being scared off by news reports about shrinkage in defense spending as well as downsizing in industry R&D. The fact is, notes Campbell, "engineering is still about the best place to be." Unemployment among engineers is

currently 3.8%, still just over half the national rate, and an engineering degree still commands the highest salary of any undergraduate degree, says Campbell.

## French Toxicologist Goes Temping

It helps to have friends in high places. Beleaguered French toxicologist André Cicoella has a new job, thanks to French industry minister Gérard Longuet. The minister found the out-of-work Cicoella a spot at the Institut National de l'Environnement et des Risques Industriels (INERIS), but the work is not in his specialty—glycol ethers.

High-level officials don't often act as employment agents for scientists, but Cicoella is a special case. He was suspended from his post at the Institut National de Recherche et de Sécurité (INRS) for "insubordination" in late April on the eve of an international glycol ether symposium he had organized (*Science*, 20 May, p. 1076). An internal review panel cleared him on 9 May, but INRS director-general Dominique Moyen fired Cicoella on 10 May amid rumors that the INRS administration was squelching findings on the hazards of glycol ethers, used to manufacture semiconductors.

Symposium participants protested by refusing to publish their papers in the meetings' proceedings. INRS officials offered to publish the papers in French in the agency's internal review bulletin or contribute 100,000 francs (\$18,000) for independent publication. Bryan Hardin, chair of the symposium in Cicoella's absence and an assistant director of the U.S. National Institute for Occupational Safety and Health, says, "I intend to accept the second offer."

During the appeal process for reinstatement at INRS, Cicoella is glad to have a job—even if the duties haven't been defined. Fortunately, he hasn't had to move far: His new office in Nancy, France, is just around the corner from his old office.

## Lab Rats Still Not Animals

According to the U.S. Department of Agriculture's (USDA's) version of taxonomy, mice, rats, and birds don't count as animals when it comes to research. A U.S. Court of Appeals ruling handed down last month limits government oversight of these laboratory animals and could restrict animal rights groups from suing the government over its regulation of animal research.

The Animal Welfare Act of 1971 allowed the USDA to define the term "animal." In 1992, U.S. District Judge Charles Richey ruled, in a lawsuit brought by the Humane Society of the United States and the Animal Legal Defense Fund against the USDA, that exempting rats, mice, and birds was "arbitrary and capricious." USDA maintained its policy while it appealed the ruling, and the plaintiffs sued to get the revision started. On 20 May the U.S. Court of Appeals ruled that the plaintiffs had no "standing": They had not been injured directly by the action or inaction of the USDA.

Martin Stephens, vice president of laboratory animals at the Humane Society of the United States, claims this decision will stymie efforts of animal rights groups to protect the well-being of animals. "It is not clear from the ruling who would have standing," says Stephens.

However, Martin Frank, executive director of the American Physiological Society, states the animals "are protected under Public Health Service Guidelines for humane treatment of animals." The Appeals court decision didn't rule on the substance of the plaintiffs' arguments, so rats, mice, and birds may be animals after all—if someone is permitted to stand up for them in court.



Not an animal? USDA doesn't think so.

JEROME WEXLER/PHOTO RESEARCHERS