# RANDOM SAMPLES

edited by CONSTANCE HOLDEN

## Faculty Ambivalence on Affirmative Action

A poll of U.S. college and university professors has revealed that almost two in three are opposed to their institution considering sex or race when making hiring and admissions decisions.

The telephone poll, of 800 randomly selected full-time faculty at 40 institutions nationwide, was commissioned by the National Association of Scholars (NAS), a Princeton, N.J.–based group devoted to "the restoration of intellectual substance ... and academic freedom" in U.S. universities. It was conducted by the Roper Center for Public Opinion Research, University of Connecticut, Storrs, in the latter half of October.

Faculty were asked whether they would approve of a policy at their institution stating that it "shall not discriminate against or grant preferential treatment to candidates ... on the basis of race, sex, or ethnicity." Overall, 64% of the respondents approved of the statement as applied to faculty and 61% as applied to student admissions. About three-quarters of the respondents said, though, that their schools have either formal or informal policies calling for race, sex, or ethnicity to be "taken into account" in decision-making.

NAS director Stephen Balch says his group had "assumed there was a lot more opposition to ... preferences in the academy than official spokespeople make out." Still, "we were surprised at how strong that opposition was."

Mary Burgan of the American Association of University Professors is skeptical of Balch's interpretation of the results because, in her view, the question surveyors used implies that race or sex would be the "sole basis" for selection decisions. Burgan finds it notable, however, that survey respondents felt that affirmative action has "not made much of a difference in [the] quality" of either teachers or students. Balch admits he was surprised at that, but interprets it to mean that "faculty oppose preferences simply on the grounds of unfairness."

Just what faculty really do think on such matters is tricky to pin down, notes chemical engineer Duncan Mellichamp, chair of the Academic Council of the University of California (UC). He says that in a 1995 Roper Poll of 1000 UC faculty, 52% said they favored using race or sex as an admission criterion, and 34% were opposed. Yet when asked whether they thought UC should follow a policy of granting preferences, only 31% endorsed the idea; 48% said they favored promoting equal opportunity without regard to race or sex.

**"Do you feel that [your institution] should or should not grant preference to one applicant over another for admission on the basis of race, sex, or ethnicity?**

| Faculty | Percent Should | Should not |
|---|---|---|
| Science/Math | 27 | 61 |
| Computers/Eng./Bus. | 26 | 64 |
| Health sciences | 18 | 75 |
| Social sciences | 43 | 46 |

N.B. Respondents not included in these percentages didn't know or declined to answer.

SOURCE: NATIONAL ASSOCIATION OF SCHOLARS

* The "National Faculty Survey Regarding the Use of Sexual and Racial Preferences in Higher Education" is on the Internet at http://www.nas.org/roper/exsum.htm

## More Support for Black Hole–Quasar Link

A gap in the leading theory of quasars may now have been filled by observations that suggest that not just some but all quasars send out fast-moving jets of plasma. That would mean that all quasars are powered by black holes.

Shining brightly in the far reaches of the universe, quasars are the most energetic objects known. Their extraordinary brilliance, most astronomers believe, is generated by black holes as massive as millions of suns, which suck material into the centers of young galaxies and heat them to incandescence. Radio-emitting jets of material that squirt from the centers of some quasars provide strong support for this scenario because, theorists believe, such jets can only originate from a massive black hole.

But only a tenth of all quasars—the "radio-loud" ones—seem to harbor these jets, an observation that has perplexed astronomers. Now a team of radio astronomers led by Heino Falcke of the University of Maryland has found evidence that most if not all of the remaining quasars have unseen plasma jets.

The team's observations of a class of quasars with radio luminosities midway between radio-loud and radio-quiet reveal extremely intense, compact points of radio emission. These focused emissions are believed to emanate from plasma jets aimed straight along the line of sight to Earth, for relativity theory predicts that radiation will be amplified if its source is moving toward the observer at near the speed of light. Falcke argues that these "radio-intermediate" quasars are the same kind of objects as the radio-quiet quasars, except that "we happen to look right into a jet." If so, other radio-quiet quasars—which make up 90% of the quasar population—would also contain fast-moving jets in their nuclei. They just can't be seen because they're not pointing at Earth, the team reports in the 10 December *Astrophysical Journal*.

Falcke's suggestion is "a viable picture," says Robert Antonucci, a quasar expert at the University of California, Santa Barbara. "If I had to vote on it, I'd say they are probably right."

LINDLEY VANN

**Snail incubator?** Submerged tank off shore of ancient Turkish town.

## Purple Business

Scientists have a tentative explanation for why an ancient town on an inhospitable part of Turkey's southern coast thrived for more than a thousand years: snails. Specifically, murex snails, the kind used to make Tyrian purple, the most prized dye of the ancient world.

In 1970, amateur archaeologist and yachtsman Bob Carter of Seattle discovered several structures just offshore of the ancient port town of Aperlae. The existence of the town has long been known, but the structures Carter found, apparently submerged from earthquake-induced land subsidence, may hold the key to the town's existence.

"Everything about the site is wrong for a coastal settlement, so the reason for it must have been very compelling," says historian and marine archaeologist Robert Hohlfelder of the University of Colorado. Prevailing winds make it impossible for a sailing vessel to get out of the bay during most of the day. There's little fresh water, as attested by the many rainwater cisterns found in the area. And getting to the nearest inland town involves a rugged, roadless, 2-hour trek, says architectural historian Lindley Vann of the University of Maryland.

But this year a team of historians and archaeologists began the first systematic exploration of the site. Among their findings: a large midden of murex snail shells and broken pottery, and three large submerged brick tanks, the largest one 8 meters long. "Our preliminary reading is they may have been murex breeding tanks," says

*(continued on page 1845)*

(continued from page 1843)

Hohlfelder. Those spiny-shelled carnivores have hypobranchial glands which secrete a substance that, when put in heated saltwater, turns purple.

Hohlfelder says the shell piles contain the right kinds of murex for dye manufacture: "In early 4th century A.D., Tyrian purple was literally worth its weight in gold. Producing a commodity of this value would explain how this city could survive and thrive." There's too little fresh water for cloth-dying, he says, so the dye was probably shipped to Myra, the nearest international seaport. Vann says the team hopes to gain definitive information on Aperlae's raison d'être when the team returns to Turkey next June.

## Deasbestosization

Governments in Europe are sinking hundreds of millions of dollars into stripping asbestos from public buildings—despite claims by experts who say that health risks from undisturbed asbestos are exaggerated.

Berlaymont, the 30-year-old headquarters of the European Commission (EC) in Brussels, is now in the midst of a 9-year, $50 million cleanup. The whole building, which covers 40,000 square meters, is shrouded in an airtight tarpaulin which sustains a low atmospheric pressure to contain airborne fibers. Air pumps work around the clock, and a battery of sensors linked to an adjacent laboratory spot leaks.

COMMISSION DES COMMUNAUTÉS EUROPÉENNES

**Under wraps.** EC headquarters in Brussels undergoes cleanup.

But the scope of this project is dwarfed by the one on Paris's Left Bank: the decontamination of the 200,000-square-meter complex of buildings that make up the Jussieu Campus of Paris University. Plans are to start the $240 million job next year and complete it within 2 years. Most observers, however, regard that time scale as hopelessly unrealistic. "Nobody believes this is possible," says mathematician Pierre Barrat. Officials propose to oust only small groups of people at a time from the campus—host to 50,000 students and faculty—during the project. But, says Barrat, people near a small, experimental deasbestosizing site on campus are already "very worried. ... We may have to evacuate everybody [at once]."

Amid the turmoil, some scientists say the risks from undisturbed asbestos are overblown. In April, toxicologist Etienne Fournier of France's Academy of Medicine and his team published a report stating that decontamination potentially poses large health risks, but if the buildings were left intact, the risks would be negligible. The Anti-Asbestos Committee of Jussieu and the National Association for the Defense of Asbestos Victims are not persuaded. On 30 October, they took the researchers to court for disseminating "false information."

## NSF Creates Layperson Award

Spreading the word about science is one of the missions of the National Science Foundation (NSF). But the idea of honoring a layperson who has done exactly that turned out to be a problem for NSF's oversight body, the National Science Board, which after rejecting the idea last winter finally approved it last month.

"It went down in flames when we first discussed it," says board chair Richard Zare, a laser chemist at Stanford University. Some were dubious about honoring a nonscientist, while others feared the new distinction might diminish its Vannevar Bush award, which goes to prominent scientists for contributions to humankind. But now the board hopes to announce its first choice for NSF's new (cashless) Public Service Award during National Science and Technology Week in the spring of 1998. "I think Isaac Asimov [the prolific author and popularizer of science who died in 1992] would have been a good choice," says Zare. He also mentions the chair of the House Science Committee, retiring Representative Robert Walker (R–PA). But candidates have to be alive and cannot be government employees. Any suggestions? Call 703-306-2000 or contact sfannone@nsf.gov.

## U.K. Genetics Group Established

The British goverment's new Human Genetics Advisory Commission finally came to life last week when Science Minister Ian Taylor named its members and its chair, legal expert Sir Colin Campbell, vice chancellor of Nottingham University. Comprising nine people representing scientific, industrial, health, and public interests, the commission marks a U-turn in government policy. Last year, the Parliament's science and technology committee, after a review of the applications of human genetics research, called for a broad-ranging commission to provide advice on everything from confidentiality of human genetic data to its use in employment and insurance decisions. The government dismissed the idea as unnecessary and instead set up a committee focused solely on genetic testing. But the parliamentary committee continued to press for a broader based body, and, in June, the government came around. Taylor says he hopes to find ways to incorporate public views into the group's operations. "[It] will also advise on ways to [increase] public confidence in the new science," he says. The first meeting will be held in early 1997.

## Undersized Protein, Oversized Heart

A big heart is nice, but too much heart muscle can be dangerous, as many learned when Celtics basketball player Reggie Lewis dropped dead on the court in 1993. Like about half of athletes who die suddenly, Lewis suffered from a congenital condition called hypertrophic cardiomyopathy.

This condition is believed to inhibit heart cells' ability to contract. The cells react by releasing more calcium, which stimulates contractions but also makes the heart grow so big that parts of it can't get enough oxygen. Arrhythmias follow, which can lead to heart failure.

Scientists have found six defective genes associated with the condition, five of which seem to make heart cells produce abnormal versions of proteins that help cells contract. But the sixth defective gene often appeared not to make any of its protein.

Now, however, a group led by physiologist H. Lee Sweeney of the University of Pennsylvania School of Medicine in Philadelphia report in the December *Journal of Clinical Investigation* that all six probably operate via defective proteins. When the scientists put this faulty gene into cultures of embryonic quail muscle cells, they made a shortened version of the protein, troponin T. When the cells took in the faulty protein, they still contracted, "but [with] less than normal force," Sweeney says.

The study "represents a significant breakthrough in understanding the cellular consequences of [this defect]," says Michael Sanguinetti, a cardiac electrophysiologist at the University of Utah, Salt Lake City. Sweeney says that if all six genes really do work alike, "a common treatment [such as a bioengineered contraction-strengthening protein] may work for all of these genetic abnormalities." Medication that limits calcium release is currently the main treatment.

B. DRAKE/SPORTSCHROME EAST/WEST

**Too much heart.** Reggie Lewis.