edited by DAVID P. HAMILTON

Gene Therapy: A New First?

The Human Gene Therapy Subcommittee of NIH's Recombinant DNA Advisory Committee has a well-deserved reputation for the rigor with which it reviews proposed protocols. Recently, it spotted the following wording in the consent form for a University of Pennsylvania clinical trial in which melanoma patients were applying for treatment using genetically tagged, interleukin-2–activated, tumor infiltrating lymphocytes: "It is very unlikely, though possible, that this treatment could cause your death. In previous studies these side effects have been transient and have returned to normal after discontinuing the administration of interleukin-2."

British Brains Continuing to Drain

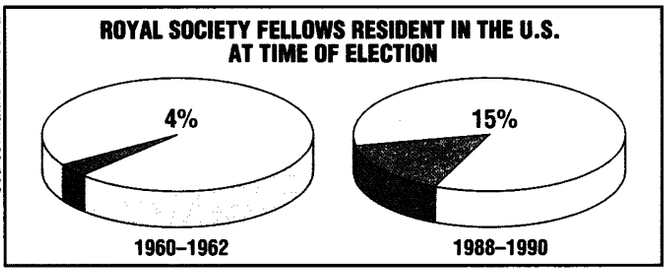
Is the crisis in British science funding causing a hemorrhage of scientific talent from that country? Not according to the British government, which staunchly maintains there is no brain drain. But data collected by British Scientists Abroad (BSA), a loose federation of expatriate British scientists, paint a different picture.

BSA analyzed the membership of the elite Royal Society, which is roughly equivalent to the U.S. National Academy of Sciences, and found that more than a quarter of the Fellows now live outside Britain. Furthermore, an increasing number are U.S. residents at the time of their election (see chart). "Top scientists are now choosing to leave Britain earlier in their careers," concludes Matthew Freeman, a BSA organizer at the University of California at Berkeley.

BSA recently gathered the signatures of 72 expatriate Fellows of the Royal Society and members of the Fellowship of Engineering for a petition warning that "unless the government acts to halt the decline in research, we fear that Britain will become a minor player in technological development." (UK officials dismissed a less ambitious effort last year which gathered 1647 signatures, arguing that the signatories were too junior to count as real scientists—despite the fact that more than half were in faculty positions.)

To BSA, the remedy is simple: increase UK government spending on R&D to a level equivalent to that of Britain's competitors, and offer industry tax incentives to conduct research that will be published. The prime minister's reply? "We are still considering our response," a spokesperson told *Science*.

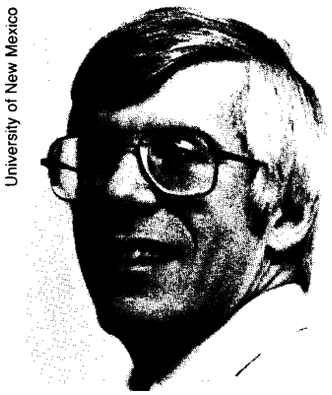
Source: Matthew Freeman



Indoor Radon: A Little Less to Worry About

If you're planning on doing some woodworking or playing with the kids in the basement tonight, you can breathe a little easier. According to a recent study by the National Research Council, the imperceptible radon gas that seeps into homes does not deliver quite the radioactive punch to your lung cells as earlier reports had suggested. That means the actual number of lung cancer deaths from household radon is probably well below a previous estimate of 13,000 per year.

University of New Mexico



Jonathan Samet

This reevaluation, headed by physician Jonathan Samet of the University of New Mexico School of Medicine, is based on a new analysis of how radon travels from uranium, where it is produced by radioactive decay, to human lung cells. In a previous NRC study, researchers had conservatively assumed that radon exposure at home was equivalent to exposure in a uranium mine, where the incidence rate of radon-induced lung cancer is well determined (*Science*, 20 April 1988, p. 606).

In the new study, however, researchers considered two facts: that people mining uranium breathe more deeply than those at home, thus drawing a larger volume of radon into their lungs; and that mines tend to be dusty places, full of airborne particles to which radon decay products can attach themselves. Taking these factors into account, Samet's panel calculated that, for an equivalent amount of environmental radon, adult household members receive a dose that is 30% lower than what a miner would receive. Children receive one 20% lower.

Despite these revised estimates, radon still kills more people every year than any other environmental hazard. And uncertainties remain over the number of people actually exposed to high radon levels at home, as well as over the role of smoking in aggravating radon-related lung damage.

Practicing What You Preach at Budget Time

In contrast to the 7-pound federal budget—2026 pages of unrecycled (albeit recyclable) machine-finished paper, bound between glossy covers—and the colorful, inkjet-printed (and nonrecyclable) Department of Energy budgetary graphs, the Environmental Protection Agency's budget summary this year lacked color and fancy graphics. The reason? EPA decided this year—for the first time—to print its material on recycled paper. In Washington, it's a rare agency indeed that takes its own advice to heart.

Heart Attacks More Severe for Women

Women are nearly 50% more likely to die during hospitalization for a heart attack than men, according to the first large-scale study comparing male and female heart attack victims. The survey, reported in the February issue of *Circulation*, was based on data collected from 5839 heart attack victims in Israel between 1981 and 1983 but not analyzed until now. After compensating for age differences between male and female patients (women tend to have heart attacks later in life than men), the authors found that 23% of the women died during their initial hospitalization, as opposed to 16% of the men.

One reason for the disparity may be that women have a higher incidence of heart failure—a sign of cumulative damage, says lead author Philip Greenland, a University of Rochester cardiologist. "We expect that when physicians learn about the result of our study, they will begin to treat heart disease in women more aggressively," he predicts.