

## New Start for Behavioral Researchers

The National Institute of Mental Health (NIMH), which spent the 1980s beefing up the biological side of the house, is now turning its attention increasingly to behavioral studies. The institute is shuffling around some of its extramural research funds to establish a new "behavioral science track award for rapid transition," known as B/START, to jump-start the careers of new researchers.

Hilleary Everist, deputy director of the Division of Neuroscience and Behavioral Science, says the program is designed to supply a one-time infusion of funds—up to \$25,000 given to a researcher for a year—to get investigators up and running on topics ranging from studies of cognition to problems in mental health care delivery. In contrast to the institute's larger and more cumbersome award mechanisms, B/START has a 5-page application and a turnaround time of only 3 months. That's pretty nimble when compared with the 25-page application and 9-to-10 month turnaround for regular awards. Up to \$1.6 million will be awarded in the new program during this fiscal year.

NIMH head Frederick Goodwin says the program started because the agency is concerned that budget cuts in psychosocial research during the 1980s scared many younger researchers out of the field. Today things have changed: Behavioral, as opposed to biomedical, research got about \$202 million in Fiscal 1992, occupying 47% of the NIMH extramural budget—up from 43% in 1990. But there aren't a lot of researchers competing for those funds, says Goodwin, who hopes that the new award will help "stimulate the field—toughen up the competition."

## Study Sections Not Kosher?

Study sections of the National Institutes of Health (NIH) have been called many things in their time, but never unconstitu-



**Policy maverick.** Surgeon General Joycelyn Elders.

## Trial Balloon or Loose Cannon?

Surgeon General Joycelyn Elders apparently wandered way out of line the other day when, according to press reports, she commented at a press luncheon that some countries have legalized drugs and, as a result, have experienced "a reduction in their crime rate, and there has been no increase in their drug use rate."

The remarks set alarm bells ringing from the White House to the drug abuse research community. Clinton

press secretary Dee Dee Myers quickly issued a disclaimer, reaffirming that the president opposes legalizing drugs. And Yale University psychiatrist and historian David Musto says Elders' sentiments are viewed with a lot of concern by drug abuse experts, coming as they do in the context of "great confusion over what is the Clinton Administration's drug policy." So far, it's been marked by "silence and lack of leadership," he says, noting that Clinton's drug czar, former New York City police commissioner Lee Brown, is barely visible, and the staff of the White House Office of National Drug Control Policy has been reduced from 150 to 25. Despite the disclaimer of Elders' comments, says Musto, "people wonder: Isn't this really what they [the Administration] have in mind?"

If Elders' remarks were a trial balloon, they took off from shaky factual ground. There are no countries in which recreational drugs are legal. Holland and England are the two most commonly cited examples, but Holland has only decriminalized small amounts of marijuana and maintains strict penalties for other drug use. In England, some physicians are allowed to dispense heroin to longtime addicts, but this practice, says Musto, is limited to "one or two physicians in the Liverpool area." Psychiatrist Herbert Kleber of Columbia University, who was deputy director of Ronald Reagan's drug policy office, says that Italy is actually the country that has come closest to legalizing drugs by decriminalizing the possession of small amounts of heroin in the mid-1980s. But that's been a "disaster"—Italy now has the highest heroin addiction rate in Western Europe, he says.

tional. That's now changed. In the December issue of the *Journal of NIH Research*, Washington, D.C. attorney Robert Charrow charges that NIH study sections (groups of outside scientists who review grant applications) defy Article 2, Section 1 of the U.S. Constitution—the bit that vests executive power in the president. Charrow rests his case on a precedent set by a New York kosher chicken wholesaler more than half a century ago.

In 1933, during the Depression, Congress enacted the National Industrial Recovery Act, authorizing industry advisory committees to adopt codes of conduct that, on approval by the president, gained the force of law. Two years later the act was challenged by the Schechter Poultry Corp., which had defied the poultry dealers' advisory committee ruling that butchers not be allowed to select the chickens they wished to buy. Kosher

chickens must be fit and hearty before slaughter, so Jewish religious law calls for kosher butchers to inspect the live birds.

In *Schechter Poultry Corp. v. United States*, the Supreme Court held that the recovery act improperly delegated congressional responsibilities—the power to enact laws—to the president and was therefore unconstitutional. From this we learn, says Charrow, that there are limits on the extent to which either the congressional or the executive branches of government can delegate responsibility.

So, according to Charrow, if NIH grants were chickens, an NIH study section were a poultry dealers' advisory group, and the Public Health Service (PHS) Act were the industrial recovery act, then the PHS act would be unconstitutional because it vests executive power—in this case, the power to decide who gets NIH funding—outside of the executive branch of government. Charrow has no intention of testing his arguments in court—that cause, perhaps, will be taken up by some disgruntled grant applicant.

## Not for Members Only

The National Academy of Sciences won't admit Carl Sagan to its august ranks, but that hasn't stopped the academy from giving the Cornell astronomer, one of the nation's premier publicizers of science, its "highest honor": the 1994 Public Welfare Medal.

Last year, Sagan's academy membership nomination sailed through his astronomer colleagues but ran aground when put to a vote by all the members (*Science*, 15 May 1992, p. 960), some of whom felt his science wasn't up to snuff.

But the academy doesn't see any inconsistency in honoring Sagan now. A spokesman points out that the criteria are different for this award—publicizing and popularizing science—than for membership, and that nonmembers have received it in the past. "In the public view," says academy president Bruce Alberts,



"Sagan's name may be associated more with science than that of any other living U.S. scientist."

## The Making of a (Female) Scientist

One the most detailed studies yet of the forces that shape a woman's decision whether or not to go into science was released last week by Wellesley College.\*

The analysis combines a questionnaire administered to Wellesley graduates from 1983 through 1991 with a closeup of a particular cohort: Wellesley's class of 1995, whose members were repeatedly surveyed from the time they were accepted in college to the time they chose their majors as sophomores.

One of the study's striking findings, say its authors, emerged from a question asking women whether they preferred problems with precise answers or ones where multiple interpretations were possible. "The most significant single predictor of whether she remained in science was that she liked precise answers," notes Wellesley's Paula Rayman, one of the study's authors. This "cognitive disposition," she suggests, may be more prevalent in boys than girls and deserves further study. The study also identifies an important force in girls' decisions to go into science: their mothers, whose influence was found to be at least as significant as the role of their fathers, which had been singled out in previous studies. The authors also note that very few women "discover" science in college. Therefore, says Rayman, "we can't wait for them to come to Wellesley. Undergraduate colleges must be involved in pre-college education."

Other findings:

■ The so-called chilly climate that is said to keep even able women from staying in science is still there in the form of sex discrimination and harassment. However, that climate does not

THE GREEN LEAGUE TABLE		
<b>AIR</b>	<b>BEST</b>	<b>WORST</b>
CO <sub>2</sub> (metric tons per person per year)	Turkey 2.3	USA 19.8
Sulphur dioxide (Kg per person per year)	Japan 7.0	Canada 122
<b>WATER</b>		
Use (cu. meter per person per year)	Ireland 144	USA 1861
Sewage treatment (% of total population covered)	Denmark 98	Turkey 1
Nitrate fertilizer (tons per sq. km. arable land)	Australia 0.9	Netherlands 41.5
<b>NATURE CONSERVATION</b>		
Percent of native mammals and birds threatened	Canada 4.1	France 40.6
Protected areas (% of total land)	Austria 19	Turkey 0.3

## How Rich Countries Stack Up Environmentally

Faced with environmentally conscious electorates, governments have been keen to broadcast their green credentials. And who is the greenest of them all? Austria, according to the New Economics Foundation (NEF), a London-based think tank. NEF, in association with the *Independent* newspaper, has ranked the overall environmental performance of 21 industrialized nations. The United States comes in last.

To compile its "green league table," NEF used data published last spring by the Organization for Economic Cooperation and Development. After figures were adjusted to account for national variations in area, population, and income, countries were ranked on 11 measures (seven shown in the table above) and were scored on a scale of 0 to 100. Austria topped the list at 76, followed by Portugal and Japan. Canada and the U.S. limped in at 37 and 35, respectively.

Study leader Alex MacGillivray concedes that the overall ranking doesn't account for the relative importance of the different categories. But the data on specific items show how environmental problems change with industrialization. Canada, for instance, doesn't look very good on resource use—it consumes oil at a faster rate relative to national wealth than anyone else. Turkey, in contrast, has a fine record on air pollution, largely because of its low level of industrial development. Degree of industrialization isn't the whole story, of course: Japan's high grades are due, in part, to its enviable record for curbing sulphur dioxide emissions.

As for the U.S., its low score is unsurprising, given that it trails the pack on four of NEF's 11 measures. More strikingly, U.S. citizens each rack up a world-beating 10,012km of car travel each year—driving more than 40 times as far as the average Turk.

appear to be a crucial factor in decisions to drop out.

■ The main reason girls don't major in science is not that they don't like it but that they have stronger interests elsewhere.

■ A significant portion of Welles-

ley alumnae—25%—felt a scientific career was not compatible with raising a family.

■ Women don't see science as a "male" field but rather a special and exceptionally demanding one.

## Reproductive Stance Staked Out for Canada

Two years late and \$4.6 million over budget, the final report of Canada's Royal Commission on New Reproductive Technologies was released last month.

The commission was created in 1989 to conduct studies and advise lawmakers about current and potential reproductive technologies. The report's major thrust: tight central regulation of all aspects of new reproductive practices and technologies.

"We heard clearly from Canadians that they don't want market forces to determine how reproductive technologies are used in this country," commission chair Patricia Baird, a medical geneticist from the University of British Columbia, said at a press conference. "Canadians have looked south of the border and seen what happens when anything goes for a price." According to the report, commercial brokers in the United States will pay up to \$16,000 to a woman to bear a child for an infertile couple.

Central among the 293 recommendations is the creation of a permanent regulatory and licensing body to govern everything from sperm banks to in vitro fertilization to research involving human zygotes. That means every research project would have to be approved by this new body as well as by the granting agency and the institution where the research is conducted. All licensing hearings would be public. The commission also wants to ban commercial traffic in sperm, embryos, or fetuses—including surrogate motherhood—and sex selection clinics where fetal sex can be determined within 12 weeks of gestation.

It is as yet unclear how—or whether—the new Liberal government will react to the report, which was ordered up by the Conservatives. In any case, the effort was unusually costly, entailing the expenditure of \$28.2 million which financed over 100 studies including surveys of patterns of infertility.

\* "Pathways for Women in the Science," Center for Research on Women in Science at Wellesley College, 617-283-2500.