

start with ground-based telescopes, move on to space observatories and, eventually, to an array of telescopes constructed on the back side of the moon. And instruments on the Hubble Space Telescope are slated to look for other planets within the next few years.

\*Copies of the report, "Strategy for the Detection and Study of Other Planetary Systems and Extrasolar Planetary Materials: 1990-2000," are available from the NRC Space Studies Board, 2101 Constitution Ave., NW, Washington D.C. 20418.

## Campus Drinking

Illegal drug use has dropped sharply among college youth. But drunkenness is as common as ever on the nation's campuses, according to a survey by a Harvard psychologist.

Henry Wechsler of the Harvard School of Public Health reports that a poll of freshmen at 14 Massachusetts colleges indicates that, compared with a similar study in 1977, the proportion of nondrinkers has quadrupled to 12%. But the prevalence of heavy imbibing remains constant: among men, close to one-third have five or more drinks at a time more than once a week; among women, the proportion is 14%. And—in line with statistics showing that people are getting in trouble with alcohol at ever earlier ages, Wechsler says that most heavy drinking stu-

One-quarter of scientists engaged in recombinant DNA research feel they have been negatively affected by public and political responses to their line of work, according to a survey conducted by biologist Isaac Rabino of the State University of New York's Empire State College.\*

Rabino wanted to know how litigation and political advocacy—in particular, activities spearheaded by genetic engineering's number one irritant, Jeremy Rifkin—have affected their work. He sent eight-page questionnaires to 160 biologists at the University of California at Davis, and to 2648 members of the American Society for Microbiology.

Of the 430 respondents currently involved in RDNA research, reports Rabino, 44% think activism has been beneficial and 24% think it harmful. Others see mixed results—only 6% perceived no impact. Scientists in industry and government were more likely than those in academia to have had bad experiences, such as having to delay or

dents are continuing habits begun in high school.

Wechsler says a companion survey of 73 deans indicates that problems such as violence, date rape, and vandalism are alcohol linked. At least one other observer, Thomas Short of Kenyon College, has suggested that drinking is also implicated in the rise in racial incidents on campus.

Wechsler's findings are in accord with a report last year on "Campus Life" by the Carnegie Foundation for the Advancement of Teaching, in which

50% of college administrators surveyed said drunkenness was one of the biggest problems at their institutions.

## Physicists Hurting

The erosion in research dollars for individual investigators has once again reared its ugly head in the responses of 667 physicists to a recent survey by the American Physical Society.

The APS queried the physics faculties of all 175 physics Ph.D.-granting universities in the United States, soliciting information from those who had received their doctorates since 1980—"the majority of our best young physicists," the report states. And the results weren't all bad.

Comparing responses to those garnered in a similar poll conducted in 1977, APS found that job satisfaction remains high: 91% (compared with 88% in 1977) said they find their positions "professionally challenging." And only 10% said they would not go into physics if they had it all to do over—compared with 19% in 1977.

But when it comes to funds for research, the change is striking.

In 1977, 63% said research funding was adequate and only 22% said it wasn't. This year, the situation was reversed: only 11% were satisfied; 69% said research funding is inadequate.

## How to Win a Westinghouse

A superficial demographic analysis of the finalists in the 1991 Westinghouse Talent Search suggests that those concerned with increasing the production of top science achievers among all ethnic and social groups throughout the nation face some difficult challenges:

Of the 40 teenage finalists including 17 females—almost one third live in New York State; 45% have Asian or Asian Indian names; and 50% have one or both parents identified as "Doctor."

A Westinghouse spokesperson says that over the 50 years of the Talent Search, "99%" of the winners have gone on to become scientists.

## Public Attitudes Toward Gene Splicing

### PERCEIVED IMPACT OF ACTIVISM ON RDNA RESEARCH, BY SECTOR

	% Academia	% Government	% Industry
RESEARCHERS WHO THINK PUBLIC ATTENTION HAS BEEN HARMFUL TO PROGRESS	20	28	29
THOSE WHO THINK ATTENTION HAS BEEN BENEFICIAL	47	43	39
THOSE WHO FEAR FEDERAL AGENCIES WILL BECOME MORE RELUCTANT TO FUND RESEARCH	46	56	63
THOSE WHO THINK INDUSTRY FUNDING IS LIKELY TO BE REDUCED	54	62	54

cancel an experiment. Even among scientists who have not been adversely affected, however, Rabino reports "considerable concern" about the future impact of activism, particularly with regard to human gene work. Eighty-two percent of the respondents said they felt the United States might lose its competitive edge in genetic engineering because of controversy and litigation.

\*"The Impact of Activist Pressures on Recombinant DNA Research," published in the Winter 1991 issue of *Science, Technology, and Human Values*.

### PMA launches ad campaign.

According to a Gallup poll of biomedical researchers in academia and industry conducted early this year for the Pharmaceutical Manufacturers Association, academic funding shortages are expected to worsen. Respondents also say fewer people are going into biomedical research, and more researchers are leaving the field. The picture is symptomatic of "a manpower problem that permeates the ranks of the entire scientific enterprise," said Sheldon G. Gilgore, chairman of the PMA Foundation, at a 12 February press conference in Washington, D.C. Pharmaceutical manufacturers, who put 16% of their income into R&D, are running scared as the growth of industry needs is outpacing the national rate of Ph.D. production.

**CAN AMERICA AFFORD TO LOSE ITS LEAD IN SCIENCE & TECHNOLOGY?**

The question is whether we will be able to keep our lead in science and technology. The answer is not a simple yes or no. It depends on many factors, including the quality of our education system, the amount of research and development funding, and the ability of our scientists and engineers to innovate. The PMA Foundation is committed to ensuring that the United States remains a leader in science and technology. We are currently conducting a study to determine the impact of pharmaceutical R&D on the broader scientific community. We hope to release the results of our study in the near future.

*Sheldon G. Gilgore*  
Chairman, PMA Foundation