Briefings

edited by CONSTANCE HOLDEN

Minorities Need More Nurture

A new AAAS survey suggests that despite all the talk about getting more women and minorpities into science and engineering, colleges and universities aren't trying very hard. The survey, described in the report "Investing in Human Potential,"* looked into programs designed to assist minorities, women, and people with disabilities by querying 276 institutions. The authors concluded that the results "paint a bleak picture."

For example, only 10% of the programs surveyed are directed at the recruitment and retention of women-and most of these charge fees for participation. Only half of the institutions surveyed calculate graduation rates for these groups of undergraduates, even though they are at higher risk for dropping out, said Marsha Matyas of the AAAS Directorate for Education and Human Resources, speaking at a 28 October press conference in Washington. Matyas added that about 30 campus officials called upon receipt of the questionnaire to ask what was meant by "attrition rate."

Data are particularly poor on students with physical disabilities, said Daryl Chubin of the Office of Technology Assessment, who noted that the passage last year of the Americans with Disabilities Act "will be putting a lot of pressure on universities."

And as for minorities, despite a multitude of special programs, blacks are still doing much better at historically black colleges and universities than elsewhere. Carol Fuller of the National Institute of Independent Colleges and Universities suggested that they have more options in such schools: "At [a predominantly black school] you can come in



Biotech rollercoaster. Investors lost interest in biotech-related companies following the stock market crash in October 1987. But by early this year the market had hit record levels despite a sluggish economy, with more than \$2.5 billion worth of new stock sold between January and November. Now the market appears to be cooling again, according to a new report, "Biotechnology in a Global Economy,"* from the Office of Technology Assessment. The 283-page report discusses biotechnology in agriculture, the pharmaceutical and chemical industries, and environmental applications, as well as policy and regulatory issues. It says that although the development of pharmaceutical products is flourishing, cash problems are becoming more acute as start-up companies move toward development and marketing.

*Available for \$13 from the U.S. Printing Office, Washington, D.C. 20402-9325.

with no math at all and still be a science major."

The biggest problem for all three groups seems to be the absence of a "nurturing" environment-leading many students to feel that "nobody really cares whether you're there or not," said Shirley Malcom of AAAS. Jules Lapidus, president of the Council of Graduate Schools, added that this problem is especially striking at research universities, where the atmosphere is more one of weeding" than of nurturing, and where faculty, preoccupied with grubbing for funds, have "almost no time for students any more."

As might be predicted, the survey found that the best programs "are also the most costly and staff-intensive." Other hallmarks of effective programs: using "hands-on" approaches; continuous, multi-year involvement with students; activities that include parents and teachers, and commitment to such programs on the part of departmental leadership.

Gloomy Words From Soviet Physicist

When Soviet physicist Sergei Kapitsa recently gave a public lecture in the Soviet Union about accelerators, he was attacked by a man brandishing an ax, who accused him not only of being an architect of the Chernobyl disaster, but an "enemy of the people" and a "Judomasonic conspirator." To Kapitsa, who is a lab head at Moscow's Institute for Physical Problems, an expert on accelerator design, and head of the Soviet Physical Society, the attack was a symptom of the tide of irrationality sweeping the country.

During a visit to the AAAS last week, on his way to the World Bank to offer advice on how to help the USSR join the world economy, Kapitsa explained that the disintegrating nation is facing a poisonous brew of antiscience sentiments, superstition, and extremist political thinking. With the dissolution of traditional authority, he said, antiscientific ideas are rushing into the vacuum. The ideological collapse is more profound in its consequences than the economic or military collapse, he added, causing "a loss of reference for hundreds of millions of people." The eruption of antiscientific trends has "become a very acute signal" of that crisis.

Kapitsa said that although the popular press and TV now have freedom, they have abnegated responsibility. "Magazines are contributing 10 times more space to astrology than to science." He added: "We have a whole horde of people propagating the idea of cold fusion in our corner of the world." Even top levels of government are not immune to the madness-Kapitsa said Boris Yeltsin, president of the Russian republic, has reportedly responded favorably to a group asking 20 million rubles for a method "to provide heat from rocks."

Kapitsa went on to predict that the situation for Soviet science is going to get a lot worse before it gets better. "I think we are heading toward a profound crisis....At huge institutions, thousands of people will be displaced." Comparing the collapse of the USSR with the loss of a major war, he said that if Germany's experience after World War II is any guide, it will be decades before science is re-established on a firm footing. German science "is only now coming back" as world science, he said. "Science recovers twice as slowly from a major national catastrophe as the economy."

New Canadian Medical Head

The Medical Research Council (MRC) of Canada has a new president: Henry Friesen, head of physiology and professor of medicine at the University of Manitoba, who was appointed on 20 October by the minister of National Health and Welfare. The MRC, whose 21 members serve without remuneration, is one of three federal agencies supporting research,

^{*}Copies of AAAS report #91-395 can be purchased for \$9.95, plus \$4 shipping, by calling 301-645-5643.