for authors of papers to specifically identify the parts for which they are responsible. Rosse has asked a Faculty Senate committee to examine the issues.

In the meantime, NIMH is conducting its own investigation of the events that led to inclusion of the experimental subjects in the control groups. The Stanford investigation focused primarily on the coauthors who are still at Stanford, while the NIMH investigators are conducting more extensive interviews with those who have since left the university. Officials involved in the NIMH investigation declined to say when it is expected to be completed.

The fact that the NIMH investigation is still going on has led some to question Stanford's publication of its findings. Davis of Mount Sinai says discussion of the incident "does everybody a disservice until NIMH issues its report." Barchas also calls the Stanford statement "premature." Rosse, however, defends Stanford's decision to go public. "We think we have to manage our own affairs, and we will. We have a real concern that research coming out of this institution is credible," he says.

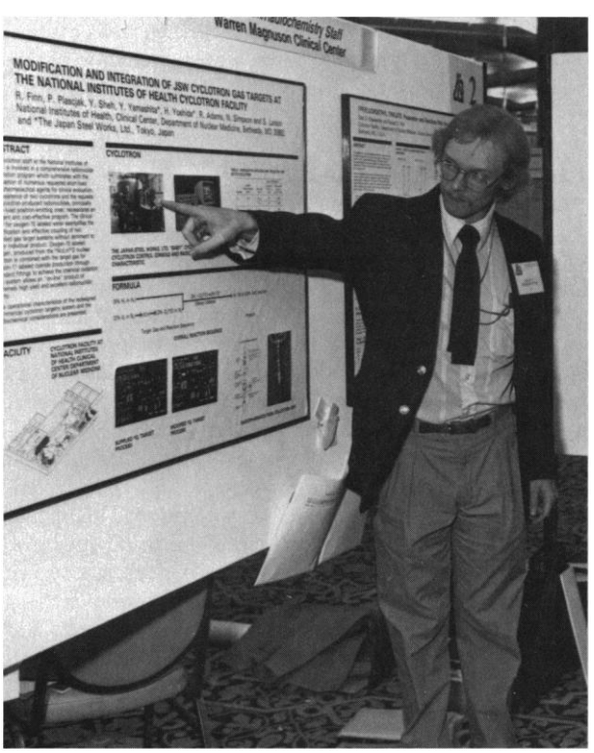
■ COLIN NORMAN

NIH Holds a Science Fair

THE FEDERAL GOVERNMENT put on a science fair last week. As with science fairs everywhere, proud scientists stood and explained their entries to judges. But these judges were not school principals and community leaders. Instead, they were executives and scientists with biomedical companies who had more than blue ribbons to offer for good projects: they held out the prospect of profitable collaborative research agreements.

The occasion was the first Industry Collaboration Forum cosponsored by the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA). It was the Public Health Service's first major effort to implement the Federal Technology Transfer Act of 1986. The Act allows federal labs to enter into Cooperative Research and Development Agreements (CRADAs) with industry to hasten the process of getting discoveries out of the labs and into the marketplace.

Under the Act, federal labs may provide personnel, services, and property—but not funding—toward a joint research project with a commercial firm. The firm can contribute cash and other services and materials, but cash alone is not enough. The firm has to make an "essential . . . or very important" contribution to the project, said Philip S. Chen, Jr., associate director for intramural affairs at NIH. "We do not wish to use the Cooperative Research and Development Agreement mechanism as simply a cheap way to buy access into the federal laboratory research enterprise," Chen said.



Ernie Branson, NIH

Show and tell. *Ronald D. Finn of the NIH Clinical Center displays his poster on cyclotron research for industry observers.*

For its financial and other investments, the outside firm receives an exclusive license to any marketable invention that results from the project, although the government retains the right to use the invention without paying a licensing fee. A major advantage to the commercial firm is that it need not go through the arduous process that the Commerce Department uses for licensing government patents, a process so unwieldy and slow that few government patents have been licensed to industry.

The government also benefits. Its scientists get to keep a share of royalty income and the lab sponsoring the research gets to keep royalties that once would have had to be returned to the federal treasury.

The forum extends the growing movement at NIH to foster closer ties with industry. That movement began 3 years ago when NIH director James B. Wyngaarden issued liberalized work rules to allow NIH scientists to consult with commercial companies on their own time, and for pay. That rule was promulgated largely to help government scientists supplement salaries that were not keeping up with those offered in the private sector. But it also had the effect of spawning some joint research programs.

Some 38 collaborative projects already exist. They include Robert Gallo's research on AIDS vaccine development with IMMUNO Co., a joint project with Sandoz on the use of cyclosporin in multiple sclerosis, and one with Hybritech on the use of monoclonal antibodies in the treatment of lung cancer. The forum was designed to foster more collaborations, and NIH encouraged scientists to participate.

"We were encouraged all right," one scientist present groused. "They even twisted the arms of some of us."

More than 200 industry representatives showed up to peruse the 105 posters on topics ranging from acne to vaccines for pertussis. Industry participants paid $150 each to attend, mostly to cover the cost of materials and the use of the hotel where the conference was held. Chen said NIH probably lost money on the deal, since 400 registrants were needed to break even.

But Chen remained pleased with the turnout, and several poster-guarding scientists expressed amazement that so many companies were interested in seeing the fruits of the nation's largest biomedical research effort. Chen said future forums would be smaller, focused on one area of research, and held at the NIH campus to reduce the costs.

Chen admits that several major issues need to be worked out, including potential conflicts of interest for government scientists. Draft rules for government scientists participating in joint ventures are being discussed now, he said. Another is the commercialization of inventions discovered under joint research. NIH and ADAMHA, as publicly funded basic research institutions, have rarely had to deal with the thorny questions of whether products resulting from their research are priced affordably and made available to those groups who need them most. Also, who is liable for injuries or loss resulting from use of a product developed in a joint venture? The answers to these questions may well determine the success of the NIH/ADAMHA venture into the marketplace.

■ GREGORY BYRNE