

police agencies are far from even approaching maximum use of modern technology for law enforcement. (the report estimates that most police departments could have been equipped 30 to 40 years ago as well as they are now). But just how important tech-

nology can be in dealing with crime is by no means certain. The commission readily acknowledges that the motivations for crime extend far deeper than the reach of any foreseeable technology. It is worth noting that, in Vietnam, the most technologically ad-

vanced military force in history has its hands full with what, by all accounts, is a relatively small and poorly armed opponent. Gadgets and systems help, but they appear to be a small—perhaps, very small—part of the answer.

—JOAN ANDERSON

Molecular Biology: U.S. and Italy To Establish New Graduate School

Naples. Graduate education, American style, is coming to Europe under a cooperative arrangement between the University of California, at Berkeley, and the International Laboratory of Genetics and Biophysics (ILGB) in Naples. The object of this cooperation will be a Graduate School of Molecular Biology in Europe to be established at the ILGB, with financial support from the U.S. and Italian governments.

As the program is now planned, a 3-year course in a new "studium of molecular biology" will lead to the Ph.D.; standards for the degree will be those prevailing in American universities. The faculty will be international, composed of some members of the resident staff of ILGB and visiting professors from Berkeley and other institutions. The studium's calendar will mesh with the Berkeley quarter system so that Berkeley faculty will be

able to travel to Naples to give 6-week courses.

Applications for admission to the school will be accepted from students from all countries. About 20 fellows will be admitted each year, initially, and the total number of fellows will be limited to about 60.

Present plans are that, at the outset, all fellows will receive stipends of \$3600 a year, paid by the studium. The organizers of the studium believe that such an arrangement is especially important in the program's formative period, since it will help assure that admissions will not be affected by the applicant's financial means. After the studium has become established, it is felt, adequate fellowship awards from the applicants' countries may be expected.

The studium is one of three initial projects under a 5-year "Agreement for a Cooperative Program in Science between the United States and Italy," signed by representatives from the two nations on 19 June, in Washington. The agreement provides that the two governments will undertake a broad-range program of scientific cooperation for peaceful purposes, and that each government will provide financial support for its portion of the program. The other two projects under the agreement involve an exchange of personnel and information in the field of molecular developmental biology between the Massachusetts Institute of Technology and the University of Palermo, and collaboration between scientists at the Department of Zoology, Washington University, St. Louis, and the Center for Neurobiology of the Istituto Superiore di Sanità, in Rome.

The studium, the largest of three, will be supported in the early period mainly by a 3-year National Science Foundation grant of \$486,000 to the University of California, and by a similar amount to the ILGB from the Consiglio Nazionale delle Ricerche (CNR), NSF's Italian counterpart. The ILGB is supported by the CNR and also performs research under grants



INTERNATIONAL COOPERATION: Signatures are placed on the recently negotiated Italian-American science agreement, 19 June, at the State Department. Seated, left to right, are Leopoldo Rubinacci, Minister for Coordination of Science and Technology, Ambassador Egidio Ortona, Eugene Rostrow, Undersecretary of State for Political Affairs. Behind them are Vincenzo Caglioti, President of the Italian National Research Council, and Donald Hornig, presidential assistant for Science and Technology.

from Euratom and the Italian atomic energy commission.

The agreement is believed to be the first of its kind involving an American university in a regular doctoral program abroad. Creation of the studium, however, can be seen as a logical outcome of the heavy transatlantic traffic in molecular biologists. Most influential European biologists have spent substantial periods working in American universities, and many have been favorably impressed by American graduate education as a system for bringing young scientists from the basic-university-degree level to that of independent research scientists.

In most European countries the system for bringing young scientists from the level of the basic degree to that of independent research scientists has

been unsatisfactory, at least in respect to numbers. In Italy, for example, there is no equivalent of the Ph.D. regimen. And partisans of reform frequently advance the American model.

A central figure in the new agreement is Professor Adriano Buzzati-Traverso, director of ILGB. Buzzati-Traverso was professor of biology at the University of California Scripps Institution of Oceanography for a number of years, returning to Italy in 1957 to become director of the Institute of Genetics of the University of Pavia. From there, he and several of his co-workers moved to Naples, where, with scientists from other Italian universities, they formed the ILGB 5 years ago. Buzzati-Traverso has been an active and influential member of the European Molecular Biology Organiza-

tion and a leader of the "progressives" on the current campaign for university reform in Italy.

On the American side, the agreement comes at a time when government funds for both postgraduate study and support of research abroad are being cut. It is interesting to note that, while the studium is now limited to molecular biology, it is being suggested that the program may eventually be expanded to include other fields. As an innovator NSF is filing a claim for the future. The new studium serves as a useful symbol that the United States is not liquidating its interest in international science. Also, through its cooperative form, it makes the U.S. a partner rather than a donor, a role that should be a more comfortable one in the long run.—JOHN WALSH

Foreign Research: CIA Plus Camelot Equals Troubles for U.S. Scholars

With social scientists now making their annual summer exodus to the foreign countries in which they conduct field work, many of them are discovering that their "laboratories" abroad have been metaphorically padlocked. In only a few instances have American scholars been expelled or projects been subjected to abrupt cancellation. Nonetheless, inquiries by *Science* make it clear that following last winter's revelations about the involvement of the Central Intelligence Agency with the nation's universities—as well as earlier revelations about military sponsorship of social-research projects such as Camelot—a pattern is emerging of informal discouragement of the initiation or continuation of American social science research abroad.

This pattern is difficult to document with precision for two reasons. First, many of the scholars contacted are willing to discuss their experiences only in broad terms, evidently out of concern that naming names and institutions would only further threaten already fragile relations. More importantly, however, the process at work is a subtle one and difficult to pin down in any formal way. One scholar reports

that in at least five Latin American countries American researchers are regarded with increasing suspicion. He told *Science* that feelers he had extended regarding the continuation of research in both Peru and Chile were discouraged by his Latin American associates, apparently out of fear that, whether or not the CIA was in fact involved, it would appear to have been. In these circumstances, collaboration with Americans involved great political risk to the collaborators. He also reported that, in the case of an international meeting that he was to have organized, the reaction of the scheduled participants was one of extreme suspicion about who would be paying the bills; plans for the meeting were canceled.

Another researcher, also in the Latin American field, told *Science* that, in addition to difficulties in arranging for institutional affiliations abroad, certain kinds of social research—particularly survey research—have become exceedingly difficult because of noncooperation by important sections of the population—the upper classes, the intellectuals, and the Left.

What it amounts to, according to one

close observer, is that "You will not see a dramatic pattern of, for instance, 25 refusals of 100 proposed projects. The academic process isn't like this. The controls operate farther back in the system, in the personal relationships between individuals and between institutions." There are also some official controls on foreign research: the State Department has been monitoring the federally financed portion of American projects since shortly after Camelot, and a number of foreign governments, especially in Africa, have begun to institute review procedures of their own. But by most accounts the barriers to research are those raised by individuals and institutions abroad who are no longer willing to play host to the Yankees.

One exception to the pattern of low-key discouragements is the direct withdrawal by a Brazilian group from a collaborative program with Cornell University, known as the Cornell-Brazil Project. The project was about to enter its 3rd year. In each of the last 2 years, about 20 American students, after substantial academic preparation and language training, have spent the summer studying the problems of development first-hand by working in poverty-ridden northeast Brazil in association with a group of Brazilian student leaders. Excerpts from a letter from the Brazilians to Cornell explaining the reasons for withdrawing from the project are printed in the box on p. 1584. The letter is worth noting in detail, for it illuminates many of the complexities that currently affect Amer-