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 coworkers 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-

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

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

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 lowkey 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 AmerThe following is excerpted from a letter to Cornell from a Brazilian group, explaining reasons for terminating the Brazil Project.

. . . There were two essential points of a general nature to be considered [regarding cancellation]. First there was a mobilization and radicalization without precedent in the Brazilian student movement. . . . The repudiation by the university student of American interference has produced demonstrations which were so strong that the Government came to the point of admitting a revision of the agreements between the Ministry of Education and USAID. In the second place, there is the pitiable incident of the involvement and interference of a security service of the American government in the academic community of your country. It is clear that in reality it is not possible, in this episode, to make a distinction between a university that was actually involved or disassociate one particular section of the university membership that is actually involved. In terms of work and of information, for the Brazilian student the entire North American academic community is involved with that agency of the government. This is the existing impression.

These two facts create a picture in which minute data or nuances lose meaning and from which it is impossible to escape. How can one maintain and justify a relationship with an institution—the university in the United States—which permits itself to be transformed into the instrument of a security agency which today is internationally known as the instigator of dictatorial coups?

We know perfectly well that you and all your friends at Cornell both students and professors—are not to be associated with the unhappy discoveries of February. We also know that the Brazil Project did not receive money from foundations linked to the security service of the American government. And we know as well that those students chosen for this year are highly qualified, socially concerned, and "movementoriented." But the project is set up in the name of an institution called the University in America. And as one of our mutual friends said in his letter, in this case, lamentably the just will pay for the sinners.

ican academic relations abroad.

The social scientists questioned by Science have discerned many of the same attitudes reflected in the letter from Brazil. They believe that the foreign academicians are not hostile to individual Americans so much as they are wary about the system in which the Americans appear to operate. Distinctions that may seem valid at close range -between an institution affiliated with the CIA and one not affiliated, between research sponsored by a military agency and research privately sponsoredare apt to look different from a distance. "It is not a question of mistrusting individuals," according to one researcher, "but a question of the public-relations impact on local institutions if they are discovered to be cooperating with Americans. Sometimes it happens even when the personal relationships are long-standing and secure. But, politically, they cannot afford to be cooperating with Americans anymore."

Another researcher believes that it is important to note that this pattern of rejection of U.S. ties, especially in Latin America, is by no means confined to the Left. He believes that while the desire to dissociate from America varies from country to country and, within each country, with particular classes, it is nonetheless an across-the-board phenomenon among those who are literate. In some places, he says, "The Right has been rejecting America for longer than the Left."

According to this scholar, as well as others, the notoriety given the CIA last winter only added to a preexisting tendency. Camelot isolated one particular way in which social scientists have used their disciplines in an exploitative fashion, and was important, he believes, in singling out American academicians as targets for the local politicians. But there seems to be a feeling that the social scientists are caught up in a general reaction against the United States, and that the role of researchers is only one component. With America situated on the profitable side of the "technology gap" and the "brain drain," resentment toward the U.S. is both inevitable and large, in the developed as

well as the underdeveloped countries. But the underdeveloped countries add to this resentment a particular hostility toward American colonialism, and, while they share with the rest of the world a general dismay over the war in Vietnam, they have an additional fear that a similarly bloody form of American protection may be thrust on them next.

While the causes of hostility perhaps can be illuminated easily enough, the question remains: What can be done? Some of the professional associations and the area-studies associations are beginning to gather information about the extent of current problems, but no overall survey of their dimensions is underway, and there is no discernible movement to plan ways of reversing the trend. Among some social scientists there appears to be a hope that some salvation at least would derive from establishment of a National Social Science Foundation, such as is now being discussed. The belief is that such a clearly civilian umbrella for research funds would eradicate some of the doubts that have arisen abroad as a result of military financing. In other circles there appears to be a feeling that one way to remove the obstacles would be to scale down the nature of research projects-some of which have been extremely grandiose in both their use of resources and their objectivesto tone things down a bit and become generally less conspicuous. Others believe that the thing to do is to make sure that "our consciences are clear," that researchers are what they appear to be, that they are not undertaking research that will be used to manipulate the host country against its own conception of its own interests. A good many of those involved, themselves dismayed by some of the same aspects of American policy that trouble the underdeveloped countries, find themselves sympathizing with the reaction while distressed about the damage to their own professional interests. In these groups there appears to be a good deal of soul-searching about what the proper role of social researchers abroad should be.

Safeguards instituted by the professionals themselves may be of some help in restoring a climate more favorable to foreign research. But the research is also deeply affected by the political relations between the U.S. and foreign nations, and over these relations the researchers themselves have little control. —ELINOR LANGER

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