

stance which apparently resulted from the fact that the Japanese medical profession strongly opposed competition from the ABCC). The ABCC has even been accused of stealing bodies and of irradiating pregnant women to observe the effects on the fetuses. These and other anti-ABCC themes continually reappear in Japanese literature and journalism and are often repeated by survivors today. As described by Robert Jay Lifton in his monumental book, "Death in Life—Survivors of Hiroshima," the ABCC has become symbolic of the American presence in Hiroshima, and the attacks on the ABCC reflect every kind of anxious and hostile image of America held by the survivors. Specifically, Lifton says, the ABCC is viewed as an "A-bomb-wielding annihilator, causer of social and economic suffering, destroyer of the Japanese essence, dispenser of counterfeit nurturance, and Svengali-like experimenter, rapist and desecrator of the dead." The most extreme attacks on the ABCC seem to have little or no basis in fact—

they are often made for propaganda reasons or else stem from unreasoning fear. Officials of the ABCC note that the Japanese government has had its employees working intimately with the ABCC since 1948 and certainly would not allow the ABCC to perpetrate the heinous crimes of which it is sometimes accused.

The people who are most important to the success of the studies—namely, the subjects and the local medical profession—have generally been cooperative. Whatever their feelings of fear and hostility may be, about 85 percent of the participants in the adult health study, who are asked to come in for clinical examinations every 2 years, show up as requested and more than 40 percent of those asked to permit autopsies do allow the ABCC to conduct a postmortem. This last figure is particularly remarkable in a country where autopsies are seldom performed. As time wears on, and as the ABCC becomes increasingly sophisticated in human relations, the

volume of criticism continually drops. Indeed, many Japanese political leaders and several newspapers have recently praised the ABCC's work and urged that its studies be continued. The praise was stimulated largely by the fact that the American side, tired of footing the ever-increasing cost, and of struggling to staff the enterprise, has suggested that the Japanese government should assume more responsibility, financial and otherwise. The Japanese, who have their own budget priorities to worry about, have not been noticeably eager to discuss the suggestion, particularly since the ABCC, as a focus for fear and hostility, might become a political liability for the government. But spokesmen on both sides have stressed that the work should continue until the full effects of the atomic bombings have been delineated—perhaps another 20 years or so into the future. Some even suggest that there is a moral obligation to assess fully the results of one of mankind's most violent acts of warfare.—PHILIP M. BOFFEY

Italy: Political Turmoil Kills Plan for First Doctoral Program

Naples. When last reported on in these columns (21 March 1969), the International Laboratory of Genetics and Biology (ILGB), Italy's pioneering wedge into modern biology, was enveloped in political agitation, and work had been halted on a joint U.S.-Italian government plan to use the laboratory as a seedbed for Italy's first program of Ph.D.-level studies. A recent visit here finds ILGB quieted, though mainly from exhaustion rather than from resolution of issues. The research staff appears to have dwindled in number, though whether it really has—and, if so, why—is a subject of contention, along with many other matters. ILGB's controversial, reformist founding director, Adriano Buzzati-Traverso, resigned last July and went to head up scientific affairs for UNESCO in Paris. His departure, following a 38-day occupation of the laboratory by left-wing researchers and technicians, is said to have been

precipitated by a sense of despair over the laboratory's future. After Buzzati-Traverso left, ILGB's normal rules of administration were suspended by government decree, and his place was taken by an all-powerful government-appointed Commissario, who functions as a sort of receiver in bankruptcy. Meanwhile, plans for the Ph.D. program, titled the Studium, have been laid to rest, and this is confronting the U.S. National Science Foundation (NSF) with a possibly historic event—the return of an untouched grant; the \$486,000, channeled through the University of California, was to have been the U.S. contribution to the Studium.

For a time, however, it appeared that the Studium might actually be born. In a last-minute rescue attempt last fall, Buzzati-Traverso and six senior researchers from ILGB sought to set up the Studium in Rome. But, though approval had been received, or so it

seemed, from the Italian National Research Council (NRC) as well as from NSF and the University of California, the plan foundered overnight when a building that had apparently been promised was mysteriously taken over as a dormitory for customs officers. The Studium team first became aware of the take-over when they saw beds being carried in.

The Commissario, Thomaso Patrissi, professor of public health at the University of Rome, seems to be a suitable choice at this point for heading up ILGB's cast of hair-trigger ideologues. Elderly, impassive, and of no apparent political persuasion, he is credited by all with an even-handed, soothing approach to his duties. He is acknowledged to be there for the purpose of bloodless pacification, and not as a research administrator, an area in which he had had no experience. With the assistance of an advisory committee drawn from the laboratory staff, Patrissi has been attending to various details of administration which had been overlooked during the period of open strife. These have ranged from securing extensions for a group of fellows whose support was inadvertently not renewed to formulating research programs for submission to the National Research Council, which finances the laboratory.

Though, as one ILGB researcher put it, there is now a "Cold War" between those who took part in the 38-day occupation and those who didn't—the size of each group and their relative importance are also matters of contention—there seems to be general satisfaction with Patrissi's performance in restoring tranquility to the laboratory. Further trouble looms, in connection with his efforts to involve ILGB in the government's design to promote closer ties between Italy's universities and the autonomous laboratories of the NRC. Operating as it did on international standards, and headed by Buzzati-Traverso, who openly proclaimed his disdain for the universities' brand of biological research, ILGB was an affront to most Italian academics working in that field. Thus, the prospect of being put in the administrative care of the feudalistic University of Naples is not appealing to those who were drawn to ILGB by its emulation of the more successful examples of American research and training.

Has ILGB been restored to scientific productivity? You can get a good argument on that. There are those who say that the laboratory is scientifically dead and discredited among its foreign associates, and that, as a consequence, people interested in research are trickling away. These views are naturally most strongly held on the right, which sees nothing but disaster flowing from the left-wing uprisings. The Commissario's office has compiled statistics comparing staffing on 1 January 1969 and 1 March 1970. The numbers show that a lot of people have left. On the earlier date, for

example, there were 50 Italian and 14 foreign researchers in residence. In March, the respective numbers were 27 and 5. The decline is not quite as great as it seems, since, during the period in question, seven Italian and three foreign researchers were transferred to ILGB's associated laboratory at Pavia. Nevertheless, the drop is a considerable one among senior researchers, as it is among fellows. In the latter group the number of Italians declined from 6 to 3, and of foreigners, from 2 to 0. The left contends that the figures are distorted because an unusual number of staff members are away on routine sabbaticals or long-term travel. It also says that, when allowance is made for the immobilization of the laboratory during last year's occupation, productivity in terms of published papers will be approximately normal. The right says that, if this turns out to be the case, it will only be because of the reworking of old material. Since an appearance of semi-idleness is not uncommon in academic science, it is difficult for a casual visitor to conclude what, if anything, is going on. Several politically uninvolved researchers say their work is proceeding satisfactorily, but they point out that this is so despite the "situation."

The researchers who led the revolt at the laboratory express themselves as pleased with the outcome. There are some regrets among them about Buzzati-Traverso's departure, for it is recognized that he founded and built ILGB to a high standard in defiance of the university "barons." But many of those who set off the uprisings at ILGB consider themselves part of a worldwide

revolutionary movement, not simply part of a campaign to reorganize one laboratory. Within that laboratory, however, they number their accomplishments with some satisfaction. Since the elimination of class and status characteristics has become a key theme among Italian scientists of the radical left, ILGB's contingent successfully agitated for elimination of the time clock, which technicians, but not researchers, were required to use. Salary increases are no longer on a percentage basis, but are the same in amount for all. Increases on the basis of merit have been virtually eliminated.

Will IGLB survive in a condition resembling its old-time status? Many doubt that it will. They point out that Buzzati-Traverso is not easily replaceable; that the embrace of the University of Naples could easily be fatal; that several NRC-supported basic biology laboratories in the Naples area have lately been showing scientific strength; and, finally, that the radical left is less concerned with the scientific future of ILGB than it is with far more grand political goals.

At present, a search for a successor to Buzzati-Traverso is said to be in progress. And there is talk of attempts to bring in one or another well-known American scientist of Italian descent in an effort to restore luster to ILGB's international image. But, with the government in Rome just emerging from one of its repeated breakdowns and with NRC in a sort of limbo, with a president whose term expired over a year ago, uncertainty is the dominant theme.—D. S. GREENBERG

Methadone and Heroin Addiction: Rehabilitation without a "Cure"

Efforts to rehabilitate heroin addicts have had generally discouraging results, but in recent years experimental treatment programs based on use of the synthetic analgesic methadone have offered the most solid promise of practical help for large numbers of heroin users. Because methadone treatment involves the substitution of one form of narcotic addiction for another, there has been a backstairs wrangle within

government over how the narcotics laws can be reconciled with large-scale methadone treatment programs.

When administered regularly to heroin addicts, methadone blocks the euphoric "high" associated with heroin use. Experimental programs, notably in New York City, have reported impressive results: addicts have stopped using heroin, have taken regular jobs or returned to school, and have broken the

pattern of antisocial behavior characteristic of so many addicts.

The hope of rehabilitation is generating strong pressure on authorities to ease restrictions on physicians using methadone in the long-term treatment of heroin addicts. And, in fact, a heroin "epidemic" has caused the rapid expansion of methadone treatment of addicts in circumstances often of doubtful legality. Methadone is now classed as an investigative drug for long-term treatment of addicts and can be used legally only in federally approved research programs. But so desperate is the plight of heroin addicts that many individual physicians are prescribing for large numbers of addicts without careful supervision or real effort at following research protocols.