17. N. S. Church, *J. Exp. Biol.* **37**, 171 (1960).
18. T. Weis-Fogh, *Phil. Trans. Roy. Soc. London, Ser. B* **239**, 459 (1956).
19. J. Buck, *Annu. Rev. Entomol.* **7**, 27 (1962).
20. E. B. Edney, *Proc. Int. Congr. Entomol. 10th* **2**, 709 (1958).
21. J. L. Cloudsley-Thompson, *Annu. Mag. Nat. Hist.* **9**, 305 (1956).
22. R. Warburg, *Amer. Midland Natur.* **73**, 363 (1965).
23. ———, *Crustaceana* **9**, 302 (1965).
24. ———, *Amer. Midland Natur.* **73**, 363 (1965).
25. E. B. Edney, *J. Exp. Biol.* **28**, 91 (1951).
26. J. E. Phillips, *ibid.* **41**, 15 (1964).
27. E. Bursell, *ibid.* **37**, 689 (1960).
28. ———, in *The Physiology of Insecta*, M. Rockstein, Ed. (Academic Press, New York, 1964), vol. 1, pp. 323–61.
29. E. B. Edney, *Comp. Biochem. Physiol.* **19**, 387 (1966).
30. D. A. Parry, *J. Exp. Biol.* **28**, 445 (1951).
31. P. S. B. Digby, *ibid.* **32**, 279 (1955).
32. R. W. Jack, *Mem. Dep. Agr. S. Rhodesia* **1**, 1 (1939).
33. E. B. Edney and R. Barrass, *J. Insect. Physiol.* **8**, 469 (1962).
34. E. Bursell, in *The Physiology of Insecta*, M. Rockestein, Ed. (Academic Press, New York, 1964), vol. 1, pp. 283–321.
35. G. A. Edwards and W. L. Nutting, *Psyche* **57**, 33 (1950).
36. J. L. Cloudsley-Thompson, *Entomol. Exp. Appl.* **5**, 270 (1962).
37. H. E. Hinton, *Nature* **188**, 336 (1960).
38. F. Rucker, *Z. Vergleich. Physiol.* **21**, 275 (1939).
39. P. A. Buxton, *Proc. Roy. Soc. London, Ser. B* **96**, 123 (1924).
40. J. H. Pepper and E. Hastings, *Ecology* **33**, 96 (1952).
41. G. Altman, *Insectes Sociaux* **3**, 33 (1956); V. G. Dethier and D. R. Evans, *Biol. Bull.* **121**, 108 (1961).
42. F. N. Schultz, *Biochem. Z.* **27**, 112 (1930).
43. K. Mellanby, *Parasitology* **24**, 419 (1932); *Ann. Appl. Biol.* **21**, 476 (1934).
44. D. A. Parry, *J. Exp. Biol.* **31**, 218 (1954).
45. J. O. Spencer and E. B. Edney, *ibid.*, p. 491.
46. K. Mellanby, *Nature* **150**, 21 (1942).
47. P. A. Buxton and D. J. Lewis, *Phil. Trans. Roy. Soc. London, Ser. B.* **226**, 175 (1934).
48. J. W. L. Beament, in *Symp. Soc. Exp. Biol. 19th*, G. E. Fogg, Ed. (Cambridge Univ. Press, Cambridge, 1965), pp. 273–98.
49. W. Knülle, *Z. Vergleich. Physiol.* **49**, 586 (1965).
50. M. Locke, *Science* **147**, 295 (1965).
51. A. R. Mead-Briggs, *J. Exp. Biol.* **33**, 737 (1956).
52. E. Bursell, *Phil. Trans. Roy. Soc. London* **241**, 179 (1958).
53. M. W. Holdgate and M. Seal, *J. Exp. Biol.* **33**, 82 (1956).
54. R. H. Stobbart and J. Shaw, in *The Physiology of Insecta*, M. Rockstein, Ed. (Academic Press, New York, 1964), vol. 1, pp. 189–258.
55. J. L. Cloudsley-Thompson, *Entomol. Exp. Appl.* **2**, 249 (1959).
56. E. B. Edney, *Smithsonian Inst. Annu. Rep.* **1959**, 407 (1960).

NEWS AND COMMENT

Naples Station: Crisis Italian Style at Marine Biology Center

Naples. The Naples Zoological Station, one of the oldest of marine biology stations, is passing through a time of troubles, both financial and administrative. In a general way, the Naples station is a casualty of the conflict between Italian academic traditions and new research modes, as well as of forces gathering momentum within modern biology. The particulars of the crisis, however, depend so greatly on personalities and personal relationships that the tale might better be told in a novel than in a news story.

Last week it became known unofficially that the Italian government would soon announce appointment of a commissioner (commissario straordinario) to take over the functions of the station's governing body for a year and prepare the way for restructuring of the institution. At the same time, it became known that the Ministry of Public Instruction will increase its annual direct support of the station from $112,000 to $144,000. This boost will not solve the station's serious financial problems, but it indicates official feeling that the station needs increased income as well as reform of its statutes.

The Stazione Zoologica di Napoli was established in 1872 by Anton Dohrn, a German research scientist who found the atmosphere of the German universities oppressive. A Darwinian, Dohrn was attracted to the Gulf of Naples by the variety and abundance of marine life which lent itself to the pursuit of one of his main interests, experimental work in support of Darwin's evolutionary theories. Dohrn, who put much of his money in the station, was a practical man as well as a distinguished zoologist. With local help he built his station in what is now a public park that fronts on the bay. An aquarium occupied the ground floor of the original building; receipts from admissions were intended to help defray the costs of research in the laboratories on the two floors above.

Collection of specimens has been the pride and strength of the station. Fishermen permanently employed by the station know most of the creatures in the gulf by their Latin names, as well as when and where they are to be found. A visitor checks in advance on the probable availability of the specimens he wants and then comes to Naples with the reasonable assurance of delivery of a daily order. One visiting scientist contrasted the performance of the station's fishermen with the situation at one well-known American station where, he said, "they hand you a pair of boots and a net and wish you good luck."

"The Aquarium," as it is known to Neapolitans and to the generations of scientists who have worked there, is an international laboratory which, at the same time, is officially an institution which operates under the authority of the Italian government. The staff is predominantly Italian, and, while the foreign governments have contributed generously to the financing of capital improvements, about half of the operating budget comes from Italian sources. At the outbreak of World War I, the laboratory was taken over by the Italian government, because Reinhard Dohrn, Anton Dohrn's son and successor as station director, was a German national. In the early 1920's an agreement was reached under which the station became a nonprofit institution operating under supervision of the Ministry of Public Instruction. The Italian government has consistently provided about half of the station's operating funds, and it is not surprising that Italians are irritated when some foreigners speak as if the station were sustained by funds from abroad.

Direction of the lab has remained, by direct succession, in the Dohrn family. The present director is Reinhard Dohrn's son, Peter Dohrn, 49, who was trained as an M.D. and after World War II studied zoology at the University of Naples. Peter Dohrn is much involved in the present controversy.

Part of Dohrn's and the station's problem is financial. The operating budget has been increasing at the rate of about 5 percent a year, and income, in the familiar pattern of nonprofit institutions, has not. The need for heavy capital investment to rehabilitate and reconstruct a stately but partly decrepit building and to acquire expensive new

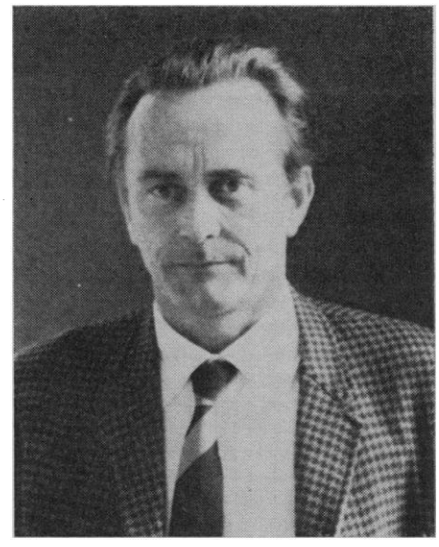
equipment has required special fund-raising exertions both in Italy and abroad. A five-story unit to house the station's library costing $320,000 was financed in the mid-fifties with contributions from Italian, German, American, and British sources. An appeal for money to renovate the east wing brought contributions of $200,000 each from German and United States (NSF) government sources and $80,000 from the British.

The 1966 budget of the station was just over $600,000, about $500,000 of that being earmarked for operating expenses. The Italian government's contribution for the year totaled about $330,000. The other $100,000 was given by the Volkswagenwerk Foundation for the remodeling of a villa on the island of Ischia and for installation of large tanks where animals can be observed in cooled and circulating sea water.

International support of the regular program of the station continues to be channeled through the "table" system established early by Anton Dohrn. A table denotes the research space for one research worker. Table rent, now $3000, is intended to cover the cost of accommodating a researcher at the station for a full year. This does not include living costs or stipend. In recent years, 60 tables have been supported. Italian governmental organizations have paid fees for about 20 tables, Germany and the United States a dozen each, Great Britain three or four, Sweden two, and Belgium, France, Netherlands, Israel, Switzerland, and Japan one each.

Income from table fees—about $177,000 last year—represents a diminishing proportion of the budget. In a move to increase income and, apparently, to further "internationalize" the station, the administrative council —the governing body of the institution—proposed that Italian or foreign private institutions (academies, for example) which contribute to the upkeep of the station the sum of at least $80,000 a year for not less than 5 years be entitled to have a member on the council.

A willingness to provide such support has been signified, by some European countries, but, ironically, the station can't accept the new income until its governing statutes are changed. And the statutes have become the focal point of a controversy in which the major parties are the Italian government, the representatives of organ-



Peter Dohrn, director of the Naples Zoological Station.

ized international biology, the Dohrn family, the administrative council of the station, members of the professional staff of the station, and a left-wing labor union.

The dispute has had cumulative elements, but the current crisis can be traced from about 1960 when the station was in particularly tight financial straits. At that time the five-story unit that houses the excellent library had just been constructed, and the station was facing the heavy costs of a very necessary modernization of much of the rest of the building. Salaries and the cost of equipment were climbing, and it was clear that income was not paying for services the station sought to provide.

The station was a matter of concern in the international biology community, and at this point Professor G. Montalenti, who was then president of the International Union of Biological Sciences, together with Paul Weiss, then chairman of the U.S. Committee on IUBS, called a conference in Naples to consider the problems of the station. Out of the conference came the specific recommendations, which were followed, that table rent should be doubled to $3000 and that the station's budget should be published annually, and also general advice that, for example, the aquarium should be renovated and a guest house for visiting scientists provided.

As another result of the meeting, a six-man advisory committee of IUBS was appointed to report regularly up the international line to the International Council of Scientific Unions (ICSU) and UNESCO. Montalenti, who is professor of genetics at Rome University and has had a long and close association with the Naples station, was named chairman of the committee and continued to serve in that post.

Events of recent months have made the controversy over the station appear to be in part a conflict between Montalenti and Dohrn. This polarization became pronounced in November after the Ministry of Public Instruction requested that the proposed new statutes be revised further. In a letter to the IUBS advisory committee Montalenti said the Ministry had suggested that the functions of scientific director and administrator, now combined in the directorship held by Dohrn, should be separated. Dohrn denied that the ministry had expressed an opinion on the

Main building of the Naples Zoological Station.

A New Ocean of NASA Publications

NASA's reputation as the government's leading producer of press releases and after-dinner speeches has been given further confirmation with the recent publication of a 767-page volume titled *Index to NASA News Releases and Speeches: 1963–1966*. In this mammoth soft-cover book, NASA publicity is listed under six headings: subject, personal names, news release number, accession number, speeches, and news releases. This volume supersedes the *Index to NASA News Releases and Speeches 1963–1965* and is available from Scientific and Technical Information Division, Code USS-A, NASA Headquarters, Washington, D.C. 20546.

Two NASA-subsidized hard-cover books have been published recently: *An Administrative History of NASA, 1958–1963* ($4.00) and *This New Ocean: A History of Project Mercury* ($5.50). (The latter volume was reviewed in the 12 May issue of *Science*.) Both books can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

According to a recent estimate by the Government Printing Office (GPO), 337 copies of *An Administrative History of NASA* and 180 copies of *This New Ocean* have been sold. "It looks like we could use a plug for *This New Ocean*," a GPO official commented. NASA historians are currently at work on chronologies of Project Gemini and Project Apollo and are scheduled to write a full history of Project Gemini.—B.N.

matter and objected to other points in Montalenti's letter. He said he felt he could not attend the meeting unless an agenda was circulated and a new chairman named. After this, Montalenti resigned not only his chairmanship of the IUBS group but also his membership on the Station's administrative council and on the Italian committee which allocates table space at the station to researchers.

The Ministry's request for a revision was prompted primarily by demands from the station's unionized staff, particularly members of the professional scientific staff. It is here that another theme in the richly orchestrated complexities of the situation is introduced. The station has about 90 employees. As is the pattern in Italy, most of these are members of either of two unions, one White (Catholic) and the other Red (Communist-led). The Leftist Italian General Labor Confederation has been more active in recent years in the underorganized south of Italy and has been the more aggressive at the station. The union has sought higher pay for station staff—pay is low at the station and in Naples in general—and has also pushed for more tenure positions for the employees; about a third now hold permanent jobs. Tenure is an important matter in Italy where security of employment compensates somewhat for low wages. Unquestionably, there was some resentment, particularly among younger employees, toward the Dohrn "dynasty" and what some viewed as a survival of a seigneurial system. Last year there were a couple of short strikes.

In addition to economic demands, the union has also pushed for participation of the staff in the making of policy. Scientific staff members felt, for example, that they have not been consulted sufficiently on reconstruction plans. But the main point at issue is the staff's desire to have their right to conduct independent research formally recognized in the new statutes.

One staff member, who has been perhaps the most active in seeking this statutory change, said that the station "is just one of the situations in Italy with basically the same problem." In the universities, scientists with research aspirations often find that the path to independent research is blocked. The greater freedom now enjoyed by physicists, in part as a result of the Fermi revolution more than a generation ago, and opportunities outside the university structure afforded by such new institutions as the International Laboratory of Genetics and Biophysics in Naples, directed by Adriano Buzatti Traverso, are cited as hopeful examples.

At the Naples station, the proponents of radical change argue that the concept of the station as a "scientific hotel" and of staff members as primarily assistants to visitors is obsolete, if only because of developments in the technology of biology since the war. To make proper use of sophisticated instruments—an electron microscope, for example—a scientist rather than a technician must be on the permanent staff. No competent scientist, they contend, will be willing to forego his own research simply to provide a service to visitors.

These points are arguable and are being argued. Among the assistants themselves, there is a split. Some feel that assisting visitors at the station can be combined with research as successfully as teaching and research are combined in many European and American universities. They maintain that it is assumed that in practice the assistant at Naples will have half his time free to devote to his own work; they point out that the careers of distinguished alumni of the station were not blighted by lack of statutory sanction for their research efforts at Naples.

The views of the revisionists were given pointed expression, however, when four members of the scientific staff appealed in October to the Ministry asking that the staff and the union participate in the reform of the station to resolve a "grave administrative, scientific, and organizational crisis."

It is on the matter of policy that Dohrn has been adamant. He says that he sympathizes with staff demand for better pay and improved working conditions, but he feels that staff participation in policymaking and the granting of formal rights to perform independent research would destroy the original character of the station. The union has backed the proposal that the functions of scientific director and administrator be separated. Dohrn argues that having a scientific director implies a planned program which contradicts the basic principle of "free research." Dohrn has taken the position that the staff under the prevailing rules should not have direct access to the administrative council, and this has added to tensions.

The administrative council, historically, has never played a decisive role in station affairs, and, in the present circumstances, some of the members may well be suffering from conflicts of interest and loyalty. On the council now, in addition to Peter Dohrn, are the Mayor of Naples, Dr. K. Dohrn, who is a Frankfort banker, treasurer of the Max-Planck-Gesellschaft, and a Dohrn cousin, and four

professors of the University of Naples, including Professor I. Califano, who also heads the biology and medicine section of the Italian National Research Council. The board has been badly shaken by Montalenti's resignation.

Adding to the disharmony has been the failure of a compromise attempt to give Dohrn some assistance with the scientific and technical side of his job. About a year ago, Professor G. Chieffi of the University of Camerino was named temporary scientific and technical adjutant to Dohrn by the council. Like most leading Italian biologists, Chieffi had close associations with the station. Chieffi's role was never clearly defined, relations between Dohrn and Chieffi were obviously strained, and last fall Chieffi made known his intention to resign.

The recent break between Montalenti and Dohrn and what it symbolizes make a settlement even more difficult. Not only did Montalenti have a long professional involvement with the station, but he was a close friend of Reinhard Dohrn. Early in his career Montalenti served as an assistant and then department head at the station. In 1939 he went to a post at the University of Bologna. When the armistice of 1943 took Italy out of the war, Montalenti made his way south and took over management of the station. He saw it through the very hard times at the end of the war and then moved to the chair in genetics at Naples University. Peter Dohrn, who served as a German army doctor, came back to Naples and, in the years after the war, studied at the university and joined the station staff as an assistant. In the mid-fifties Montalenti, a respected and influential figure in Italian and international science, supported Peter Dohrn in his succession to the directorship and took his part in times of stress afterwards. At a purely personal level, the estrangement between the two very different men is one of the saddest aspects of the events at Naples.

Dohrn's real misfortune is perhaps not, as his detractors say, that he lacks the scientific authority of his grandfather or the outstanding managerial talents of his father, but that he lives in a time when the scientific impresario is an anachronism.

A view held by some biologists is that the Naples station has become a backwater, an unproductive place at an unsuitable site, run in a casual style that is no longer tolerable. An opposite view, held with equal vehemence, particularly by people who use the station, is that despite physical shortcomings the research atmosphere at the station is a unique and salubrious one. For example, an American visiting scientist said that for biologists accustomed to the grind of the committee-ridden American university, the Naples station is "the greatest therapy center in the world" and that he had gotten more research and writing done in Naples than at any time in recent years. Some alumni of the station are unstint-

Particle Physics: New Talk of East-West Ties

Over the past dozen years, Soviet and American physicists have occasionally talked of cooperative endeavors in high-energy physics, but outside of an exchange of visits to each other's facilities, no concrete results have followed. Now, with the Russians putting the finishing touches on the world's biggest accelerator, a 70-Bev machine at Serpukhov, near Moscow, new talks of cooperation have informally been taking place. According to some sources, these have centered on the possibility of American scientists designing and constructing experiments for the Serpukhov machine, and of Russians doing the same here when the AEC's 200-Bev accelerator is completed. Since the Russians have agreed to an arrangement under which a French group is building a bubble chamber for the 70-Bev machine, it is felt that they favor some international cooperation. But since we are pounding the Soviets' ideological cousins in Vietnam, and they pound back with Soviet-manufactured ordnance, the question of opening a new East-West avenue of scientific cooperation is considered to be delicate and uncertain. Nevertheless, talks are proceeding on an informal basis. One AEC official commented, "Wouldn't it be something if we put a $3-million experiment into Serpukhov? Think of the bookkeeping problems."

Meanwhile, the 200-Bev accelerator continues to produce contention. Civil-rights groups around the Weston, Illinois, site chosen for the machine are adamantly insisting that the project should not be permitted to proceed unless Illinois passes an open-housing law. Last week, Senator John O. Pastore (D–R.I.), chairman of the Joint Committee on Atomic Energy, again voiced his support for their position. The Republican Minority Leader, Senator Everett M. Dirksen of Illinois, replied that, if the accelerator is blocked for lack of an open-housing law, he will attempt to block funds for projects in other states that lack such legislation. Among those projects, he said, are NASA's facilities in Houston and at Cape Kennedy. Dirksen was quoted as saying that he told Pastore, "John, you've got a fight on your hands." To which Pastore is said to have replied, "I know it."

In another development concerning the accelerator, the Joint Committee's subcommittee on research, development, and radiation, chaired by Representative Melvin Price of Illinois, stated its opposition to the AEC's plans to economize by building a stripped-down model of the original design. Price's subcommittee declared that "the AEC's decision to propose a reduced scope accelerator was dictated by the Bureau of the Budget for budgetary rather than technical reasons"—which is a fair statement of the matter. The subcommittee concluded that short-term economizing would ultimately increase the overall costs.

The assorted uncertainties that confront the 200-Bev machine are said to be having an effect on the recruitment of staff for the vast project. Many persons are eager to work on the project, but at the moment there is very little to work on. As the high-energy community recalls, political complications produced several years' delay in the start of construction on the Stanford Linear Accelerator. Design work on the 200-Bev machine was sufficiently advanced for construction to have started at least 18 months ago, but the competition for the site introduced an unforeseen delay, and now the civil-rights issue poses the possibility of still further delays.—D.S.G.

NEWS IN BRIEF

• **CUT BACK IN RESEARCH ABROAD:** Federal agencies have reduced their spending for scientific research and postgraduate study abroad by $4 million during the last 12 months, according to Rep. Henry S. Reuss (D–Wis.), chairman of the Research and Technical Programs subcommittee of the House Committee on Government Operations. Reuss said that the National Institutes of Health and the National Science Foundation have cut back the funds awarded for postgraduate study by $1.2 million. Reduction in funds spent on research activities reported to the subcommittee included: Defense Department, $2 million; Public Health Service, $798,000; Atomic Energy Commission, $103,000; National Aeronautics and Space Administration, $100,000; and National Science Foundation, $73,000. Reuss had earlier recommended that funds be cut from non-urgent and postponable research projects and that stricter criteria be applied in awarding the study grants. The agencies submitted the amounts of reductions to the subcommittee but did not indicate just where the cuts were made.

• **NIAID REORGANIZATIONS:** The National Institute of Allergy and Infectious Diseases (NIAID) has reorganized some of its intramural research work. The Laboratory of Infectious Diseases (LID), the largest of the NIAID research units, was renamed the Laboratory of Viral Diseases, retaining its chief, Robert J. Huebner. Roger M. Cole has been named chief of the newly created Laboratory of Microbiology, which will be responsible for research formerly conducted under LID. The Laboratory of Tropical Virology has been abolished. It "died a natural death," a NIAID spokesman said, because much of its work had already been taken over by other NIAID divisions.

• **NSF APPROPRIATION:** The House last week provided no grounds for cheer among the many scientists who have been contending that the National Science Foundation should become the principal fount of federal support for basic research and scientific training. In its budget for the coming fiscal year, the administration sought to increase the NSF budget by $31 million, to a total of $495 million. The size of the proposed increase was generally considered to be inadequate in terms of the demands being made on NSF's resources, but the House declined even to go along with that amount. When the verdict was in, NSF emerged with an increase of $15 million. The Senate now takes up the budget, but in recent years, it has tended to go along with the House on the NSF budget. Just how NSF will revise its plans in order to work with a lesser amount is not yet known. But under the original budget, it had intended to increase its research grants from 3600 to 3870, and it had planned to add $2.3 million to its present budget of $45.9 million for advanced training.

• **HIGHER EDUCATION SUPPORT:** Grants and loans of more than $100 million for institutions of higher learning were announced recently by the U.S. Office of Education. Under the "Strengthening Developing Institutions" title of the Higher Education Act of 1965, more than $22 million was awarded 325 institutions in 46 states, the District of Columbia, Guam, and Puerto Rico. Schools qualifying for the program, an Office of Education official said, are those that "are struggling for survival because of financial or other reasons such as geographical isolation." Included in the total were funds to establish 1213 National Teaching Fellowships under which junior faculty members and graduate students from established institutions will spend a year at a developing institution. Ten southern states accounted for more than half of the $22 million and approximately $10 million went to predominately Negro schools. A total of $30 million has been appropriated for the program this year, compared with $5 million last year when it was just beginning operation.

Under Title I of the Higher Education Facilities Act of 1963, grants totaling $52 million were awarded to 106 institutions to pay part of the cost of building or remodeling undergraduate facilities. A total of $460 million has been appropriated for the program this year, the same figure as last year. Under Title II of the same act, 29 colleges and universities received $30 million in construction loans, part of this year's appropriation of $200 million, up from $110 million last year.

ing in praise of the "spirit of Naples" and often express their feelings in testimonials to Dohrn.

Opinions on Dohrn's personality and his administration of the station will doubtless continue to differ. He is worn by the controversy and sometimes overreacts irritably to his critics. His style of life is hardly grand—he lives in a peasant house on the Sorrento peninsula, and he drives one of the smaller Fiats. As for his stewardship of the station, users say that the new library is well designed and well run. Handling of the major reconstruction job now in progress has drawn criticism from inside and outside the lab, in part, it seems, because of delays caused by efforts to stretch the lire. Nevertheless the work goes on. With regard to regular operations, cost effectiveness criteria are obviously hard to apply, but visiting biologists seem to think that the station gives more for its half-million-dollar annual budget than most places could.

What marks Dohrn most deeply is the intensity of commitment to the principle of "free science." He sees the mission of the station as providing "hospitality to intelligent science." No doubt he feels that he is the defender of the scientific faith and family tradition. He accepts as inevitable that the freedom he espouses will be linked with a good deal of uncertainty. There is no doubting his resolution and this is what, as much as anything, has so far prevented compromise.

To a significant number of foreign scientists, Dohrn symbolizes the station's international character. Without Dohrn, many Italians feel that, as one activist staff member said, the station would "fall under the risk of university dominance."

In some ways the Naples station has deviated from the main trends of modern biology. The organizational ideal in biology now seems to be the large, interdisciplinary laboratory where agglomerations of talent will permit efficiencies of scale. The ideal has been achieved in few places—even the Cambridge lab and Pasteur Institute have their strengths and weaknesses—but the way seems to lead to the "research factory" which the physicists pioneered. Whether there will be a place for a Naples station which attracts biologists who want to work only on the marine fauna and flora available there seems questionable. What happens at Naples may suggest the answer.

Other forces for change are work-

ing. From this year hence, for example, grants from the Italian National Research Council (CNR) must be targeted for specific research projects. CNR has adopted the NIH model. The aim apparently is to pry some research funds from the control of the professors for the use of able junior people. A side effect in the case of the *stazione*, however, will be to reduce funds available for the support of "free research."

At Naples there is obviously no choice between clear alternatives. Almost everyone wants the same thing—to maintain the station as an international facility, to put it on a sound financial footing, and to provide the staff with more security and more satisfactory working conditions. The differences are over how to accomplish these aims.

After a meeting in March, the administrative council replied to the Ministry's letter by forwarding minutes that dealt with some of the relevant issues. The council emphasized the necessity of guaranteeing the "internationality" of the station and also stressed the need for increased regular income of some $500,000 a year. In addition, the council affirmed a readiness to recognize the right of scientific personnel to perform their own research according to a program "limited only by the need to fit into the scientific framework of the station." The council also noted its view that a different structure of the board of directors is necessary. The response was couched in general terms which seemed to indicate a receptivity to change, but it hardly afforded a basis for settlement.

International interest remains high. A meeting of the IUBS advisory committee has been called for this week in Naples by Professor C. H. Waddington of Edinburgh, now president of IUBS, when the committee is expected to review the situation. The Italian government seeks to know what the biologists in countries which support the station want, and this group is likely to influence whatever action is taken.

Germany and the United States, which have been the heaviest foreign contributors to the station, are following developments at Naples closely, but have taken the view that this is an Italian matter and are keeping mum at least officially.

The appointment of a government official to a post of highest authority at the station relieves the suspense and obviously moves the discussion into a new phase. It is a serious step, but such appointments are not uncommon in Italy when a public institution is in difficulty. Details of the commissioner's brief are not yet clear. The commissioner, understood to be an official called out of retirement to take the post, will be advised by three senior professors who are familiar with the station.

The decision itself is the responsibility of the Ministry, although the CNR and Italian biologists will no doubt be consulted. Because the Italians presumably wish to preserve the international character of the station, and also because of the relevance of the whole matter to the vexed question of university reform, the decision on the Naples station is a matter of real consequence for Italian science policy.

—JOHN WALSH

NIH Budget: House Committee Sticks to Administration Figure

The President's budget for the National Institutes of Health emerged virtually unchanged this week from the House Appropriations Committee, but whether this should inspire joy or gloom in the biomedical research community is an uncertain matter.

In the handling of the budget, this was the first time out for Representative Daniel J. Flood (D–Pa.) as successor to the late John E. Fogarty in the chairmanship of the Labor-HEW appropriations subcommittee. And along with Flood, as a consequence of Republican victories and one retirement last fall, was an altogether new and relatively conservative Democratic lineup on the subcommittee. This new cast did not emulate Fogarty's well-established practice of adding substantial funds to the administration's medical research budget. But, considering the political complexion of the House, the financial drain of Vietnam, and an impending deficit that may crack all records, NIH did quite well to come out in one piece. Nevertheless, there is no arguing that, relatively speaking, it did not ask for very much in the first place.

This is how the numbers break down: Last year Congress appropriated for NIH $1,123,162,000. Because of the uncertain budget situation this year, NIH prepared "high" and "low" budgets for submission to its administrative parent, HEW. These were for $1,517,955,000 and for $1,158,622,000. After examination by HEW, these were modified to $1,409,111,000 and $1,202,078,000. The Bureau of the Budget took these figures and finally came out with $1,187,250,000—the figure that was submitted to Congress. Flood's subcommittee voted to apropriate all but $13.3 million of the amount requested. The cuts were from the Regional Medical Programs and the environmental health sciences, but these amounts wer said, in effect, to be available for expenditure next year because of delays in spending funds appropriated earlier.

Redoubtable as Fogarty was in promoting federal support of medical research, there is little reason to believe that he would have fared much better. At the time of his death, considerable chilliness prevailed between him and the President (Fogarty regularly referred to him as "a Kennedy man," and would jokingly point out that, while he had several portraits of the late President on the walls of his office, his pictorial acknowledgment of the Johnson Presidency was a snapshot-size photo atop a bookcase). The President paid no more than lip service to Fogarty's insistence that medical research be supported to the limits of its financial appetite. But, even if he had urged it, it is doubtful that the House membership that was voted in by the last election would have gone along with a major increase for NIH.