The Hawaii Marine Laboratory

ON APRIL 21 the official opening of the Coconut Island branch of the Hawaii Marine Laboratory was celebrated. The laboratory is an integral part of the University of Hawaii and consolidates under one name the long-established Marine Biological Laboratory at Waikiki Beach, the biological laboratories devoted to marine sciences on the main campus of the university, and the newly constructed branch at Coconut Island, Oahu.

The laboratory's program includes both teaching and research, with the Waikiki branch and the laboratories on the main campus of the university devoted primarily to instruction, and the Coconut Island branch exclusively to research. These new facilities greatly enhance the effectiveness both of the academic program in marine and fishery biology leading to the bachelor's, master's, and doctor's degrees, and of the research program in marine sciences. Ample physical separation of instruction and research has been achieved so that neither interferes with the other, and both activities may proceed throughout the year at a marine laboratory.

Staff members of the University of Hawaii will have first priority on laboratory space, with second priority going to staff members of the University of California because of an agreement between the two universities for mutual assistance in marine research in the central Pacific. Remaining space is available to qualified visiting investigators upon application. Application blanks and a brochure describing the details of the laboratory and the regulations for visiting investigators are available from the director.

Coconut Island is situated in the protected waters of Kaneohe Bay, about 15 miles from Honolulu. The bay, about 15 square miles in extent, opens broadly to the sea over a protective elevated reef. The northeast trades sweep directly into it, thus forcing a rapid exchange of the bay and oceanic waters, creating ranges of salinity from brackish conditions, close to stream mouths, to almost normal ocean conditions in the more open areas. The central part of the bay consists of many channels which are of varying widths and surround coral platforms that reach the surface of the water at low tide. Each platform is fringed by an extensive growth of corals, comprising the finest development of corals in the Hawaiian Islands. The fringing reef platform surrounding Coconut Island is replete with coral heads and intervening sandy areas, thus providing one of the richest collecting areas in Hawaii. Contributing greatly to the varied ecological situations in the vicinity of the island are the true oceanic conditions found just outside the bay, within a half-hour launch trip from the laboratory.

Biologically, Hawaii is situated at the extreme eastern periphery of the rich Indo-Pacific faunal area. Over 2,000 species of invertebrates and over 500 species of fish are known to inhabit the reef and inshore areas. The laboratory and its environs offer ideal facilities for studies on all phases of the biology of tropical and subtropical fish, turtles, and invertebrates. The zooplankton of the bay waters and of the neritic waters just outside is exceedingly varied and abundant, in contrast with that of the oceanic waters farther offshore. The finest oceanic bird rookery in the Hawaiian archipelago (except for some of the leeward Hawaiian Islands) is located just outside Kaneohe Bay on the islet of Moku Manu. A half-hour launch trip from the laboratory places the observer in an unparalleled outdoor laboratory for studies of several species of terns, shearwaters, petrels, boobies, and frigate birds.

Hawaiian shores abound in algae of all major groups. Especially abundant are chlorophycean genera such as Ulva, Cladophora, Caulerpa, Codium, and Halimeda. The last four offer special possibilities as subjects for physiological research. Among the Phaeophyceae, prominent genera are Ectocarpus, Sargassum, Padina, and Stictyota. The red algae are represented by many genera, perhaps the most abundant of which are Laurencia, Rhodymenia, Liagora (mostly calcareous), and the corallines. The agariferous genus Gelidium is of special interest. The blue-green algae and the diatoms are, of course, abundant.

The laboratory building contains two large rooms, one for general biological work and one for physiological studies, and two smaller general-purpose laboratories. Laboratory tables are available for 12 to 16 persons. Workshops, storerooms, a darkroom, and a long concrete porch with aquarium tables complete the working facilities; the remainder of the building consists of living quarters. In addition to the laboratory, there is a residence hall, net house, dock, marine railway, six tidal ponds of varying dimensions and depths, a battery of large glass-fronted aquaria, and five partially sunken concrete tanks. Two separate salt-water systems supply the large outdoor tanks and the saltwater tables at the laboratory. Pumps and motors for the sea-water systems are arranged in duplicate for automatically alternating duty, so that there is no storage or recirculation of sea water, but rather a continuous pumping mechanism. Stainless steel, antimony-free lead, and cast iron have been used in the sea-water systems so that the water delivered is free from toxic contaminants and suitable for the most critical embryological studies.

The laboratory is stocked with routine supplies and equipment. Certain equipment such as pH meters, colorimeters, Warburg-Barcroft apparatus, Van Slyke apparatus, cathode-ray oscilloscope, microscopes, microtomes, etc., will be furnished when needed from the supply room on the main campus.

Field equipment available includes a 46-foot research vessel, the *Salpa*, which has a live well and hoisting gear for all types of biological and oceanographic collecting. Routine gear, such as plankton nets of various kinds and sizes, bathythermographs, Nansen water bottles, reversing thermometers, current meters, diving gear, etc., is stored at the laboratory. In cooperation with the Territorial Division of Fish and Game and the Pacific Oceanic Fishery Investigations, larger vessels for work at sea are often available to qualified investigators.

The proximity of the extensive libraries of the university, the Bernice P. Bishop Museum, the Hawaiian Sugar Planters Association Experiment Station, and the Pineapple Research Institute makes it unnecessary to maintain a separate library at the laboratory. The Hawaii Marine Laboratory issues two series of publications. "Contributions from the Hawaii Marine Laboratory" are technical papers published in suitable journals and numbered serially. A series of mimeographed leaflets, entitled *Hawaii Marine Laboratory News Circular*, reports on the progress of current research and is sent to anyone interested.

The Advisory Board consists of Albert W. Bellamy, Division of Life Sciences, University of California at Los Angeles; Vernon E. Brock, Territorial Division of Fish and Game; Robert W. Hiatt (chairman of the board and director of the laboratory), University of Hawaii; Carl L. Hubbs, Scripps Institution of Oceanography; George F. Pappenfuss, University of California; and Albert L. Tester, University of Hawaii.

The resident research staff includes Albert H. Banner (biological oceanography); Vernon E. Brock (ichthyology, fishery biology); George W. Chu (parasitology); Maxwell S. Doty (marine botany); William A. Gosline, III (ichthyology); Robert W. Hiatt (marine invertebrates, ecology); Sidney C. Hsiao (experimental embryology, physiology); John L. Kask (fishery biology); Donald C. Matthews (invertebrate zoology); O. E. Sette (fishery biology); Albert L. Tester (fishery biology, biometrics); and Pieter van Weel (comparative physiology).

ROBERT W. HIATT

Hawaii Marine Laboratory University of Hawaii

Scientists in the News

William H. Adolph, who recently returned from the Peking Union Medical College, is leaving at the end of the summer to serve on a nutrition research project under the auspices of the Point IV program in the eastern Mediterranean area. Dr. Adolph will make his headquarters at the School of Medicine, American University, in Beirut, and will be concerned both with the development of a research program and with the training of laboratory personnel.

Paulo C. A. Antunes has been appointed assistant director of the Pan American Sanitary Bureau, replacing John R. Murdock, who recently resigned to return to his post in the U. S. Public Health Service. Dr. Antunes, who has been in charge of all the bureau's public health programs for the past three years, is on leave of absence from the School of Hygiene and Public Health of the University of São Paulo, where he holds the position of dean.

E. J. Baldes, of the Mayo Clinic, has been named Chevalier de l'Ordre National de la Légion d'Honneur by the French government, "as a token of gratitude for outstanding services . . . rendered to medical sciences, especially . . . in the field of aeronautics. . ."

Maurice L. Brashears, Jr., district geologist, of the Mineola, N. Y., office of the Ground Water Branch, Water Resources Division, U. S. Geological Survey, has returned from his assignment as a visiting expert consultant on water supplies in Japan.

Paul S. Burgess, for 20 years dean of the College of Agriculture and director of the Agricultural Experiment Station at the University of Arizona, has resigned to return to the Department of Agricultural Chemistry and Soils in the Agricultural Experiment Station. He is being replaced by **Phil S. Eckert**, of the Food and Agriculture Division of the ECA and Point IV programs in Washington, D. C.

Robert L. Corsbie has been appointed chief, Civil Defense Liaison Branch of the Atomic Energy Commission's Division of Biology and Medicine. He will be responsible for liaison with the Federal Civil Defense Administration and other government and private agencies on problems having to do with the effects of atomic weapons, methods of protection against hazards associated with atomic energy, methods of treatment for radiation injuries, and methods for building structures to minimize the radiation and blast effects of atomic weapons.

Reuben Frodin has been appointed executive dean for the four-year and professional colleges of the University of the State of New York. Mr. Frodin, who was administrative assistant to Robert M. Hutchins, president of the University of Chicago, and assistant dean of the college, has been consultant to the State University since last September.

Hyman I. Goldstein, of Camden, N. J., has been elected an honorary member of the Italian Gastroenterological Society (Rome); he was also made medical historian of the New Jersey Gastroenterological Society at its recent annual meeting at Asbury Park. Dr. Goldstein is an honorary member of the Belgian Society of Gastroenterology, and foreign correspondent of the National French Gastroenterological Society and of the Cuban Society of Cancerology.

Lucy Armistead Goldthwaite, who from 1905 to 1942 was the director of the Library for the Blind of the New York Public Library, and who since has been a member of the staff of the American Foundation for the Blind, has retired. In 1946 the foundation honored Miss Goldthwaite for outstanding service to the blind with the award of the Migel Medal. She was a member of the New York State Commission for the Blind and represented the American Library Association on the Uniform Type Commission, which obtained adoption of the universal Braille type.

William E. Gordon was recently appointed professor of research at the George Warren Brown School of Social Work of Washington University. His appointment, to conduct basic research in social work, is the first such to be made by a school of social work.

Donald E. Gregg, chief of the Cardio-Respiratory Diseases Department, Army Medical Service Graduate School, was one of the lecturers at the CIBA Foundation conference on visceral circulation in London. The program included addresses by 47 of the outstanding leaders in this field from England, the U. S., Canada, Scotland, Ireland, Belgium, Sweden, Denmark, and Germany. Other U. S. speakers were D. H. Barron, of Yale University Physiology Laboratory; S. E. Bradley, of Presbyterian Hospital in New York; and S. R. M. Reynolds, of the Carnegie Institution of Washington.

D. R. Hartree, professor of mathematical physics at the University of Cambridge, is in Australia, at the invitation of the Commonwealth Scientific and Industrial Research Organization and the Australian National University, to discuss mathematical computing with officers of CSIRO and of the Department of Supply, to take part in a conference on automatic computing machines which CSIRO is arranging at the University of Sydney, and to visit the universities of Sydney, Melbourne, Adelaide, and Tasmania.

Thomas C. Holy, authority in the fields of school finance, school buildings, and school surveys, is retiring as director of Ohio State University's Bureau of Educational Research. A member of the staff of the bureau for 24 years, Professor Holy has been its director during the past nine years.

Henry A. Imus, head, Psychophysiology Branch, ONR, has recently transferred to the ONR branch office in London, where he will serve as general psychologist. Sherman Ross, from the Department of Psychology, University of Maryland, is now attached to the Psychophysiology Branch in Washington. William Consolazio, formerly head of the Biochemistry Branch, has joined the National Science Foundation, and Louis Levin, of the ONR branch office, New York, has replaced him as head of the Biochemistry Branch.

Fisher Scientific Co. has recently appointed Samuel W. Levine as director of development. A researcher in x-ray and emission spectroscopy, the properties of petroleum reservoirs, and hydrocarbon thermodynamics, he was also active in the development of microwave radar systems in World War II at the MIT Radiation Laboratory.

Recent visitors at the Communicable Disease Center, USPHS, Atlanta, Ga., were: Kuang Chi Liang, malariologist, Taiwan Provincial Malaria Research Institute, Taipeh, Formosa; Abdul Rahim, director general, Malaria Society, Kabul, Afghanistan; Pramern Chandavimol, chief, Communicable Disease Control Division, Department of Public Health, Bangkok.

Syotaro Mizuno, professor of orthopedic surgery at the Osaka Municipal University School of Medicine and director of the Osaka Vocational Training and Rehabilitation Center for the Handicapped, was a recent visitor at the Kessler Institute.

William H. Newman, professor of business administration, has been named the first Samuel Bronfman professor in democratic business enterprise in the Graduate School of Business at Columbia University.

John H. Ottemiller, acting chief of the Division of Library and Reference Services of the Department of State, has been named associate librarian of the Yale University Library. He will succeed David H. Clift, who will become executive secretary of the American Library Association.

S. C. Pan, formerly with Joseph E. Seagram & Sons at Louisville, Ky., is now with the Research Department of E. R. Squibb & Sons, New Brunswick, N. J.

Roland R. Renne, Montana State College president, has been appointed to head a government mission to build up the economy of the Philippines. He is chief of ECA's special technical and economic mission.

José Carlos Rodriguez is in Washington, D. C., for a year's in-service training with the U. S. Geological Survey in engineering geology, under the sponsorship of the Department of State Point IV program. He is one of five young professors from the University of São Paulo, Brazil, to come to the Survey for training.

The Spingarn Medal, presented annually for the highest achievement of an American Negro, was awarded to Mabel Keaton Staupers, of New York, for her successful efforts to integrate Negro nurses into American life as equals. The presentation was made at the annual convention of the National Association for the Advancement of Colored People. Mrs. Staupers was largely responsible for bringing about the commissioning of Negro nurses in the armed services in World War II. She served as executive secretary and president of the National Association of Colored Graduate Nurses, and last winter she was instrumental in dissolving the association because it had achieved the democratic aims to which it had been dedicated.

Harry Stinson has been appointed assistant professor and acting chairman, Department of Biology, College of William and Mary.

Walter P. Taylor, wildlife research supervisor, Fish and Wildlife Service, leader, Oklahoma Cooperative Wildlife Research Unit, and professor of zoology, Oklahoma Agricultural and Mechanical College, will retire Sept. 1, after 35 years of service. He plans to make his home in Claremont, Calif., and to devote his time to studies in ecology, conservation education, and wildlife management.

Education

The study-plus-work education plan has worked so well at Antioch that the college is seeking a way to extend the benefits to its faculty through a teachingworking arrangement. During the 1951–52 academic year community leaders in about 20 centers in the U. S. will meet in a series of regional conferences to help develop a plan through which faculty members can alternate between teaching and working. Antioch will ask for help in making its thirty-year-old general education program of even more practical value to its students. Financed by the Rockefeller Foundation, the college is conducting a self-study of this program.

Staff of the Bureau of Mines North Central Experiment Station on the University of Minnesota campus has been increased from seven to twelve persons as a result of expanded defense programs, including the development of practical methods to recover manganese, sulfur, and iron from low-grade manganese-bearing iron ore and iron sulfide deposits. New staff members are Roy T. Sorensen and Paul A. Wasson, metallurgists; Alfred H. Wendelbo and Don C. Seidel, chemical engineers; and Cedric T. Erickson, laboratory mechanic. Carl E. Wood is in charge of the Region V Metallurgical Division.

A committee of seven American applied research experts left Aug. 5 for Germany under the auspices of ECA, to investigate the country's needs for industrial research and development and make recommendations to the German government. The group, headed by Harold A. Vagtborg, president of Southwest Research Institute, is composed of Jesse E. Hobson, Robert R. Adams, William A. Casler, Calvin O. Williams, Hugh B. Buhrman, and Maurice Holland. Late this month, they will meet in Paris with European and American officials to arrange for similar surveys in Austria, Belgium, France, Italy, The Netherlands, and Norway.

The University of Illinois, the Children's Bureau, the Public Health Service, and the Division of Rehabilitation (FSA) will conduct an \$83,500 demonstration program in the training of doctors, nurses, social workers, and technicians in the Consultation Clinic for Epilepsy, which is part of the Department of Psychiatry, College of Medicine, University of Illinois. Patients will be chosen on the basis of special problems in diagnosis and treatment and will come from all sections of the country.

A new curriculum in feed technology will start this fall at Kansas State College, although complete building facilities will not be ready before 1953-54. The first two years' work will not require special feed technology equipment.

An Institute for Fluid Dynamics and Applied Mathematics is being held at the University of Maryland, with S. R. de Groot as visiting research professor. The seminars are held on Tuesday and Thursday evenings and will extend through Sept. 20.

In the Laboratories

John L. Schmidt has joined the Pharmacology Department of Abbott Laboratories in North Chicago, as senior research pharmacologist.

The Charles Beseler Company has appointed Allan Finstad, Navy Training Aids head, educational director. For the past five years Mr. Finstad has acted as civilian head of the Bureau of Naval Personnel Training Aids Section.

Dow Corning Corporation, whose plant and main office remain at Midland, Mich., has moved its New York offices to 600 Fifth Ave.

Heinicke Instrument Corporation is moving from Rochester, N. Y., to Hollywood, Fla., in an expansion program requiring more manufacturing space. It is also contemplating the opening of a branch in Puerto Rico.

The High Voltage Engineering Corporation, Cambridge, Mass., has appointed Davis R. Dewey II vice president. Dr. Dewey was previously technical director of American Research and Development Corporation, Boston.

Directors of the Interlake Iron Corporation have elected R. W. Thompson president, director, and a member of the executive committee, succeeding the late Edward L. Clair. J. Paul Fagan was advanced from vice president and treasurer to executive vice president and treasurer, and J. H. McDaniel from general works manager to vice president in charge of operations.

R. C. Coupland, (USAF, ret.), has been appointed manager of a new product development department of the metal products division of Koppers Company, Inc.

The Midwestern Communicable Disease Center Services have recently moved into a new headquarters and laboratory building at 3900 Eaton St., Kansas City, on the campus of the University of Kansas School of Medicine, which made the facilities available. LeGrand Byington is medical officer in charge of the staff of 54 located in Kansas City and at field stations in several states.

Parke, Davis & Company will replace without charge all its products damaged or destroyed by flood in retail drug stores throughout Missouri, Kansas, and Oklahoma. The company has already sent 32,000 pounds of disinfectant and supplies of typhoid-paratyphoid vaccine and other medicines to the floodstricken area.

Raytheon Manufacturing Company has appointed Nathaniel B. Nichols, authority on servomechanisms and automatic controls, as manager of its research division. Dr. Nichols has been teaching general electrical engineering and courses dealing with analog and digital computers at the University of Minnesota.