

of a sequence pattern of nucleotide units, subject to possible mutation, it has promoted bold thinking and experimentation with immensely fruitful results. Many of the current genetic ideas may be wrong, but a powerful model has been set up, leading to experimental predictions, and therefore subject to constant change and improvement.

All three of these Nobel prize winners have now gone on to other, but closely related problems. Crick has recently been primarily concerned with

unraveling the nature of the genetic code; Watson, with studies of the mechanism of protein biosynthesis. Wilkins and his collaborators have recently reported [*Nature* (16 June 1962)] the crystallization of soluble ribonucleic acid and have obtained the first really good x-ray diffraction patterns from RNA, with results that promise to be of far-reaching importance.

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Penguins and Politics: A Zoo Finds It Useful To Have Friends in Washington

Sometime last spring several leading citizens of Portland, Oregon, decided that they would like to see more penguins in the city's Zoological Gardens. They quickly found that the shortest path to the penguin rookeries of Antarctica is through Washington, D.C., and therein lies a tale of penguins and politics that involves the National Science Foundation, the State Department, the President's science adviser, Congress, the Navy, the Air Force, and the New Zealand government. The outcome is that with a not too-well concealed twisted arm, NSF, which is responsible for coordinating scientific programs in Antarctica, has told Portland that it may add to its penguin collection.

Multiple problems accompany any attempt to transport penguins from Antarctica, not the least of which are the still pungent memories the Air Force has of penguin airlifts in 1957 and 1958. Persons who participated in that adventure point out that a glassed-in penguin in a zoo is a very different creature from a penguin who is a fellow passenger in the narrow confines of a military transport. The Emperor penguin, which is a much sought-after variety, weighs as much as 80 pounds and can employ his flippers to convince any accessible target that he is not going willingly into captivity. Furthermore, when excited, penguins have a tendency to lighten themselves. This characteristic passed into Air Force lore after a batch of penguins made a break for freedom while

being loaded aboard a plane at McMurdo Sound in 1958. Air Force men, operating in teams of two, recaptured them by pinning their flippers and confining their feet, but the price was a very sorry looking group of airmen. The journey to the United States is reported to have left the transports in a condition that even today makes them readily identifiable as the aircraft used in the penguin airlift.

Also affecting penguin acquisition is the Antarctic Treaty, a 12-nation agreement which dedicates the region to peaceful, scientific pursuits and, among other things, commits the signatories to the conservation of wildlife. With conservation as a guiding principle, the collection of wildlife is specifically authorized, but NSF was not particularly pleased with what happened to the penguins brought to the United States in 1957 and 1958. The Portland Zoo was a leader in that operation, and while it fared extremely well in keeping its own collection healthy, it also sold ten penguins to other zoos. This was profitable for Portland—the ten cost about \$2000 in U.S. charges for transportation and brought in about \$10,000—but few of the recipients were equipped to keep the penguins alive and the survival rate was low.

Thus, when Portland decided to seek permission to carry out another penguin expedition, considerable built-in opposition awaited its proposal. The Navy, which is in charge of Antarctic logistics, is tight lipped about its own

deliberations on the matter, but from other sources it appears that support for Portland was strong in Navy administrative circles and nonexistent at the working level. Those in favor looked to the public relations dividends while those opposed appeared to be concerned about the effect on their Air Force colleagues who would have to carry out the task. They also felt that the proposition had been made rather late for inclusion in the complex supply preparation for the overall Antarctic program.

Within NSF, the reaction was also divided but tended to be dominated by recollections of the commercial aspects of the last penguin collection, as well as the unfortunate fate of the birds that were put up for sale. While NSF desired to contribute to public awareness and understanding of the Antarctic programs, it felt that it would like to have some additional time to work out a "penguin policy" to govern standards of care and to restrict commercial operations. However, NSF discovered that by the time Portland's proposal came to its attention, the city had gone a long way toward rounding up some fairly impressive support.

Congresswoman Edith Green, who represents the city, had made her services available to her penguin-seeking constituents. When it became known that NSF was feeling "sticky" toward the project, Mrs. Green contacted Jerome Wiesner, the President's science adviser, and received an assurance that the difficulties would be worked out. Mrs. Green also received a similar assurance from Charles Daly, a White House special assistant whose duties include convincing West Coast congressmen that the White House is deeply concerned with their problems.

At this point, NSF did not find itself under any compulsion to go along with the scheme, but it found that the agencies with which it is closely associated in the Antarctic were going along. As one official pointed out, "It would have been difficult to say no." This became especially apparent when Admiral David Tyree, commander of the Naval Support Force in the Antarctic, said that his force could carry out the job, after he had informally told NSF that he wanted no part of a penguin expedition. The admiral, whose force consists of 2000 men, 10 ships, and about 25 aircraft and helicopters, stated in a dispatch

that "the problems involved in this move are not insurmountable and are within the capabilities for the forces assigned to Task Force 43."

With no visible allies to be had, NSF now fell into line with the Portland project. It did, however, insist upon reducing Portland's goal from 60 to 40 birds, justifying this on the ground that the State Department felt 40 was more in keeping with the spirit of conservation in the Antarctic Treaty. It insisted that Portland provide cages, pens and plastic tarpaulins to protect the interior surfaces of the transports. It also exacted a pledge that the birds would not be sold or traded without specific permission from NSF.

Within the next few weeks, Jack Marks, director of the Portland Zoological Gardens, is expected to arrive in Antarctica to collect the birds. The only major detail that remains to be worked out is to get permission from the New Zealand government for the birds to land at Christchurch during a refueling and crew rest stop after the 2400-mile flight from McMurdo Sound. NSF is not altogether certain as to how the New Zealand government will regard the project, and if it should say no, it is not likely that NSF will feel disappointed.—D. S. GREENBERG.

Birth Control: Nobel Laureates Urge U.S. to Offer Assistance

Eighteen Nobel laureates this week urged the U.S. government to assist nations seeking to control population growth.

In a joint statement with 25 prominent businessmen, they said: "Clearly the urgent, indisputable need today is for intensified action to decelerate world population growth." The statement was issued in New York at a conference on the economic consequences of the population explosion, sponsored by the Planned Parenthood Federation of America. The Nobel laureates who signed the statement are John Bardeen, Felix Bloch, Edward A. Doisy, Joseph Erlanger, Donald A. Glaser, Edward C. Kendall, Polykarp Kusch, Joshua Lederberg, Hermann J. Muller, John H. Northrop, Edward M. Purcell, Dickinson Richards, William Shockley, Wendell M. Stanley, Harold C. Urey, Selman A. Waksman, Thomas H. Weller, and G. H. Whipple.

Announcements

This column was in error when it recently reported that the National Institutes of Health failed to respond to a request from the Office of Education for information on NIH expenditures for education. Under the Office's definition, research grants contribute to education and are included with educational expenditures. NIH holds that research grants should not be considered as supporting education. It therefore reported only those funds assigned specifically to training programs.—D.S.G.

A 1-year project to gather and codify **dietary information** on 500 culture groups in Asia, Africa, South America, and Oceania has been initiated by the Human Relations Area Files, New Haven, Conn. The project, financed by the Armed Forces Food and Container Institute, Chicago, and headed by HRAF executive director Frank W. Moore, will cover major food preferences, resources, taboos, preparation, and related aspects. (HRAF, 421 Humphrey St., New Haven, Conn.)

Publications

The collected **Nobel prize lectures** in physics, chemistry, physiology or medicine, literature, and peace, are to be published in English and issued separately by the American Elsevier Publishing Company, New York. The company also plans to issue English editions of the annual Nobel Prize Yearbooks, beginning with the 1962 prizes. (American Elsevier Publishing Co., 52 Vanderbilt Ave., New York 17)

Scientists in the News

DeWitt Stetten, Jr., director of intramural research at the National Institute of Arthritis and Metabolic Diseases has been appointed the first dean of the planned 2-year medical school at Rutgers University. The school will be financed by a grant from the W. K. Kellogg Foundation, Battle Creek, Mich.

The following are serving as visiting professors at Case Institute of Technology for the fall semester:

Gary K. L. Chien, of International

Business Machines' control systems, San Jose, Calif., as professor of engineering.

Walter E. Fricke, professor and dean of the faculty of sciences at the University of Heidelberg, Germany, as professor of astronomy.

Robert J. Magee, senior lecturer in organic chemistry at Queen's University, Belfast, Ireland, as associate professor of chemistry.

Maurice B. Visscher, distinguished service professor and chairman of the department of physiology at the University of Minnesota, is the 1962 recipient of the American Heart Association's \$1000 research achievement award for "scientific accomplishment in the field of heart and blood vessel diseases."

Paul B. Sears, emeritus professor of Yale University, has joined the staff of Wake Forest College, Winston-Salem, N.C., as the Mary Reynolds Babcock professor of botany.

Herbert C. Barnett, recently retired chief of the entomology department at Walter Reed Army Institute of Research, has joined the University of Maryland's International Center for Medical Research and Training, Baltimore, as director of the newly organized division of medical entomology and ecology.

Roman Kulwich, a research biochemist with the U.S. Department of Agriculture, Beltsville, Md., has joined the NIH Division of Research Grants, Bethesda, Md.

Victor L. Loosanoff, director of the U.S. Bureau of Commercial Fisheries' Marine Biological Laboratory, Milford, Conn., has been appointed consultant on shell fisheries to the five Pacific states, with headquarters at Tiburon, Calif.

Frederick E. Steigert, of Yale University, has been appointed associate professor of physics at the University of Connecticut.

Geoffrey V. Raynor, Feeney professor of physical metallurgy and chairman of the department at the University of Birmingham (England), is serving as Battelle professor of metallurgy at Ohio State University for the fall quarter.