moved, 15-gallon polyethylene drums, with steel outerpack, will be filled for return to Woods Hole, Mass., by freighter from the *Crawford's* ports of call. The small vessel cannot stand the additional deckload of 88 filled drums. These samples will later be analyzed for many radioactive elements, such as strontium-90, antimony-125, cerium-144, promethium-147, possibly cesium-137, and the naturally occurring tritium. Some analyses for stable rare earths will also be made. An idea of the size and importance of this program may be obtained from the list of organizations cooperating in this study. The National Science Foundation and the Office of Naval Research have aided with financial grants, while samples will be analyzed at Woods Hole, at Yale University, the Swedish radioactive dating laboratory at Stockholm, and at Clark University.

Although the physical and chemical observations are the main object of the cruise, the *Crawford* is making a continuous trace of the ocean bottom on the Woods Hole precision echo-sounding recorder. This instrument measures the depth of the ocean with an accuracy of one part in 10,000. In addition, biological observations are being carried out, particularly of whales and porpoises, and sea and land birds are identified and recorded. Further, lines are being towed for pelagic fishes such as tuna, wahoo, and so forth.

The ship is also continuing the usual shark-catching program. Much has been learned during recent years about the activities and natural history of the white-tipped shark, the most common open-sea shark in the North Atlantic and in the Caribbean Sea. At night, an underwater light is hung just below the surface which usually attracts a glittering array of small sea-life, particularly larvae and young stages of fishes and the many deep-sea fishes that come to the surface at night.

Fulbright and Smith-Mundt Awards

The application deadline is *25 Apr.* for 1958–59 awards under the Fulbright Act for university lecturing and advanced research in Argentina, Australia, Burma, Chile, Colombia, Ecuador, India, New Zealand, Pakistan, Peru, the Philippines, Thailand, Argentina, Israel, and Turkey.

Programs for Austria, Belgium and Luxembourg, Denmark, Finland, France, Germany, Greece, Israel, Italy, Japan, the Netherlands, Norway, Turkey, and the United Kingdom and Colonial Dependencies will be announced in June, although applications will be accepted from 1 May through the closing date, *1 Oct. 1957.*

Grants for lecturing abroad under the Smith-Mundt Act will be available in approximately 40 countries which do not participate in the program under the Fulbright Act. These countries are in Latin America, the Near East and Africa, the Far East, and Europe. Application forms and additional information may be obtained from the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Ave., NW, Washington 25, D.C.

Markle Scholars

The John and Mary R. Markle Foundation has announced the appointment of 25 scholars in medical science, all faculty members of medical schools in the United States and Canada. The sum of $750,000 was appropriated toward their support to the schools where they will teach and carry on research.

With these appointments the fund completes 10 years of a program to aid young medical-school faculty members seeking careers in teaching and research. In the decade, 206 doctors in 74 medical schools in the United States and Canada have received help from appropriations totaling $6,070,000. For each scholar appointed, the fund has allocated $30,000 granted at the rate of $6000 annually for 5 years to their medical schools.

The program will continue as a major interest of the foundation. Of those appointed in the 10 years, two have become heads of departments, one directs an important cancer research institute, and two head research divisions in Government laboratories. Twenty-five are full professors and 51 associate professors.

This year's Markle scholars are Richard H. Adler, associate, University of Buffalo School of Medicine, thoracic surgery; Aurele Beaulnes, assistant professor, University of Montreal Faculty of Medicine, pharmacology; Robert E. Carter, instructor, University of Chicago Division of the Biological Sciences, general pediatrics; Sanford I. Cohen, instructor, Duke University School of Medicine, psychiatry (at present medical officer, U.S. Air Force, Wright Patterson Air Force Base); John E. Connolly, instructor, Stanford University School of Medicine, surgery; Frank Falkner, assistant professor, University of Louisville School of Medicine, pediatrics; Lawrence R. Freedman, instructor, Yale University School of Medicine, internal medicine; Thomas R. Hendrix, instructor, after 1 July, Johns Hopkins University School of Medicine, internal medicine (at present research fellow, Evans Memorial–Massachusetts Memorial Hospitals and assistant in medicine, Boston University); David S. Howell, assistant professor, University of Miami School of Medicine, internal medicine; T. R. Johns, assistant professor, University of Virginia School of Medicine, neurology; Kermit E. Krantz, assistant professor, University of Arkansas School of Medicine, obstetrics and gynecology; Lloyd D. MacLean, instructor, University of Minnesota Medical School, surgery; James A. Merrill, instructor, University of California School of Medicine (San Francisco), obstetrics and gynecology; Robert O. Morgen, demonstrator, McGill University Faculty of Medicine, internal medicine; George C. Morris, Jr., instructor, Baylor University College of Medicine, surgery; Arno G. Motulsky, assistant professor, University of Washington School of Medicine (Seattle), internal medicine; Russell M. Nelson, assistant professor, University of Utah College of Medicine, surgery; George Nichols, Jr., associate, Harvard Medical School, internal medicine; Donald E. Pickering, assistant professor, University of Oregon Medical School, pediatrics; Arthur H. Schmale, Jr., instructor, University of Rochester School of Medicine and Dentistry, internal medicine and psychiatry; John D. Thompson, instructor, Louisiana State University School of Medicine, obstetrics and gynecology; Henry O. Wheeler, instructor, Columbia University College of Physicians and Surgeons, internal medicine; Joseph R. Wilder, assistant professor, New York Medical College, general and cardiovascular surgery; T. Franklin Williams, instructor, University of North Carolina School of Medicine, internal and preventive medicine; William J. Williams, assistant professor, University of Pennsylvania School of Medicine, internal medicine.

AEC Reactor Explodes

A critical assembly, known as the "Godiva," which has been in operation at the Los Alamos Scientific Laboratory since August 1951, was severely damaged during an experiment on 12 Feb. Since the experiment was remotely controlled, no one was exposed to radiation. No physical damage was done to the building in which the experiment was being conducted, and radiation contamination has been removed by standard clean-up methods with no appreciable loss of uranium. Damage to the assembly was such that it is considered impractical to repair it.

The Godiva was one of several simple critical assemblies at Los Alamos that are used for developing information on fast-neutron systems and as a source of large quantities of neutrons for instantaneous irradiations, called "prompt bursts." It consisted of an unshielded spherical mass