"It must never be forgotten that the whole purpose of our policy is to save countless millions from death and suffering. This must be balanced against the possible future hazards associated with nuclear tests."

The preceding statements appeared in the May *Newsletter* of the Society for Social Responsibility in Science, which ended its report by observing:

"Shortly after this [exchange], it was announced that the British H-bomb tests at Christmas Island in the Pacific had unexpectedly been cancelled after the first of three scheduled blasts. The reason was not stated."

Jane Coffin Childs Memorial Fund for Medical Research

The Jane Coffin Childs Memorial Fund for Medical Research of New Haven, Connecticut, has announced appropriations totaling $312,779.93 in support of research and fellowships in cancer for the year 1 July 1957–30 June 1958. This brings to slightly over $4 million the total distributed by the fund since its establishment in 1937, when it represented the largest capital investment ever dedicated to the search for the causes of cancer. (Now, 20 years later, $4 million is approximately the sum spent in one year by a single institution, the Sloan-Kettering Institute for Cancer Research; the National Cancer Institute, which for 1958 received an appropriation of $56,402,000, allocated to research grants alone $22,675,000.)

Support is given for research in both the basic and clinical sciences; for postdoctoral fellowships providing advanced research training; for conferences, meetings of national and international societies concerned with cancer research. Among publications to the support of which the fund has contributed since it helped to establish them are the journal *Cancer Research* and the *Atlas of Tumor Pathology.*

Appropriations are voted by the fund's Board of Managers on recommendation of the fund's Board of Scientific Advisers. Directed by M. C. Winternitz, this board includes Edward A. Doisy, Charles B. Huggins, John J. Morton, Thomas Francis, Jr., Richard E. Shope, C. N. H. Long, William U. Gardner; and Levin L. Waters, assistant director. R. G. Harrison, Rudolph J. Anderson, S. Bayne-Jones, and Peyton Ross, members of the original board in 1937, now serve in an honorary capacity.

England, France, Austria, Japan, and Sweden are represented on the list of grants active in 1958. Bengt E. G. V. Sylven, associate professor of experimental cancer research at the Karolinska Institute in Stockholm, received a first grant ($30,000 for 3 years) to develop cytochemical methods to be applied to the problem of how proteolytic enzymes in malignant cells affect surrounding tissues. Jacques Monod, director of the department of cellular biochemistry at the Pasteur Institute, received a fifth grant (totaling $29,400 since 1954) for studies of specific enzymes involved in the selective penetration of certain organic molecules into bacterial cells. Monod has been invited to summarize this work at Harvard University, where he is to give the Dunham lectures this fall. Grants made to the Institute of Cancer Research in London's Royal Cancer Hospital, beginning 1938, when the late Sir Ernest Kennaway, at that time director of the institute, visited the Fund in New Haven, totaled $73,500 in 1958.

American investigators supported by the fund's grants in 1958 were working chiefly in university and medical school departments of the basic and clinical sciences. Six, however, were located outside the schools in nonprofit research institutes, three of which were devoted entirely to cancer.

First grants were made to ten investigators for periods ranging from 1 to 3 years. The other 16 grants active in 1958 represented renewals, some for the tenth to the fourteenth time, bringing support to some of these individuals and groups for twenty consecutive years. These include grants since 1938 for the study of the role of viruses in the genesis of cancer by the late Francisco Duran-Reynals at Yale University's medical school. Among several long-term programs currently supported on the basis of 5-year grants ($25,000 a year) is that of Charles B. Huggins and his associates at the Ben May Laboratory of Cancer Research, University of Chicago.

Biochemical approaches outnumber all others in the work of both investigators and fellows supported by the fund, with especial concern shown for the chemical reactions in normal and neoplastic cells and tissues and with particular interest in protein and nucleoprotein metabolism. Tumor and other viruses, immunological mechanisms, and steroid hormones are being investigated. Studies of steroid hormones range from synthesis in normal tissues to investigation of their role in the metabolism and growth of tumor cells, from use in experimental induction of tumors to use in the treatment of cancer in man.

Relevance to cancer is more broadly assessed in the award of postdoctoral fellowships, in which the primary emphasis is placed on providing training and research opportunities to promising candidates who intend to devote themselves to research. Such fellowships, given for 1 year and in some instances renewed for a second, have taken American and foreign students in a wide range of disciplines to major laboratories in the United States, England, France, Belgium, and the Scandinavian countries. The fellowship program has also made its modest contribution to academic medicine since its inception 15 years ago. Now, when the medical schools have for several years suffered from critical shortages of full-time instructors, past fellows of the Jane Coffin Childs Fund are conducting their research as full-time members of 12 university and medical school departments of the basic and clinical sciences; two are directing coordinated teaching programs in cancer; six others are engaged in full-time research outside the schools in nonprofit research institutes.

Applications for research grants and fellowships are reviewed by the Board of Scientific Advisers three times a year at the offices of the Jane Coffin Childs Memorial Fund for Medical Research, 333 Cedar St., New Haven 11, Conn.

International Unit of Enzyme Activity

The Committee on Biological Chemistry of the Division of Chemistry and Chemical Technology, National Academy of Sciences–National Research Council, has undertaken a program of supplying to investigators information regarding commercially available biochemical reagents. As part of the effort to obtain appropriate data for the description of commercially available enzymes, the Subcommittee on Enzymes of the Committee on Biological Chemistry has searched for a suitable general unit to express the activity of enzyme preparations. Such a unit, universally adopted, would permit easy, direct comparison of data obtained in different laboratories. To further this purpose, it was felt desirable that such a unit (i) should not be based on the use of a particular instrument, (ii) should eliminate as much as possible the use of high numbers and decimal points.

After consideration of various possibilities, it was decided to define a unit as 1 μmole of substrate utilized per minute under specified conditions of *p*H and temperature control, and the specific activity as micromoles per minute per milligram of protein—that is, units per milligram of protein. The latter represents 1/100 the activity value given for many enzymes in the literature expressed as moles of a substrate utilized per 100,000 grams of protein. It is in the range 1 to 1000 for the majority of enzymes commonly used.

The above-mentioned unit cannot be used readily in the description of pro-