

Origins of the Research Program

The origins of the Office of Health and Environmental Research (OHER) trace back to the outset of World War II and the establishment of nuclear research centers under the "Manhattan Project." The first formal program began in 1942 as a Health Division, established by Dr. Arthur Holly Compton, Director of the University of Chicago Metallurgical Laboratory. Already a Nobel laureate for his work on X-ray scattering, Dr. Compton recognized the unprecedented hazards posed by radiation to wartime workers at the laboratory. With the perspective of a half-century of earlier experience with X-rays and radium, he and his colleagues could well appreciate the dangers, as well as the possibilities, of atomic radiation. Biomedical programs were soon established at Oak Ridge, Tennessee, and in the Manhattan Project at large, and it is fortunate that these were able to attract the most competent physicians and medical researchers in the field of the biomedical effects of radiation.

Like the Curies and other pioneers in the field of radiation, those who sought to protect the health of their colleagues could understand, more than others, that the phenomenon that so concerned them was, at the same time, an opportunity. They grasped its significance and foresaw the promise of radiation and nuclear medicine as a new means for medical diagnosis and treatment. This promise has been fulfilled. Today, radiopharmaceuticals are produced and packaged in myriad forms and are in widespread use; for example, radiopharmaceuticals containing thallium-201 ions were administered for the diagnosis of heart disease to 370,000 patients in 1981.

In providing the first legislative basis for the health research program through the Atomic Energy Act of 1946, the Congress overlooked neither the opportunities nor the dangers presented by radiation. In the Act the Congress directed the Atomic Energy Commission (AEC) to

. . . make contracts, agreements, arrangements, grants-in-aid, and loans . . . for the utilization of fissionable and radioactive materials for medicine and health purposes . . .

and for

. . . the protection of health during research and production activities . . .

The need for a highly qualified group of research administrators was foreseen to fulfill this broad charter. Thus, the Division of Biology and Medicine was established, and Dr. Shields Warren, Professor of Pathology at Harvard University, was named its first Director. Under Dr. Warren, the Division laid down the outlines of a vigorous research effort of fundamental studies in the life sciences; in applied areas to ensure industrial hygiene in Commission facilities, as well as for the public health and safety; and in fostering the rapid growth of nuclear medicine.

The responsibility for administering this program was assigned to the Energy Research and Development Administration (ERDA), which succeeded the AEC through the Energy Reorganization Act of 1974. However, the oil embargo had underscored the need for developing a wide range of energy options and technologies in addition to nuclear, and this need was reflected in the new agency's mission. Therefore, this Act additionally charged the ERDA Administrator with the responsibility of

. . . engaging in and supporting environmental, physical, and safety research related to the development of energy sources and utilization technologies.

These responsibilities were assumed by the Agency's Division of Biomedical and Environmental Research, which initiated a significant program of non-nuclear