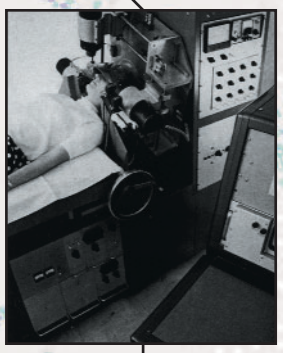
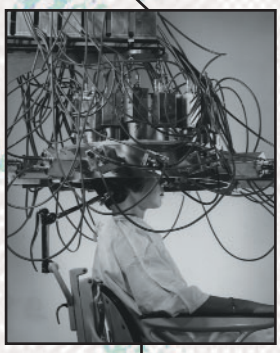
Healthcare through Nuclear Medicine

1959 1960 1961 1970 1973 1974 1976



Beginning of emission computed tomography

David E. Kuhl and other BER scientists at the University of Pennsylvania build the Mark II scanner, ancestor to today's CT and SPECT scanners.



"Headshrinker" direct forerunner of PET

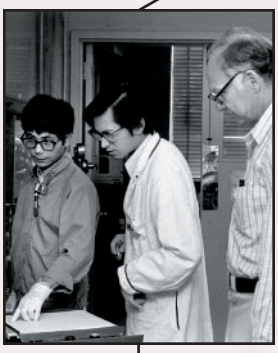
James S. Robertson, a BER scientist at Brookhaven, develops the "headshrinker," a direct forerunner of PET.

Thallium-201 for medical use

BER scientists at Brookhaven (Elliot Lebowitz, Harold Atkins, and colleagues) develop a faster, more efficient method for producing thallium-201, leading to nuclear stress testing as a routine scan for heart imaging. By the 1990s, doctors will use thallium-201 about a million times a year, accounting for 13% of all nuclear medicine scans.

First PET camera built for human studies

Following several prototypes, Michael E. Phelps, Edward Hoffman, and Michel M. Ter-Pogossian at Washington University, with DOE and NIH support, build the PETT III to use advanced algorithms for computing three-dimensional images.



Development of fluorine-18 FDG for PET

Alfred P. Wolf (right), Joanna S. Fowler (not shown), Tatsuo Ido (middle), and other BER colleagues at Brookhaven developed and synthesized fluorine-18 fluorodeoxyglucose (FDG), a form of radiolabeled sugar, for PET imaging of glucose metabolism.

First shipment of fluorine-18 FDG to a hospital

Brookhaven sends F-18 FDG, a PET radiotracer, to the University of Pennsylvania, also a BER research site.