

Physician and nuclear medicine pioneer, Dr. Marshall Brucer, created head and neck, as well as half body manikins, for training. Above, Brucer poses with a few of the manikins he used for calibrating equipment used in thyroid treatment.



Marshall Brucer (1913-1994)

A pioneering figure in the field of nuclear medicine, and specifically at ORAU, Marshall Brucer's contributions significantly shaped the landscape of medical research and practice. Brucer coined the term "nuclear medicine" in the 1940s, a discipline that deploys radioactive substances to diagnose and treat disease.

Originally from Chicago, Brucer spent his most productive years, 1949-1962, as chairman of the Medical Division at the Oak Ridge Institute of Nuclear Studies, now Oak Ridge Associated Universities (ORAU).

His major focus was the development and application of radioactive isotopes. He led studies on

the use of radioactive iodine for diagnosing and treating thyroid disease, a practice that has saved countless lives. His most important work included the production and distribution of thyroid "phantoms" that were loaded with "mock iodine," a mix of barium-133 and Cs-137 patented by Brucer. He shipped these phantoms to medical facilities around the world where they were used to standardize and evaluate instrumentation and procedures.

Brucer also made significant contributions in radiology, a branch of medicine that employs sources of radiation to diagnose and treat medical conditions. Specifically, he played an important role in the design and use of Co-60 and Cs-137 teletherapy sources.

