

# 140 East Vance Road A Rich History...



# Constructed in 1943





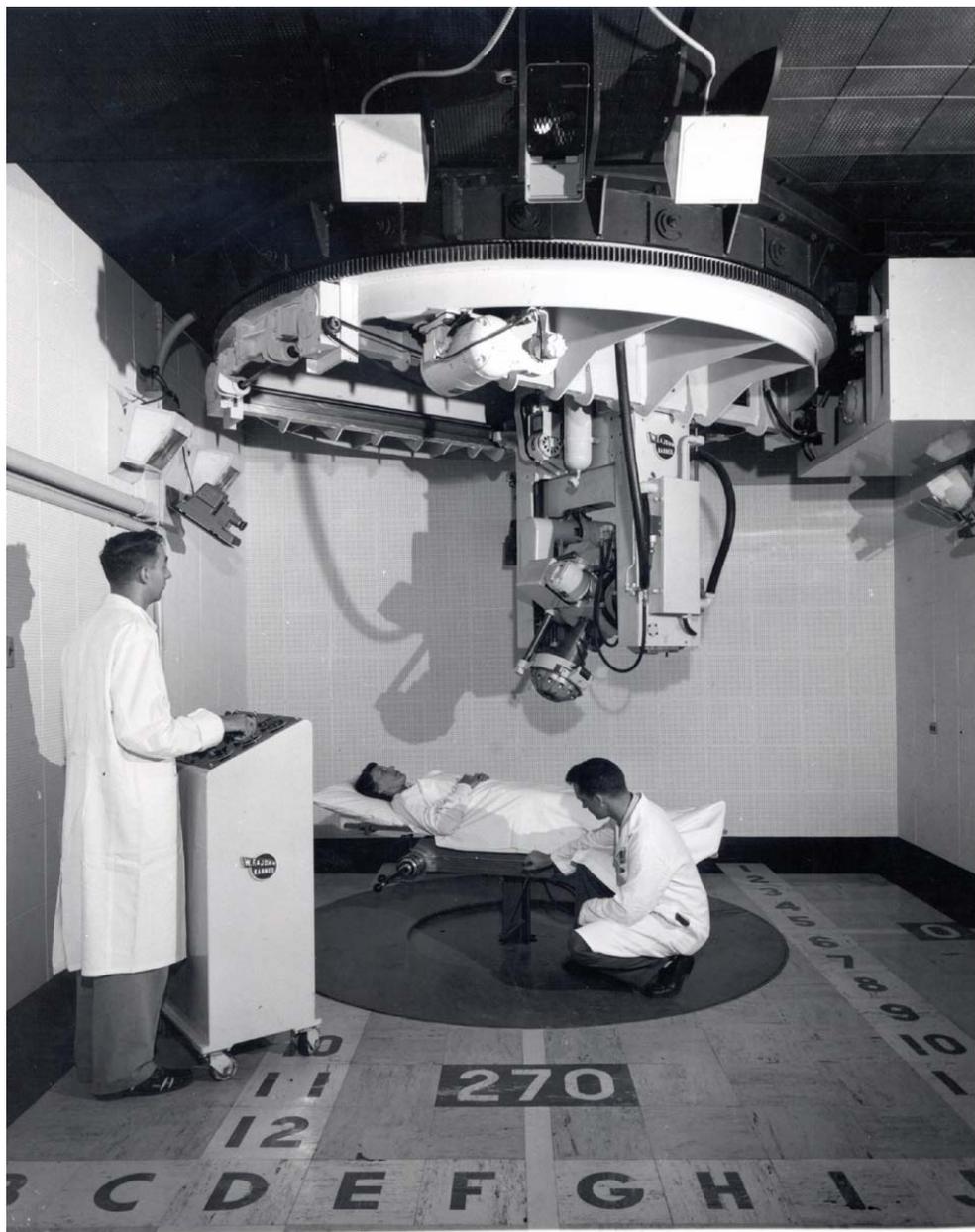
**The 3-  
story  
East  
Wing  
was the  
original  
Oak  
Ridge  
Hospital.**

# The 2-story West Wing was constructed in 1949.



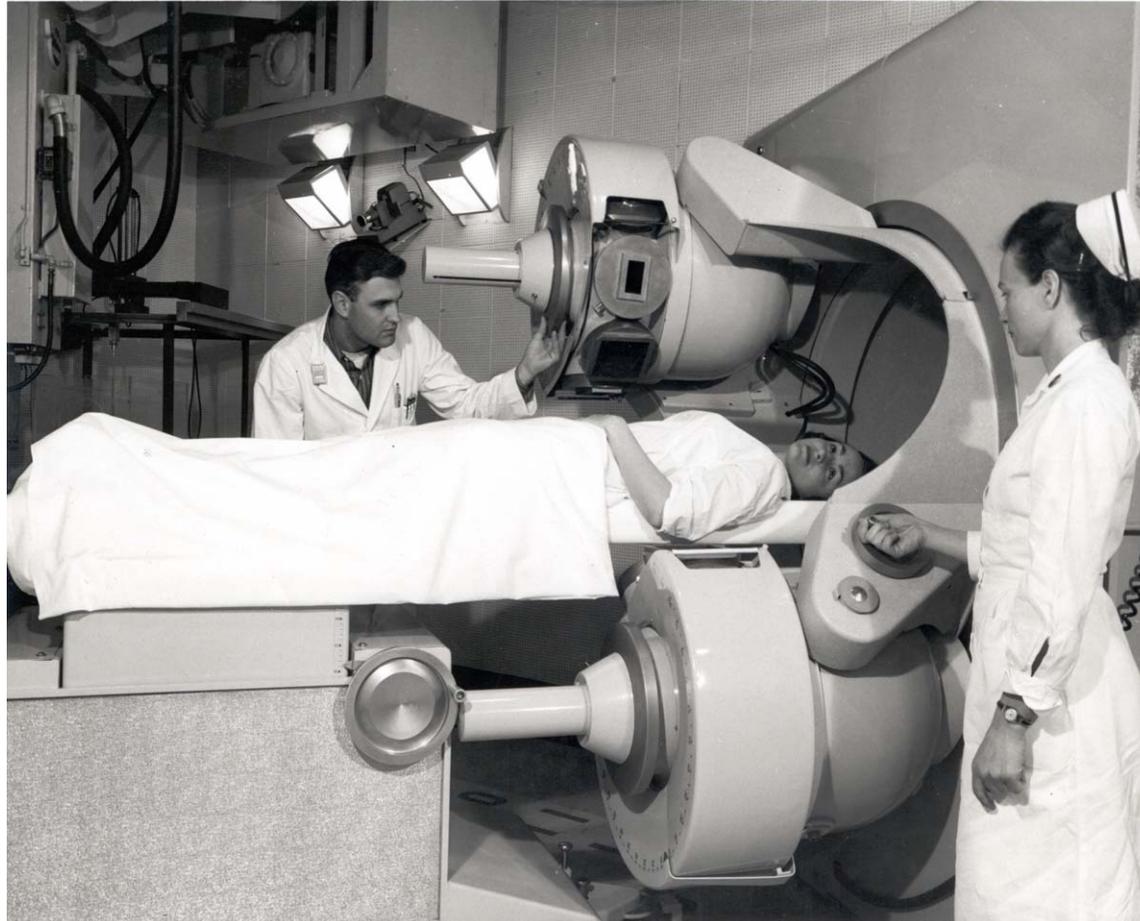


**A number  
of  
diagnostic  
tools and  
teletherapy  
machines  
were  
developed  
here.**



**This  
Cesium-137  
teletherapy  
machine  
was used  
to focus  
radiation on  
diseased  
tissue.**

**A revolving cobalt-60 teletherapy machine was developed here and then transferred to M. D. Anderson Hospital in Houston for clinical trials.**



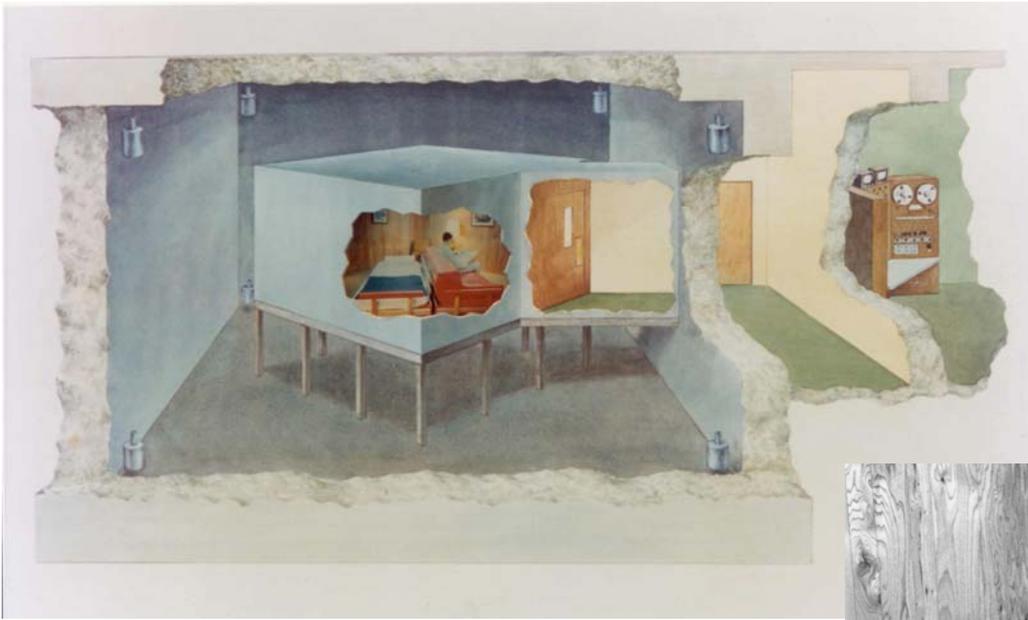
**Eleanor Roosevelt toured the ORINS  
Cancer Research Hospital in 1955.  
She visited with staff and patients and  
toured the research facilities.**



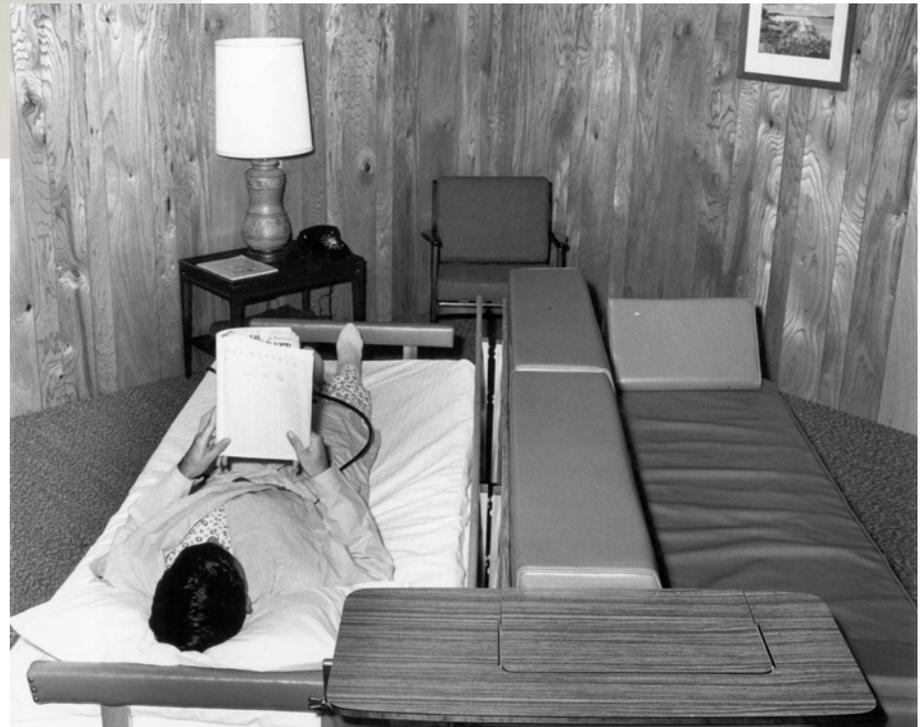
# Two facilities were built to treat whole-body cancers like lymphoma and leukemia.

Built in 1959, the Medium Exposure Total Body Irradiator, or METBI, used closed circuit TV and intercoms to talk with patients during treatment.

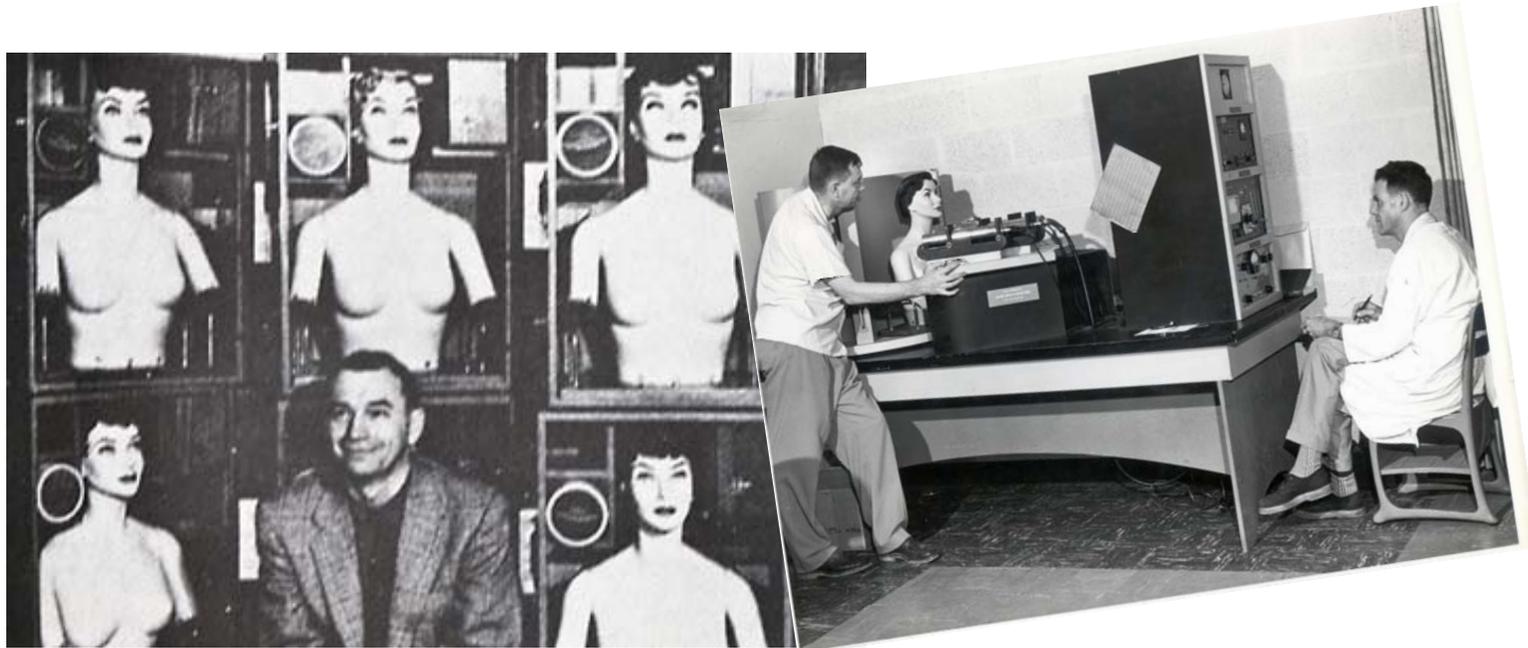




**The Low Exposure  
Total Body  
Irradiator, or LETBI,  
resembled a 1960s  
hotel room.**

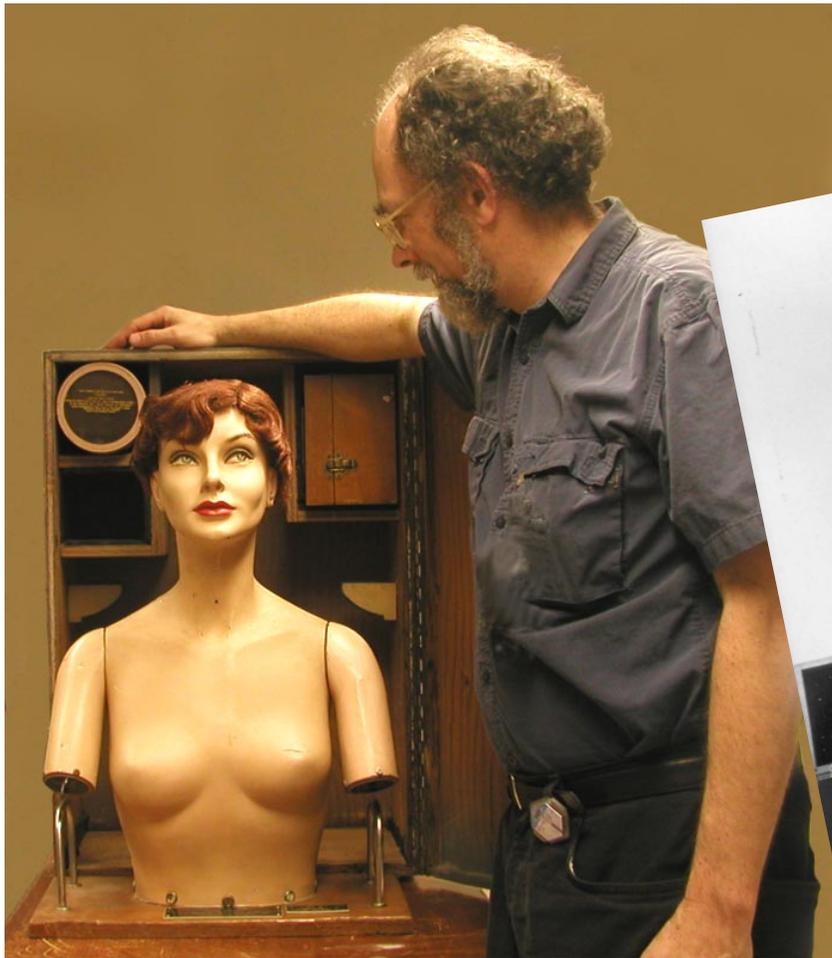


**Marshall Brucer, M.D., used a collection of store mannequins to implement a nationwide radioiodine uptake calibration program. Iodine-131 was used for the diagnosis and treatment of thyroid cancer.**



***Radioactive Iodine is still used today in the treatment of thyroid cancer.***

**Affectionately named Abigail, Bridget, Chloe, and so on, these mannequins traveled across the United States.**





**Installed in  
1963**

**The 60 ton, low-  
background,  
whole-body  
counter was used  
to measure photo  
emissions from  
the human body.**



**Prototype emission tomographic scanner, or ECAT, was used for 3-dimensional scanning of radioisotopes in patients.**



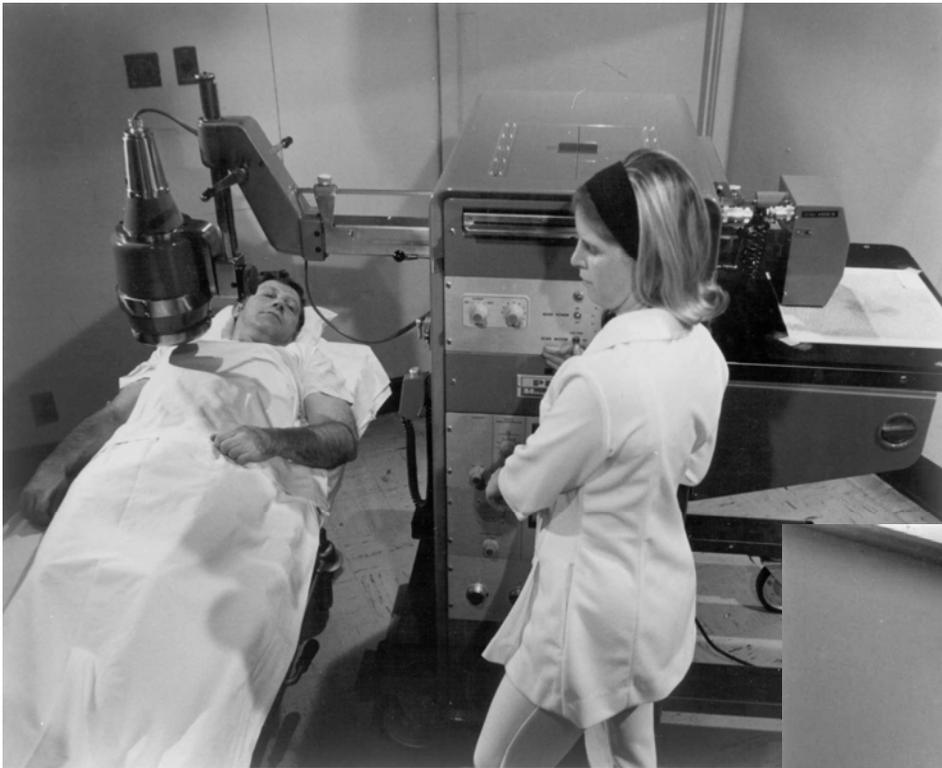
**The ORISE  
Beryllium Testing  
Laboratory was  
started at Vance  
Road. Now located  
at the ORISE South  
Campus, it is one of  
only five  
laboratories  
nationwide that can  
perform the  
lymphocyte  
proliferation test  
for diagnosing  
Beryllium  
sensitivity.**

**Tiny cotton-top tamarins were part of an ORAU research study. These tiny monkeys are the only species known to spontaneously develop colon cancer.**





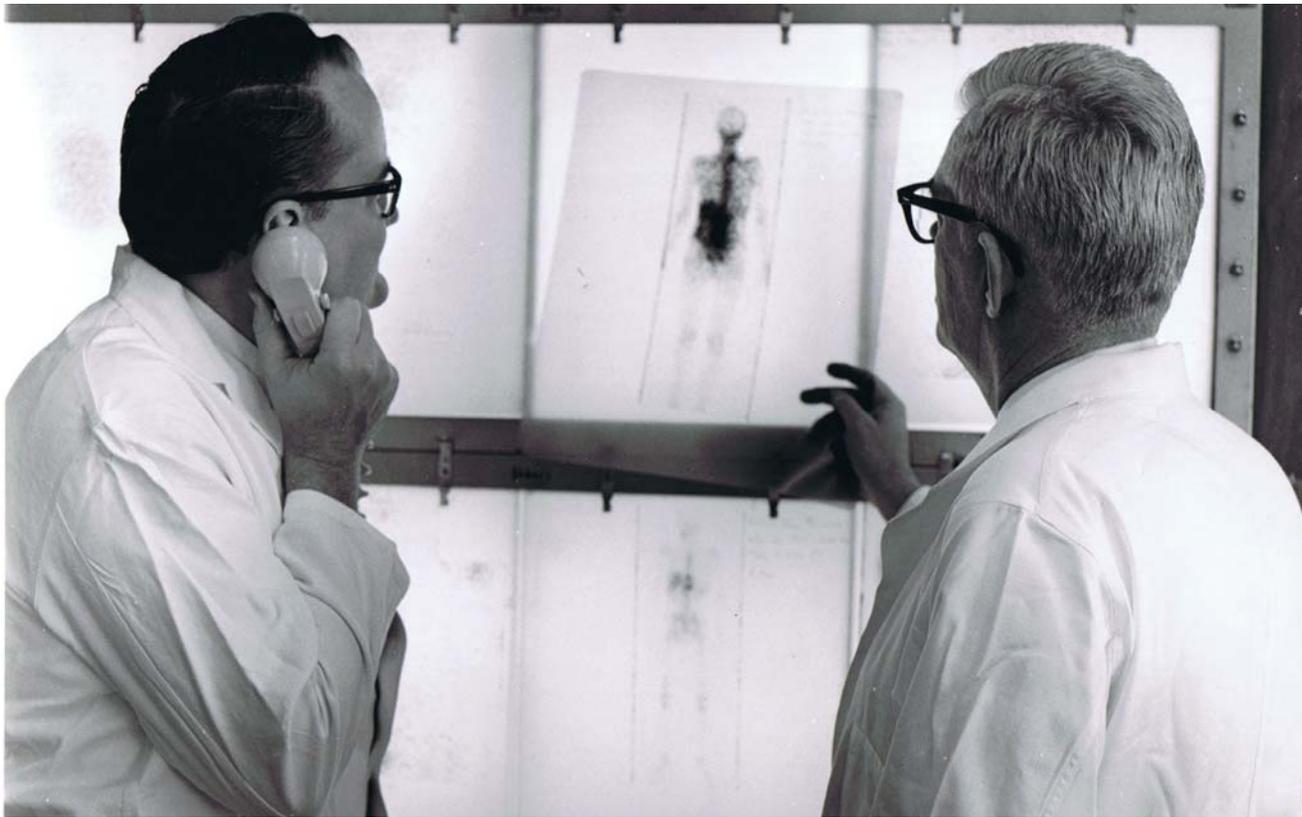
**The Radiation  
Emergency  
Assistance  
Center/Training Site,  
or REAC/TS, trains  
physicians and  
technical personnel  
in the medical  
management of  
radiation accidents.  
While it was started  
at 140 E. Vance  
Road, it continues  
today just down the  
street—connected  
to MMC.**



**ORINS researchers developed and tested a number of scanners to detect cancer in the body.**



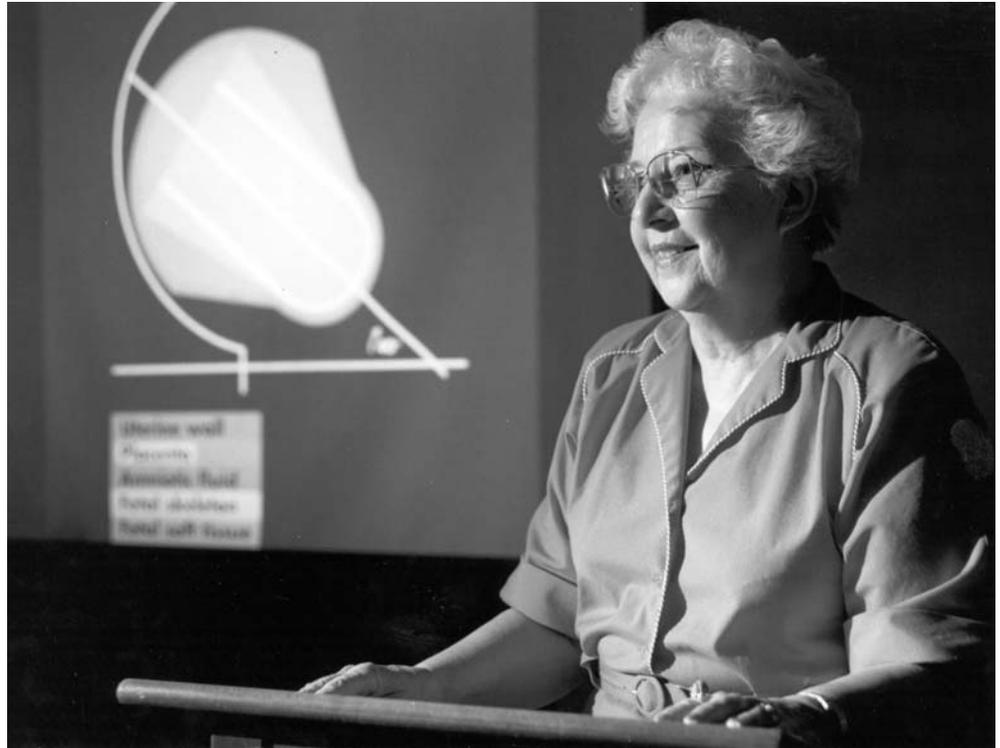
**Gallium-67 proved to be very valuable in locating soft tissue tumors. In the early, 1980s, it was also determined to be a diagnostic tool for finding postoperative infections.**



**The Center for  
Epidemiologic  
Research was  
created in 1977.  
Today, ORISE  
serves as the  
data center for  
the DOE Human  
Subjects  
Research  
Database and  
DOE's Radiation  
Exposure  
Monitoring  
System.**

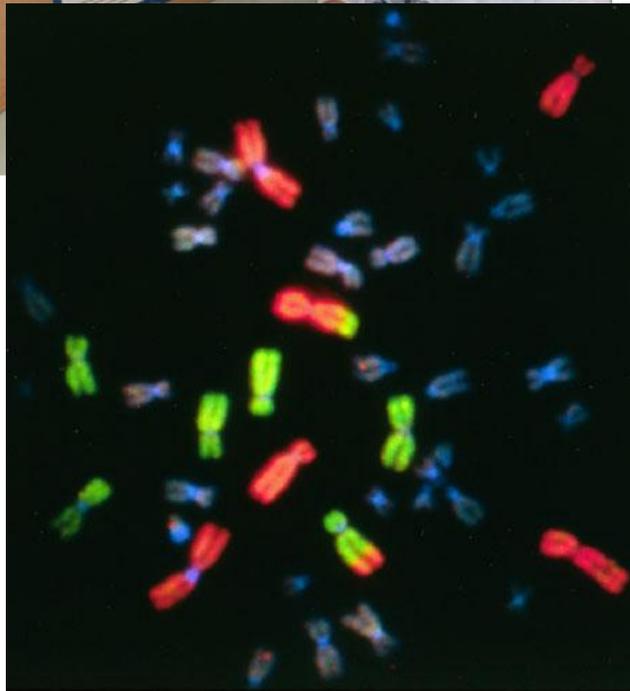
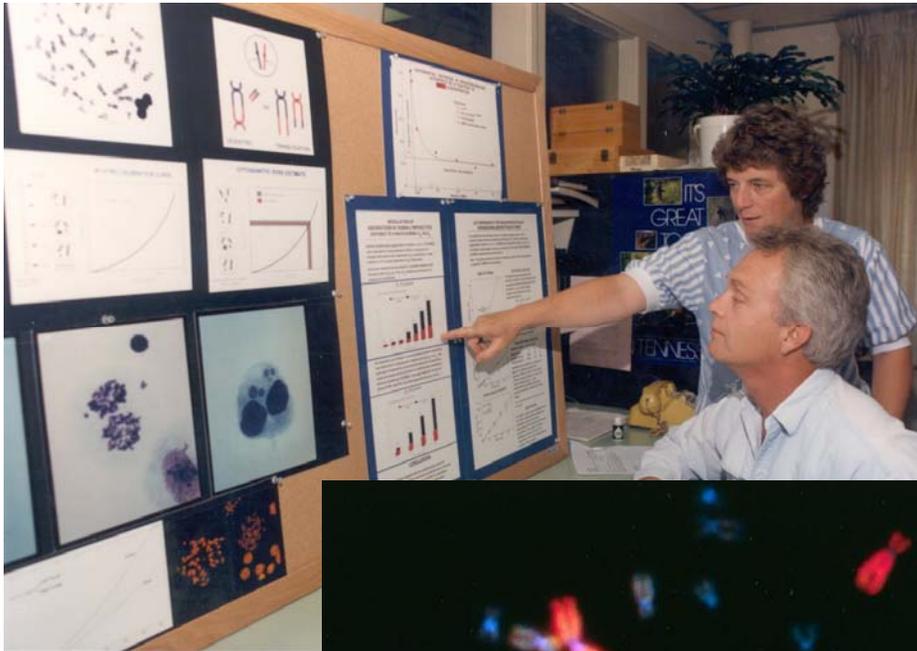


**The Radiation Internal Dose Information Center, or RIDIC, helped physicians estimate the dose to various organs of the body from medical therapies. Special work was focused on pregnancy models.**



**Dr. Fred Snyder shows a model of PAF, or platelet activating factor, discovered by the ORAU Biochemistry program. PAF plays a major role in tissue inflammation and various physiological areas such as reproduction and blood pressure.**





**Dr. Gayle Littlefield and the ORAU Cytogenetics team studied human chromosomes to determine radiation exposure. A new cytogenetics dosimetry lab is opening in the winter of 2007.**

**Vance Road  
also included  
an Electron  
Microscope  
Facility  
beginning in  
1968.**



**The Hymn to Life, a mosaic commissioned by patients and staff of the ORINS Cancer Research Hospital, hung at the front door of Vance Road from 1970 until it was moved to the Pollard Auditorium in 1999.**



ORAU Medical Division

