

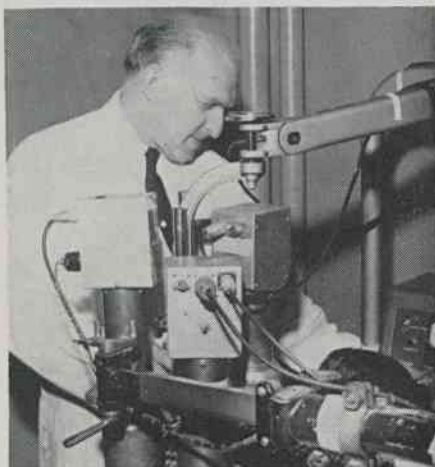


(Duke Photo by Sparks)

Dr. Reeves demonstrates image amplifier. These amplifiers are used to reduce radiation exposure to both patient and radiologist. The instrument requires about 75 per cent less current to get a satisfactory fluoroscopic image than does the conventional fluoroscope.

was at Duke Hospital that tests for study of the gastro-intestinal tract with isotopes were developed in conjunction with the Departments of Medicine and Surgery. With members of the Pediatrics Department, studies have been made of the use of radioisotopes in the diagnosis of congenital heart disease in infants and children.

Another major operation in the Isotope Laboratory focuses on research: development of the isotope fat test; development of the radioisotope test for kidney function; investi-



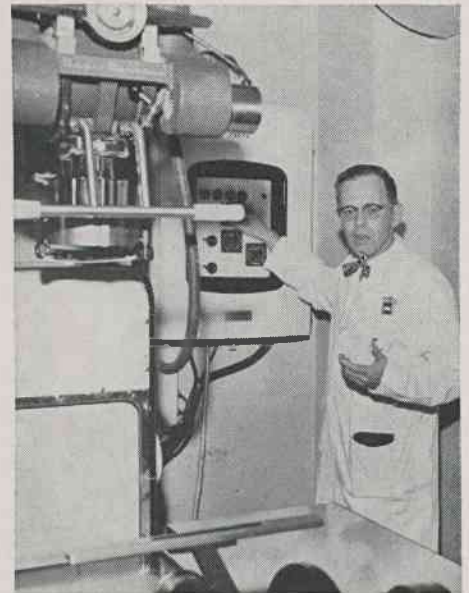
(Duke Photo by Sparks)

Dr. George Baylin with the isotope counter used in the study of kidney function.

gation, in conjunction with the Division of Dermatology, of the application of isotopes in the study of the function of the skin in health and disease. The Department of Surgery has collaborated in an investigation of the use of isotopes in evaluation of diseases of the pancreas. Studies have been made, also with the Department of Surgery, of the status of the gastro-intestinal tract in large groups of patients who have had gastric surgery.

One important function of the Isotope Laboratory is the training of both graduate physicians and technicians. For graduate physicians two courses have been given, each providing three weeks of intensive work in the Isotope Laboratory. At the end of this training the physicians are qualified to set up their own laboratories. With 6 students in each group thus far, the geographical range was from New Hampshire to Florida.

Evidence of the importance attached to training in this area is the fact that the physicist for the Duke Medical Center Isotope Laboratory, Aaron P. Sanders, is on loan for nine

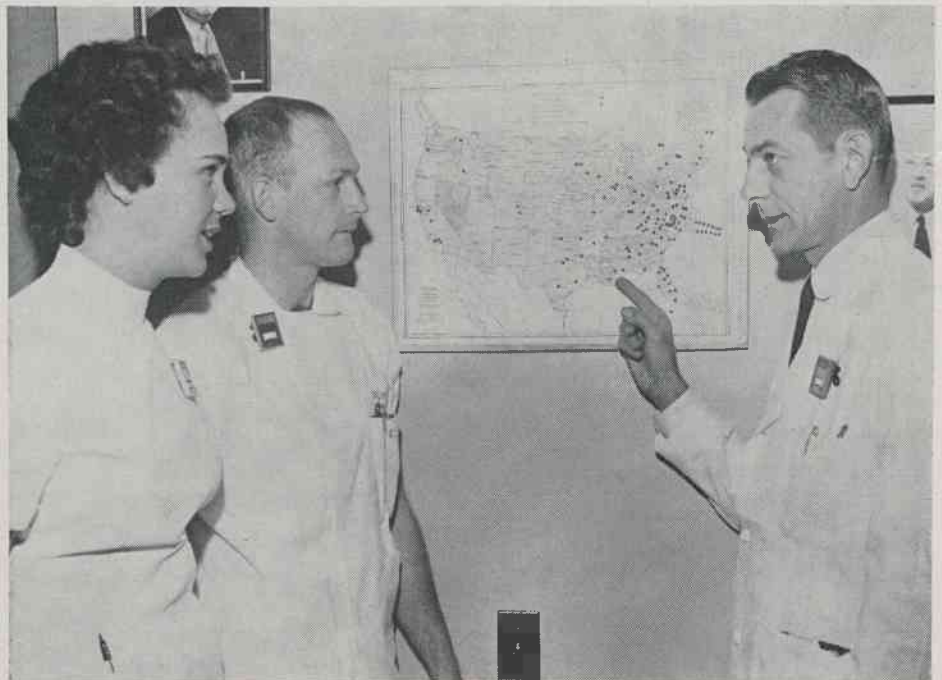


(Duke Photo by Sparks)

Dr. William F. Barry at the bi-plane angiographic unit. Used in congenital heart cases prior to treatment or surgery, this instrument takes two sets of fast x-ray pictures of the heart and great vessels after injection of iodide.

months to Argentina to help set up in that country a basic isotope program.

Angiocardiology, another field of work in the Department of Radiology, provides another tool for investiga-



(Duke Photo by Sparks)

John B. Cahoon, Technical Director of the School of X-ray Technology, points out to student technicians, Laura Smith and Conrad Rich, the geographical distribution of the School's graduates.