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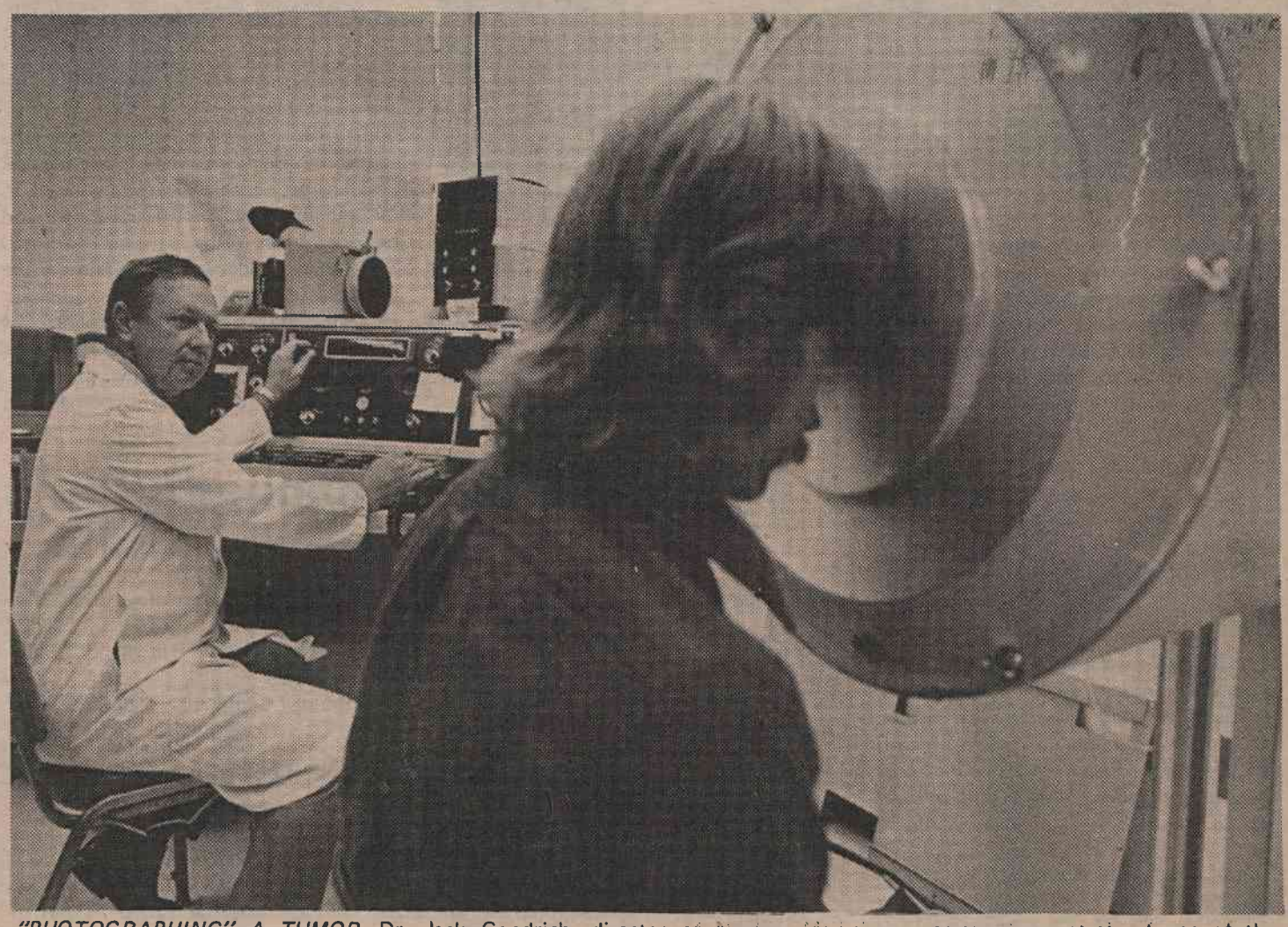
Successes Encouraging Chemotherapeutic Research

Drugs Thrown into Great War on Cancer

America has assigned a top priority to the conquest of cancer. The National Cancer Institute has chosen Duke as the site for a Comprehensive Cancer Center, one of the regional facilities that will lead the all-out effort to conquer this disease.

This is the second in a series of four articles by Miss Yvonne Baskin, medical writer in the Office of Public Relations, exploring the status of cancer research and treatment, with particular emphasis on some of the work under way at Duke.

This article deals with chemotherapy—the role drugs play in cancer treatment. The first article, in the Oct. 12 INTERCOM, dealt with surgery and therapeutic radiology. Subsequent articles will examine immunotherapy and research with viruses.



"PHOTOGRAPHING" A TUMOR—Dr. Jack Goodrich, director of Nuclear Medicine, operates the controls of one of the department's gamma ray cameras. The patient is given a dose of radioactive tracer material, then a gamma ray picture, similar to an x-ray, is taken of the area where a tumor is suspected. The technician here is positioned for phtographing of a brain tumor. *(Photo by Jim Wallace)*

A North Carolina man came to Duke in 1965 with acute leukemia. He was treated with two experimental drugs and the signs of cancer disappeared.

For five years he continued on the drugs, remaining healthy and active and watching his children graduate from high school and leave home. In 1970 the doctors decided to stop the drug treatments because of possible long-term toxic effects.

For three more years he continued healthy and disease-free. Then last spring his leukemia recurred, he did not respond to drugs and he died.

The man's case reflects both the progress and the limitations in the use of chemotherapy in the treatment of cancer.

"In 1965 we were only using one or two drugs and getting about 10 per cent of our adult patients into remission," said Dr. John Laszlo, professor of medicine at Duke. "Now we're using a combination of five drugs and 40 per cent are going into remission, and today these people have a better chance of this remission lasting longer.

"We say now that if a person survives for five years after diagnosis with no signs of cancer, he is cured," Laszlo said. "But a cure is hard to define because the cancer may recur years later. I don't think we should be discouraged by this, though. Fifteen years ago these people wouldn't have lived but a few months. We have to be thankful for what we've gained."

In the past 25 years, more than 40 drugs have been developed that are useful in the treatment of some type of cancer. Duke is one of 200 medical centers in the United States doing clinical investigations of drugs developed by the National Cancer Institute, by pharmaceutical research teams and by other researchers.

"Basically there are three situations in chemotherapy now," Laszlo said. "First there are the diseases which we know will respond to drugs. Prominent among these examples are various types of leukemia and lymphomas.

"Then there are the kinds of tumors for which we can't predict the response. Sometimes they will respond to drugs and sometimes they won't," he said. "These include recurrent and widespread breast cancer, colon and prostate cancer.

"Four or five of 10 may respond to drugs, and we don't know why," Laszlo said. "This is an area that needs research and it's one project that will be going on under the new Comprehensive Cancer Center.

"The third situation is the tumors that very rarely respond to drugs, and unfortunately, this is the most common classification," Laszlo said. "This includes such cancers as those of the lung and kidney. Surgery and radiation are still the major treatment for these tumors."

Since 1956, one type of tumor has stood as the "bright, shining light" in the field of chemotherapy. This is choriocarcinoma, a rare malignancy which arises from placental tissue—the "afterbirth"—after pregnancy. If untreated it rapidly spreads from the uterus to other parts of the body and is quickly fatal.

A 10-year clinical trail by the National Cancer Institute which ended in 1966 has shown that choriocarcinoma was uniquely sensitive to two drugs—an antibiotic called Actinomycin D, and Methotrexate, a "metabolic antagonist" designed to starve cancer cells by interfering with vital life processes.

In 1966 a center was set up at Duke to

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Dr. Anlyan To Lead AAHC

Duke's vice president for health affairs is the new president-elect of the Association for Academic Health Centers (AAHC).

Dr. William G. Anlyan will become the fourth president of the organization next fall. Its membership is made up of persons at the vice president or chancellor level who have senior administrative responsibility for academic health centers.

Anlyan has been on the AAHC Board of Directors since it was established in 1971. The current president is Dr. Edmund D. Pellegrino, vice president for health sciences at the State University of New York in Stony Brook.

AAHC membership represents most of the nation's 114 schools of medicine and 42 schools of dentistry, 32 schools of allied health and 58 baccalaureate schools of nursing, plus schools in other health fields including optometry, pharmacy, public health, veterinary medicine and graduate medical science education.

"The comprehensive scope of responsibility for health professions education represented by the membership, makes the AAHC uniquely qualified to address itself to many of the problems in health education which in turn affect the delivery of health care throughout the country," Anlyan said.

The association's objective, Anlyan said, "is to maintain active interrelationships among all of the health professions," adding that special liaison committees have been appointed to work with separate health professions associations.

For example, he said, the Liaison Committee for Public Health is chaired by Dr. Cecil G. Sheps, vice chancellor for health sciences at the University of North Carolina.

Major support for the association in this organizational phase of its development is coming from a five-year grant by the W.K. Kellogg Foundation.

Just two years ago Anlyan stepped down from chairmanship of the Association of American Medical Colleges (AAMC), the guiding organization for medical education in the United States.

He currently is chairman of the Coordinating Council on Medical Education, whose members represent the AAMC, the American Medical Association, the American Board of Medical Specialties, the American Hospital Association and the Council on Medical Specialty Societies.