

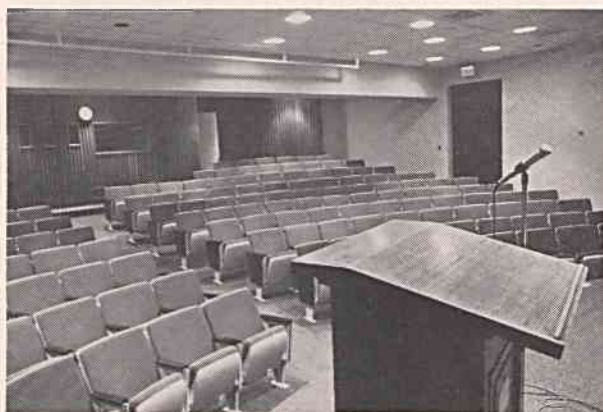
May I Have Your Thumbprint, Please?

Grants amounting to millions of dollars are pouring into the halls of colleges and universities to pave the way for a computerized society. At Duke University, for instance, the computer is well on its way to becoming as important to education as the chalk and blackboard.

The resources of one of the world's most up-to-date computation centers at the Research Triangle is pushing Duke, the University of North Carolina, and North Carolina State University further into computer-associated research. Over \$2 million has been invested in this Research Triangle facility to serve as education's "great brain."

The School of Medicine is finding the application of the computer almost inexhaustible. So is the College of Engineering. Other departments are quickly getting into the act.

The use of the computer for advances in medical technology is growing by leaps and bounds. Dr. William Anlyan, dean of the School of Medicine, announced several months ago plans to program the entire school's library.



The amphitheatre is open for business! The seats are in, the carpeting down, the stage set, and the colors schemed. Those who recall the steep steps, the uncomfortable seats, the difficulty audiences had in hearing speakers, and the poor light associated with the old amphitheatre should find the features of the new one very appealing. Special features of the new amphitheatre include upholstered seats, a carpeted and gently sloping floor, an acoustically tiled ceiling that sports television monitors (not installed when pictures above were taken), special lighting, a stage designed with numerous conveniences for speakers, and a visual aids booth.

But more intriguing is the plan to have incoming patients register with the computer. Instead of their signature, the computer would be given their thumbprint to seek out their records and deliver them to the doctor within a few seconds.

Dr. Trevor Williams, associate professor of both mathematics and community health sciences, is using a \$115,000 grant from the National Institute of Health to refine a mathematical formula which may solve some unanswered questions about infectious diseases.

The formula, he believes, may be used to calculate the concentration of germs it takes to make

the carrier become contagious; the number that will cause him to show clinical symptoms of the disease, and the number which will cause death.

A project being undertaken by medical and engineering authorities proposes to make the computer help the doctor diagnose heart diseases in children.

Many young children are not strong enough to undergo exploratory operations where diseases are suspected. The doctors and engineers hope to use wires taped to the surface of the body to record electrical impulses which would be interpreted by the all-knowledgeable programmed computer.

Known as the "TUCC," the Triangle Universities Computation Center is a non-profit, high-speed computer facility jointly operated by the three large universities in the Research Triangle area. The center is designed to provide computer instruction and research service to the nearly 30,000 students and several thousand faculty members and administrators at Duke, the University of North Carolina at Chapel Hill, and North Carolina State University in Raleigh.

The center was established last winter. Its development is already almost two years ahead of original schedules.

Professional News, Continued



Roy T. Parker

and chairman of the Department of Obstetrics and Gynecology, will enable Duke physicians to make early diagnosis of the tumor. Although trophoblastic neoplasms are moderately rare tumors (about 500 new cases are found each year in the U.S.), they run a rapid course ending in death if not treated in time; and finding them requires the screening of almost 20 times as many patients. The laboratory will provide community physicians throughout the southeastern part of the United States with rapid, accurate tests of gonadotrophin excretion (a hormone produced by the tumor and found in the urine) in patients suspected or found to have the tumor. Also named in the Duke project are Dr. C. Donald Christian, associate professor, and Dr. Charles B. Hammond, an instructor. ● DR. JOHN RECKLESS, assistant professor of psychiatry, has returned from an extended European trip, during which he attended several medical conventions. Included in his itinerary were the Sixth International Congress of Psychiatry, Edinburgh, Scotland; the International Congress of Psychotherapy, Germany; the World Congress of Psychiatry, Madrid, Spain; and the Twentieth International Congress of Ophthalmology. ● The Department of Psychiatry announced the appointment of two new instructors in psychiatric social work in the Division of Child Psychiatry, LEAH ROSE WILLIAMS and MRS. ERIC PFEIFFER. Miss Williams was previously a psychiatric social worker at South Eastern Louisiana State Hospital in Mandeville, and Mrs. Pfeiffer was employed as acting chief of social work in the Division of Child Psychiatry at the University of Kentucky Medical Center in Lexington.

● The combined efforts of medicine and engineering in providing better diagnosis of heart ailments in children was described in a paper presented by two Duke scientists, DR. MADISON S. SPACH, an associate professor of pediatrics, and Roger Barr, a graduate student in electrical engineering, at a conference in Bratislava, Czechoslovakia. The technique specifically mentioned in the paper concerns a method of measuring the surface electrical voltage in a patient's body. With these measurements recorded on a magnetic tape, they can be fed into a computer and analyzed rapidly. Having digested something like 250 electro-cardiograms, the computer can, within about 20 minutes, produce a sort of contour map which shows the electrical function of the heart. One particular benefit of the technique described is in giving doctors a means of evaluating the abnormal workload on a defective heart. ● The following appointments were announced by the School of Nursing, effective September 1: PATRICIA KENNEDY, instructor in medical/surgical nursing; DIANA FOGLEMAN, instructor in fundamentals of nursing; ANN BOHNET and BEVERLY FLINT, instructional assistants in pediatric nursing. Also announced were the resignations, effective August 31, of MRS. PHOEBE AHLGREN, assistant professor, and RUTH S. HARRIS, assistant professor and director of the Division of Medical/Surgical Nursing. RUBY WILSON, assistant professor, is on a year's sabbatical leave, and JANET CAMPBELL, assistant professor, is on a leave of absence working on her doctorate in public health nursing at the University of North Carolina at Chapel Hill.



Madison S. Spach