



DR. MELVYN LIEBERMAN

## Prof Sets Study For Tokyo Site

More than 40 Japanese and American investigators will be studying the cellular make-up and natural development of the heart muscle in Tokyo next week thanks to the foresight and interest of a Duke physiology professor.

The bilaterally-sponsored seminar, "Developmental Aspects of Cardiac Cellular Physiology," was planned and established by Dr. Melvyn Lieberman, in cooperation with Dr. Toyomi Sano, a professor at Tokyo's Institute for Cardiovascular Diseases.

One of the areas of research Lieberman hopes will be introduced at

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# Ob-Gyn Clinic Speeds Up Patient Service With Computerized Appointment System

Women who've come to be treated at Duke Hospital's obstetrics and gynecology (ob-gyn) outpatient clinic in the past have had to sit for as long as half a day waiting for a doctor to be free.

Not any more.

The clinic has now introduced a computerized appointment system that ends long waits for women who take advantage of it. It also gives most patients their choice of doctors for the first time.

Bruce Gebhardt, administrative assistant in the Ob-Gyn Department, remembers well the queue of patients that formed at the clinic every morning.

"Before, it was 'get in line at eight o'clock and wait,'" he said.

Those who came first were served first. And those who came last, sat, Gebhardt added.

"I've seen people wait five or six hours" before a doctor could see them, he recalled.

The new system prevents such a situation. It works like this, Gebhardt explained:

A patient phones the clinic to set up an appointment. The receptionist who takes the call checks to see which doctors are on duty and which have time available on the date requested.

The patient chooses a doctor from among those not already booked up. Finally, on the day of the appointment, she arrives at the clinic just a few minutes early—instead of crowding into line at 8 a.m.

"Some people might think a computerized system would lead to a factory-like atmosphere," Gebhardt noted. "But on the contrary, it frees our people from a lot of paper work and

gives them more time to spend with the patients."

Eventually, the system will automatically print out a reminder card two weeks before the appointment which will be mailed to each patient.

Women who come in without appointments will still be seen, he said. But if their problems aren't acute, they'll be seen only after those who've phoned ahead. And they may be asked instead to make an appointment and come back later, Gebhardt explained.

"We've got to discourage walk-ins—people who have a routine problem, or who just happened to be in Durham, or who were visiting someone in the hospital and decided to drop in," he stressed.

About 40 per cent of the 120 or so outpatients seen in the clinic daily had been walk-ins, Gebhardt said.



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## With Aid of Modern Equipment

# Surgical Replant Team Saves Severed Digits

By David Williamson

Eighteen-year-old Doug Rushton, a recent high school graduate from Greenville, S.C., was earning money for his freshman year at Clemson University by working on a road crew when the accident occurred.

As he adjusted the engine of a steamroller in the hot South Carolina afternoon, the large machine which packs asphalt into roadbeds lurched a few inches, and Doug fell toward the unprotected cooling fan.

The whirling blades sliced into his

right hand, severing his thumb, making deep cuts into his ring and index fingers and leaving his little finger dangling by a thin flap of skin.

Co-workers rushed him to the Emergency Room at Greenville Memorial Hospital along with his amputated thumb.

The physician on duty who treated the young man knew of the highly specialized replantation work being done here 250 miles away. Coincidentally, both Mr. and Mrs. Rushton had read a story that same day

in the Greenville newspaper about Paul Stewart, a Fayetteville, N.C., youth who had had a similar accident and whose thumb was saved through surgery at Duke.

Parents and physician agreed that every attempt should be made to save the boy's fingers. A small chartered plane carried Doug and his father to Durham.

Surgery began at seven o'clock on Friday and lasted for 16 hours. By 11 a.m. Saturday morning all digits, including the severed thumb, had been

replaced, and not long afterward, a team of tired orthopaedic surgeons went to bed.

As recently as four years ago, an operation such as the one Douglas Rushton underwent probably would have been unsuccessful, and the young man would have had to adapt his lifestyle to compensate for his injury.

Now, with the aid of new microsurgical equipment made available recently and new microsurgical techniques currently being perfected, surgeons are doing what they once thought impossible.

"The reason we've been able to replant severed digits has been the development of the operating room microscope and sutures which are small enough to join together arteries and veins no larger than one millimeter — about the size of the lead in a mechanical pencil," said Dr. James Urbaniak, associate professor of orthopaedic surgery at Duke and head of the medical center's replantation team. (Other members of the team are research associate Panayotis Soucacos and orthopaedic residents Robert Adelaar and Donald Bright. Dr. J. Leonard Goldner, a hand specialist and chairman of the Division of Orthopaedic Surgery, serves as consultant.)

The operating room microscope, he explained, makes a tiny vessel seem as much as 40 times larger during surgery, and the tiny sutures, a surgeon's "needle and thread," have been made small enough so that the stitches won't block the flow of blood in and out of a digit which has been reattached.

Each specially designed microscope ("diploscope") has twin binocular heads, one for the team leader and one for his assistant, usually a resident. Foot pedals provide ease in focusing.

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**PRECISION WORK**—Bundled up like Bedouin tribesmen to decrease the chances of infection, members of the Orthopaedic Replant Team at the medical center rejoin severed arteries and veins in the fingers of an accident victim. A double-headed microscope allows the surgeons to see and sew together tiny blood vessels no larger in diameter than the lead in a mechanical pencil.

