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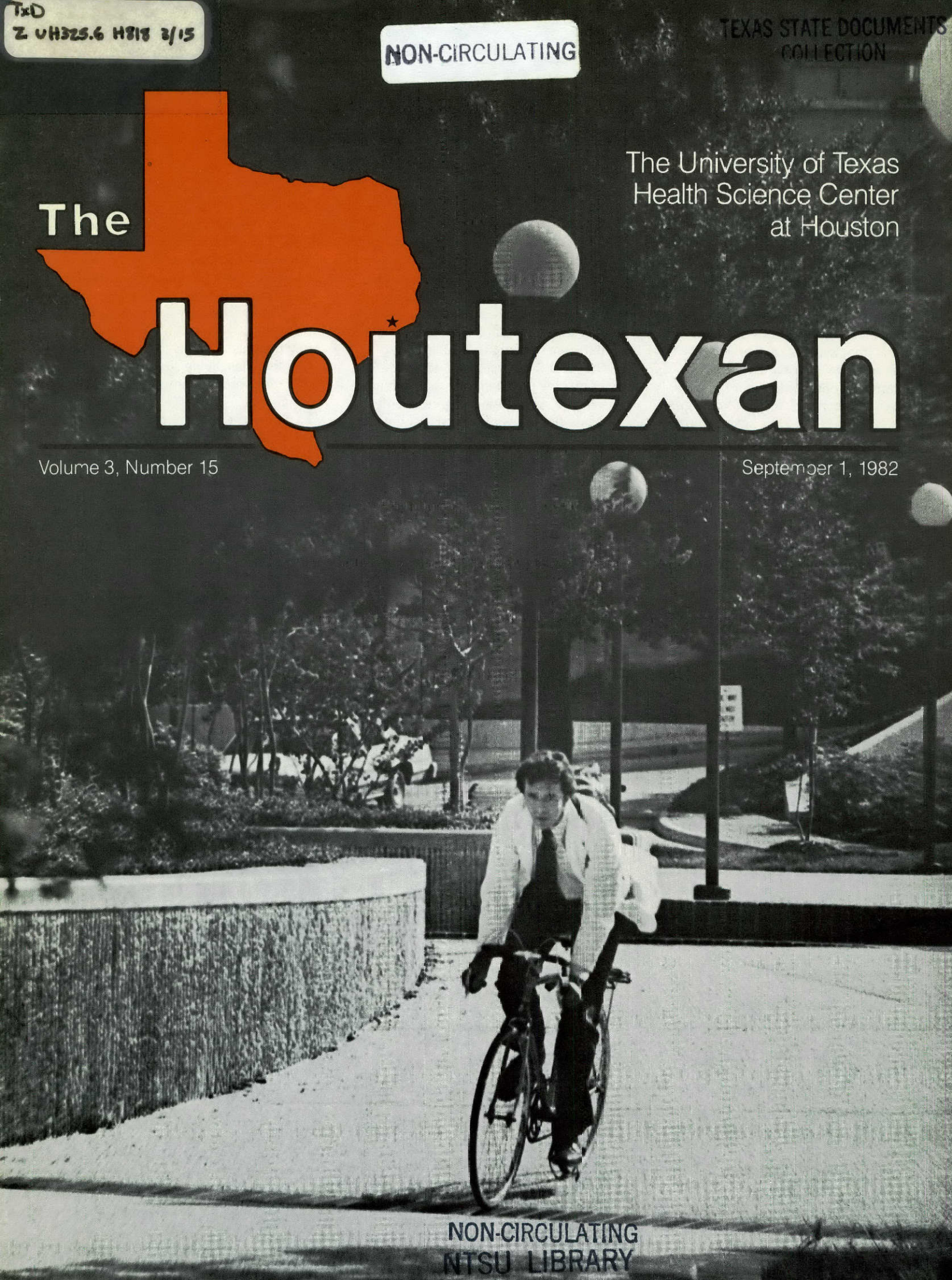


Texas Kidney Institute now open, offering comprehensive care

By David Moore

The Texas Kidney Institute (TKI), the first such totally comprehensive center in the country, formally opened its doors July 29.

The kidney institute took about 10 months to build. It has 53 beds, 12 dialysis stations, 33,000 square feet of floor space and cost $8.3 million. William E. Young of Hermann Hospital oversaw construction of the institute.

"This is the 25th hospital project I've done," he said, "and this is probably the best one I've ever done. I like the feeling of it, the colors. It's a very classy feeling, it's not real flashy. I think it will have a lot of very positive impact on the patients who come up here for care."

Patients of all ages with all types of kidney disease can be treated in the TKI.

Doctors, staff, kidney patients, and other visitors filled the new ninth floor of Jones Pavilion during a July 29 open house. One highlight for many was the chance to see and hear about the Mox-100 Transport Module.

"This machine is responsible for keeping kidneys viable for up to 72 hours," Diane Mintz said. "Once somebody is declared brain dead and the family gives its consent for donation, we try to find a recipient who needs that specific type of kidney. If we don't think we're going to be able to use them, or find a recipient within 24 hours, we put them on this machine. They're kept at nine degrees Centigrade right now. You can feel the tubing; it's really cold.

"This way we can transport kidneys to where the recipient is or keep them if we can't use them within 24 hours," she said.

How often is it used? someone asked.

"I would say it's usually used about twice a month. We do try to use the kidneys in Houston first.

"We did once have a rare type — I'm not sure what it was — and they were given to Japan," she said. "No one in the whole nation could use the kidneys, and it just so happened that somebody in Japan needed a kidney."

The institute has one Mox-100 now and has another on order, said Mintz, who is a nurse.

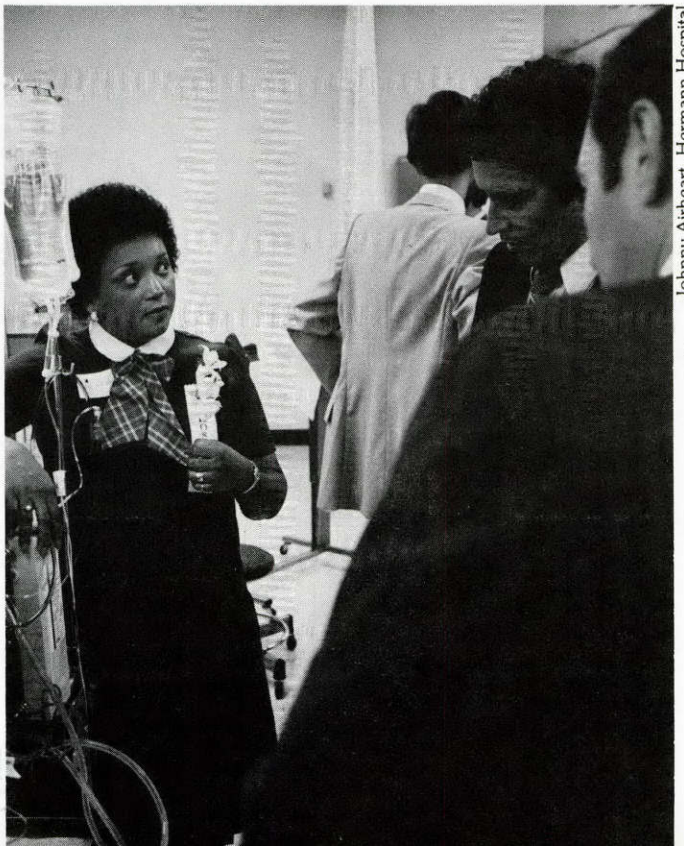
Its hardware aside, the TKI joins the UT Departments of Pediatrics, Internal Medicine and Surgery in collaboration with health care professionals at Hermann Hospital.

Twenty beds in the institute will be devoted to the medical problems of kidney patients. The TKI has dialysis beds and the latest in life support systems and monitoring equipment for acutely ill patients.

For patients with chronic end-stage renal problems, the 19-bed surgery and transplant portion of the institute will offer medical and nursing facilities as patients wait for kidney transplants from living related or cadaveric donors.

There are four beds in the intensive care unit and 10 in the pediatric unit.

Dr. Thomas E. Andreoli is medical director of the TKI. Dr. Edward J. Weinman is director of TKI's nephrology division and its dialysis program. Dr. Barry D. Kahan is the institute's director of surgery/transplantation, Dr. Eileen Doyle Brewer is director of pediatric nephrology, and Dr. Susan B. Conley is associate director of the dialysis program and pediatric nephrology.



Johnny Airheart, Hermann Hospital

AN INSIDE LOOK at the Texas Kidney Institute was given to visitors at the open house July 29 as staff showed off their new facilities on the ninth floor of Hermann Hospital's Jones Pavilion.

Houtexan

is published monthly by the Office of Public Affairs. The University of Texas Health Science Center at Houston, Box 20036, Houston, Texas 77025 Offices are located at 1100 Holcombe Blvd., Room 11.140. (713) 792-4266. **Roger J. Bulger,** M.D., president, **Joe Sigler,** executive director of public affairs.

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Cover: Back to school, by Cathy Gubin.

First pregnancies confirmed here from in vitro fertilization

By Joe Sigler

Physicians at the Medical School have confirmed that two patients are pregnant as a result of the school's in vitro fertilization (IVF) program.

Dr. Berel Held, chairman of the Department of Obstetrics/Gynecology, said in late July that the pregnancies were continuing normally at the end of the first three months — one in the Houston area, one in the Pacific Northwest.

Dr. Martin M. Quigley, director of the department's Division of Reproductive Endocrinology and Infertility, is leader of the IVF team that brought together the wife's egg and the husband's sperm in a laboratory and then reimplanted the developing embryo into the wife at Hermann Hospital.

Dr. Don Wolf is director of the IVF embryo transfer laboratory and was responsible for accomplishing fertilization of the egg in the laboratory. Dr. June Z. Kendall supervises the hormone measurements necessary for the procedure. Dr. Nabil Maklad of the obstetrics/gynecology ultrasound laboratory was responsible for monitoring egg development in the mother prior to ovulation.

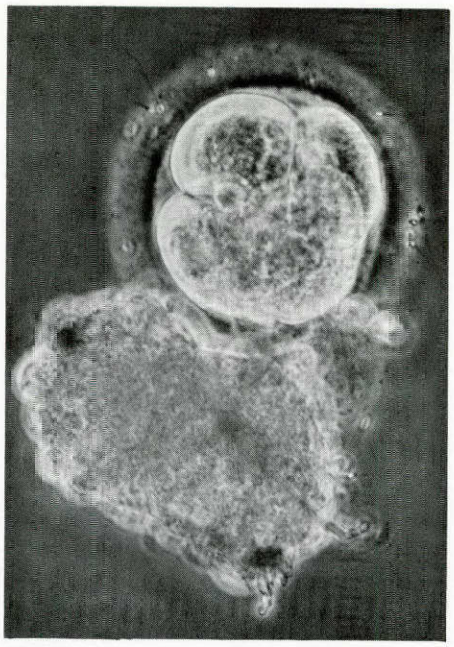
The first patients began treatment in the IVF program here in July of 1981. Since then, 51 patients have undergone timed laparoscopies — commonly called "band aid" or "belly-button" surgery, the procedure used to recover eggs from the woman's ovary for fertilization.

Uniting a woman's egg with her husband's sperm in a glass container in a laboratory gives the procedure its name, in vitro fertilization. "In vitro" in Latin means "in glass." This also gives rise to the common term, "test tube baby."

Quigley explained that more than one egg was recovered from some of the patients and that fertilization was attempted on 77 eggs.

Fertilization — the successful uniting of the egg and sperm in the laboratory — took place in about 70 percent of the trials, Wolf reported.

Of these 52 fertilizations, 47 of the eggs developed normally and were transferred to the woman's uterus, usually two days after fertilization. This transfer is a procedure similar to the insertion of an intrauterine device (IUD) for contraception.



SUCCESS — An examination under the microscope shows an embryo that has developed normally to the four-cell stage at 48 hours after fertilization in the laboratory. This is magnified 200 times.

Failure of the embryo to adhere to the wall of the uterus or otherwise develop normally has been a major problem facing IVF researchers here and elsewhere. Worldwide the present success rate for in vitro fertilization is between 10 and 20 percent per treatment cycle, and the current percentage success rate in the program here is within that range, Quigley said.

Of the 51 patients who underwent laparoscopy, 29 subsequently underwent embryo transfer, and three pregnancies resulted. One of the pregnancies ended in an early spontaneous abortion (miscarriage).

The researcher emphasized that all normally fertilized eggs were reimplanted and he said that in no case was a fertilized egg reimplanted in a patient other than the one from whom the egg originally was extracted.

To provide the greatest chance for successful fertilization and maturation, an egg must be obtained immediately prior to ovulation. Fertility drugs are administered to the patient to aid in precise timing of ovulation, Quigley said. Ultrasound examinations assist in predicting the time of ovulation and blood tests are made to check for hormones indicating the approach of ovulation.

The entire IVF procedure involves an eight-to-10-day treatment course primarily as an outpatient, with one-to-three days' hospitalization for egg recovery and embryo transfer.

The IVF program here is one of the few treating patients in the United States. The first baby conceived through IVF and born in the U.S. was delivered in Norfolk, Va., in December 1981. The world's first IVF baby was Louise Brown, born in England in July 1978.

The group here has received more than 2,000 inquiries. Those who meet all criteria for treatment are invited to participate in the order in which their medical records are received.

Patients must be married; the woman must be under 35; she must be unable to become pregnant normally because her fallopian tubes (the normal conduit for the egg from the ovary to the uterus) are missing or irreparably blocked; and there must be no other infertility factors.

Interested patients may inquire by writing to the Department of Obstetrics/Gynecology, 3.270 MSMB or by calling 792-5959.

Others on the team include: Dr. Cecilia Schmidt, Dr. Pedro Beauchamp and Dr. Susan Pokorny, of obstetrics/gynecology; Technician Robin Buchloz in the ultrasound laboratory; Technicians Pramila Dandekar and Joe Sokoloski in the embryology laboratory; Technicians Stephanie Gilbert and Susan Wilbourn in the hormone laboratory; secretarial staff members Marjorie Stringer and Nancy Mann; Nurses Roxanne Watkins, Shelly Klatzkin and Margaret Sessons; and Clinical Coordinator Sylvia Pace-Owens.

Researcher, students band together using gulls to monitor bay

By David Moore

SOUTH DEER ISLAND — Nests are scattered over much of this small, natural island in Galveston Bay. Brown and black eggs are three to a nest in many; others contain only the broken shells of their former occupants.

Dr. Carl Hacker is snooping around among the nests. He bends over, reaches into a thick tuft of grass and pulls out a young, gray, gangly seagull.

"Too young," Hacker says, and drops the gull back in its nest.

Hacker's looking only for birds that are a certain size, about three weeks old. As he advances on one, it squeals and tries to run. He snatches it up. Holding the bird upside down, he puts a small aluminum band around one of its legs and closes the band with a pair of needle-nose pliers. Then he drops the bird back in the grass and moves on.

The work is going a little slowly today. It's early in the banding season and many of the young are not yet the right size.

But in two weeks, said Hacker, an ecologist, "it's going to be a piece of cake to get 300 or 400 birds in just a couple of hours."

At the height of the banding season, Hacker and a boatload of graduate students will arrive at the island early in the morning twice a week. Two teams will band.

Today, on the other hand, is only the first banding trip of the season. Just 100 young birds will get bands today, as parent gulls screech disapprovingly from above.

Although chasing down the young gulls is fairly simple — they are born to fly, not run — Hacker and company pursue with care today: to avoid stomping on the smaller, recently hatched gulls and the unhatched eggs that remain. There are also, Hacker mentions casually before going ashore, a few rattlesnakes on the island.

But no one among his crews has ever been bitten. And the minimal risk is, Hacker thinks, well worth it. In recent years, five theses and four research papers have come out of work here. Not to mention a number of good tans.

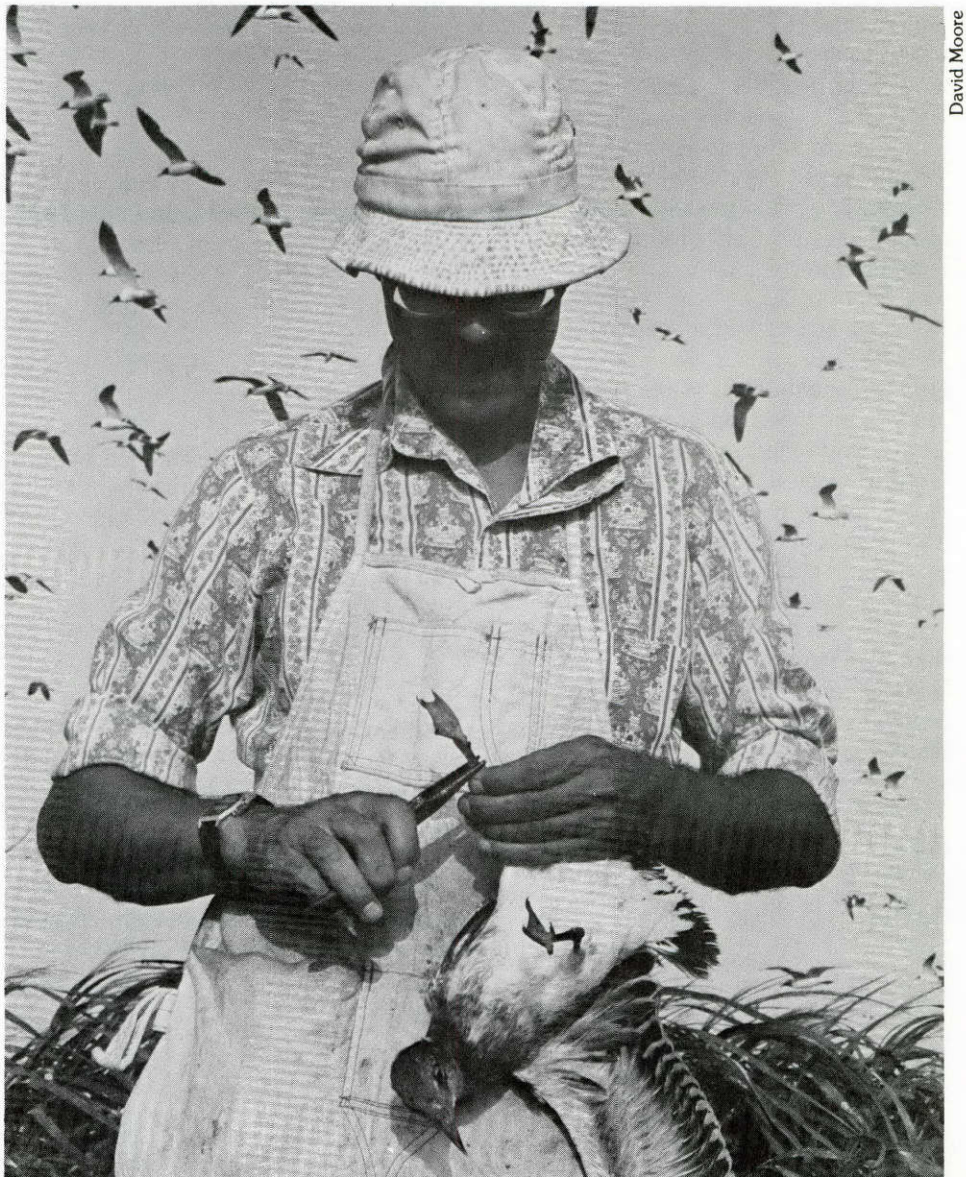
Hacker has been coming to this island, to band and keep track of the seagulls that nest here, for 10 years. Low budget research, it's taken just some gas in the school boat, a few student volunteers and some lab time to get a payoff: research that tells us something about how we're treating this bay, Hacker says.

An associate professor at the School of Public Health, Hacker is particularly pleased with the latest journal article to come off of this island. That paper showed that lead levels in the gulls declined from 1977 to 1980, the same period in which unleaded gasoline came into wide use.

Hacker interprets the decline as evidence that the amount of lead — and other pollutants in the environment — can be reduced if man makes the effort.

In the case of lead, the payoff for reduction could be significant, he says, since lead has been shown to retard the learning ability of young children when they eat it in peeled paint or inhale it from leaded gasoline car exhaust.

But the scope of his work is wider than just lead, he says: by banding the



David Moore

A STOIC YOUNG SEAGULL submits itself to being banded by Dr. Carl Hacker as elder gulls swoop overhead. Hacker and students have banded thousands of gulls on South Deer Island over the past 10 years, learning through the research there about environmental trends in the bay.

gulls' young and observing their nursery, he hopes to keep on top of environmental trends in the bay.

"We're using the gulls sort of as a canary in a coal mine, as an indicator species," Hacker said. "They are a measure of the health of the Galveston estuary environment."

He added, "Often what happens in environmental studies is that a change is sensed but since we often aren't recording before we sense the change, we're really hard-pressed to specify what's causing it."

The gulls offer a data base. Ten-years' worth so far.

Why the common seagull rather than, say, whales? Or shrimp?

For one thing, Hacker explains, the gull is high on the food chain so that pollutants that would be present in only trace amounts in a lower species are more likely to accumulate in the gull. It takes about 10 pounds of fish to make one pound of gull, he points out.

The gulls are also easy to observe, since they breed every year on this island, just 45 minutes from Houston. He can easily measure data like their reproductive rate (it's stable), nesting density (about 30 per 100 square yards) and infant mortality (it varies: spring thunderstorms last year killed about 95 percent of the young while this year looks like a bumper crop, perhaps 5,000 new gulls).

From banding the young here, he can find out about migration patterns (they winter on the coasts of Mexico, Central America and Venezuela) and adult mortality rates (they have a seven-year life expectancy).

There's also one slightly less scientific reason Hacker is studying the birds: he *likes* seagulls.

Banding lasts just a few weeks and by the time he's finished this year, Hacker hopes to have tagged 1,500 young seagulls. Then, in about seven years, there's a one in 100 chance that he'll get each of their bands back when people, usually fishermen, find them.

Only 15 tags after banding 1,500 birds? Actually, that's pretty good, Hacker said: "We can learn a lot from those 15 birds."

Bulger discusses five-year-plan with Intercouncil

By Kenna Giffin

President Roger Bulger discussed the five-year plan and fielded questions about it from members of the 1981-82 Student Intercouncil .

The plan is "the first time there's been a significant planning effort at UT and in Texas," Bulger said. "The growth phase is over. There is a limit on resources out there. We're supposed to have an oversupply of health care professionals and a decrease in students.

"We must try not to duplicate programs. The University of Texas is a university of the first class, but we must have 'selective excellence,' with each institution focusing on different areas," he said. "We have to defend our budgets on the basis of the programs."

He explained the current use and proposals for UT's 100-acre site, bounded roughly by Cambridge on the east, Old Spanish Trail on the north, Fannin and Knight Road on the west and El Paseo on the south. The student-faculty housing project and recreational facilities have taken up 20 acres. Plans include an ambulatory clinic and gerontology care and research facilities on the site. The focus on the care of the elderly might include a "teaching nursing home" and other facilities involving all the health professions in gerontology care.

President Bulger answers questions at the final Student Intercouncil meeting for the 1981-82 school year.

There are already research and clinical projects focusing on gerontology in the Dental Branch and in the Department of Psychiatry in the Medical School, Bulger pointed out.

Because of the site's proximity to the Astrodome, the Oilers' training site and the Summit, opportunity exists for the HSC to become involved in sports medicine, Bulger said.

"We ought to be able to help [the teams] play better so they can win," he added.

UT also has bought five additional acres linking Old Spanish Trail with the Brown Lot. In theory, it's possible that a two-lane road could be built through that area, connecting the 100-acre site facilities directly to the medical center, he said.

Turning to the individual schools, Bulger said the five-year plan focused on cooperation among units.

"What could we do together that would benefit what we do separately?" he phrased the main question. "There are a lot of ways to share resources: teaching courses in common, sharing professors."

The emphasis is still on excellence, he said.

"We're going to be here and we're going to attract people," he explained. "We're not the new kid on the block anymore. We want to keep our orange jerseys, but this environment in the medical center is so rich that we need to take advantage of it."

"We've made progress in attracting private giving, from $300,000 a few years ago to more than $3 million last year. People know we're here," he said.

The fact that 95 percent of the $14 million in bonds needed to finance the apartments were bought by local banks, despite an interest rate of 10 percent, shows the confidence business has in the institution, he said.

Now, the HSC is trying to raise more scholarship and loan money.

One of the minority student representatives asked if the minority student population would be cut in any student cutbacks in Dental Branch or Medical School.

Bulger indicated that HSC officials expect the minority student population at HSC will grow as the number of minorities in Houston increases.

"There is an increase in the number of minority students choosing to come here," Bulger said. "We're the best of the HSCs in terms of minority enrollment, whereas we were last just 4 years ago. I hope that means we're being chosen for the quality."

Intercouncil President Alan Coleman was re-elected president for 1982-83.

Duke links Hermann and UT as new Holmes professor

Dr. James H. "Red" Duke, professor of surgery at the Medical School and medical director of Hermann Hospital's Emergency Center, has been appointed the first John B. Holmes Professor in the Clinical Sciences by the UT System Board of Regents.

Mrs. Mildred Holmes and her family established the endowment in memory of John B. Holmes Sr., a trustee of the Hermann Hospital Estate for 20 years and a longtime supporter of UT. The professorship was created to honor an individual whose career embodies the ties between UT and Hermann.

Additional funds will be used to support an annual symposium oriented toward chronic diseases or the care of chronically disabled patients.

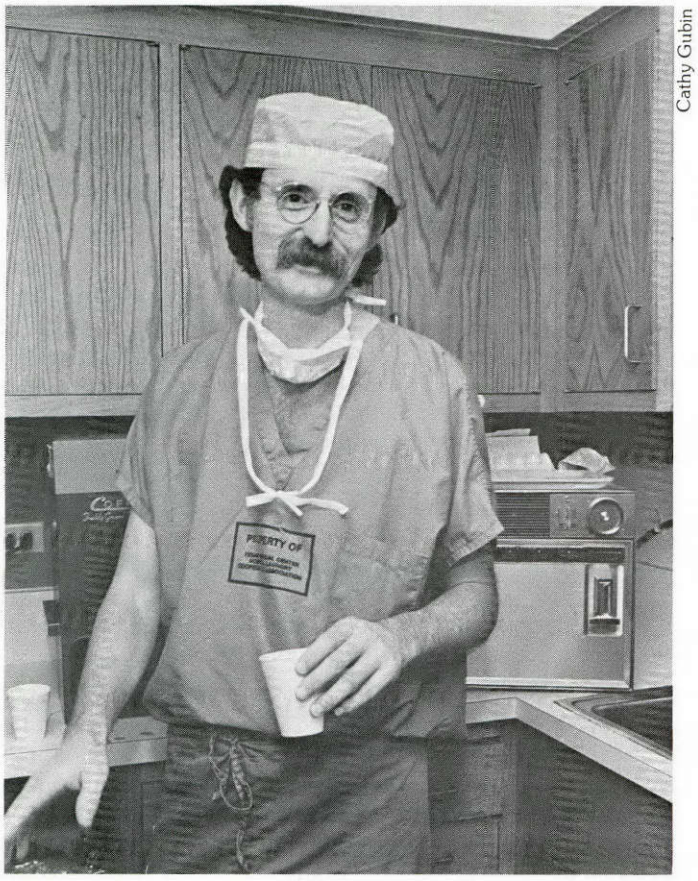
Duke came to the Medical School in 1972 as an associate professor of surgery. He currently serves as a special assistant to President Bulger.

A native of Ennis, Texas, Duke received his bachelor of science degree from Texas A&M University, a bachelor's degree in divinity from Southwestern Baptist Theological Seminary in Dallas and his M.D. from UT Southwestern Medical School. After completing an internship in medicine and a residency in general surgery with Parkland Memorial Hospital in Dallas, he served a special research fellowship with the National Institutes of Health at Columbia University in New York City.

From 1970-72, Duke practiced surgery with the Nangarhar University Faculty of Medicine in Jalalabad, Afghanistan, first as a visiting professor and later as chairman of the Department of Surgery.

An emergency medicine and trauma specialist, Duke is a member of many professional organizations and committees and has a number of other interests including the Foundation for North American Wild Sheep.

Holmes, a UT-Austin graduate, received the school's Distinguished Alumnus Award and was a member of the Chancellor's Council. A Houston native and independent oil drilling contractor, Holmes also served as an executive committee member of the board of directors of Southwest Bancshares, Inc.



Cathy Gubin

RECENTLY APPOINTED the first John B. Holmes Professor in the Clinical Sciences by the Board of Regents, Dr. James H. "Red" Duke can now be seen three times a week on KTRK-TV Channel 13. He donates his time in the interest of public health education on their expanded 6 p.m. news (see story below).

See HSC on Eyewitness News

Watch for a series of health reports from here that began airing on KTRK-TV (Channel 13) on Aug. 30. Dr. James H. "Red" Duke is the host.

The Monday-Wednesday-Friday reports, a new part of the station's expanded 6 p.m. Eyewitness News, are entirely written and produced by the staff of the Health Science Center's UT/TV-Houston (formerly HSC-TV). Duke is donating his time to the project while continuing his responsibilities as a professor in the Department of Surgery.

KTRK, which telecast a sponsored pilot program of the Texas Health Letter last April and donated time for a second one to air on Aug. 26, will donate three more 30-minute slots as public service time over the next year for additional Texas Health Letter programs.

Both the published and video Texas Health Letter are produced by the Office of Public Affairs, of which UT/TV-Houston is a part.

Special patients require special dental treatment

By Kenna Giffin

Cathy Gubin

SPECIAL PATIENTS receive dental care, and dental students like Rebecca Maxwell (left) learn how to work with patients who have mental or physical problems. Dental instructor Dr. Ken Curl supervises Maxwell's work in the Dental Branch's special patients clinic.

Out there in there in the Real World, some things aren't the same as the book said they were.

For dental students, some patients are more of a challenge to treat than others are. Some dentists won't treat such patients. But before a dentist graduates from the Dental Branch, he or she can have experience with those "special patients," at least enough to know how to work on them so they won't lack for dental care.

What the Dental Branch calls special patients include people with epilepsy, cerebral palsy, serious heart conditions or other physical and mental handicaps.

Special patients are seen all day Mondays and Fridays, Tuesday afternoons and Thursday mornings, according to Dr. Isaac Konigsberg, director of the clinic.

The six students in the clinic first interview patients, then find out the dental and medical histories, said Mark Ozier, a student who worked in the clinic. The students take blood pressure readings and X-rays, if needed. Then they make an outline proposing treatment for each patient.

The students meet with faculty members from a variety of departments to discuss each case. Although every student can't work on patients with every disability, students do learn about difficult situations from each other's cases, Ozier said.

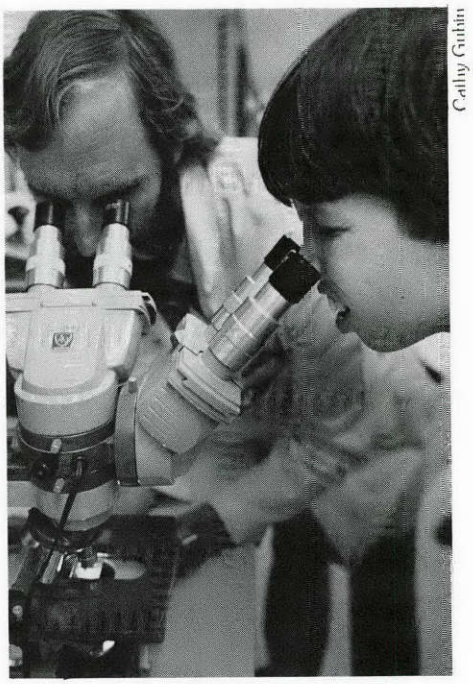
In the group discussion, each student "expounds on the patient's medical compromise," said Steve Thomas, another clinic student.

One of Thomas' patients had cardiovascular problems, including a heart blockage. He was on nitroglycerin, had had a triple bypass operation in 1975 and was to have more bypasses. The patient "couldn't walk from the parking lot to the school without a pill," Thomas said.

Because of the heart condition, Thomas had to limit the amount of time the patient was being treated and the amount of stress the treatment caused the patient. For example, Thomas could do only two fillings at one sitting rather than the three or four a normal patient might tolerate.

One of Ozier's patients had cerebral palsy and eventually had to be referred to Texas Children's Hospital where he could be completely anesthetized before any dental work was done.

"It was a great learning experience," Thomas said of the clinic. "Lots of patients in real practice have similar problems. If dentists have no background in treating them, they feel it's a burden to treat them."



Cathy Gubin

"THAT'S IN MY BLOOD?" a sixth-grader (right) from Lanier Middle School's Vanguard Program seems to be saying as he and Dr. Steve Kohl look at blood cells under a microscope. Kohl explained that this microscope magnifies about 1,000 times, while the one the students use at school magnifies about 100 times. Kohl is associate professor of pediatrics and of infectious diseases and clinical microbiology at the Medical School. He hosted a group of students including his daughter Gwynne. The Vanguard Program is an HISD magnet program for the gifted and talented.

Dr. Don Allen chosen as new Dental Branch dean

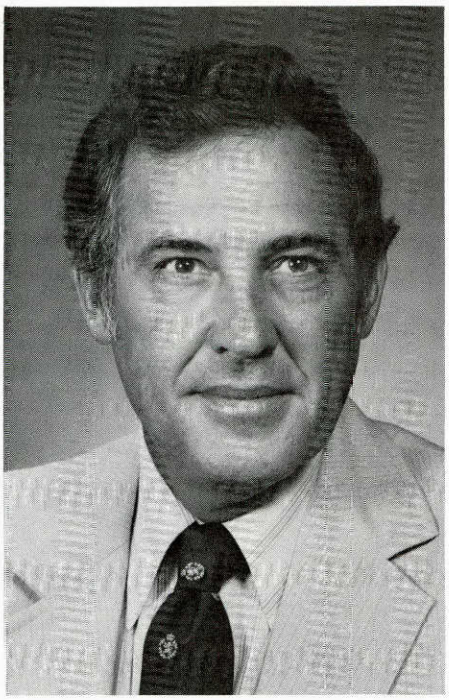
Dr. Don Allen, dean of the University of Florida College of Dentistry, has been selected to succeed Dean John Victor Olson at the Dental Branch.

Olson announced his retirement last fall, effective as soon as a new dean was chosen. He has headed the Dental Branch administration for 30 years.

Allen will begin his career here early in this academic year, according to President Bulger.

In announcing Allen's acceptance, Bulger said, "It is particularly encouraging that we have attracted a person of such calibre to this crucial position. I believe you will soon see Dr. Allen's commitment to general dentistry and to sustaining the curricular innovations established with such painstaking care by Dr. Olson and the Dental Branch faculty over the past decade. He will also further develop, where appropriate, the excellent community dentistry programs.

"As the new dean, Dr. Allen is charged with integrating research into the life of the school and is expected to assume a major leadership role, along with the other deans, in the overall affairs of the Health Science Center," Bulger added.



Dr. Don Allen

Allen, a Burlington, N.C., native, is a 1955 graduate of Elon College. He earned his dental degree from the University of North Carolina (UNC) School of Dentistry in 1959 and his in-service teacher training certificate there in 1961. He earned a master of science degree in periodontics from the University of Michigan in 1964.

Allen began his professional career as an instructor in the Department of Oral Pathology and Periodontology at UNC in 1959. He became associate dean for administrative affairs and professor of periodontics at UNC before becoming associate dean and professor in the Division of Periodontology at the University of Florida. He was chosen as dean of that dental college in 1974.

Hurricane expert visits HSC

Alberto is a has-been, and most people on the Texas Gulf Coast would just as soon Beryl, Chris, Debby and Ernesto not be born. Those are a few of the names chosen by the National Weather Service for the 1982 Atlantic Ocean hurricanes — should they arrive.

HSC employees interested in hurricanes were recently treated to a slideshow and lecture by Dr. Stephen Lyons of the Institute of Storm Research, St. Thomas University. The hosts were the Medical School Employee Relations Committee and Brown Bag Productions.

The reason for hurricane concern, began Lyons, is that coastal populations of the whole country (and especially, of Texas) have dramatically increased since the 1960s. There are many people living here who have never experienced a hurricane.

And even if you've lived here awhile, it has been many years since a major hurricane (Carla, 1961) has hit the Houston area.

Lyons said it is a myth that we are due for a hurricane soon because they occur in cycles. But if one should hit, flooding and tornados would be the major dangers, he said. Low-lying coastal areas would suffer the most. Tornados like to strike inland a bit, making Houston, 50 miles from the coast, a perfect target.

Most buildings would be left standing, Lyons said, but there might be a real problem with lightweight mobile homes, with older structures and with the glass from skyscraper windows.

People would flock to the stores for canned goods, flashlights and other supplies. Bathtubs would be filled with potable water in case plumbing lines should break. Evacuations would cause standstills on the freeways, but Houston would not evacuate, Lyons said.

The good news is that hurricane forecasting is getting better all the time. Landfall sites can be foreseen, and the "most dangerous" part of the storm ("the right, front part, depending on the direction the storm is moving") can be easily identified.

And it could be worse. The northern Pacific Ocean (near the Philippines) has three or four times as many hurricanes as the Gulf, he said.

Names Chosen by the National Weather Service for Atlantic Storms
1982 — Alberto, Beryl, Chris, Debby, Ernesto, Florence, Gilbert, Helene, Isaac, Joan, Keith, Leslie, Michael, Nadine, Oscar, Patty, Rafael, Sandy, Tony, Valarie and William.
1983 — Alicia, Barry, Chantal, Dean, Erin, Felix, Gabrielle, Hugo, Iris, Jerry, Karen, Luis, Marilyn, Noel, Opal, Pablo, Roxanne, Sebastien, Tanya, Van and Wendy.

Secretary makes a difference through the United Way

By Ina Fried

Saturday night usually means going out for Cherie Chalk. Out to a car wreck in the north Houston area. Out to help save lives as a volunteer with Cypress Creek Emergency Medical Services.

She usually works from 6 p.m. to 9 a.m. Then, instead of going home to sleep all day, she teaches Sunday School.

Several times a year, she also teaches cardiopulmonary resuscitation (CPR) for the American Heart Association and first aid for the Red Cross, a United Way agency.

During the workweek, Chalk is a secretary in family practice and community medicine at the Medical School.

Why does she spend so much of her leisure time as a volunteer?

"It makes me feel good," she said. "It's my little part to help the world be better."

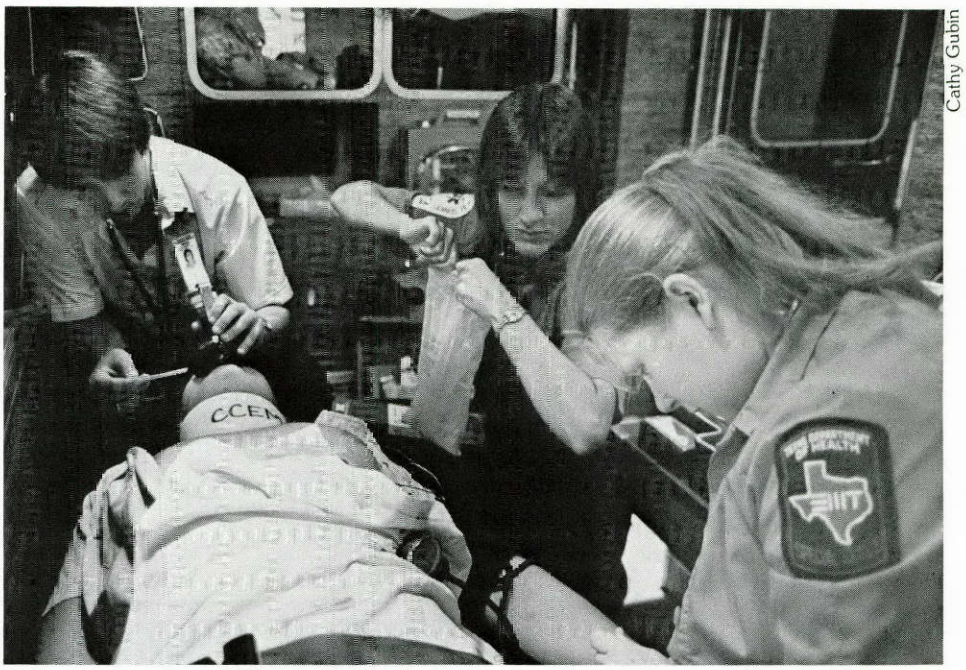
She first got interested in emergency work about three or four years ago when she received a bulletin from North Harris County Community College. She took classes for certification as an emergency medical technician and has been volunteering ever since. She must take additional classes for recertification every two years, and she plans to take a paramedic class in the spring.

Her teaching was a byproduct of her experience with the emergency team.

"It takes about 15 minutes to get an ambulance," she explained, "and somebody who needs CPR needs it right then. Fifteen minutes later could be too late."

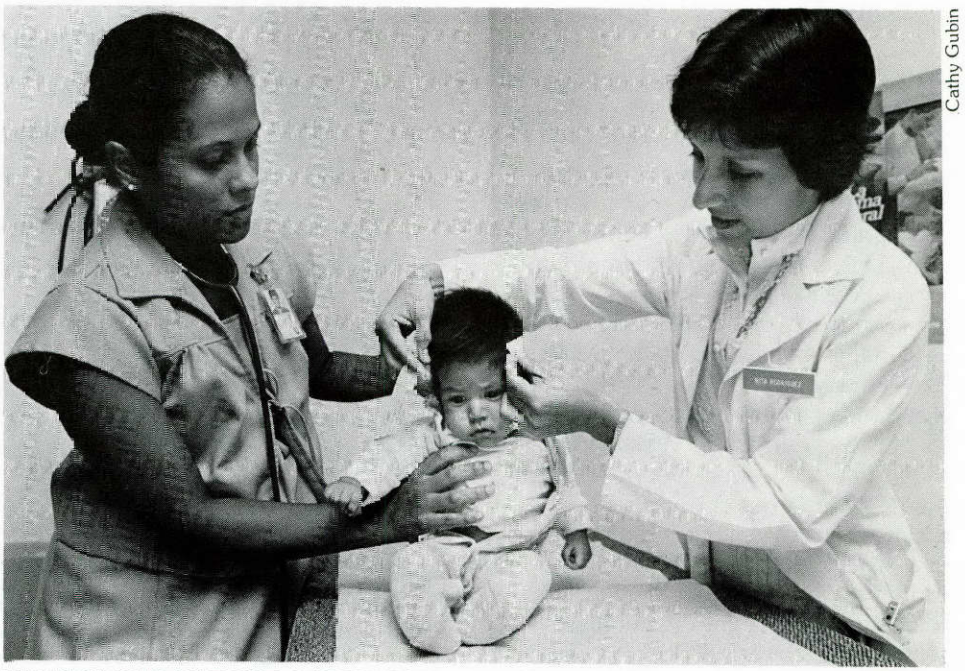
"It really makes a difference when you know you've saved someone's life," she said.

With United Way, you make the difference.



Cathy Gubin

SATURDAY'S A BIG NIGHT for traffic accidents and a busy one for the Cypress Creek Emergency Medical Services, where Cherie Chalk (far right) volunteers. A secretary at the Medical School, she also teaches first aid for the Red Cross, a United Way agency.



Cathy Gubin

WHAT'S YOUR HAT SIZE, PARDNER? Dr. Edna Flores (left), assistant professor of pediatrics in the Medical School, holds Jose Louis Lopez, a patient at the San Jose Clinic, while Rita Rodriguez, a student in the Summer Enrichment Program, checks him out. The Summer Enrichment Program is sponsored by the Student Support Services of the Medical School and is designed to help minority and disadvantaged college students prepare to apply for medical school admission or for other medical careers. Students go on rotations with Medical School faculty and residents.

New program in cytogenetics seeking first class at SAHS

By Kenna Giffin

The increasing demand for genetic counseling and research has in turn created a demand for a new breed of technologist: the cytogenetic technologist.

In response to that demand, here and across the country, the medical technology program in the School of Allied Health Sciences (SAHS) has initiated a special elective in cytogenetic technology.

Cytogenetic technologists prepare slides of blood, bone marrow, solid tissue and amniotic fluid for geneticists to study and use for genetic counseling. The first class here will begin in January.

Dr. Kathleen Becan-McBride, medical technology program director, said the program is accepting applications for the first class, which will begin in January. Development of the program began 18 months ago, and approval from the Board of Regents has been received. The curriculum and instructors are ready to begin.

She said that the two other cytogenetics programs in the United States are a graduate program at North Texas State University and an undergraduate program at a California college.

Cytogenetics is a relatively new field in the medical profession, McBride explained. It came about after the correct number of 46 chromosomes was identified in humans in 1956. In 1959 the first chromosomal abnormality was identified, an extra chromosome in Down's Syndrome. Since then, new cytogenetic techniques have allowed more detailed study of individual chromosomes, and increasing numbers of relationships to clinical diseases are being identified.

Cytogenetic technologists prepare slides of blood, bone marrow, solid tissue and amniotic fluid for geneticists to study and use for genetic counseling, the director continued.

Assisting McBride with the program lectures is Ann Cork, an assistant professor in the Program in Medical Technology and a research associate in the Department of Laboratory Medicine at M.D. Anderson Hospital and Tumor Institute. Cork is a recent addition to the cytogenetics program, as she replaces Dr. Charlene Moore, who helped develop the curriculum.

The SAHS program is the first to feature a multidisciplinary approach, McBride said. Students will follow the curriculum for medical technology until their senior year, when two quarters will be spent on cytogenetic studies. Students will receive degrees in medical technology and certificates in cytogenetics.

Students will have cytogenetic affiliations with Shriners' Hospital, Baylor College of Medicine and M.D. Anderson Hospital.

Graduates specializing in cytogenetics should find many employment opportunities in the three affiliated institutions as well as in other large hospitals and research centers, McBride said. Because the field is so specialized, graduates probably would not find work in smaller cities and towns but could work as medical technologists. That potential versatility is why cytogenetic technology was incorporated into the medical technology program, the director added.

Cathy Gubin

BEGINNING A TRADITION of giving C.U.P. (for Coordinated Undergraduate Program) Awards to Nutrition and Dietetics Program adjunct faculty is Jeanne Martin (left), associate professor in the School of Allied Health Sciences (SAHS) program. She honors M.T. DiFerrante, chief of nutrition services for the City of Houston Health Department. DiFerrante is the community nutrition division honoree. The administrative nutrition division's award went to Peter Hollaar, director of food services at St. Anthony Center. The clinical division honored Avis Maslovitz, medical dietitian at Hermann Hospital. The awards, presented at a special reception, are based on the faculty member's exceptional commitment and contribution to the program and students. Each honoree receives a cup with a school seal on it.

September, 1982

WHAT GOES ON

Volume 13, Number 1

Texas Research Institute of Mental Sciences

The 16th annual symposium, **"The Chronically Mentally Ill,"** will be held Nov. 3-5 at the Shamrock Hilton Hotel. $100 fee. For more info. call Dr. Mohsen Mirabi at 797-1976.

TRIMS Weekly Conference Tues., 3-4:30 p.m., TRIMS Aud. For topics call 797-1976 ext. 454.

The UT Education and Research Computer Center

The following is a list of Sept. courses. For more info. call 792-6345.
Sept 9 — **"New User Tutorials,"** 9 a.m.- noon, ERCC.
Sept. 10 — **"New User Tutorials,"** 9 a.m.-4 p.m., Galveston.
Sept. 13-15 — **"Intro to SPSS,"** 9 a.m.- noon, Galveston.
Sept. 15 — **"Special Topics in SIR,"** 9 a.m.-4 p.m., ERCC.
Sept. 16 — **"Basic Computer Concepts and Use of Computing Center,"** 9 - 11 a.m., ERCC.
Sept. 20-23 — **"Intro to System 2000 Data Base Management,"** 9 a.m.-4 p.m., ERCC.
Sept. 24 — **"Intro to Word Processing on Cyper Computer,"** 9 a.m.-4 p.m., Galveston and ERCC.
Sept. 27 — **"Intro to IDAP,"** 1:30-3 p.m., ERCC. Also **"Intro to Easy Graphing,"** 9 a.m.-noon, ERCC.
Sept. 28-30 — **"Intro to BMDP,"** 9 a.m.- 4 p.m., ERCC.

The UT Health Science Center at Houston

Dental Branch

Sept. 10 — **"You, Your Practice & the Drug Laws,"** 9 a.m.-4 p.m., Marriott Hotel.
Sept. 15 — **"Tooth Transplantation,"** 7 a.m.-9 a.m., Marriott Hotel.
Sept. 17 — **"Recent Advances in Periodontial Surgery,"** 9 a.m. Also **"Gingival Recession and Gingival Grafting"** in afternoon, Marriott Hotel.

Division of Continuing Education

For info. on courses or for design of individualized programs, write or call: The UTHSCH Div. of Continuing Ed., P.O. Box 20367, Houston, Tex. 77025. Phone 792-4671.

Oct. 21 — **"Infectious Disease"** course at Memorial Hospital.

Graduate School of Biomedical Sciences

For course info. contact Brenda Gaughan at 792-4655. UT/TV Channel 4 will broadcast some course sessions. Consult your weekly UT/TV schedule.

Medical School

Nov. 2 — Continuing Ed. seminar titled **"Quandaries in General Pediatrics,"** 8:30 a.m.-4:30 p.m. For info. contact Caci Kochwelp at 792-5346.

Anesthesiology

Conferences - Mon., Tues., Wed., & Fri., 6:30-7 a.m. Room 2.103.

Clinical Conference - Thurs., 6:30-7:30 a.m., Rm. 2.103.

Endocrinology

Conferences - 2nd & 4th Mon., noon, South Aud. Hermann.

Grand Rounds - Thurs., 5:30 p.m., Rm. 111-A BCM.

Infectious Diseases and Clinical Microbiology

Microbiology-Infectious Disease Conference Mon., 1:15-2:15 p.m. Rm. 2.103.

Internal Medicine

Grand Rounds - Tues., 12-1 p.m., Rm. 3.001.

Noon Conference - Mon. & Thur., 12-1 p.m., Rm. 1.302.

Neurobiology & Anatomy

Neuroscience Seminars - Call Lynn Blum for details, 792-5700.

Neurology-Neurosurgery

Grand Rounds - Fri., 12-2 p.m., Rm. 2.135.

Pediatric Neurology Conference - Fri., 8-9 a.m. Hermann Hospital Jones Pavilion Rm. 3485.

Spinal Cord Injury Rounds — Thurs., 1 p.m. Jones Pavilion, Rm. 4487.

Obstetrics & Gynecology

Thursday Conference - Thurs., 8-9 a.m., Rm. 2.135.

Grand Rounds - Tues., 5-6 p.m., Rm. 2.135.

Grand Rounds (Brackenridge) - Fri., 8-9 a.m., Brackenridge Hospital.
Nov. 19 — One day seminar titled **"Infertility 1982,"** Inn on the Park Hotel. For info. call Dr. Martin Quigley's office at 792-5360.

Ophthalmology

Pediatric Ophthalmology Grand Rounds - 3rd Tues., 4-6 p.m., Hermann Hospital, 7th floor, Jones Pavilion.

Grand Rounds - 2nd Thurs., 4:30-6 p.m., Hermann Eye Center.

Orthopaedic Surgery

Grand Rounds - Thurs., 8-9 a.m., Rm. 2.103.

Children's Orthopaedic Conference - Tues., 7-8 a.m., Shriners Hospital.
Hand Surgery Conference - Fri., 6:30-7:30 a.m., Birch Rm., Hermann Hospital Cafeteria. For info. call 792-5610.

Otology

Otology Conference - 1st & 3rd Thurs., 5-6 p.m., Rm. 6.018.

Clinical & Pathology Conference - 2nd & 4th Thurs., 5-6 p.m., Rm. 6.018.

Pathology & Laboratory Medicine

Hematology Grand Rounds - Thurs., 12-1 p.m., Rm. 2.103.

Laboratory Medicine Grand Rounds - 1st & 3rd Fri., 12-1 p.m., Rm. 2.103.

Renal Biopsy Conference - 2nd Mon., 4-5 p.m. Rm. 2.020.

Pathology & Laboratory Medicine Conference - 2nd & 4th Wed., 8-9 a.m., Rm. 2.135.

Surgical Pathology Conference - Fri., 8-9 a.m., Rm. 2.024.

Neuropathology/Clinical Pathology Conference - Fri., 12:45-1:30 p.m., Rm. 2.135.

Gross Neuropathology Conference - Mon., 3:30-4:30 p.m., Rm. 7.037.

Autopsy Case Conference - Thurs., 8-9 a.m., morgue.

Pediatrics

Grand Rounds - Tues., 8-9 a.m., Rm. 2.135.

Perinatal Noon Conference - Wed., 12-1 p.m., Rm. 2.135.

Pediatric Morbidity/Mortality - 4th Thurs., 12-1 p.m., Rm. 2.135.

Pediatric Surgery

Grand Rounds - Fri., 1:30-2:30 p.m., Rm. 6.282.

Weekly Teaching Conference - Wed., 10-11 a.m., Rm. 6.282.

Pharmacology

Research Seminars, Mon., 4 p.m., Rm. 2.103.

Plastic & Reconstructive Surgery

Grand Rounds - Sat., 9-10:30 a.m., Rm. 2.135.

Pituitary Service

Grand Rounds - 4th Wed. 4:30-5:30 p.m., Rm. 1.024.

Pituitary Foundation - 4th Tues., 7:30 p.m., Crozier Aud., Hermann Hospital.

Psychiatry

Grand Rounds - Wed., 10:30 a.m.-noon, Rm. 2.103

Radiology

Diagnostic Radiology Interesting Case Conference - Mon., Tues. & Thurs., 12-1 p.m., Hermann Hospital, Jones Pavilion Rm. 2443.

Houston Trauma Radiology Club - 2nd Tues., 7:30-9:30 a.m., Rm. 2.103.

The Dept. of Radiology and Office of Continuing Ed. will present a course titled **Computed Tomography and Ultrasound - Current Applications - 1982"** Oct. 14-16 at the Four Seasons Hotel. Contact Sherry Smith, 792-5346, for info.

Surgery

Grand Rounds* - Thurs., 5-6 p.m., Rm. 2.135.

Urology

Grand Rounds - Tues., 5-6 p.m., Rm. 6.018

Medical Surgical Teaching Conference - Wed., 12-1 p.m., Del Oro Hospital.

School of Public Health

For info. on courses contact the UTSPH, Continuing Education, at 792-4455.

Employee Assistance Program

For help with personal problems — marital, family, emotional, financial, legal — call the program at 792-4804 and ask for a counselor. Services are strictly confidential and free to UTHSC employees.

The UT System Cancer Center M.D. Anderson Hospital and Tumor Institute

For info. on the following listings call 792-2651 or 792-7231.

Education

Oncology Grand Rounds* - 12-1 p.m., Fri., MDAH Aud. Taped for transmission via the UT/TV channels 4 & 16. Consult the UT/TV weekly schedule.

Fundamentals of Oncology - Part II, Fri. 12-1 p.m. or Wed. 5-6 p.m. MDAH Aud. For info. contact Dr. Yaal Silberger at 792-2738.

Cancer Screening & Detection Program for Nurses/Division of Cancer Prevention:

Sept. 13-17 - Breast Module
Sept. 20-Oct. 1 - Gynecology Module
Sept. 27-Oct. 1 - Head & Neck Module
Oct. 4 - **"5th Annual Cancer Prevention & Detection Seminar,"** Marriott Hotel.
Oct. 5 - **"2nd Annual Colyscopy Seminar,"** Marriott Hotel. For info. call Judy Patterson at 792-3427.

Baylor College of Medicine

For info. contact the Office of Continuing Education, BCM, 790-4941.

Anesthesiology

Anesthesiology Seminar - Mon., 5 p.m.

Basic Science Lectures - Mon., 5 p.m.

Clinical Conferences - Wed., 4 p.m.

Morbidity & Mortality Conference - Wed., 5 p.m.

Meeting Place: Basement Conference Rm., Ben Taub.

Didactic Conferences - Mon. & Wed., 4 p.m. Ben Taub Seminar Rm.

Journal Club - Meets monthly. For dates & times call 790-4693.

Biochemistry

Marrs McLean Department of Biochemistry Seminar - Thurs., 4 p.m., Rm. 301A Cullen Bldg.

Medicine

Endocrine Grand Rounds - Thurs., 5:30 p.m., Rm. 111, BCM.
Sept. 11 - **"Endoscopy and Gastrointestinal Motility,"** Adams Mark Hotel. Hosted by the medicine dept. and Texas Society for Gastrointestinal Endoscopy. For info. call Lila Lerner at 790-4944.

Neurology

Neurology Grand Rounds - Tues., 9:30 p.m., Methodist Main Assembly Rm.

Jerry Lewis Neuromuscular Disease Research Center Conference - Mon., 4 p.m., Rm. B422 Neurosensory Center.

Neuroscience Conference - Fri., noon, Rm. B422 Neurosensory Center.

Obstetrics & Gynecology

"Postgraduate Workshops in Real-time Obstetrical Ultrasonography," Thurs. & Fri. at Jeff Davis Hospital. Call Marilyn Paru at 790-4941 for details.
Sept. 23 - 25 - **"Updates in Obstetrics & Gynecology,"** Marriott Hotel. For info. call Lynne Tiras at 790-4944.

Pediatrics

Grand Rounds* - Fri., 8:30 a.m. For location call 790-4781.

Physical Medicine

Grand Rounds* - Fri., 8 a.m. Call 797-1440, ext. 451, for info.

Sept. 3 - VAMC (RMS)
Sept. 10 - Jefferson Davis
Sept. 17 - Ben Taub
Sept. 24 - Methodist (Bluebird Aud.)

Plastic Surgery

Pathology Conference - 1st Thurs., 4:30 p.m., Rm. 416D.

Plastic Surgery Journal Club - 2nd & 4th Thurs. 4:30 p.m.

Surgery

Surgical Grand Rounds, 7:30-8:30 a.m. Sat., Jaworski Aud.

Basic Science Course - 8:30-9:30 a.m., Sat. following Grand Rounds.

Texas Institute of Rehabilitation and Research

For info. call 797-1440, ext. 202.

Clinical Neurophysiology Seminar - Fri., 2-3 p.m., Neurophysiology Conference Rm.

First Thursday - 1st Thurs., noon-1 p.m., Promethean Rm. Film & info. series.

The UT Medical Branch Galveston

For info. about courses contact The UTMB at Galveston, Continuing Ed., (713) 765-2996 or UT School of Nursing Continuing Ed. at Galveston, 765-4802.

Sept. 15 - Pediatric Grand Rounds: **"Management of Diabetes in Children"**
Sept. 23-25 - **"Emergency Medicine"**
Sept. 25 - **"Current Concepts & Controversies in General Pediatrics"**

University of Houston

Pharmaceutics

For info. contact Dr. Stuart Feldman, 749-4044.

Houston Ophthalmological Society

Sept. 9 - **"Cataract Surgery and Lens Implantation"**

Harris County Hospital District

Nov. 18-20 - **"Ascent to New Heights in Perinatal Nursing,"** Stouffer's Greenway Plaza Hotel. Given by Perinatal Nursing Institute. Call Katherine Sudela for info. at 751-8373.

American Heart Association

Cardiac Catheterization Conference - Wed., 4-5 p.m., Rm. 2.035 MSMB.

Cardiovascular Physiology & Instrumentation - Fri., 12-1 p.m., Rm. 1.036 MSMB. For info. contact Paula Freeman at 792-5178.

American Association of Medical Transcriptionists

Sept. 11 - Monthly meeting of Greater Houston Area chapter. Topic is **"Venereal Disease."** 10 a.m. at Memorial Hospital Cafeteria. Call Diane LaDue for info. at 661-7192.

Area Hospitals

Eastway General Hospital

Clinical Conference - Tues., 12:30 p.m., Conference Rm.

Hermann Hospital

Colon & Rectal Meeting - 1st Fri., 7-8 a.m., Birch Rm.

Houston Northwest Medical Center

Continuing Education Courses for Physicians - Tues., 12:30-1:30 p.m. For info. call Anna Elliott, 440-2104.

Laurelwood Hospital

Lectures are from 7:30-8:30 p.m. in the Dining Rm. Contact 367-4422 for info.

Memorial Hospital

Regular Conferences - Wed., 7 a.m., Dining Rm. D. For info. call Medical Ed., 776-5303.

Memorial City General Hospital

Continuing Education Conference - Thurs., 12:30-1:30 p.m., Conference Rm.

Parkway Hospital

Medical Staff Seminars - Fri., 12:30 p.m., Temporary Classroom.

Pasadena Bayshore

Grand Rounds - 1st, 2nd & 4th Thurs., 8-9 a.m.

Surgical Case Presentation - 2nd Thurs., 7-8 a.m.

Raleigh Hills Foundation

Contact Alan Spears, Raleigh Hills Hospital, 6160 South Loop East, Houston, 644-2241.

Rosewood General Hospital

Tumor Board - 2nd & 4th Tues., 12:45 p.m., Library.

UT Teleconference Programs - Thurs., (alt. wks.), 12:30 p.m. Call Administration for dates & topics, 780-7900.

St. Joseph Hospital

Ob/Gyn Clinical Conference - Fri., 8-9 a.m.

Ob/Gyn Grand Rounds - Thurs., 7-8 a.m. Both meet in 6th Floor Aud., Women's Bldg.

St. Luke's Episcopal Hospital

For info. on conferences & lectures contact Dr. John D. Milam, 521-4279.

Texas Heart Institute

For info. on conferences, topics & speakers contact Debby Butler, THI Medical Director's Office, 791-2157.

Shriners Hospital for Crippled Children

For info. on surgery, clinics & conferences contact Sandra Tantillo, 797-1616, ext. 49.

***AAFP and/or AMA credit awarded.**

UT/TV-Houston is part of The University of Texas Health Science Center-Television. The network transmits over Channel 4 on a cable system within the Texas Medical Center and by microwave to a hospital network outside the center. For information call Betty Martin at 792-4226.

Additional continuing ed. programming is broadcast by UT/TV-Houston. For program info. consult the UT/TV schedule. Copies of the weekly schedule may be obtained by writing: UT/TV Suite 1900, 1100 Holcombe Blvd. (UT-Houston Main Bldg.), Houston, Texas 77025. Call 792-4633.

All announcements and information for the next issue of What Goes On (October) must be in our office prior to September 10. Please send announcements to:

Betty Martin
Editor, What Goes On
1100 Holcombe Blvd.
Suite 11.144
Houston, Texas 77025

Or call: 792-4226

Please notify us of change of address.

Understanding the construction: the cyclotron explained

By Diane Broberg

If a visitor to the medical center asked you what the construction in the front yard of the Medical School was, would you be able to explain the cyclotron? If not, here's help.

To understand the cyclotron's purpose better, it helps to understand the big picture: its role in the Positron Diagnostic and Research Center (PDRC).

The positron camera can go one step further than an X-ray. It can do for pictures of the body what the movie "Tron" did for computer games: it makes the picture three-dimensional and alive. Even small changes in circulation, cell growth and metabolism can be seen. And after treatment has begun on a patient, the computer pictures can measure the improvement.

It can keep patients from having a full-fledged heart attack through early detection of medically treatable heart problems.

It can map the brain, taking pictures of what the cells are doing in a person with medical or psychiatric brain disease.

It might be able to identify pre-malignant cells before they develop into cancer.

There are three main parts to the positron center, which will be one of the largest such centers in the country, providing a powerful attraction to the Health Science Center for renowned scientists and for patients. They are (1) the cyclotron, (2) the positron camera and (3) the radiopharmacy.

The front yard of the medical school is the site of the cyclotron, or "atom smasher" that will create small amounts of radioactive elements to be mixed into compounds and injected into patients before their "pictures" are taken by the positron camera.

Because the elements are so short-lived, they must be created here, said Dr. K. Lance Gould, professor of cardiology and director of the center.

After they are created by the cyclotron, they will be made into compounds in the radiopharmacy portion of the center, which will be located in the cyclotron building. The resultant isotope will be transported to the positron camera and injected into the patient.

The positron camera will detect the location of the radioactivity in the patient, and a computer will convert the camera's electrical signal to cross-sectional pictures of the distribution of radioactivity in the patient's body.

And the rest is up to the center's staff: diagnosis and treatment of the patients.

Besides Gould, they are Dr. Richard Smalling, director of the coronary care unit; Dr. Richard Goldstein, director of nuclear cardiology; Nizar Mullani, technical director of the PDRC; and Dr. Timothy Tewson, director of radiochemistry.

Look for the construction in front of the Medical School to be complete by fall of 1983, and the clinical imaging of patients by that time, said Mullani.

Should the cyclotron building be thought of as "dangerous," like some people perceive nuclear power plants?

"Unlike nuclear reactors, which produce electricity from a large quantity of radioactivity, cyclotrons use a large amount of electricity to produce a small amount of radioactivity. Thus, there is no danger of 'meltdowns' or contamination of the environment," Mullani said.

They have been in use for more than 50 years, and some medical cyclotrons have even been installed inside major hospital buildings, he added.

A NEW LOOK for the medical school will be the result of recent construction begun in its front yard. The cyclotron building will be completed in the fall of 1983 as part of the Positron Diagnostic Research and Treatment Center. Below is an artist's rendering of what the campus will look like then.

Medical School researchers try to reduce kids' dose of X-rays

By David Moore

Three researchers here hope they can significantly reduce the radiation dose a child currently receives in a routine X-ray.

Drs. Louis Wagner, Gerald Cohen and Lawrence Robinson are looking for the best way to reduce that dose, in hope of minimizing the possibility of later side effects from X-rays given children.

That doesn't mean, Wagner is quick to point out, that a routine X-ray harms a child. There is "no existing knowledge of adverse effects [of radiation] at diagnostic levels," he said.

But, he added, "We have reason to believe that children are more radiosensitive than adults since they are rapidly growing and developing."

Cohen and Wagner, assistant professors of radiology at the Medical School, are using a mathematical model they developed to adjust experimental variables in the X-ray process. They want to get pictures that are just as good, using less radiation.

Right now they're looking at six different types of film in combination with nine types of screens (a screen on top of the film converts the X-rays to light, exposing the film) at three different energy levels. That adds up to some 800 possible combinations in this first stage of the two-year project, funded by the National Institute of Child Health and Human Development.

After they've analyzed those results they'll examine:

- Various types of grids, which catch "scatter radiation" that can make the picture fuzzier.
- Different radiolucent tabletop and film cassette materials, which allow X-rays to pass through to the film with minimal interference or absorption.
- And several X-ray energy levels used with metal filters to tailor the X-ray beam specifically to the smaller, pediatric patient.

The interrelationships among the variables are especially important, they emphasized.

"It isn't just a matter of taking the best of each," said Wagner, who also has an appointment to the Graduate School of Biomedical Sciences. "It's a matter of putting the combination together which gets you the best image. That's the trick."

"You have tradeoffs," Cohen added. "Optimizing one degrades the other, and that's really the key: how do you trade off one variable against the other?"

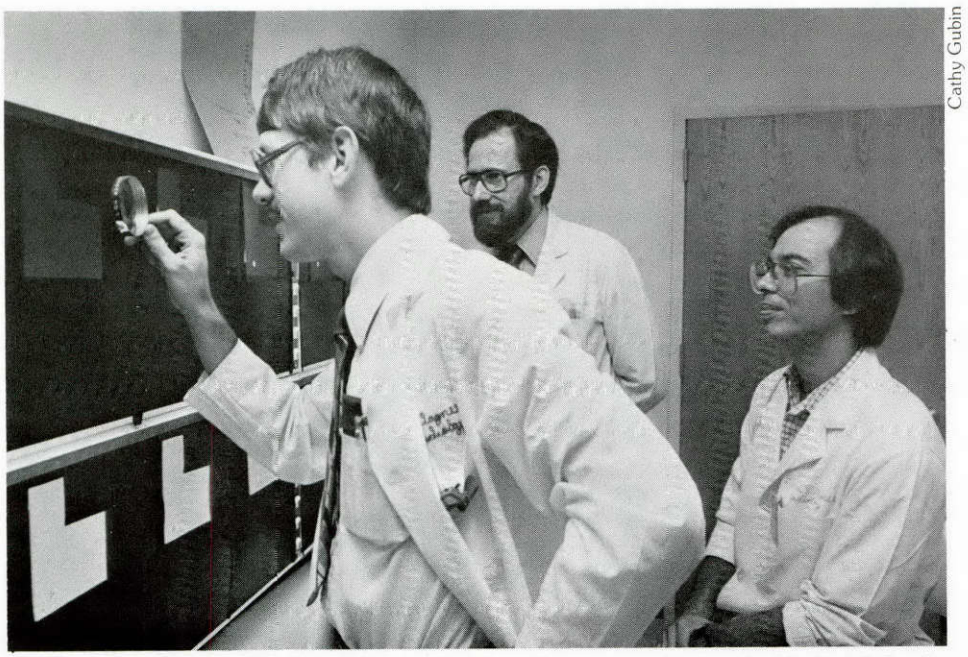
Many researchers use advanced equipment to analyze quality of experimental images, but these researchers chose visual analysis because (a) the aforementioned equipment is very expensive and (b) the human eye will ultimately be used in the clinical setting anyway.

Cohen noted: "To reduce the dose is of course the ultimate aim. But whether we can do that or not, we still will gain a lot of information regarding various approaches to analyzing the radiographic image."

Because the interrelationships among the variables are so complicated, Wagner pointed out, neither imaging equipment suppliers nor hospitals have ever investigated in the necessary depth the possibility of developing an improved system for kids, of making "a good system, better."

Now seven months into the study, Cohen and Wagner, physicists, are X-raying "phantoms" — inanimate objects. Later they'll move to patients. Images are evaluated for contrast and resolution and as they approach the "optimal system," the opinions of clinical radiologists, in particular Robinson's, will be sought concerning the images.

The researchers hope to have their "optimal system" ready for clinical tests by the end of the year.



Cathy Gubin

MORE EFFICIENT USE OF X-RAYS is what these three researchers at the Medical School are aiming to achieve. Dr. Louis Wagner (left), Dr. Lawrence Robinson (center) and Dr. Gerald Cohen hope to reduce the amount of radiation used in pediatric radiology, while getting images that are as good as those currently made.

What are the dangers of radiation in everyday life?

By Diane Broberg

"There is no such thing as a radiation-free lifetime," said Dr. Samuel Dreizen at a recent seminar held at the Medical School. And statistics quoted by others supported that premise.

For example, did you know that you get 70-310 millirem per year of radiation just by living in the United States? High altitude locations like Denver get more than sea level locations like Miami because of their lack of atmosphere.

But the U.S. ranks low for radiation levels when compared to the northern Nile River delta (300-400 millirem per year). Terrestrial factors like sand, volcanic materials, smog and even buildings can change the radiation levels we live with, according to Dr. Louis Wagner, assistant professor of radiology.

No studies have ever definitely linked this type of radiation with increased cancer or other diseases, Wagner admitted. Why? "Because the lifestyles and dietary habits of each culture are so different that no accurate comparison can be made," he explained.

The meeting was held by the HSC Committee on the Protection of Human Subjects, chaired by Dreizen, out of concern for health risks radiation might cause experimental subjects.

Dr. Phillip Johnson said that though women's breasts cause them to be 50 percent more sensitive to radiation than men, the occupational radiation guidelines do not distinguish between the sexes. Johnson is chairman of the Texas Radiation Advisory Board. However, pregnant women do have radiation restrictions, he noted.

Speakers besides Dreizen, Wagner and Johnson included Dr. Robert McConnell, professor of radiology, and Dr. K. Lance Gould, chief of cardiology. HSC Radiation Safety Specialists Joe Foley and Will Ivey and Dr. Otto Zeck of Hermann Hospital helped answer questions.

How risky to your health is a typical chest X-ray? Not very. Wagner said "one rad" of such radiation delivered to your entire body is similar to the accident risk of flying 40,000 miles by air, or driving 2,000-6,000 miles. And a chest X-ray is confined to the limited area of the chest and delivers only .03 rad, he said.

NEWS NOTES

International Education

Professional educators and administrators interested in jobs in foreign countries can be matched with overseas institutions seeking qualified Americans to fill vacancies through RISE, the Register for International Service in Education.

RISE is an international computer-based referral service, established by the Institute of International Education in 1981 primarily to help developing countries find educators and specialists in such fields as health care, social sciences, physical and life sciences, business and public administration. Positions last from a few weeks to five years.

Individuals seeking assignments may register for $35 per year. For more information contact Daniel Heyduk, Director, RISE, Institute of International Education, 809 United Nations Plaza, New York, N.Y. 10017.

Cycle for Sight

Riding a bike can help support the Lions Eye Bank on Sunday, Oct. 10.

The sixth annual Cycle-For-Sight includes a 22-mile rout through Memorial, River Oaks and Tanglewood. Free refreshments for riders will be available at the 6-mile and 15-mile marks. Riders who raise $25 or more will receive official T-shirts.

For pledge forms and additional information, contact the Cycle-For-Sight-1982 Office, 6501 Fannin, C307, Houston 77030 or call 797-9270.

Family Education

The Family Service Center, a United Way agency, will sponsor a series of education programs at various locations in the Houston area this fall.

Programs in September are "Coping with Kids," "Positive Parenting," "Managing Stress Before It Manages You" and "A Chance Worth Taking." Fees are from $10-$30 per person.

For information and registration call 524-3881.

Orchestra Discounts Available

HSC employees and students can get a 20 percent discount on tickets to the Sept. 17 Texas Chamber Orchestra concert, which features Ronald Braunstein as conductor and Richard Goode as pianist. Concert selections include Bach, Wagner and Beethoven.

Ticket prices are $10 for adults and $5 for students. To get the discount, call 862-7287 and give your name and UT extension.

The concert will begin at 8 p.m. in Sumners Hall. That's in St. John the Divine Episcopal Church, 2450 River Oaks Blvd., at the corner of Westheimer and River Oaks Boulevard.

Correction

The following School of Nursing students were incorrectly listed in the graduation section of the July Houtexan. They received Bachelor of Science in Nursing degrees in September 1981:

Laura Wakefield Kaufman, Shara Kizzee-Golub, Barbara Barbre Konarik, Colleen Ann Lathem, Melinda Ann Martinez, Donna Minton, William Joseph Morris, Candace Allen Moyer, Mary Ann Noce, Mary Anne Page, Charla Ann Parker, Theresa Marie Scarnato, Susan Hummel Schmidt, Janice D. Sloan, Shirley Humphries Smith, Susan Lynn Survillas, Carole Joan Tuttle, Patrice Rochelle Watts.

Hodges resigns as SAHS dean to study public health policy

By Kenna Giffin

The latest brouhahas in Washington, D.C., don't seem to bother Dr. Alton Hodges a bit, even though he'll soon be on Capitol Hill and its environs.

Hodges recently resigned as dean of the School of Allied Health Sciences (SAHS), to become President Bulger's special assistant for health policy development. As Hodges begins his new duties Sept. 1, Bulger will be acting SAHS dean and Dr. Doris Ross, associate dean, will become acting executive associate dean. A search committee has been appointed to accept and study nominations for a new dean.

Hodges began the SAHS and has been the school's only dean. He has developed the school to its current level of 11 allied health programs.

Hodges defines his new role as serving as an "academician — to evaluate and study trends in decision-making affecting health policy."

He will report on who makes public health policy decisions, how those decisions are made, and how a health sciences university could effectively respond to or influence those decisions.

He will also be making contacts in Washington for the HSC to use in expanding its knowledge about government and health policy.

However, he emphasized, "I will not be trying to influence public policy in health. I am not a legislative liaison, I am not a lobbyist, and I will not be representing the university in the legislative process. Hopefully, I'll be a true scholar."

He hopes to develop ways for colleges and universities to investigate legislative issues pertaining to health.

"There is a trend in federal health policy to reduce the rate of growth in publicly subsidized health care," Hodges said. "And there are things we in health can expect as a result of that. We can see some reduction in effort as well as in growth. But that gives us the opportunities for creative thought. And that ought to excite us.

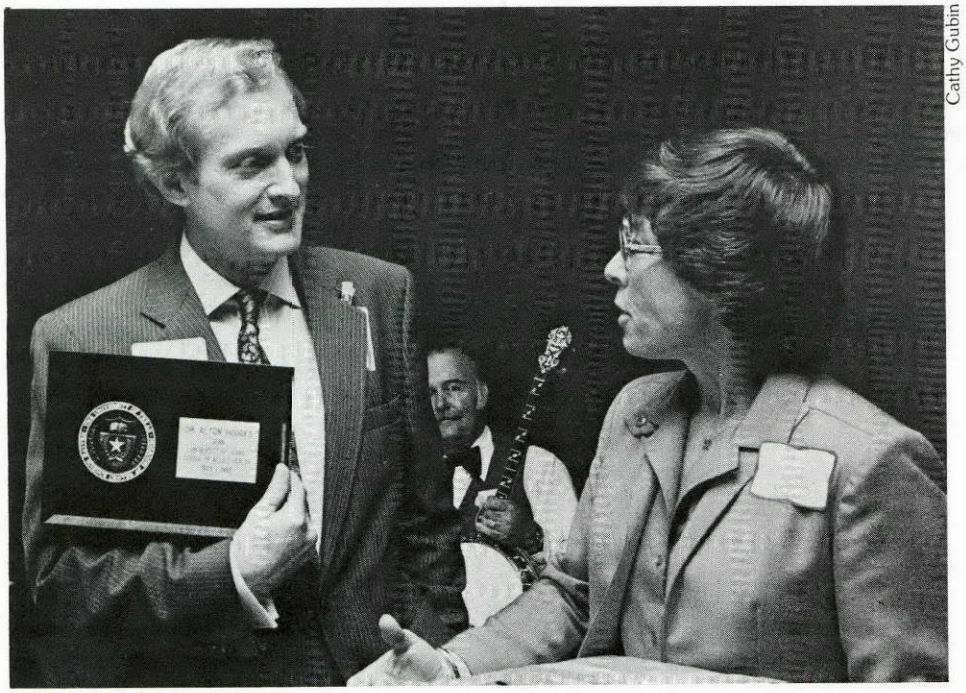
"We, as universities, ought to be change agents. Research should supply alternatives for change in our social systems," he added.

The federal government is also looking at its funding of research projects and institutes, Hodges said. It seems to see itself as providing money for short-term projects, funding research that private enterprise might deem unrewarding financially, and encouraging private enterprise to invest in research.

"The only way to get industry to finance research is through incentives in the form of tax deductions or credits, or through commercial development. The only real benefit to the government, of industry financing research, is reduction in administrative overhead costs," Hodges said.

What the HSC could get from Hodges' time on the Hill is possibly "to become recognized as experts in analysis of the issues — and answers — in health care policy," the dean said.

"If we can create a forum where the issues can be fully explained," he continued, "we as professionals and teachers, as well as our students, will be better equipped to deal with the changes in public policy. We can be influential in molding that environment and our destinies."



Cathy Gubin

IT'S HARD TO SAY GOODBYE to the person who started your program. That might be on the mind of Kathy Pitre (right), director of the School of Allied Health Sciences (SAHS) Program in Radiologic Technology as she talks with Dr. Alton Hodges, who recently resigned as dean of the SAHS to take a new HSC position in Washington, D.C. Hodges was hired to start SAHS in 1972; the school now has 11 programs varying from one-year certificate (requiring high school diploma) to postgraduate certification programs. The dean's office staff and program personnel gave Hodges a going-away party where he received a plaque to commemorate his time as dean.

Children grieve at their own pace, psychiatrist says at Brown Bag

By Ina Fried

"The dead cry because they're dead," a three or four-year-old child may believe. To help children deal with grief, you need to understand how they understand death. Dr. Shamal Beltengady, a child psychiatrist in private practice, explained the three stages most children go through in understanding death during a Brown Bag program sponsored by Employee Relations.

"A child often has the feeling that if he doesn't cry, he can deny the death has taken place."

Under the age of 5, when a child is very egocentric and not able to see things from another person's point of view, a child usually thinks only old people die, she explained. The child doesn't understand the permanency of death; he thinks of it as a sort of departure from which the person will return.

At that age, a child may think of death as a "fitful and unpleasant sleep" or as imprisonment. She quoted a child as saying, "The dead person wants to get up, but the coffin is nailed down."

From about age 6 to 9, a child tends to understand death as something that happens to people only if it catches them. Death is seen as an evil, invisible, powerful figure in pursuit of people.

Children at that age often dress up for Halloween as ghosts or skeletons, which they associate with death. "I think Halloween helps children deal with death in a relaxed way," Beltengady suggested.

After about age 10, children become more aware of the different ways that people die, she said. They see death as the final state for all people, a part of the laws of nature.

"The bogeyman is gone, and with it the security of denial," she said. "Death becomes an issue to deal with."

"Children are not able to grieve like adults in a lump sum," she said. "They do go through all the stages of grief that you see in an adult but at their own pace."

A child may start making jokes while adults are still very sad, but later events — such as, seeing a dead bird — may bring up the subject of death again, and the child will ask questions.

"A child often has the feeling that if he doesn't cry, he can deny the death has taken place," the psychiatrist said. "Also, boys tend not to cry because of our culture emphasizing that boys should be strong. They need to know that it's okay to cry."

If children feel that they did something to cause the death, they may start getting into trouble to get rid of their guilt feelings, she said. They need to be reassured that they did not cause the death.

Beltengady played a taped discussion about children and death. The psychiatrist in the tape stressed that children should be as much a part of the mourning over the death of a loved one as the adults can handle. Parents need to show their feelings and the ways that they cope with those feelings. He gave an example in which a close friend of the family was able to help a child understand and deal with the death of his grandfather and the feelings it caused him and his parents.

Cynthia Miller

Two bits, four bits, 8 million bits of information per computer

By Ina Fried

A computer from Radio Shack can handle 64,000 bits of information. Each of the two IBM 4341 computers used by Data Processing can handle 8 million bits of information.

Data processing (DP) is the center of administrative information for the Health Science Center. DP systems vary from accounting and animal care to TV video film library and WATTSBOX (which controls long distance calls from all HSC telephones).

Scheduling data entry and computer time to meet demands of 8,000-9,000 jobs a month, designing programs for new requests and maintaining the equipment to keep "down" time to a minimum is a 24-hour-a-day job for DP, explained Paul D. Stewart, acting director.

In addition to its routine functions, the department receives an average of 50 DP service requests each month, Stewart said. When a service request arrives, it is logged in and then goes to a project leader for analysis. Analysis determines whether there is a solution that meets the user's needs, whether it it is feasible to implement this solution and how much it would cost. If the user and the analyst agree to pursue a solution, the programmer then begins to design a program. Each step of the program must be tested and documented.

Programming is "telling the hardware how to operate," said Patrick Mottonen, manager of software systems programming. "Back in the early days, to program computers you had to actually move the wires around." Now programmers can use a language that people can understand and that can be translated into language the computer can understand.

DP has available several programming languages that can produce information without going through the tedious process of programming, said Henry Diaz, manager of systems analyst services. For instance, Answer/DB allows a user to extract reports from existing data in the order he wants on a daily basis. This is useful for such tasks as maintaining up-to-date inventory records. The user can either pick up the report from DP or print it out at his own terminal.

Cathy Gubin

THE HEART OF THE MATTER — Steve Wenholz, supervisor of computer operations for Data Processing (DP), points inside the central processing unit, the heart of the whole DP system. The gate, on which he rests his right hand, contains the memory for the unit.

Almost 100 terminals are connected to the DP computers through a local network in the Houston Main Building. These terminals are connected to the computer through cables.

In addition, 125 remote terminals are located at the Graduate School of Biomedical Sciences, the School of Public Health, the Medical School, Hermann Professional Building, South Main Warehouse, Memorial Hospital and Speech and Hearing Institute. These terminals involve more hardware since all remote communications must go through telephone lines, said David Vale, operations supervisor. "This is traumatic because we lose control."

The telephone communication technology is improving though, he said, and smaller, cheaper, and more efficient equipment is becoming available.

More than one person can use the computer at the same time. For instance, "while the computer is reading data from a tape for one program, it can perform functions for another program," Mottonen said. "The computer is so fast — it might take a person 10 or 15 seconds to do his part of the job, while it takes the computer one-millionth of a second to do its part."

A user's meeting each month allows DP "customers" a chance to learn more about the department and its services. Tours of the facilities can be arranged for users or prospective users by calling 792-4484.

"The more sophisticated our users become," Stewart said, "the better we like it."

Health insurance open enrollment continues through September

There is still time for Health Science Center employees to enroll in or change their coverage for health insurance during the open enrollment period that continues through Sept. 30, according to an announcement by Clough Shelton, director of Human Resources and Employee Relations.

All group health coverage for the UT System is being shifted from Blue Cross/Blue Shield to Aetna Life and Casualty as of Sept. 1.

Because of the change in carriers and because of the increase in UT's contribution from $48 to $58 per month, employees enrolled in Plans 2 UT, 3 UT and 4 UT and who do not change their level of coverage will pay the same amount or even less than they did during 1981-82 for health and dental coverage. Only employees enrolled in Plan 1 UT will have an increase in their out-of-pocket monthly premium expenses.

Coverage under all health plans will remain similar to that provided by Blue Cross, and Aetna will continue to provide dental insurance coverage.

Invitations to bid on the coverage went to 461 companies, Shelton said. Of those, 17 indicated interest, but only Aetna and Blue Cross submitted bids. Aetna submitted the lower bid.

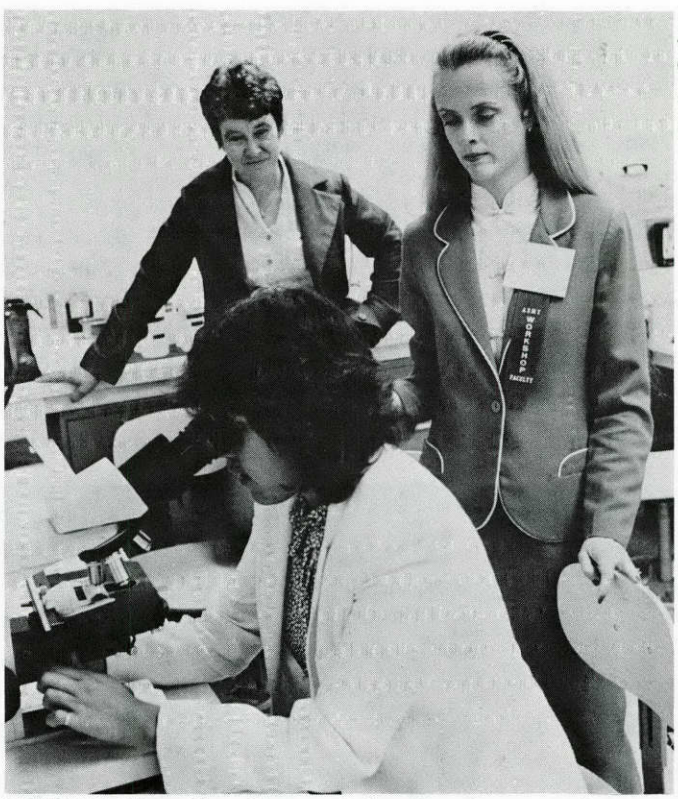
"Aetna has provided excellent dental claim service in the past year with a two week average turnaround time," Shelton said. "We look forward to the same service for health claims. Aetna has announced that it will expand its UT Dental Claim Unit to include processing of health claims as well."

Aetna also will provide group term life, accidental death and dismemberment, and long-term disability insurance coverage at no increase in rates.

During the open enrollment period, employees may enroll for medical and dental coverage without evidence of insurability, may upgrade or downgrade their coverage, and may add or drop dependents to the Medical coverage. For more information on these procedures or on filing claims with Blue Cross or Aetna, contact the personnel representative at the Dental Branch, 792-4913, Houston Main Building, 792-4250, or the Medical School, 792-4900.

Cathy Gubin

ALLIED HEALTH ASSOCIATE DEAN Doris Ross is the 1982 recipient of the French Professional Achievement Lectureship award given by the American Society of Medical Technologists. She received her award and lectured on "Turning Points in Medical Technology Education" during the 50th anniversary convention of the society, which was held in Houston this summer.



Bradley Perkins

***BEST IMAGE** — Cheryl Lotspeich (standing, foreground) watches as Gloria Palomo adjusts her microscope to obtain the best specimen image during a seminar for the American Society of Medical Technologists. Lotspeich and Barbara Smith Michael, instructors in the Allied Health Sciences' Program in Medical Technology, presented the workshop along with Stanley Schwartz from Nikon Instrument Division. They plan to offer the workshop in Houston again in early 1983. For more information call 792-4721.*

Vinyl skull provides realistic model for dental students

By Kenna Giffin

When a patient goes to a dentist for difficult work or oral surgery, the patient fully expects the practitioner to be an expert at deadening the nerves around the area to be treated.

But learning to give dental injections isn't easy, according to junior dental student Frank Frishkey. There are no models to practice on — students use each other.

The best block is the Gow-Gates, which is a very deep injection that affects almost all the nerves on one side of the mandible (lower jaw). Unfortunately, this superior type of anesthesia is more difficult to use than the more common kind, Frishkey said.

But thanks to Frishkey and his associate, Alex Gonzalez, dental students all over the country might have practice jaws available one day.

For their first-place table clinic at the Houston District Dental Society meeting, Frishkey and Gonzalez bought a vinyl skull, then fabricated nerves, musculature and ligaments with silicon rubber to create a model that gives students the feeling of working on a human mouth. With the help of a mirror below, students can see just where the needles are, Frishkey added.

"No one has adequately demonstrated or described" how to do a Gow-Gates Block, he said. "Words and pictures won't describe it well. The procedure is 95 percent effective, but learning it is hard. The model is the third mode of learning to give the injection."

It took the junior students about nine months to create the model from the idea stage to the finished product.

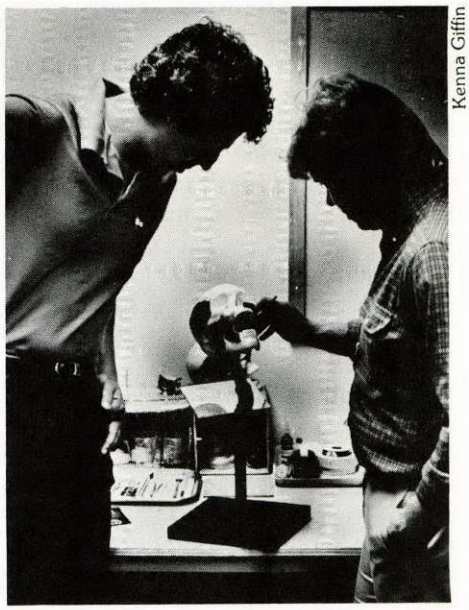
Dr. Ray Warner, Dr. Paul McFarland and Dr. Heyl Tebo were sponsors for the project.

After winning at the district meeting, the students took their table clinic to the state convention. They will put it in national competition in November at the American Dental Association meeting in Las Vegas.

If the model elicits the same kind of response as it did at the Houston meeting, Frishkey and Gonzalez will scarcely see their project once they put it on display.

"At the Houston meeting, the dentists kept practicing on it," Frishkey happily complained. "We couldn't see any other exhibits. And our sponsors couldn't get in to congratulate us when we won."

Winners in the dental hygiene table clinic division at the Houston District Dental Society meeting were Charlotte Granger, Susan Williams and Irene Kopp from the School of Dental Hygiene at the Dental Branch. Their clinic was on intraoral photography and was also exhibited at the state dental association meeting.



Kenna Giffin

OPEN WIDE — Alex Gonzalez (left) and Frank Frishkey study their first-place dental table clinic exhibit: a vinyl skull they constructed to help dental students practice an effective yet difficult nerve block. The juniors exhibited the skull at the Houston District Dental Society convention and received first place, which entitles them to display it at the American Dental Association convention in Las Vegas in November.

Cathy Gubin

THANK YOU FOR THE HELP, Nancy Fasano (far right), assistant dean for undergraduate students at the School of Nursing, tells Cynthia Flasik (center), staff development coordinator of the Visiting Nurse Association, and Kathy Vestal, associate executive director of Hermann Hospital. The School of Nursing held a reception at the Doctors' Club to thank sponsors of student clinical internships for giving the nursing students opportunities to experience a variety of nursing situations.

'I pledge allegiance' is special to new American citizen

By Ina Fried

What does the Constitution stand for? How many amendments are there? What are the branches of government?

If this sounds like your high school course in American Government, you're not far from being right. These are a few of the questions that foreign-born permanent residents of the United States must answer to become naturalized American citizens.

Mazhar Rangwala, associate architect in the Health Science Center's Office of Facilities and Space Planning, was one of those passing the test to become citizens this summer.

Rangwala is a native of Bombay, India, a modern and cosmopolitan city of 8 million people. He has lived in the U.S. for 15 years.

He came here to pursue a higher education and better opportunities. He earned a bachelor's degree in architecture at the University of Oregon, a master's degree in town planning at Ohio University and a master's degree in architecture at the University of Houston. He has worked at the HSC since 1978.

Rangwala is the sixth in his family to become an American citizen. About 20 relatives, including four brothers, live in the U.S. He became a permanent resident in 1974. A person must wait five years after gaining permanent resident status to apply for citizenship, he explained. He applied a year and a half ago.

"People told me I was lucky my application was processed that quickly; they told me it could take two to four years because of the large number of applications in the Houston area," he said.

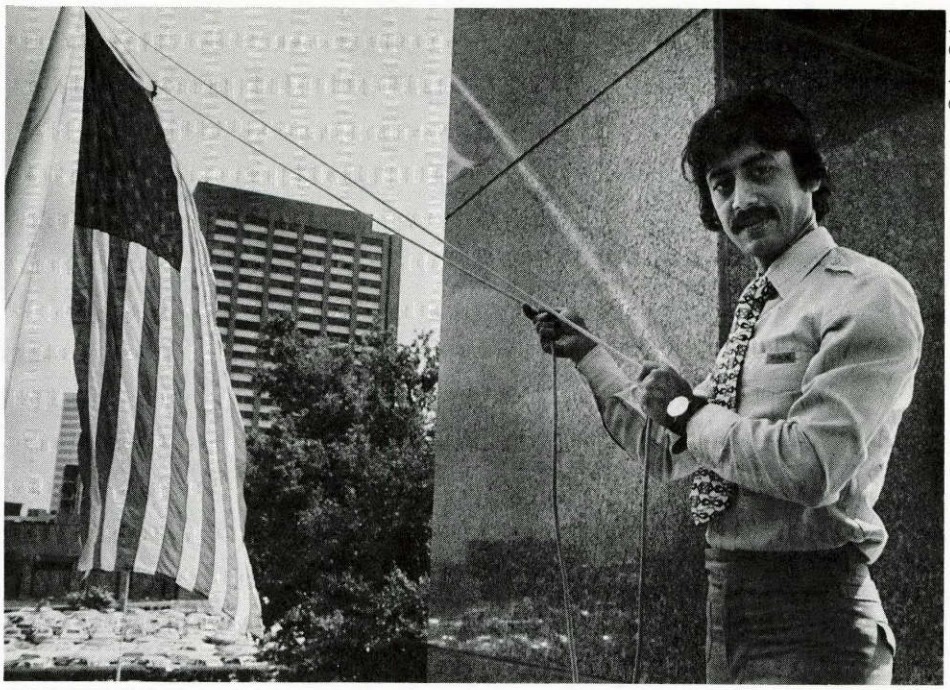
After studying a book titled "Our United States," Rangwala took tests to show that he could read, write and speak English and that he understood U.S. history and government. Later he was sworn in with a group of other new citizens.

"It hurts a little to lose my Indian nationality — that was the place I was born," he said. "Being realistic, though, I really don't see myself going back home and settling there now.

"I'm accustomed to the lifestyle and customs here; I have friends; and I like my job," he said. "It's an interesting country."

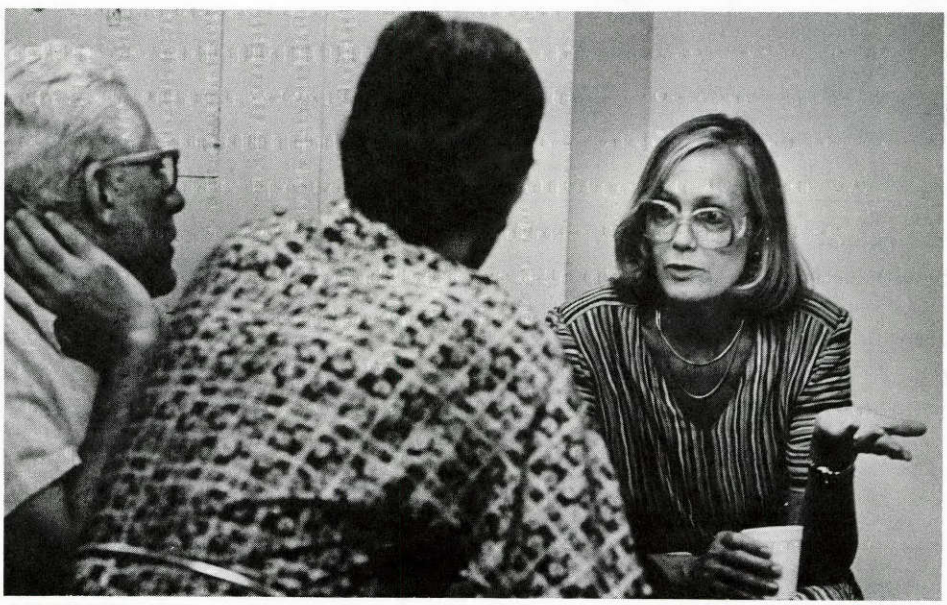
Becoming a citizen allows Rangwala to participate more fully in American life. He can hold jobs that require U.S. citizenship; he can vote; he can hold public office.

"The only thing I can't do — no naturalized citizen can do — is be president or vice president."



Cathy Gubin

NOW IT'S HIS FLAG TOO — Mazhar Rangwala became an American citizen this summer. A native of India, he has lived in the U.S. for 15 years. He is associate architect in the Health Science Center Office of Facilities and Space Planning.



Cathy Gubin

GETTING READY to retire was the topic at a Pre-retirement Counseling Seminar sponsored by Human Resources and Employee Relations. Carol Cossum (right), psychologist and management consultant, was one of the speakers. The seminar will be offered again in October. For information call 792-4911.

Afterthoughts

Kenna Giffin

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