

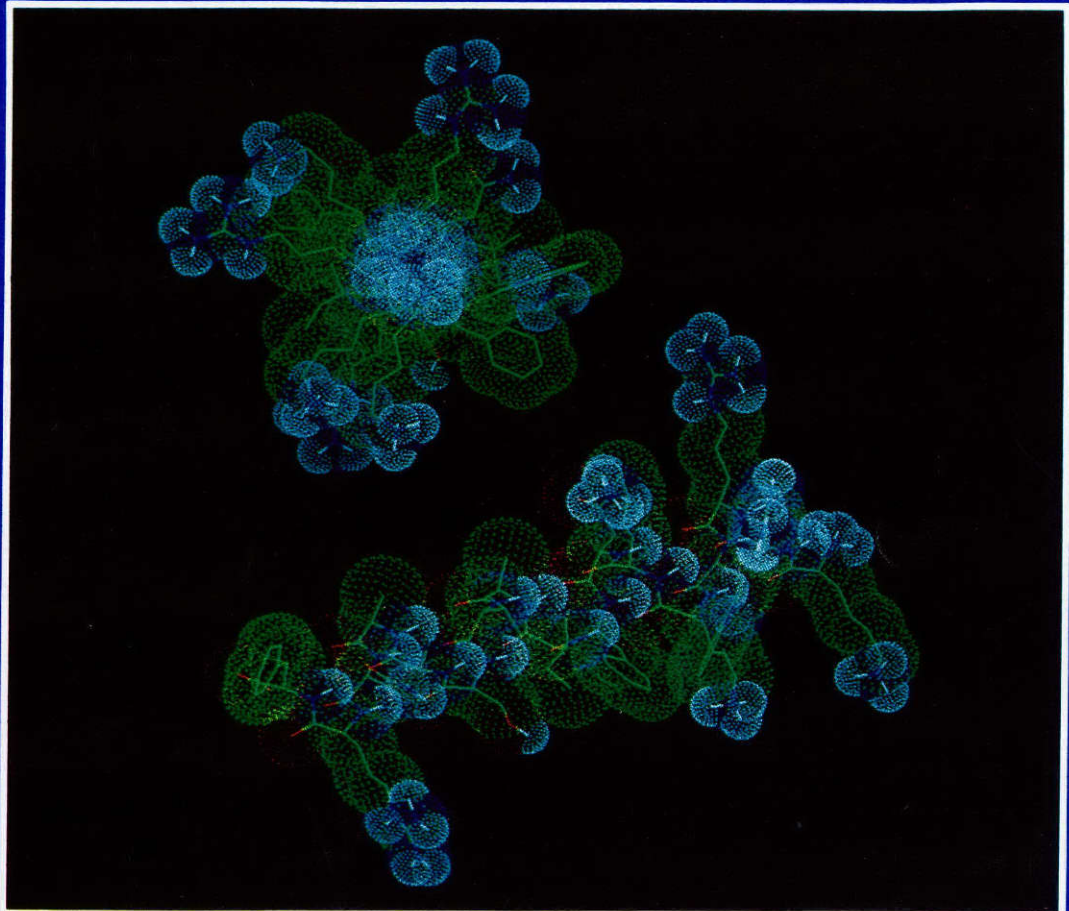
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THE UNIVERSITY OF TEXAS HEALTH CENTER AT TYLER

capsule



**Three-dimensional computer graphics
enhances research capabilities.**

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Fall/Winter 1989

capsule

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Vol. 6, No. 1

In this issue:

UTHC's new computer graphics system enables researchers to perform state-of-the-art computations like the colorful molecular design of a crystallized protein shown on the cover. The story is on page 4.

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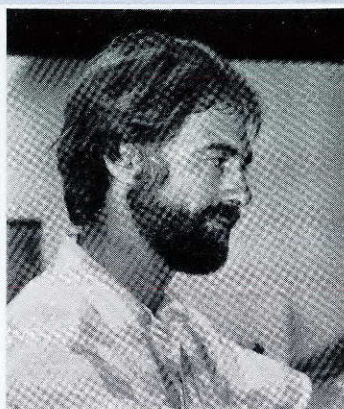
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The University of Texas Health Center at Tyler is the state referral hospital and research center for cardiopulmonary diseases. It is accredited by the Joint Commission for Health Care Organizations and is a member of the American Hospital Association and the Texas Hospital Association.

Harnessing a Defense Team

Macrophages team up to hone in on enemy organisms and fight infection. A UTHC biochemist is exploring the possibility of manipulating these cells to direct the body's own immune system to treat disease.



Foreign invaders, coveting an ideal environment for their own sustenance and domain, infiltrate the human body, causing infection and disease.

But the body's immune system, using its intricate system of cells and organs, fights back, launching attack after attack. The ensuing battle—albeit a microscopic one—is part of a large-scale war fought daily to protect the body from viruses, bacteria and germs.

Among the warriors are a group of body cells called macrophages. In combat, they are a formidable foe, acting as a part of the main line of defense against infectious diseases by seeking out, engulfing and destroying the enemy. And after the battle, they even clean up the mess. In fact, because of their constant housekeeping to remove dead cell material, they are tagged scavengers.

Macrophages, found in most body tissues, also provide a natural defense against cancer cells and play an important role in cleaning the blood.

Dr. Mark Atkinson, a biochemist at the University of Texas Health Center, is looking for answers to how macrophages work and how scientists might be able to control and increase their effectiveness in treating disease. He has undertaken a five-year study supported by a \$341,490 grant from the National Institutes of Health.

“What I'm really interested in,” says Atkinson, “is how the macrophages recognize an infection and then are able to move to that specific site, stop moving and begin to ingest the viruses, bacteria or dead cells.”

This ability to hone in on enemy organisms and engulf them is a wonderfully effective defense mechanism. Atkinson sees learning the mechanics of its operation as a vital step in being able to enhance the protective role of macrophages both in fighting infections and in



Dr. Mark Atkinson is studying how macrophages work.

overcoming cancer tumors.

But problems can occur. In illnesses such as tuberculosis, Legionnaire's disease and AIDS (Acquired Immune Deficiency Syndrome), the infecting organisms are swallowed up by the macrophages but are not destroyed, leaving them free to live, develop and perpetuate the illness from within the macrophages.

“Once inside the macrophage, these microorganisms are hidden from the

immune system and can multiply, causing reoccurring illness. The AIDS virus, for example through cycles of viremia (presence of virus in the blood), will eventually destroy the immune response,” he said.

Treatment of menaces like AIDS and Legionnaires disease doesn't come from just trying one drug after another to see how they work.

“It comes from basic research —

understanding how these type of diseases progress and how defense mechanisms such as macrophages are normally effective," he said.

Atkinson points out that the NIH funds a lot of research in smaller laboratories

"In most sciences today, we're doing things that couldn't have been done even five years ago, not because we are any better trained but because five years ago the technology was not available to work at the levels we can study today."

Dr. Mark Atkinson

because these have proved to be very cost-effective investments.

"The research effort is built on the 'shoulders' of many laboratories," he added.

NIH acknowledged his work by granting him a FIRST (first independent research support and transition) award designed to recognize the talents of young scientists newly involved in competitive research. Atkinson is the fourth UTHC researcher to receive this award, and his grant proposal was in NIH's top 7 percent last year.

Atkinson received degrees from Oxford University in Great Britain and was a postdoctoral fellow at Yale University School of Medicine. Prior to joining UTHC's research staff, he worked in the cell biology laboratory at the National Heart, Lung and Blood Institute in Bethesda, Md., a unit of the NIH.

With his background in cellular biology, he was drawn to UTHC's biomedical research facility by the freedom to do research, the strong support staff available, the advanced facilities, the financial backing and the quiet climate conducive to concentrating on his continued

work. With grants like this one, he hopes to expand his research and increase funding.

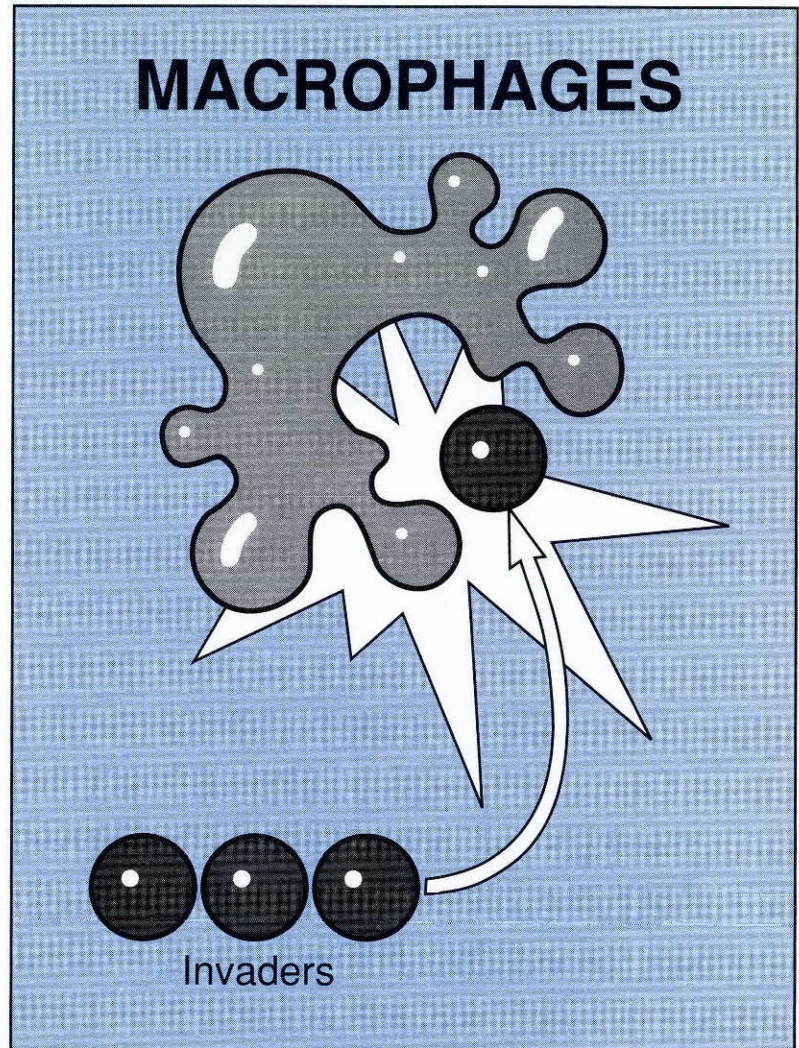
He emphasizes the importance of having good research facilities available to study minute amounts of cell materials. "In most sciences today, we're doing things that couldn't have been done even five years ago, not because we are any better trained but because five years ago the technology was not available to work at the levels we can study today."

One of the most important tools in his laboratory is a protein sequencer. It was purchased with allocations from the UT System's Permanent University Fund.

This sensitive piece of equipment contains an oxygen-free environment into which minute amounts of protein can be introduced and broken up into the 20 different amino acids. Using this process, proteins may be analyzed in quantities that were unheard of four or five years ago.

Undoubtedly macrophages are among the most effective protectors of continued good health. Learning how they work and how to control their activities could lead to treatments for overcoming cancer or the body's newest enemy, the AIDS virus.

—Carol Hare



Macrophages recognize an infection or invader and then are able to move to that specific site, stop and ingest the virus, bacteria or dead cell.

Computer Technology in the Laboratory

By Rita Nute

Remember those science projects building models with wire and mesh to simulate the molecular structures of carbohydrates and lipids?

Many scientists still use those methods, spending valuable time and money to build expensive, cumbersome and difficult to manipulate physical models of wire or plastic.

But today recent advances in computer technology have brought sophisticated

“Because this system helps visualize at the molecular level, we can perhaps suggest drugs with certain molecular structures that will effectively inhibit an enzyme.”

Dr. Donald Blumenthal

computer imaging into the research laboratory, allowing University of Texas Health Center researchers to model and manipulate complex molecular structures on computer in their efforts to understand biochemical processes of cardiopulmonary diseases.

“We want to understand how the structure of a protein at the molecular level results in certain functional or other biological properties we can measure,” says biochemist Dr. Donald Blumenthal.

The equipment is located in epidemiology and biomathematics for easy access by Blumenthal and other researchers, including biochemist Dr. Daryl Fair and molecular biologist Dr. Gokul Das, in their various studies of the unique macromolecular structure-function relationships.

“In order to design drugs that act on specific biochemical processes, we must understand the molecular level. But understanding these biochemical processes requires appropriate

molecular models,” he said. Most projects here require visualization of molecules such as proteins, peptides, complex carbohydrates, nucleic acids as well as drugs and toxins.

“Because this system helps visualize at the molecular level, we can perhaps suggest drugs with certain molecular structures that will effectively inhibit an enzyme,” he said.

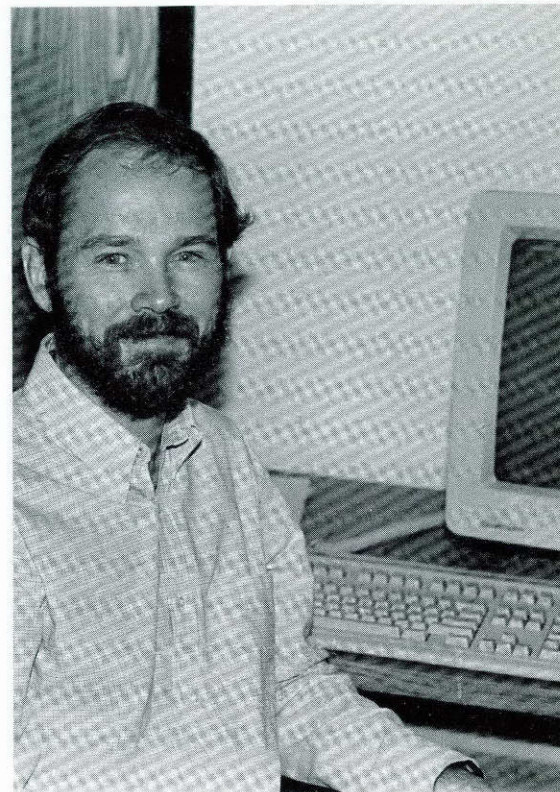
By acquiring this three-dimensional graphics workstation, UTHC researchers can perform state-of-the-art computations to design molecular structures and perform genetic and protein engineering experiments. This system also allows researchers to access the CRAY supercomputer at the UT System in Austin and network with other UT components to reduce computation time and to share information.

“Molecular structures are downloaded from atomic coordinate databases,” he said. “We can also manipulate and re-engineer the molecular structures so we can analyze the three-dimensional structural consequences of mutations or any other modifications,” he said.

The software program from Polygen Corp. called QUANTA/CHARMm, allows UTHC scientists to get proteins already crystallized (a process which reveals a protein’s three-dimensional structure) from the computer tapes into the computer and allows very sophisticated calculations in conjunction with modeling to find the most favorable conformations or interactions of a molecule.

“Or to indicate the extent to which unfavorable interactions or conformations might occur,” Blumenthal added.

“Many important biochemical proc-



Biochemist Dr. Donald Blumenthal models molecular structures on computer.

esses are regulated by the interaction of two or more macromolecules— nucleic acids with proteins, proteins with other proteins and protein interaction with molecules like drugs and hormones,” he said.

In genetic engineering projects, a molecular biologist can study how mutations can affect a genetically engineered protein.

“A lot of what molecular biology is about is trying to define where the mutations causing hereditary disease, such as sickle cell and cystic fibrosis, lie in the protein sequence and why that should have such a drastic effect on the function of that protein,” Blumenthal said.

Research Projects Focus on Lung and Heart Disease

The National Cancer Institute has awarded a \$445,000 grant to the University of Texas Health Center to fund a study of microscopic changes in lung cells of asbestos workers.

Dr. Ronald Yanagihara, an associate professor of medicine and cancer specialist, is principal investigator of the two-year pilot project which represents a refinement of another NCI-funded project now in its fourth year at the health center.

In addition, the American Heart Association, Texas Affiliate has awarded the health center a \$55,000 grant for a

In the newly funded trial, Yanagihara will examine lung cells by a novel method recently developed.

“Although final results of the first study will not be known for another couple of years, some preliminary work indicates that simple microscopic changes in sputum cells may not be sensitive enough to tell us about a person’s risk of developing lung cancer,” he said.

“In this new study we will be obtaining tiny pieces of the lung air passages and staining them with a monoclonal antibody which appears to be highly sensitive and

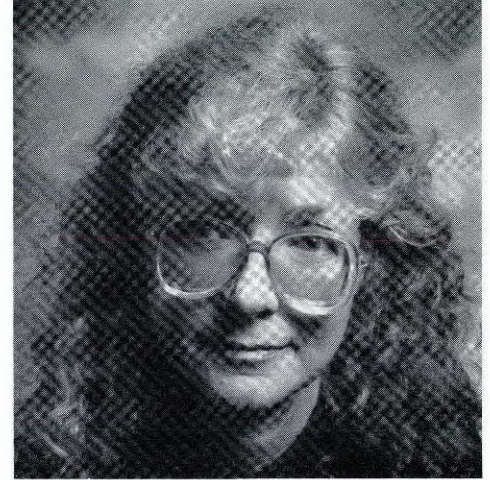
specific for a certain type of lung cancer. Participants who are positive for this marker will then be offered a powerful man-made form of vitamin A for six months in an attempt to reverse the abnormality,” Yanagihara said.

Yanagihara’s project is one of only two cancer prevention trials funded by the NCI this year. A related project will be conducted at the UT M.D. Anderson Cancer Institute in Houston.

Yanagihara, who has been at UTHC since 1984, received his specialty training at the Memorial Sloan Kettering Cancer Center in New York and the National Institutes of Health in Bethesda, Md. He received his M.D. degree from the University of Minnesota Medical School.

Dr. Karleen S. Callahan, an assistant professor of biochemistry, is examining the effects of oxidant exposure on the endothelial cells which line the inner surface of all blood vessels.

“When activated by microorganisms, circulating cells— such as white blood cells and platelets— can release oxygen by-products called oxidants,” Callahan said.



Biochemist Dr. Karleen S. Callahan

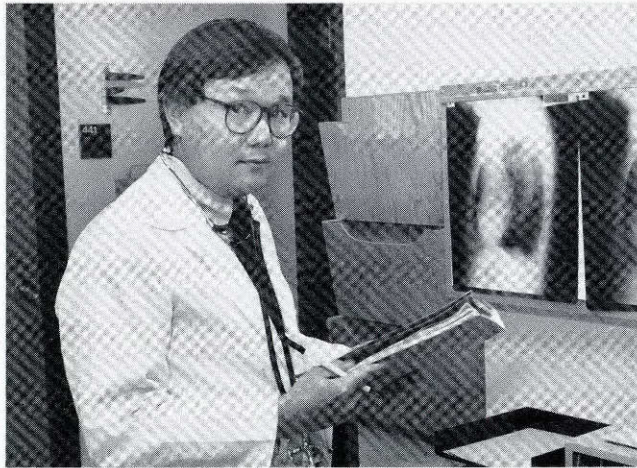
“These resulting oxidants help kill invading bacteria. However, oxidants may also damage normal tissue and alter the cell’s normal function. Vascular cells are particularly susceptible to oxidant effects because they line all blood vessels and thus are in direct contact with circulating cells and their released oxidants,” she said.

Normal vascular cells have smooth surfaces which maintain blood flow; however, once they are damaged, the cells may become clot-producing or leaky. Both conditions could lead to reduced blood supply to the heart.

To examine any changes in normal cell function after exposure to oxidants, Callahan will grow normal endothelial cells in culture dishes, expose them to oxidants and assess the various biochemical parameters.

“These studies should contribute to the knowledge of cardiovascular diseases and possibly the development of drug therapies to prevent or improve these harmful processes,” she said.

Callahan joined the research staff in 1985 after completing a postdoctoral fellowship at the University of Washington in Seattle. She received a B.S. degree in pharmacy from the University of Utah and a Ph.D. in pharmacology from the UT Health Science Center in Dallas.



Oncologist Dr. Ronald Yanagihara

study of vascular cell damage which could lead to hypertension, plaque build-up in the arteries and eventually heart attacks.

In 1984 NCI awarded UTHC a \$1.7 million grant to conduct a cancer prevention study among Texans occupationally exposed to asbestos. More than 650 people are enrolled in this five-year clinical trial. Researchers are trying to determine whether low doses of beta carotene and vitamin A can improve abnormalities of cells found in the sputum of former asbestos workers who are at high risk for lung cancer.

Yanagihara is co-investigator of this study headed by Dr. Jerry McLarty, chairman of the health center’s epidemiology and biomathematics department.

Fighting The Odds

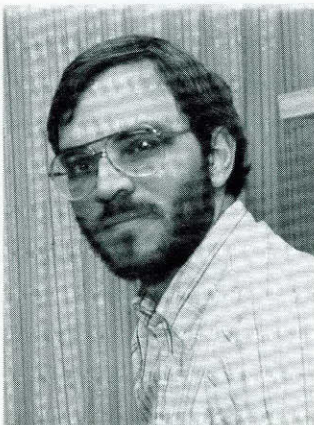
With early diagnosis and intensive treatment to control cystic fibrosis' onslaught on the respiratory and digestive systems, the odds of increased longevity continue to improve.



Alice Bowins, left, with granddaughter, Polly Todd, who has cystic fibrosis.



Dr. Michael Green



Dr. Philip Black

While 3-year-old Polly Todd waits to see the doctor, she washes her doll's face. After moments of intense concentration, she finishes her task and looks up with a broad grin at her grandmother. "She's cleaned up now, Nani," she says, pushing her own blonde curls behind her ear.

Her grandmother, Alice Bowins, responds and gives her a big hug. "You've done a beautiful job." Polly's face is beaming. She sits down and with a toy stethoscope listens carefully to her baby's heart.

It's obvious Polly doesn't mind the periodic visits to the University of Texas Health Center's pediatric pulmonary clinic where her condition is carefully monitored.

Polly, who has cystic fibrosis, has learned quickly to adapt to these detours from simple childhood.

"She's a bright little girl. Polly knows when she has difficulty breathing, she's going to need her treatment," her grandmother said.

"When we first heard the diagnosis, it was hard to believe. But we don't think about this disease being incurable. We just try to take one day at a time," Mrs. Bowins said.

Polly is one of more than 30,000 children and young people in the United States with CF, an inherited disorder which affects the lungs and digestive system.

Children with cystic fibrosis, the most common fatal genetic disease in the U.S., have a 50-50 chance of surviving to 27 years of age or older, according to pediatricians at UT Health Center's specialty clinic.

"Today's odds are a significant improvement over statistics 30 years ago. In 1950, most children with CF died at 2 to 3 years of age," says Dr. Michael Green, assistant professor of pediatric pulmonology.

Dr. Philip Black, also an assistant professor of pediatric pulmonology added

“By 1970 there was a rapid rise of life expectancy, due in large part to a combination of the development of improved enzymes for better nutrition and antibiotics to fight previously antibiotic-resistant pneumonias.”

Prior to joining the health center staff last year, Black was director of a cystic fibrosis center in Utah. He’s currently involved in research of various therapies to treat CF patients.

In 1985 the National Cystic Fibrosis Foundation and the State Services for Crippled Children designated UT Health Center’s pediatric pulmonary clinic one of 125 satellite centers nationwide specializing in the diagnosis and treatment of cystic fibrosis.

Before this designation, East Texas area CF patients sought the special treatment in Houston or Dallas hospitals. Some 35 young people now receive CF care here.

Cystic fibrosis affects the exocrine glands which produce the body’s secretions like saliva, sweat and mucus.

Abnormal secretions in the glands can cause various complications, including chronic respiratory problems and frequent lung infections, Black said.

“We don’t have finite answers. But as ongoing treatment improves, there is now the possibility or even probability that a CF patient will live to make decisions about marriage, family planning, college and careers.”

Dr. Michael Green

This abnormality also block the pancreas’ digestive enzymes, causing the untreated CF patient to have frequent bulky and fatty stools. And although the cystic fibrosis patients may have very large appetites, they fail to gain weight or grow normally, he said.

Other dysfunctions include high sweat electrolytes which could result in severe salt loss and cause listlessness, abdominal pain and vomiting. Patients sometimes have cirrhosis of the liver.

Symptoms may vary with each child or young adult and may even mimic other

respiratory conditions like allergy or asthma.

“In fact, some patients may go undetected until they reach adolescence,” Green said.

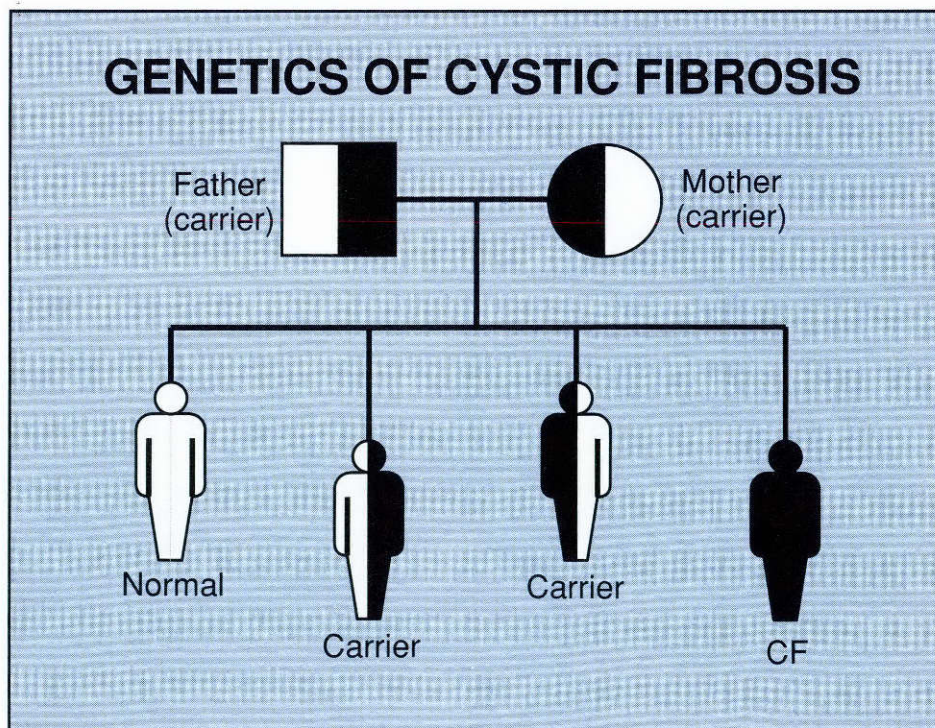
Every parent should be concerned if their child has an excessively salty-tasting skin, he said. As public awareness of cystic fibrosis has grown, the medical community has urged parents to give their children a simple ‘kiss to tell’ if the skin is extremely salty. A salty kiss should be suspect, and diagnostic testing at a CF center may be in order, Green said.

Although the disease is incurable, cystic fibrosis patients should be identified early and intensive treatments begun immediately to control the disease’s onslaught on the respiratory and digestive systems.

A team approach to diagnostic testing and treatment at the UT Health Center’s cystic fibrosis center involves pulmonary function technicians, respiratory care practitioners and nurses in addition to the medical staff.

“The pediatric clinic provides outpatient care, watching the youngsters’

Researchers are excited about the discovery of a genetic marker of cystic fibrosis. The studies may also lead to a genetic tests to determine who may be carriers of this inherited disease. Because no genetic tests are available, a person isn’t recognized as a carrier until he or she becomes a parent of a CF child. Both parents must be carriers for a child to inherit the disease. (See chart)



nutrition, growth and development,” Green said.

Pulmonary assessments are important to maintain clear airways and minimize dangerous infections, Black said.

Researchers are excited about the discovery of a genetic marker of cystic fibrosis. These genetic studies and others nationwide mean optimism for the devel-

opment of better treatment and eventually a cure. The studies may also lead to a genetic tests to determine who may be carriers of this inherited disease. Because no genetic tests are available, a person isn't recognized as a carrier until he or she becomes a parent of a CF child. Both parents must be carriers for a child to inherit the disease. One in 20 whites is a carrier.

While scientists continue their research for a cure, patients and their families continue to hope and plan their futures.

“We don't have finite answers. But as ongoing treatment improves, there is now the possibility or even probability that a CF patient will live to make decisions about marriage, family planning, college and careers,” Green said.

A Beacon of Hope

Fifty years ago, the life expectancy for 25 percent of cystic fibrosis patients was one year. Over the years, the life expectancy has changed dramatically. But cystic fibrosis remains the number one genetic killer of young people today.

The growing number of adults with cystic fibrosis indicates the tremendous advances made in diagnosis and treatment. These adults also offer a beacon of hope for parents with young children with CF, especially the newly-diagnosed ones.

Jerry Lynch, a 37-year-old cystic fibrosis patient from Garland, is somewhat of a symbol of hope around the cystic fibrosis center at the University of Texas Health Center.

With his tall, thin frame, Lynch stands out as one of only a few adults in UTHC's pediatric pulmonary clinic. In for a checkup, he jokes with the nurses: “I'm always nice to people with needles.”

“As a toddler, I was first diagnosed as having tuberculosis,” Lynch said. He was treated for TB but continued to cough and have shortness of breath.

Growing up, he constantly had what were believed to be colds and coughs and had been treated frequently for pneumonias and bronchitis. Meanwhile, he continued his school activities, playing basketball, running track and performing in the marching band.

At 17, he was diagnosed as having cystic fibrosis. He began the special treatments and medications to control further damage to his respiratory system.

“I had heard of CF but after the diagnosis I tried to learn as much as I could,” he said.

“Awareness about CF has increased, and many people are curious about CF. When I meet people who don't know what it is, they ask me a lot of questions,” Jerry said. “One of the

“I talk with young couples who have just discovered their babies have CF. They're often very frightened, and I think our conversations and meeting me gives the parents hope.”

main things I tell them is to give their child a kiss. And if they taste salty see a doctor,” he added.

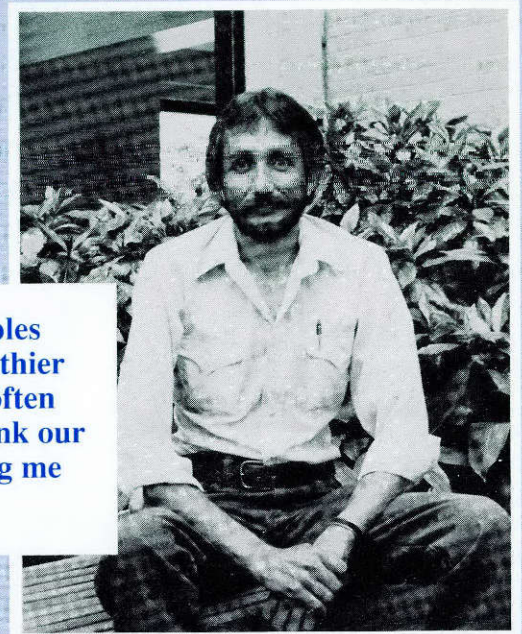
Parents of cystic fibrosis patients have a lot of questions, and Lynch has been very willing to talk to parents who are frightened by statistics and numbers.

“I talk with young couples who have just discovered their babies have CF. They're often very frightened, and I think our conversations and meeting me give the parents hope,” Jerry said.

“I also talk to CF patients and I've made a lot of friends. But I've already lost three friends. They were all in their 20s,” he said.

Jerry says that other cystic fibrosis patients like him try to ‘live’ their lives. He attended Baylor University and later married a nurse. Following genetic counseling, the couple agreed not to have children.

“I jog and swim. But I try to remember not to overexert myself,” he said.



Jerry Lynch is a 37-year old CF patient.

“Sure it's emotional. I've often had 14-day hospital stays. Sometimes I get depressed. And I think about dying. But I try not to stay depressed too long. I remember that I'm not the only one with CF. I've been pretty lucky,” Lynch said.

He believes a person's attitude can be a strong factor in determining how they cope with the disease.

“I'm very independent. As long as I can do things for myself, I'm going to,” he said.

Cystic fibrosis is hereditary. Yet no genetic tests are available to determine carriers of the CF gene, unless a child is born with the disease which indicates both parents are carriers.

“My brother doesn't have CF. But as soon as he and his wife had a baby, I urged them to have her tested. She's all right. And she's the apple of her uncle's eye.”

—Rita Nute

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Mr. and Mrs. Dan Woldert
Dr. and Mrs. Paul W. Wright
Maxell Wright
Year Round Garden Club

Texas Chest Foundation & UTHC Development Board

Private Support Key to Maintaining Quality

In the future, institutions such as the University of Texas Health Center must rely more on their development board members in order to maintain quality, cautioned Kent E. Dove, Rice University's vice president for external affairs, at the annual joint meeting of Texas Chest Foundation trustees and the health center Development Board held Nov. 9 at Hollytree Country Club.

Dove, the guest dinner speaker, said the purpose of development boards and foundation trustees is to contribute in some way to the institution they serve.

He said development boards provide a bridge with the community and help develop influential friends. He said a board's membership should bring in new ideas and give to the annual fund within their means. Members also can assist in deferred giving, such as estate planning, for the institution, he said.

Isadore Roosth, who heads both boards, was re-elected foundation president and chairman of the Development Board. A.W. (Dub) Riter was re-elected vice president and vice chairman. Jud Adams and Henry Bell III will continue as secretary and treasurer, respectively.

In special presentations, H.J. McKenzie, retired president of Cotton Belt Railroad, was named trustee emeritus and a life member. Mrs. D.K. Caldwell also was recognized as a life member.



Kent Dove (left), Rice University's vice president for external affairs, with UTHC's chairman of radiology Dr. Robert Shepherd.

Endowment fund assists residency program

Gilmer residents Gladys and C.H. Robinson have contributed \$10,000 to establish a Robinson Medical Resident Endowment to assist the University of Texas Health Center's family practice residency program.

"The endowment will be used as an award to support outstanding medical school graduates who have chosen to become medical residents here," says health center director Dr. George A. Hurst.

The health center's family practice residency program was established in 1985 to help train physicians who want to practice in rural areas of Texas.

The Robinsons became consistent donors to the UT Health Center following her stay here as a lung patient several years ago.

Chest research aided by Gugenheim gift

A research fund was recently established at the University of Texas Health Center in memory of Elizabeth S. Gugenheim of Tyler, announced health center director Dr. George A. Hurst.

This fall the executor of the Gugenheim Estate, Phil Hurwitz, presented the \$25,000 donation to the UT Health Center to be used in UTHC's efforts to treat and conduct research in chest diseases.

Ms. Gugenheim, a Louisiana native, was a department manager of Joyner-Fry clothing store in Tyler for 40 years. She was an active member of Temple Beth El.

Texas Chest Foundation

Associates Gift Club Broadens Horizons

The successful attainment of 100 charter members in the Director's Associates program has spawned new opportunities for the UT Health Center, says development director John Anderson.

"The initial success of this program is due to the overwhelming support of its members encouraging others to join and has enabled the program to broaden its horizons for 1989," he said.

Anderson said a life member category has been established in the Director's Associates for a one-time contribution of \$5,000 or the purchase of a life insurance policy with a face value of \$15,000 or more.

"It is only fitting that the suggestion for

the creation of a life membership came from the associate's first member, Norman Shtofman," he said. "And it is even more appropriate that the first life member is Mr. Shtofman."

Anderson also credited Vincent Brach for the move to use a life insurance policy as another way to become a life member. Thus far new life members using this means are Brach, Anderson and Dr. George A. Hurst.

Anderson said in addition to life membership in the Director's Associates, the purchase of a whole life insurance



Director's Associates charter members Leon and Mary Gibson

policy with a face value of \$15,000 or more also entitles the donor to membership in the UT System Chancellor's Council.

For information on how to be a life member, contact the Office of Development at 877-7733.

Contributions to Development Fund

The following people or firms and organizations made donations to the UT Health Center March 1988 through January 1989. The many gifts provided the UT Health Center in remembrance of a deceased relative or friend serve the living by advancing medical research, patient care and health education. Thank you.

Mr. and Mrs. I. Jeff Adams
Margo H. Adams
American Cyanamid Company
American Heart Association
American Legion Post 12
American Lung Association
Mr. and Mrs. Gerald Anderson
John A. Anderson
Verna R. Anderson
Joy Anderson
Wilma and Bob Andre
J.W. Arnold
Dr. Wilbur G. and Judy Avery
Ella Mae Bailes
Bailey Negem Patterson & Drott
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Mick Bandy
Mr. and Mrs. Lin Barker
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Katherine and Bill Bertram
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Floreta B. Bradford
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Mr. and Mrs. George M. Johnson
Polly P. Johnston

An Aspiring Physician

This four-time grandmother is in resident training to be a family doctor.

When Dr. Vera Luther, a first-year family practice resident at the University Texas Health Center, decided she wanted to do something different with her life, she never imagined becoming a doctor.

But after much encouragement and hard work, she finished medical school and has begun three years of intense training to become a family doctor.

Her drive and determination are not unusual traits of aspiring physicians. But her age is. She's 49-years-old and has four granddaughters.

While attending medical school at Texas Tech Health Science Center in Lubbock, most of her classmates were young enough to be her children.

"So many of them would call me mom. I enjoyed my days at Texas Tech. I received so much encouragement," Luther said.

This mother of three is often asked why she chose to attend medical school at age 46.

"One day in the heart of the ERA (Equal Rights Amendment) movement, feeling that my wonderful family was taking advantage of me, I announced, 'I'm so tired of being unappreciated. From now on, I'm going to do what I want to do.' I decided I wanted to be a nurse, never dreaming that I would be accepted into nursing school."

Nurturing her hope of becoming a registered nurse, Luther completed a licensed vocational nurse training program at an Arlington hospital and later attended a junior college to obtain an associate's degree in nursing. While a nurse at a Dallas hospital, Luther changed her directions — with strong encouragement from a female physician there and another doctor, a family friend — and transferred to UT Arlington to begin work on pre-medicine studies.

Without graduating from UT Arlington, Luther took the entrance exam to medical school and was accepted at Texas Tech. She was the oldest person to ever be accepted as a first-year medical student.

Upon graduation, she chose family medicine as a specialty and Tyler to train because she wants to practice in the rural East Texas area.



Dr. Vera Luther on the job, left; with youngest granddaughter, above.



"I always liked the concept of family medicine. Our family doctor was there when I was born and he was there when my Daddy died. He took care of all of us," she said.

"One of the main things attracting me to UTHC is that I believe the residency program here will better prepare me to be a rural physician in the Northeast Texas area," she said.

Luther prefers small towns, a preference established during her childhood days in Chico, Texas — population 500.

"Perhaps I have an advantage over some of my peers. I've already experienced a lot of life," she said. Because of her maturity during her internship, many patients thought she was an attending

physician instead of a medical student, she said.

Luther has a son, 25, and two daughters, 19 and 14. Cathy, the youngest, is an honors student in the Winona school district and wants to be a cardiologist.

"My children were always so encouraging. They didn't complain because I couldn't go to school plays and ball games like most moms," she said.

She cherishes the experience of her first "solo delivery" and a highlight of her medical career — the arrival of her fourth granddaughter.

—Rita Nute

Patient Education Can Save Lives

Cardiovascular risk greater as hypertension rises

Hypertension (high blood pressure) has become the most common chronic medical illness in the U.S. affecting more than 40 million Americans. It's a serious medical problem because as blood pressure rises the risk for heart attack or stroke increases.

Dr. W. Thomas Belt Jr., medical director of the hypertension education program at the University of Texas Health Center, says there are misconceptions that stress causes hypertension, and that hypertension will go away if kept under control.

"The major dietary factors contributing to hypertension are obesity and excessive amounts of salt in the diet," he said. "In some cases, if individuals eliminated those two things they could probably effectively treat hypertension without taking medication."

Belt said approximately 75 percent of people with high blood pressure have mild elevations, and a large number could avoid or reduce the need for medication just by changing their lifestyle.

He said a person's heredity also may influence development of hypertension. If an individual's parent has high blood pressure, they are more likely to have it also.

Belt said exercise and reduction of alcohol consumption also can help reduce high blood pressure.

"There's also a misconception that high blood pressure will go away if treated properly. For a large majority there is no cure, but high blood pressure can be controlled in nearly everyone," he said.

In general, a blood pressure level of 140/90 (systolic/diastolic) is considered an acceptable level and not hypertensive. Belt said physicians use a higher systolic blood pressure for older people. "Generally, if their systolic blood pressure level is less than 160 and the diastolic is less than 90 they are not considered hypertensive," he said.

Ignoring Diabetes Can Lead to Problems

Although there are 5 million people in the country diagnosed as having diabetes, there are millions more who have the disease but are not aware of the symptoms.

Dr. David Shafer, who directs the diabetes education program at the University of Texas Health Center, says the blood sugar level in many people is higher than normal but not high enough for them to be aware they have a problem.

Most people should have a blood sugar level of less than 140, if tested when fasting, and less than 200 if tested within a few hours after eating. Preferable ranges are 80-120.

Shafer said there are two types of diabetes. The most serious is called Type I, found in children before the age of 20, which apparently is caused by a combination of virus and a hereditary factor. Those with Type I diabetes must be put on insulin for the rest of their lives because their body does not secrete insulin.

The second type relates to heredity and being overweight which usually develops after the age of 35 or 40.

"If someone has a parent who developed diabetes as an adult, their chances of developing diabetes are about 50 percent, especially if they are overweight," Shafer said. If both parents developed diabetes, the chances increases to 100 percent.

"But being overweight is the primary factor that seems to precipi-

tate diabetes," he added. "If you have a parent with diabetes and the weight is normal, you probably will be able to prevent it by diet and exercise," he said.

If that doesn't work, there are oral medications that are effective.

Shafer said overweight adults who have the hereditary factor—a parent with Type II diabetes—should have their blood sugar checked. They should also be examined if they develop the classic symptoms of being very thirsty, have frequent urination, blurred vision and weight loss.

He said people with diabetes who ignore the problem are in danger of developing serious complications, which include problems with the eyes, kidneys, nerves and heart.

Shafer said the biggest advancement in the treatment of diabetes in the past 10 to 15 years has been the development of home glucose monitoring. This test allows people with diabetes to check their own blood sugar at home, enabling them to keep it under control.

"In our education classes, we teach people how to do this, as well as maintaining a diet and exercise program especially for them," Shafer said. Free classes are conducted each month at the health center.

"We also try to avoid the word 'diabetic' because we want to stress that people with diabetes are no different than anyone else. We instead use the term 'a person with diabetes.'"

"We feel that if we can teach people how to control their diabetes, it will enable them to prevent many of the complications of the disease."

—Ken Whitt

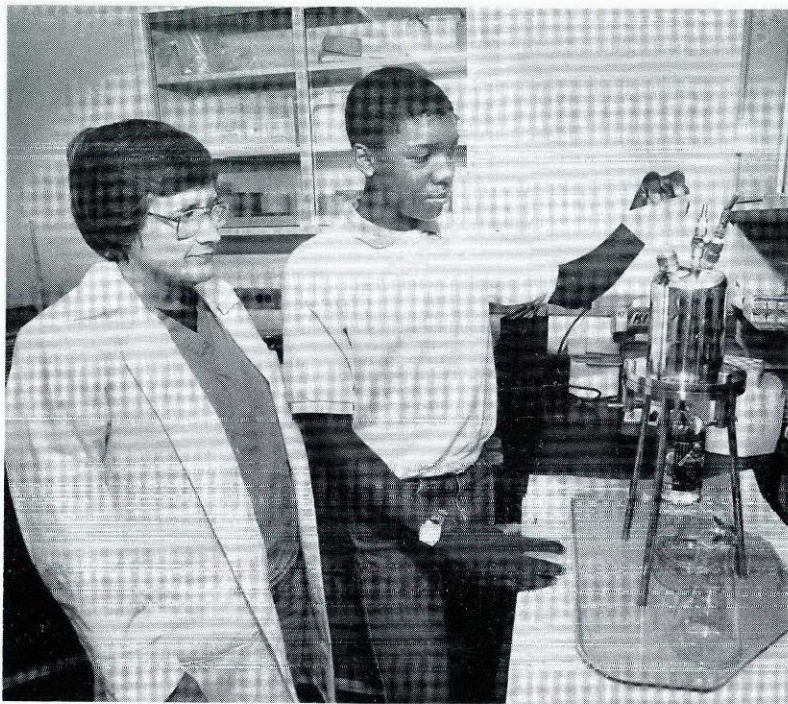
For more information about UTHC's free hypertension and diabetes programs, contact patient education coordinator Barbara Hiltcher at (214) 877-7569.

Belt said parents need to teach their children to reduce the consumption of salt and fatty foods and to encourage exercise.

The UT Health Center offers free

education classes on hypertension the last week of each month. For more information contact patient education coordinator Barbara Hiltcher at (214) 877-7569.

Newsbriefs



(Photo courtesy of Tyler Morning Telegraph.)

Research associate Carolyn Corn helps David Radford with project.

Students introduced to health, research careers

Four Winona High School students in the school district's health occupations education program are getting a first hand look at what goes on in a hospital through a special clinical rotation at the UT Health Center.

These students are learning how to take patient's vital signs, identify lab specimens and read pulmonary function test results. They also watched an open heart surgery.

The special vocational education program is designed to introduce students to health professions through classroom instruction and structured clinical rotations in various hospital departments. The program also is important to hospitals such as UTHC because of the national shortage of nurses and other allied health professionals.

The statewide pilot program allows Winona students to hear teleconference courses broadcast from UT Austin and participate in classroom discussion with 36 other students from such small Texas towns as Clifton,

Dime Box, Goliad, Seymore, Welder and Wimberly.

"Our students are really fortunate to be able to come to the UT Health Center, a teaching hospital, for their clinical rotation. Some students in the program are going to doctor's offices and clinics because there are no hospitals in their area," Winona teacher Vanessa Snyder said.

"We appreciate the training each health center department is giving our youngsters. The staff has been so helpful in giving them such vital experience," she added.

In addition to the special vocational education program in the fall and spring semesters, the UT Health Center is participating in a summer program designed to encourage minority students to pursue careers in basic and biomedical research.

Funded by a National Institutes of Health grant, the program offers area students the opportunity to work in UTHC's research laboratories and see first hand what careers are available.

Asbestos research nets national recognition

Asbestos research at the UT Health Center has led to several interesting discoveries and resulted in national recognition.

Among recent findings is one that shows the presence of large numbers of asbestos fibers in the lungs of infants.

"The possible source of these fibers, from either hospitals or other environmental factors, is being studied further," says UTHC's associate director for research Dr. Ronald F. Dodson. This study is in collaboration with Dr. Abida Haque of the UT Medical Branch at Galveston.

Another finding by UTIC's lab and Dr. Claudio Bianchi, who is affiliated with the Hospital of Monfalcone in Italy, involves the study of tissue from shipyard workers.

"These investigations have shown that asbestos breathed into the lung can be relocated into the lymphatics and into the pleura, confirming the suspicion that small asbestos fibers are very mobile and can move throughout the body," Dodson said.

Because of the extensive work being conducted in the laboratory, the Department of Cell Biology and Environmental Sciences has received Asbestos Hazard Emergency Relief Act (AHERA) certification which is recognized by the National Bureau of Standards.

"This makes the Tyler facility only one of several academic centers in the U.S. that is recognized for its accuracy in analysis of asbestos," Dodson said.

Through a contract with the National Asbestos Council, the health center has been established as a clinical referral center for asbestos induced diseases. Expertise in this area is jointly provided by occupational medicine physicians and the cell biology and environmental sciences department.

Newsbriefs

Guest physicians provide lectures

Among the UT Health Center's guest lecturers this fall was a surgeon who attained a world-wide reputation for his pioneer work in lung transplantation.

Dr. Joel Cooper, professor of surgery and head of thoracic surgery at Washington University in St. Louis, was this year's John Chapman Distinguished Professor Lecturer in October.

Cooper, formerly chief of surgery at Toronto, Canada, before accepting the position at Washington University, discussed the progress of transplantation surgeries.

In addition, pediatric pulmonary specialists from Tulane University and the University of Illinois at Chicago were guest lecturers at the fourth annual Topperman Pediatric Pulmonary Symposium in November.



Dr. Will Avery, left, UTHC's medical education director, with pioneer lung surgeon Dr. Joel Cooper, center, and UTHC surgeon Dr. John Clarke.

They spoke on sudden infant death, bronchopulmonary dysplasia and oxygen therapy in the child.

These special lectures are named in honor of Dr. John Chapman, a retired Dallas physician and UT Southwestern

Medical School professor who helped establish biomedical research at UTHC, and Dr. Sam Topperman, superintendent of the facility from 1952 to 1970 when it was known as the East Texas Tuberculosis Hospital.

Microbiology focuses on tuberculosis-like disease

While UTHC remains a leader in the management of tuberculosis and multi-drug resistant organisms, the microbiology research staff continues the challenge of developing new and better drugs to treat patients whose organisms have become resistant to standard anti-tuberculosis drugs.

One such drug-resistant organism is mycobacterium kansasii, an environmental organism related to the tuberculosis-causing agent which produces a lung disease similar to tuberculosis, says microbiology chairman Dr. Richard Wallace Jr.

"Mycobacterium kansasii is generally treatable with currently available anti-tuberculous drugs, but occasionally patients become resistant to some of these drugs and then their management is extremely difficult," Wallace said.

Wallace said patients who develop the disease, mycobacterium kansasii,

are referred here from all over the state for care. Over the past five or six years, the health center has treated between 10 and 15 patients who have developed mycobacterium kansasii and who have serious lung disease.

"Most of the patients seen here have been treated with experimental protocols and have done well," he said.

"Research continues, however, to find new and better drugs that hold more promise to those people who develop drug resistance and who fail standard therapy," Wallace added.

"The exact number of people infected with mycobacterium kansasii per year is hard to determine, but best estimates are that approximately 200 people in the state develop the disease each year, with a majority of those in the Dallas/Fort Worth and East Texas areas," he added.

Rivera participates in cancer studies

UT Health Center's director of oncology services Dr. Ragene Rivera is participating in two major national studies on the treatment of colon and rectal cancers.

The colon cancer study compares two different forms of chemotherapy following surgery while the rectal cancer study is designed to evaluate a drug given with radiation therapy to make cancer cells more sensitive to radiation.

As an investigator Dr. Rivera recruits patients as volunteers in the trial, administers their treatment, monitors their progress and will submit findings to complete the research.

Information provided by the National Cancer Institute states that study results may have a significant impact on survival of patients with these cancers.

Newsbriefs

Indigent care cost exceed state funds

In a special report on indigent care costs University of Texas Health Center officials question whether the health center can afford to continue providing medical services for increasing numbers of charity patients sent here for treatment of heart and lung diseases.

Last year the health center provided nearly \$19 million in free medical care while only receiving \$14.8 million in state appropriations.

Most patients are sent here by private physicians for further diagnosis and treatment and accepted regardless of their ability to pay.

"There has to be some relief from this financial burden if the health center is to continue providing the quality medical services expected of it," said health center director Dr. George A. Hurst.

He said the health center's goal is to improve services for paying patients which have helped offset the spiraling indigent costs. "But we cannot improve these services if the state does not provide adequate reimbursement for indigent patients," Hurst said.

About half of last year's 4,244 hospital admissions and 42,854 outpatient visits were totally indigent.

Hurst said the increased indigent care is not only for East Texas residents—the primary service area—but has grown to a large number of counties outside the region. Approximately 28 percent of charity care, or \$5.3 million, was for patients outside the 24-county East Texas region.

Nearly \$4 million or 21 percent of the total charity costs was provided for residents in Smith County. For different kinds of patients served statewide, almost \$4 million was provided for tuberculosis patients sent to the facility, making TB care the largest category of charity cases.

CHAPEL HILL INDEPENDENT SCHOOL DISTRICT
Johnny R. Johnston, Superintendent
Tyler, Texas

Dr. Jim Crutcher
Family Medicine Department
University of Texas Health Center
Tyler, Texas

Dear Dr. Crutcher:

In behalf of the board of education, faculty and student body, I would like to thank you and your colleagues for the outstanding and highly successful AIDS education program which you conducted in the Chapel Hill Independent School District. The program provided our students with needed, factual information and had a profound impact on them.

All the related comments from the students have been complimentary and positive, and a number of parents have contacted the schools to express their appreciation for the AIDS education program being offered. Needless to say, we are indebted to you for your taking the time to provide our school system and students with this exemplary program.

Because of involved, caring community members like you, our school system is able to offer the best possible programs to our students, and we thank you for that kind of support and participation.

Sincerely and best wishes,

Johnny R. Johnston,
Superintendent

The UT Health Center mailbox often contains letters complimentary of UTHC services or programs. Chapel Hill ISD superintendent recently praised an education program presented by family practice residents.

The second largest category of charity cases was heart patients which amounted to \$3.5 million.

Other patient categories written off for \$1 million or more in charitable services included general internal medicine, chronic respiratory disease, occupational disease, cardiovascular surgery, oncology and pulmonary rehabilitation.

Eight years ago, state appropriations represented 66 percent of the health center's operating budget, but last year the state funding amounted to only 43 percent.

Doctor on Call features medical staff

The UT Health center began a weekly 30-minute Doctor on Call series at 8:30 a.m. Sundays on KTYL 93.1 FM radio this fall. The program features UTHC clinical staff who provide information on their medical specialties. The doctors respond to questions on the air.

Among the topics covered by the program are children and adult asthma, breast cancer, diabetes, emphysema, exercise physiology, heart disease, lung cancer, sleeping disorders and smoking cessation.

Newsbriefs



Lutheran donation made

Our Saviour's Lutheran Church in Tyler contributed more than \$6,000 to the University of Texas Health Center to help purchase medicine and other medical equipment for needy patients. From left, the Rev. Paul Kirchner, church pastor, presents UTHC Development Director John Anderson and UTHC social worker Jackie Simpson a check.

Health center provides heart surgery orientation

The UT Health Center provided orientation in open heart surgery and follow-up care to a team of nurses from Lufkin Woodland Heights Hospital and Nacogdoches Memorial Hospital which began offering the specialized surgery for the first time.

Critical care nurses from the two East Texas hospitals participated in open heart surgeries, gaining first-hand experience in coronary artery bypass operations.

The visiting nurses also received orientation in follow-up care in the health center's surgical intensive care units.

Two operating room nurses are required to

assist cardiovascular surgeons in open heart surgery. While the patient's blood is diverted through a heart-lung machine, surgeons construct a detour around the obstructed coronary arteries to improve the blood supply to the heart.

The UT Health Center began providing open heart surgeries five years ago and now averages four per week.

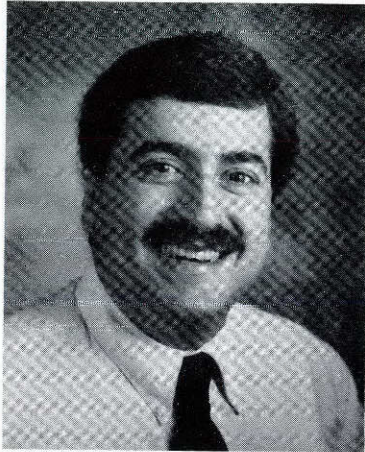
UTHC cardiovascular surgeons are Dr. Roy Kingry, who performed the health center's first cardiovascular surgery in 1983, and Dr. John Clarke, who joined the staff in 1985.

NIH recognizes scientists

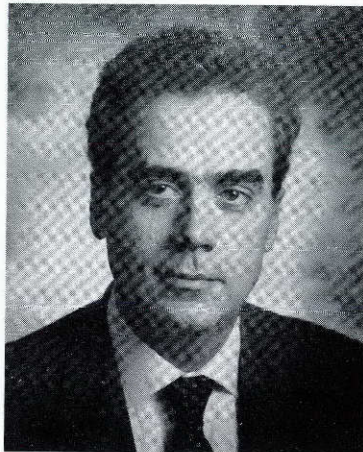
The National Institutes of Health has granted four UT Health Center researchers FIRST (first independent research support and transition) awards designed to recognize the talent of young scientists newly involved in competitive research. Among the recipients are, pictured, biochemists Drs. Martha Aiken, Mark Atkinson (front), Donald Blumenthal and molecular biologist Gökul Das.



Appointments



Dr. Jeffrey Levin



Robert McCorkle



Dr. Susan Walker

The University of Texas Health Center has made several appointments, including a physician, another researcher and a new ambulatory care director, announced Director Dr. George A. Hurst.

Dr. Jeffrey Levin, an occupational medicine specialist, joined the medical staff as an assistant professor of medicine, and Dr. Susan Walker, formerly of the National Jewish Center for Immunology and Respiratory Medicine at Denver, was appointed assistant professor of cell biology and environmental sciences.

Other appointments included Robert McCorkle, formerly executive administrator of obstetrics and gynecology at the University of Alabama at Birmingham Medical Center, as ambulatory care director, a newly created position. Merigale Allen was promoted to director of internal audit, and Carrita Mitchell was appointed director of data analysis and reimbursement. Linda Small, formerly an assistant in volunteer services, was appointed director of that department.

Levin came to Tyler from the University of Kentucky where he completed a two-year residency in occupational medicine and obtained a master of science degree in public health. Levin received a B.A. degree in biology from Austin College in Sherman and an M.D. degree from the

UT Medical School at San Antonio. Following medical school, he completed a two-year residency in internal medicine at the University of Missouri in Columbia, and is board certified.

Walker, who worked as a researcher at the Denver facility, works in the department that uses electron microscopy techniques to study the ultrastructure of normal and diseased lungs. Her specialty area is pulmonary cell biology, and she has written several articles for journals and abstract publications.

Since obtaining a Ph.D. degree in pathology from Duke University, she completed a postdoctoral research fellowship at the Cardiovascular Research Institute at the University of California at San Francisco and worked in the department of medicine at the National Jewish Center. She received a B.S. degree in zoology from North California State University.

McCorkle, in the newly created position, manages all outpatient clinics — cardiology, internal medicine, oncology, pediatric pulmonary and adult pulmonary— except for the Family Practice Center which is operated by the Department of Family Medicine for the residency training program.

He is a native of Mobile, Ala.. He received a B.S. degree in chemistry from Spring Hill College and a B.S. in pharmacy from Auburn University. He has a master's degree in public health

from the University of Alabama at Birmingham and a master's degree in business administration from Samford University. A registered pharmacist, he also completed postgraduate studies at Mercer University School of Pharmacy in Atlanta.

Allen, who joined the health center staff in 1982, was the internal audit department's interim director the past year. She is a graduate of Stephen F. Austin University where she received a B.S. degree in accounting. She is also a certified internal auditor.

Mitchell joined the health center staff in 1985 as an administrative assistant in the Department of Epidemiology and Biomathematics. As director of data analysis and reimbursement, she manages Medicare/Medicaid activities, maintains the hospital's cost accounting system and provides a cost containment program. She received a B.S. degree in accounting from Kansas State University.

Small, who attended the University of Alabama and the University of Colorado where she received certification in volunteer management, is responsible for coordinating the activities of more than 100 UTHC volunteers. She also oversees donations of money, clothing, toys and other personal items for use by both inpatients and outpatients.

Published Research

The following are recently published or to be published research papers written by research and clinical faculty at The University of Texas Health Center at Tyler. Health center authors are in bold.

American Review of Respiratory Disease "Alveolar macrophages from patients with asbestos exposure release increased levels of leukotriene B₂." Garcia JGN, **Griffith DE**, Cohen AB, Callahan KS.

American Review of Respiratory Disease "Local abnormalities of coagulation and fibrinolysis and alveolar fibrin deposition in sheep with oleic acid-induced lung injury." Idell S, Peterson BT, Gonzalez KK, Gray LD, Bach R, **McLarty JW**, Fair DS. 1988, 138:1282-1294.

American Review of Respiratory Disease "Asbestos-induced endothelial cell activation and injury. Demonstration of fiber phagocytosis and oxidant-dependent toxicity." Garcia JGN, Gray LD, Dodson RF, Callahan KS. 1988, 138:958-964.

American Review of Respiratory Disease "Molecular genetics in pulmonary emphysema." Cohen AB, Woo S. 1988, 138:1041-1043.

Biomedical Biophysical Research Communications "Synthetic peptides based on the calmodulin-binding domain of myosin light chain kinase inhibit activation of other calmodulin-dependent enzymes." **Blumenthal DK**, Charbonneau H, Edelman AM, Hinds TR, Rosenberg GE, Storm DR, Vincenzi FF, Beavo JA, Krebs EG. 1988, 156:850-865.

Chest "Comparison of light and electron microscopy for defining occupational asbestos exposure in transbronchial lung biopsies." Dodson RF, Hurst GA, Williams MG, Corn CJ, Greenberg SD. 1988, 94:366-370.

Clinical Pharmacy "How many subjects." **McLarty JW**. 1988 accepted.

Cytobios "A comparison of asbestos burden in nonurban patients with and without lung cancer." Dodson RF, Williams MG, Corn CJ, Rankin TL. In press.

Cytobios "The use of a semiautomatic image analyzer in directly determining mean linear intercept." Ford JO, Davis ML, Zinkgraf SA, Dodson RF. 1988, 53:107-112.

Diagnostic Microbiology and Infectious Diseases "Susceptibility testing of nocardia species for the clinical laboratory." Wallace RJ Jr, Steele L. 1988, 9:155-166.

Experimental Lung Research "Properties of isolated non-ciliated bronchiolar cells from mouse lung." Walker SR, Hale S, Malkinson AM, Mason RJ. Accepted.

FEBS Letters "Enzymatic activity and filament assembly of Acanthamoeba myosin II are regulated by adjacent domains at the end of the tail." Atkinson MAL, Appella E, Corigliano-Murphy MA, Korn ED. 1988, 234: 435-438.

Journal of Aerosol Medicine "Comparison of three Tc-labeled tracers for detecting lung epithelial injury in anesthetized sheep." Peterson BT, Dickerson K, James HL, Miller EJ, **McLarty JW**, Holiday DB. 1988, 1:233.

Journal of Biological Chemistry "Cooperative Dependence of the Actin-Activated Mg-ATPase Activity of Acanthamoeba myosin II on the extent of Filament Phosphorylation." Atkinson MAL, Lambooy PK, Korn ED. 1989, in press.

Journal of Biological Chemistry "Function of neutral endopeptidase on the cell membrane of human neutrophils." Painter RG, Dukes R, Sullivan J, Carter R, Erdos EG, Johnson AR. 1988, 263:9456-9461.

Journal of Cell Biology "Identification of putative calmodulin-binding domain(s) in the gamma-subunit of phosphorylase kinase." Dasgupta M, Honeycutt TA, **Blumenthal DK**. 1988, 107:284a.

Journal of Cell Biology "Neutrophil activating factor (NAF) is secreted by human alveolar macrophages in the absence of added stimuli." Miller DJ, Carr FK, **Blumenthal DK**, Cohen AB. 1988, 107:58a.

Journal of Immunological Methods "Protease interference with immunoblot techniques." Miller EJ, Cohen AB. 1988, 111:281.

Journal of Infectious Diseases "Human disease due to Mycobacterium smegmatis." Wallace RJ Jr, Nash DR, Tsukamura M, Blacklock AZ, Silcox VA. 1988, 158:52-59.

Journal of Protein Chemistry "Sequence similarities between chicken intestinal 110,000 dalton ATPase and myosin-like enzymes." Atkinson MAL, Collins JH. 1989, in press.

New England Journal of Medicine "Mycobacterium chelonae causing otitis media in an ear-nose-and-throat practice." Lowry PW, Jarvis WR, Oberle AD, Bland LA, Silberman R, Bocchini JA Jr, Dean HD, Swenson JM, Wallace RJ Jr. 1988, 319:978-982.

Proceedings of the Society of Experimental Biology and Medicine "Identification of a uterine elastase in the pregnant rat uterus." Percival S, Starcher B. 1988, 189:117-129.

Seminars in Respiratory Medicine "Pulmonary disease due to rapidly growing mycobacteria." Griffith DE, Wallace RJ Jr. 1988, 9:505-513/

Thrombosis Research "Monoclonal antibody analysis of purified and cell-associated tissue factor." Morrissey JH, Fair DS, Edgington TS. 1988, 52:247-261.

ABSTRACT PUBLICATIONS

American Review of Respiratory Disease "50% oxygen induces alveolar macrophage activation in humans." Griffith DE, Garcia JGN, Garcia P, Iriana S, Callahan KS, McCoy S. 1988, 137:A82.

American Thoracic Society Annual Meeting "Analysis of drugs to reduce the load of neutrophilic granule enzymes in patients at risk of developing emphysema." Stevens MD, Carr FK, Cohen AB. 1988.

American Thoracic Society Annual Meeting "Modification of the bronchoalveolar lavage procedure to allow measurement of solute concentrations in lung epithelial lining fluid." Peterson BT, Idell S, MacArthur C, Cohen AB. 1988.

Biophysical Journal "Phosphorylation and regulation of macrophage myosin by myosin light chain kinase isolated from avian smooth muscle." Atkinson MAL, Trotter JA. 1989, 55.

Circulation Research "Association of factor VII with stimulated human umbilical vein endothelial cells." Fair DS, Callahan KS. 1988, 78(4):315, A1258.

Clinical Research "Guanine nucleotide regulatory protein (G-protein) involvement in endothelial cell synthesis of prostacyclin." Garcia JGN, Painter RG, Callahan KS. 1988, 36:6(855A).

Electron Microscopy Society of America, Proceedings of 46th Annual Meeting "Lung parenchymal response to amosite asbestos and cigarette smoke exposure." Gray LD, Brady DE, Ford JO. 1988, 144-145.

Journal of Aerosol Medicine "Comparison of three tracers for detecting lung epithelial injury in anesthetized sheep." Peterson BT, Dickerson KD, James HL, Miller EJ, **McLarty JW**, Holiday DB. 1988, 1:233.

Journal of Cell Biology "A proteolytically sensitive site in the tail of myosin II isolated from Acanthamoeba castellanii corresponds to the putative hinge region of the molecule." Atkinson MAL, Korn ED. 1989, 107:259.

Journal of Cell Biology "Phosphorylation and actin-binding sites on the intestinal brush border 110,000-dalton protein-calmodulin complex." Collins JH, Ballard T, Nanavati H, Swanlung-Collins H, Atkinson MAL. 1989, 107:471.

Journal of Cell Biology "Neutrophil surface glycoprotein 110 is detectable on the membrane of some specific granules." Walker SR. 1988, 107 (6):59a.

Journal of Cell Biology "Functional consequences of the non-helical tail piece of Acanthamoeba myosin II." Sathyamoorthy V, Atkinson MAL, Korn ED. 1989, 107:260.

Journal of Cell Biology "Cloning of the chicken intestinal brush border 110-kDa myosin-like protein." Halsall DJ, Atkinson MAL, Hess P, Collins JH, Hammer III JA. 1989, 107:471.

Laboratory Investigation "Asbestos fibers in sputum—an indicator of past occupational exposure." Dodson RF, Williams MG, Corn CJ, Idell S, **McLarty JW**. 1988, 58:144.

Physiologist "Bacterial proteases increase the clearance of Tc-albumin from the air spaces of guinea pig lungs." Azghani AO, Connelly J, Johnson AR, Peterson BT. 1988, 31(4):A134.

Tumor Virus Meeting on SV40, Polyoma and Adenoviruses "DNA-protein interaction in polyoma virus early promoter." Das GC. 1988, 35.

Tumor Virus Meeting on SV40, Polyoma and Adenoviruses "Functional analysis of the enhancer region of polyoma virus spanning F9 mutation." Das Gupta S, Das GC. 1988, 36.

Tumor Virus Meeting on SV40, Polyoma and Adenoviruses "Cis and trans-acting elements of BK virus early promoter." Chakraborty T, Das GC. 1988, 35.

BOOK CHAPTERS

Signal Transduction in Cytoplasmic Organization and Cell Motility. (ed. P. Satir, J.S. Condeelis and E. Lazarides) "Structure-Function Studies on Acanthamoeba myosins IA, IB and II." Korn ED, Atkinson MAL, Brzeska H, Hammer JA, Jung G, Lynch TJ. 1988, p 69-82. Alan R. Liss, New York.

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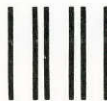
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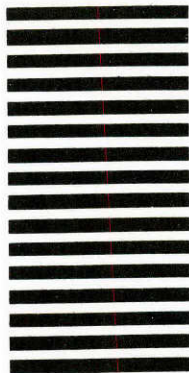
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