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# Dean's Message



Some days the newspaper headlines make it appear that health-care professionals live in a sea of problems. We hear about the faults of managed care, overworked residents, and rising liability insurance rates for physicians almost daily. Yet, despite such headlines, the outlook for the health of our nation has never been brighter. Both basic scientists and physician scientists are advancing medicine in an era of innovation and technology that is unlike anything witnessed in the history of medicine. In that regard, I contend there has never been a better time to be a patient than right now.

In research, our Medical School is developing a distinguished track record, both in the basic and clinical sciences. Over the past six years, our research dollars have increased by 50 percent, with our scientists overseeing more than \$78 million in research during 2001.

Nationally, we are ranked 17<sup>th</sup> in the nation among the nation's 125 medical schools for the amount of research dollars generated per clinical faculty member. This is very strong position to hold given the pressure placed on clinicians to see more patients in a managed-care environment, which takes valuable time away from research.

The growing success of our research enterprise places a premium on space and the aggressive planning for new buildings by our Health Science Center is designed to meet those needs for the future. At the same time, we need to look beyond the growth of our research endeavors and prepare for the future by training the next generation of scientists. This fall, the first class of our new Master of Science Degree in Clinical Research began. Inside this magazine you will find more on this new program that is coordinated by our Center for Clinical Research and Evidence-Based Medicine.

New advances in molecular and genomic medicine provide the makings for future decades of medical discovery that hold promise to drive our medical capabilities to levels unimagined only a few years ago. These are exciting times on the frontline of research, yet difficult on many fronts as the first two lines of this column depict. Of special interest is the national spotlight on academic medicine and overworked residents. See Dr. Patricia Butler's column, *Resident's Corner*, for an update.

Take a moment to review that progress and other happenings at the UT Medical School at Houston as reported in this issue of *UT-Houston Medicine*. As Dean for the past six years, I can say without reservation that we have much to be proud of, and the outlook for the future is even brighter.

*L. Maximilian Brupp, MD*

## Medical School reconstruction begins

By DARLA BROWN

After more than a year since Tropical Storm Allison left its mark on Houston and the Texas Medical Center, the Medical School is gradually coming back to life.

Detailed architectural programming has been developed as well as architectural design plans for spaces in the School's ground floor and basement, which will re-open as the "mall."

"It is trying that it is taking so long to bring about progress, but the general map of the space has been approved and detailed plans are in the process of being agreed upon," said Dean L. Maximilian Buja, M.D.

The delay with renovating the Medical School is attributed to the numerous entities involved in approving and funding the project. "We are still in discussions with our insurance company to get as high a settlement as possible – above the standard \$50 million," Dr. Buja said, adding that he hopes to have a settlement by the end of the year.

Losses not covered by insurance will be made up by the Federal Emergency Management Agency (FEMA), which pays only 75 cents on the dollar. The School will look to the UT System and the Legislature for the remainder of the funds.

Construction on the new outer wall of the School began in September, and July 2003 is the target date by which a significant amount of construction should be completed. Philo & Wilke Architects plans call for removing the existing limestone panels of the ground and first floors, replacing it with a wall of aquarium glass and granite (see drawing). This new wall will extend the perimeter of the Medical School Building by about 15 feet around the whole building, except for under the Ross Sterling breezeway.

The mechanical room and the new research imaging center – home to high-tech equipment, such as MRI and NMR – are the first areas

targeted for construction and are both part of the new ground floor.

The ground floor will have a student focus and will include the Office of Student Affairs, the Office of Admissions, and other student services. The new Learning Resource Center will be located on the portion of the ground floor that is across the Ross Sterling breezeway – the site of the old cafeteria, which will be relocated on the first floor of the John Freeman Building, across from the bookstore. The bookstore will remain in its location and will be expanded to include the Copy Center.

The ground floor and mall will have commons areas for mingling and relaxation for students, faculty, and staff and will become the functional equivalent of the old leather lounge.

The mall area will include problem-based learning and small group conference rooms, a recreation

center, as well as the gross anatomy lab.

Moving much of the administrative offices of the Medical School across Webber Plaza to the Jesse Jones Building has freed up space on the ground floor and mall areas – the usable space of which had shrunk due to the relocating of electrical and mechanical building instruments.

"All of the building's mechanical instruments and animals that were once located in the basement will be moved out of harm's way," Dean Buja said.

The external generators will be removed in January 2003, when the building will run off of its own power. Aquarium glass and a strengthened earthen berm also will be in place to protect the School.

"We're trying to protect the School as you would a castle with a moat," Dean Buja said.



[www.med.uth.tmc.edu](http://www.med.uth.tmc.edu)

### New look!

Check out the Medical School's newly designed Web site at [www.med.uth.tmc.edu](http://www.med.uth.tmc.edu)

"Our Web site is our most important piece of real estate, and we wanted to update our look to reflect the dynamic nature of our School," said Dean Max Buja, M.D.





## NEWS WORTHY

### New drug treats seizures

A Medical School's neurologist's study of a new medication is giving new hope to parents of children with epilepsy. Published in the July 29 issue of *Journal of Child Neurology*, the findings reveal that Keppra® (levetiracetam) is safe and effective for children with epileptic seizures that cannot be controlled with other treatments.

James W. Wheless, M.D., the principal investigator and director of the Texas Comprehensive Epilepsy Program at The University of Texas Medical School at Houston, said the drug also may improve children's behavior and



Dr. James Wheless

their ability to concentrate and stay alert.

"The patients in this study have basically run out of treatment options, so it's encouraging that Keppra® was effective and controlled seizures in 30 percent of our patients," Dr. Wheless said.

Of 39 patients in the trial, the drug reduced frequency in a variety of seizure types, and it was most effective for partial onset seizures. A third of the patients who took Keppra® daily had a 50 percent or greater reduction in seizures. The seizures stopped completely for three of the patients, and nine had more than a 90 percent

reduction in seizures.

Additionally, 26 percent of the patients reported improvements in cognition and behavior. And most importantly, Dr. Wheless said, Keppra was safe for use by these patients.

### UT Docs tops in the nation

Two new consumer guides to the nation's most outstanding physicians have singled out 52 faculty members from the Medical School. Both guides are especially prestigious because only physicians evaluated and selected by their peers are included each year.

The *Best Doctors in America*® contains the names and professional profiles of approximately 31,000 doctors in more than 40 medical specialties in its proprietary *Best Doctors*® database ([www.BestDoctors.com](http://www.BestDoctors.com)), which is frequently updated. *America's Top Doctors* has selected UT-Houston faculty members in 12 of 16 board-certified medical specialties and their numerous subspecialties recognized by the American Board of Medical Specialties. The 2002 edition of *America's Top Doctors* includes less than 1 percent of U.S.

physicians.

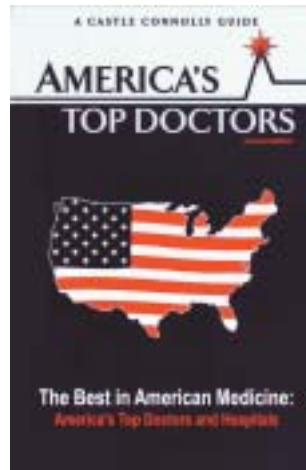
James T. Willerson, M.D., president of The University of Texas Health Science Center at Houston, is recognized in both consumer guides as one of the nation's top cardiologists. Ten other UT-Houston faculty members are listed in both *The Best Doctors in America* and *America's Top Doctors*. These exceptional physicians are: Drs. James A. Ferrendelli, James C. Grotta, and Jerry S. Wolinsky for neurology; Susan E. Denson and Jon E. Tyson for neonatal-perinatal medicine; Hope Northrup for clinical genetics and pediatrics; Frank C. Arnett Jr. for

rheumatology; Richard W. Smalling for interventional cardiology; Barry D. Kahan for surgery; and Hazim J. Safi for thoracic surgery.

Profiled in *Best Doctors* are: Drs. L. Maximilian Buja for pathology, Fabrizia Faustarella for internal medicine (general); Robert W. Guynn for psychiatry; Robert F. Lodato, as a specialist in pulmonary and critical care medicine; Margaret O. Uthman in pathology; Thomas O. Clanton for orthopedics; Francisco Fuentes as a cardiovascular specialist; C. Y. Joseph Chang and Michael D. Poole for otolaryngology; Larry D.

Scott and Joseph H. Sellin in gastroenterology; Alan W. Friedman and Noranna B. Warner for rheumatology; Lewis B. Morgenstern for neurology; Ian J. Butler as a specialist in child neurology; Carlos A. Moreno and Robert S. Tan for family medicine; Barbara E. Murray and John H. Rex for expertise in infectious diseases; Gailen D. Marshall Jr. for allergy and immunology; Stanford M. Goldman for radiology; and anesthesiologist Dr. Jeffrey Katz. Recognized as "best" pediatric specialists are Drs. Thomas G. Cleary, Sharon Crandell, Marilyn Doyle, Kathleen Ann Kennedy, Fernando R. Moya, and Ronald Jay Portman. Drs. Richard Andrassy, Frank G. Moody, John R. Potts III, and Charles Thomas Van Buren appear in *Best Doctors* for outstanding skills in surgery.

This year's paperback edition of *America's Top Doctors* lists Drs. K. Lance Gould for cardiology; Victor R. Lavis for endocrinology; Herbert L. DuPont for infectious disease; and Guy L. Clifton for neurological surgery. Also included are Drs. Malcolm L. Mazow for ophthalmology; William H. Donovan and Gerard E. Francisco for physical medicine and rehabilitation; and Maureen Mayes for rheumatology. In addition, *America's Top Doctor's* recognized Dr. O. H. Frazier, UT-Houston professor of surgery, who also holds an appointment with the Texas Heart Institute at St. Luke's Hospital.





## NEWS WORTHY



Dr. Steven Norris and Matthew Lawrenz

### Lyme disease vaccine in sight

Determining the structure of a telltale protein in the Lyme disease bacterium may provide physicians with a diagnostic test and one day a vaccine. The protein, known as VlsE, is found on the surface of the bacterium and picks a fight with a patient's immune system and then evades the antibodies sent out to destroy it.

Writing in the June 14 edition of the *Journal of Biological Chemistry*, a team of researchers from Institute of Biosciences and Technology, Texas A&M University, and The University of Texas Health Science Center at Houston describe the protein's structure and likely reasons for its ability to simultaneously provoke and dodge an immune response.

Research on the protein has provided a highly accurate avenue for diagnosing the disease, which can be difficult to recognize in many cases, said co-senior author Steven J. Norris, Ph.D., professor and vice chair for research of the Department of Pathology and Laboratory Medicine at the Medical School and a professor in the Gradu-

ate School of Biomedical Sciences. Findings also explain in part the tenacity of Lyme disease, which can survive in a host for years if left untreated.

Detailing the protein's structure helps determine the precise location in the protein of the variable and invariant portions. This offers important clues as to why the antibodies against the invariant regions are ineffective despite eliciting a strong immune response in more than 90 percent of Lyme disease patients.

Lyme disease is a tick-borne illness that initially can cause a skin rash, flu-like symptoms, and fatigue, and ultimately can damage the joints, heart, and nervous system. While understanding VlsE's structure has future research applications for illuminating Lyme disease, it has more immediate utility as a diagnostic tool, Dr. Norris said. More than 20 percent of Lyme disease victims do not get a distinctive bulls-eye rash at the site of the tick bite or simply fail to notice the rash.

Norris' earlier research established the genetic structure of VlsE, connected the DNA encoding the protein to the infectivity of Lyme disease, and described the antibody response caused by the protein.

UT-Houston co-authors include Matthew B. Lawrenz, a graduate student in the UT-Houston Graduate School of Biomedical Sciences, and John M. Hardham, a former post-doctoral fellow in Dr. Norris' lab.

### Scientists isolate reward learning

A gold star. A doggie treat. An attaboy. Neuroscience researchers at the Medical School are studying cellular responses to understand the mechanisms of how and why we respond to reward learning.

The findings of the identification of a brain cell that changes during operant conditioning (a major, but poorly understood, form of reward

learning) appeared in the May 31 issue of *Science*. By pinpointing a neuron that

changes when a sea snail learns to bite to earn a reward, the research team opened a new path for analyzing the cellular and molecular processes underlying operant conditioning.

"Reward learning is a very big part of everything that we do. When you do something and get a reward for doing it, you change your behavior," said the paper's senior author, John H. Byrne, Ph.D., chairman of the Department of Neurobiology and Anatomy.

Scientists have observed the behavioral aspects of operant conditioning in animals and humans for decades.

"The big question is how does it work, what are the underlying processes in the brain?"

Dr. Byrne said. "We've reduced the complex process of reward learning down to the level of a single nerve cell. The promise here is that we can use biochemical and molecular approaches to understand the cellular processes in the neuron that give rise to changes in behavior."

Dr. Byrne and colleagues drew on their extensive knowledge of the marine snail *Aplysia* to design a project that tracked a learned behav-

ioral change to a change in a single neuron.

The project focused on the snails' feeding habits.

*Aplysia* bite spontaneously in their search for food. A successful bite that secures food sends a reward signal to the brain via a nerve in the animal's esophagus. The reward signal is absent when the bite comes up empty. By wiring an electrode to this nerve, the scientists mimicked the food reward signal with electrical stimulation. Similar to the virtual reality depicted in the movie *The Matrix*, they now could "feed" the snails with food that didn't exist.

Analysis of the brain activity from trained animals pinpointed changes in a specific neuron, known as B51. Researchers found cultured B51 cells changed their electrical properties when they were "rewarded" with a puff of dopamine right after



*Aplysia*



## NEWS WORTHY

receiving an electrical pulse that mimicked the cell's activity during the biting behavior. "The B51 neuron changes its properties to allow it to get more dopamine," Dr. Byrne said.



Dr. John Byrne

Dopamine is thought to mediate the rewarding properties of drugs abused by humans. If the similarities continue on

the molecular level, the single-cell approach introduced by Dr. Byrne and his colleagues would be a very promising way to study the molecular mechanisms of addiction.

Co-lead authors on the paper are postdoctoral researcher Björn Brembs, Ph.D., and Fred D. Lorenzetti, a doctoral student with the Graduate Neuroscience Program in Dr. Byrne's lab. Neuroscience doctoral student Fredy D. Reyes and Douglas Baxter, Ph.D., associate professor in the Department of Neurobiology and Anatomy, are also co-authors.

### Diabetics at risk for "glucolipototoxicity"

Patients with diabetes have an increased risk of heart failure because their heart cannot adapt to the toxic levels of glucose and lipids that build up in the heart muscle, cardiology researchers at the Medical School have found.

"We have known that diabetes is an established risk factor for coronary artery disease, but

diabetes does much more than put fatty deposits in the arteries. It also attacks the heart muscle, causing it to weaken and fail," said Heinrich Taegtmeier, M.D., Ph.D., a cardiologist and professor of medicine.



Dr. Heinrich Taegtmeier

The findings – the second of a two-part series – were published April 16, in *Circulation: A Journal of the American Heart Association*.

There is a complex system of metabolic signals in the diabetic heart that cause it to become overloaded with glucose and fatty acids. The investigators call the phenomenon "glucolipototoxicity."

Martin Young, Ph.D., assistant professor of medicine and biochemistry, and co-author of the two-part perspective, said this finding puts researchers one step closer to understanding why fat is so bad for the heart. Now that they are beginning to appreciate the metabolic process in the diabetic heart, they can develop medications or other methods for preventing the fat from going into the heart or somehow removing it from the heart muscle. Patrick McNulty, M.D., associate professor of medicine at Penn State University, also contributed to the report.

"Worldwide, there are about 145 million patients with diabetes, almost five times more than estimates of 10 years ago," Dr.

Taegtmeier said. "People are getting fatter. As a nation, we tend to eat too much, and we've also become very sedentary.

There is no magic pill for diabetes and heart failure, but now we can identify critical steps in a chain of events that cause heart muscle to weaken, because it loads up with more fat and glucose that it can use."

### Clifton studies cool brain effects

The National Institutes of Health (NIH) recently awarded a neurosurgeon at The University of Texas Medical School at Houston \$15.6 million to lead a study of prolonged hypothermia's effects on patients with severe brain injury.

Guy L. Clifton, M.D., chairman of the Department of Neurosurgery and developer of the hypothermia therapy for brain injury, will test whether maintaining a cool body temperature in brain injury patients who already are hypothermic when they are brought to the hospital substantially improves their outcome.

"Current management for patients with traumatic brain injury is unsatisfactory," said Dr. Clifton, who holds the Runnells Distinguished Chair in Neurosurgery. "We have to find something that

improves outcome. In a previous study, this seemed to work, and now we need to examine it more closely."

In the first National Acute Brain Injury Study, which began in 1994, Dr. Clifton found that inducing hypothermia in patients with severe head trauma does not have the therapeutic value that scientists expected. The results of the five-year study were published in the *New England Journal of Medicine* in February 2001.

With the recent NIH grant, Dr. Clifton will expand on that research. He expects to begin enrolling patients this fall. Half will be placed in temperature-controlled suits, which were invented and designed by UT-Houston researchers.

The Rap Round suits, manufactured by Gaymar Industries, allow doctors to precisely control and maintain their patients' body temperatures at 33-37 degrees Celsius. After 48 hours, doctors will gradually re-warm the patients over an 18-hour period. The other patients will re-warm by

themselves, with no medical intervention to raise their body temperature.

"If this works, this could have a tremendous benefit to patients who might otherwise be dead, comatose or severely disabled," Dr. Clifton said.



Dr. Guy Clifton

– written by David Bates, Scott Merville, and Meredith Raine-Middelton

# Clinical

## UCP works to create “ideal experience”

By DARLA BROWN

“**T**he Ideal Patient Experience” — that’s the name and the goal of a new customer-service initiative by University Care Plus (UCP) for the UT Physician Offices.

“The Ideal Patient Experience involves a patient knowing where they are going and what to expect, encountering a friendly and knowledgeable front office staff, and coming to expect the same level of high service in any one of our offices,” explained Melinda Gerukos, physician office administrator and co-team leader of the project with Lorie Medlenka.

An 18-member team, comprised of employees from across all areas of UCP, convened in December for the kick-off under the direction of Duke Rohe, a consultant from The University of Texas M. D. Anderson Cancer Center. After six months of planning and research, the first round of new policies and procedures were implemented in all UT Physician Offices in August.

The team first did fact finding across the offices, which included questionnaires and the creation of office flow charts, which track patients as they move through the system. The team also surveyed patients through a Hertzberg Survey, asking for the most frustrating aspects of their office visit. Quarterly patient satisfaction surveys also were taken into account.

From this research, the group prioritized major issues to tackle, including internal communication, lobby wait time, unprepared patients, the referral process, and claims.

“Two of our biggest customer service challenges are telecommunication and wait times,” said Diana Browning, vice president of clinical operations. “Currently our satisfaction rate is at 79 percent on

telecommunication – taken from patient surveys from those who rate it ‘good’ or ‘very good.’ And our wait time satisfaction rate is 70 percent. Our goal for each of these areas is 85 percent, and part of the implementation of the Ideal Patient Experience will help us achieve this goal.”

To address internal communication, UCP’s intranet will be strengthened. “We’ll also do a pre- and post-survey of our employees regarding internal communication to make sure we’re meeting our goals,” said team member Angelica Lozano.

To ameliorate the problem of patient wait time, puzzles, television health news, magazines, and music will be introduced into UCP waiting rooms. Although these “lobby occupiers” will not reduce the wait time, they will improve the patients’ perception. Frequent communication with patients regarding wait time and options available also will help with this problem.

Strategies for reducing patient wait times are a high priority, said Brandy Chandler, a member of the Customer Service Subcommittee.

“Unprepared patients refers to those patients who arrive for their appointment without essential documentation, such as X-rays, and patients who are not familiar with our location and parking,” Chandler explained.

To assist such patients, the Office of Neurosurgery sends out new patient packets, which tell patients about their appointment, their physician, what they need to bring to their visit, and parking and traffic information.

“As a result of these packets, the patients are better educated, and it

cuts down on phone calls to the office,” Chandler said, adding that all offices implemented the new patient packets and reminder calls to patients in August.

To address internal systems, such as claims and referrals, a new referral process with the new Health Directions management consultants is under way and a “Did you know?” campaign aimed at employees will ensure claims are complete. UCP is using some creative educational techniques, such as skits, to help employees understand the importance of “clean claims,” said Sandra Jeffries, of the Systems and Processes Subcommittee.

The implementation of these new procedures in August is just the beginning of this project. The team will meet continually to improve processes and create “The Ideal Patient Experience.”

“This will be ongoing forever because there is always so much you can do to improve,” Gerukos said.

The UT Physicians site is can be found at [www.utdocs.com](http://www.utdocs.com)

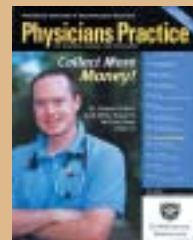


*Patient waiting rooms are more fun with jigsaw puzzles.*

### Physician Practice Debuts

In an effort to drive patient referrals, UT Physicians is sponsoring a series of magazines, *Physician Practice*, which highlights specific specialists and centers of UT Physicians.

The first issue debuted in July, and a total of six will be mailed to more than 6,500 practicing physicians in and around the Houston area. A unique referral number will monitor response.



## Passing the torch

# Dr. Michael W. Bungo appointed Harris County Programs

By BRYANT BOUTWELL, DR.P.H.

**O**ur country has been in a health-care crisis during the last decade, and there is much that physicians can do to reclaim stewardship of the health-care system, says Michael W. Bungo, M.D.

Dr. Bungo, the new chief of staff at Lyndon B. Johnson General Hospital and associate dean for Harris County Programs, assumed his new role Aug. 1 and is already at work to make a difference.

His philosophy is simple but direct: "Our greatness as physicians will be measured by our research and education efforts. Our greatness as a people will be measured by our ability to provide health care to the least fortunate among us."

Helping people less fortunate is what Dr. Bungo is all about, and his survey of the needs and challenges at hand reveals numerous opportunities that attracted him to Houston. Managed-care implications on health-care delivery, staffing in an era of nursing shortages, public funding of

county medical resources, and issues related to the growing number of citizens who are uninsured or underinsured – all present challenges on Dr. Bungo's radar screen.

"Hospitals like this (Lyndon B. Johnson General Hospital) have been the mainstay of medical education in this country, and medical education is undergoing considerable change addressing service versus learning. All of the complex issues that confront LBJ potentially can serve as a poster child for solutions regarding care for the underserved and

## After 20 years at UT, Dr. James D. Hefner retires

**J**ames D. Hefner, M.D., was already a certified hero when he joined the faculty of the UT Medical School at Houston in 1982. At age 19 he commanded a tank destroyer in Patton's 3<sup>rd</sup> Army during the Battle of the Bulge. After World War II, Hefner earned undergraduate and medical degrees at Vanderbilt University in Tennessee and resumed active military duty as a physician specializing in obstetrics/gynecology.

In the Vietnam War, he was commander and chief surgeon of the First Medical Battalion and was responsible for the medical needs of the 18,000 troops of the First Infantry Division (also known as the Big Red One). Under enemy fire, he pulled soldiers through mud and mine fields to save lives. In doing so, Col. Hefner received the Bronze Star Metal for valor and went on to become one of the most decorated surgeons in the history of the military service, with 32 metals.

Off the battlefield, he was appointed chief of staff for the U.S. Army Health Services Command with an international scope of responsibility. Following his retirement from the military in 1978 with 34 years of

military service, Dr. Hefner's next move led him to the UT Medical School in 1982. Recruited by the late Dean Ernest Knobil, it would be another 20 years before Dr. Hefner would retire from UT. Here he found a way in civilian life to save lives and make a major difference in the health-care delivery of Houston and Harris County.

Consider his service to the Medical School, which includes medical director of the Hermann Hospital Emergency Center, Program Director (and founder) of the Transitional Year Residency Program, assistant dean for Clinical Affairs, chief of staff at LBJ General Hospital, associate dean for Harris County Programs, and professor in the Department of Surgery.

At his retirement celebration at the Medical School on Aug. 13, Dean Max Buja, M.D., announced one more accolade, emeritus professor. Dr. Hefner, who leaves his post as Chief of Staff at Lyndon B. Johnson General Hospital, recalled in a very emotional farewell the many friends and colleagues he will miss on a day-to-day basis. However, he warned, he will still be around in a consulting faculty role.

The Fifth Floor Gallery was filled with friends, family, and colleagues who paid tribute to Dr. Hefner's many contributions and welcomed Michael Bungo, M.D. (see article above).

A man of uncommon valor in the heat of battle, Dr. Hefner mixed an emotional farewell and salute to each of the deans he has served under with jokes and stories that are his trademark.

A farewell ceremony scheduled at LBJ General Hospital proved to be equally heartwarming.

It was in July 1990 that UT took over the delivery of patient care at LBJ General Hospital, and Dr. Hefner himself greeted the first patient. As chief of staff, he would oversee the evolution of that community hospital that is now recognized as one of the county's medical treasures.

Recalling his early days as a tank com-



*Dr. James Hefner*

## associate dean

underinsured. We have a unique opportunity here to design health-care management systems and project a model that can be used by others throughout the country," he said.

Dr. Bungo, a cardiologist, replaces Dr. James Hefner, who retired after 20 years of distinguished service to the Medical School (see sidebar). A graduate of the New Jersey Medical School, Dr. Bungo completed his residency and cardiology fellowship at the New England Deaconess Hospital. Most recently he served as

mander at the Battle of the Bulge, Dr. Hefner still winces a bit at the memory of a voice in the dark that approached his parked tank after a long day of battle and demanded to know what unit he was. A very tired Jim Hefner snapped back, "Who the heck wants to know." After a moment of silence came a voice of authority... "Soldier, come down off that tank." Out of the shadows stepped Gen. George Patton himself in full general uniform, pistols, Ike jacket, and all.

Recalls Dr. Hefner, "I tried to salute, report, and apologize all at the same time." Patton's scowl softened, and he put his arm around Hefner's shoulder and said, "That's all right, son, you've probably never heard my voice before." The general offered hot coffee and a sandwich and drove back into the darkness.

No doubt, if George Patton himself could be here to see the UT retirement of Dr. James Hefner, he would find great humor in that story and add, "Job well done, Hefner."

—Bryant Boutwell, Dr.P.H.



Dean Max Buja, left, congratulates Dr. James Hefner on his retirement and welcomes Dr. Michael Bungo, right.

the medical director of the Heart Station, vice chair for inpatient affairs, and professor of internal medicine/cardiology at the UT Medical Branch in Galveston (UTMB).

"I'm not the traditional kind of physician who knew medicine would be my career from an early age," Dr. Bungo said. "I dabbled with the idea and started college (Rensselaer Polytechnic Institute in Troy, NY) where I received a degree in chemistry. Early on I imagined I'd make a career somewhere as a professor teaching chemistry."

As a college student looking for a career that could sustain his interest in helping others, medicine soon emerged to better fit the bill. Following medical school and fellowship training, Dr. Bungo recalls sending "blind" letters to each of the three federal space facilities, including the Johnson Space Center in Clear Lake. Calling the Space Center to follow up, he was surprised that they not only were interested but also wanted him to come to Houston the very next day for an interview. That began a distinguished, 11-year career with NASA as director of the Space Biomedical Research Institute and chief scientist of the Medical Sciences Division.

One of the highlights of his work at NASA, he recalled, was implementing the first use of

echocardiography aboard a U.S. spacecraft. That project established new insights into the physiology of the cardiovascular system in the absence of gravity. For his work, NASA awarded him the Medal for Exceptional Scientific Achievement.

Seeing patients through private practice and developing joint NASA programs with UTMB led to his volunteer faculty appointment in Galveston in the late 1980s. Additionally, he has held volunteer faculty roles at Baylor College of Medicine and the UT-Houston Medical School. In 1995, he became the director of the UTMB's Heart Station, where approximately 55,000 tests (ECGs, stress tests, and Holter monitors) were overseen annually. Additionally, he took on a growing list of responsibilities and leadership roles at UTMB, including vice chairman for inpatient affairs in the Department of Internal Medicine.

Dr. Bungo and his wife, Pam, have two children and reside in Clear Lake. Their daughter recently completed a degree at the University of Chicago and their son is beginning classes at UT-Austin. Summarizing his first nine days on the job, he noted, "Enough can not be said for the warm welcome I've received, and I'm looking forward to addressing both the challenges and the many opportunities ahead."

# A checkup with Dean Buja

*After a successful five-year dean review by The University of Texas Health Science Center at Houston, Dean L. Maximilian Buja, M.D., recently sat down to reflect on his tenure as dean and the progress and future of the Medical School.*

BY DARLA BROWN

**Q: National statistics show that the average tenure of deans of colleges of medicine in the United States is five years. You'll have seven years as dean in April 2003. How have you been able to exceed the national average?**

A: I sit on the Association of American Medical College's Leadership Committee for the Council of Deans, and this group is very concerned about supporting the role of the dean of colleges of medicine and doing something to counter this trend of short incumbency. At one point, the average tenure was down to three years for a medical school dean. Some institutions have a shorter half-life than others, which is indicative of a lack of clarity about goals and objectives, and therefore the dean has trouble implementing policies and conducting operations.

I am very pleased to have been able to serve the school six and a-half, going on seven years. I think the UT-Houston Medical School, with the advantages of being a part of The University of Texas and being in the Texas Medical Center, has done well for its relatively short lifespan of 30 years and has a positive future. What has helped me succeed in office has

been focusing on the mission of the school – education, research, and patient care – and doing what I perceive as right for the Medical School without

letting extraneous factors and favoritism enter into my policies and leadership. I think the corollary to that is that people may agree or disagree with what I've done, but I think they understand I am trying to put the best interests of the Medical School above any other consideration. I work proactively to understand and serve the needs of the

entire Medical School community – chairs, faculty, students, and staff.

**Q: Dr. John Ribble holds the record for the longest tenure as dean at the UT-Houston Medical School – almost nine years. Do you plan to beat Dr. Ribble's record?**

A: Right now, I'm focusing on getting the School through the recovery from Tropical Storm Allison, which will take another one to two years, as well as through the reaccreditation process of the Medical School. We are preparing for a site visit in January 2004 by the Liaison Committee on Medical Education. Those are my most important, immediate goals, and I want to see them through.

**Q: You recently unveiled your updated vision for the Medical School. How do you plan to move the School forward to achieve this?**

A: My vision for the UT-Houston Medical School is that it be recognized as one of the top-tier medical schools in the country and the world by pursuing measured growth to achieve balanced excellence in education, research, and service. To achieve this vision, I am working to see that we have constant advancement of excellence in our mission, and based on the achievements of our faculty, students, and staff, we will be recognized for that excellence. We have grown tremendously in terms of the size of the Medical School faculty and staff, and the accomplishments of the School have followed from this growth in a relatively brief 30-year history. I think we are well poised to move to a higher level.

Having a source of flexible funds to promote faculty recruitment and retention is a key component of our strategy and this gets at our fund-raising efforts.



We are making progress in articulating this to the philanthropic community of Houston, and although we have a significant endowment – about \$48 million now – we hope to double or triple that in the next few years. Other development priorities are master teacher and scholar programs, student scholarships, and a clinical researcher development fund.

I also would like to see our research grants and awards continue to grow at a rate of 10 percent a year. We clearly need additional facilities to see our measured growth continue, and therefore we're joining forces with Health Science Center President Dr. James Willerson to plan a new basic research building for the Medical School.

**Q: What has been the toughest challenge for you as dean? What has been the most rewarding?**

A: Let me start with the most rewarding. Being in the role of the dean, you have to take vicarious pleasure from seeing others succeed, and my constitution is such that I get great satisfaction in seeing our faculty and students continue to be successful in many different ways. Since I've been dean, 1,200 students have graduated – over a fourth of the students who have graduated from this Medical School. And several hundred physicians have graduated from our residency programs. I hope my leadership has set a standard to ensure that they have been well

trained. Knowing that I have contributed to the next generation of physicians has been very rewarding. Also, I've recruited 11 of the 22 Medical School departmental chairmen and other important leadership positions as associate deans. The



chairs, in turn, continue to recruit excellent faculty, and are key to the success of a medical school. Being a part of Dr. Ferid Murad's winning of the Nobel Prize, knowing I had a major role in recruiting him here, was very gratifying.

The toughest challenge is managing people in this very complex environment. Trying to find accommodation for two or more good points of view that are yet in conflict is difficult. Promoting the Medical School to our key affiliates and constituents through relationship building with the leadership of multiple entities – the Health Science Center and its various components, Memorial Hermann Hospital and Healthcare System, the UT System, the Harris County Hospital District, M. D. Anderson Cancer Center, other components of the Texas Medical Center, etc. – is an ongoing challenge for the dean. Managing those

relationships is critically important.

**Q: During your tenure as dean, what have been the greatest changes affecting the Medical School?**

A: Shortly after I became dean in late 1996, the Medical School conducted a revision of our basic science organization, merging pharmacology and integrative biology/physiology into a single department. Problem-based learning was introduced about the time I became dean, and the maturation of that aspect of the medical curriculum has been an important change in our educational programs. The merger of Hermann Hospital with the Memorial Hospital System in 1998 and adapting to our role in that merged entity was a major change. Also, there have been major changes in leadership at the Health Science Center, Memorial Hermann Hospital, and the Harris County Hospital District, and those have had significant impact on the School. I think we have been able to position the School well with the new leadership in these various entities. Of course, change is constant in the topsy-turvy health-care delivery system, and constantly



repositioning the Medical School to function well in the changing clinical environment has been particularly challenging.

**Q: Have you noticed a change in the students over this time?**

A: We continue to attract a diverse and well-qualified group of medical students. I think that the students still come to medical school with an idealism about wanting to serve mankind as physicians, and I think that's very heartwarming. In the last 10 years, many come to Medical School with more complex situations – they are married, have children, and have other financial obligations. There is now essential parity between males and females in the classes. A hallmark of this Medical School is the considerable effort given by the faculty and administration to facilitating the careers of our medical students. We also give special emphasis to inculcating ethical standards and professionalism in our students. To this end, we have recently formed a student group called SCAIP, Student Committee for Academic Integrity and Professionalism.

**Q: Nationally, medical school applications have declined since their peak of 37,402 in 1992. What must medical schools and the profession of medicine do to combat this trend?**

A: In general, the number of Texas residents applying to medical school has dropped 25 percent over the last six or so years, mirroring the national situation. With the shrinking number of applicants, we are getting the most dedicated, most committed future physicians. Our entering students have a good understanding of the profession today, and that bodes well for the future. Even with a smaller number, we still have a well-qualified applicant pool, with more than two applicants for every acceptance. I sincerely hope that this attrition in application levels off, and I think the lackluster economy might change that. As a medical school and as physicians, we need to redouble our

efforts to make known that at the core, medicine is a profession, not a business. Physicians have obligations to attempt to change the negative aspects of the health-care system and to insist on optimal delivery of care and to promote reforms in the funding mechanisms to ensure that optimal care takes place. We need to continue to serve as role models for the profession of medicine.

**Q: What words of advice would you give a student considering a career in medicine?**

A: Medicine is the greatest profession in the world, and being able to care for people and improve their health and well-being is a most rewarding activity. Don't let the current dysfunction over the financing of health care obscure the basic functions of medicine. Stick to your ideals, and you will find great satisfaction in the profession.

**Q: Research expenditures at the Medical School have increased more than 50 percent over the last six years. Why is research important at a medical school?**

A: A medical school's mark of excellence is in faculty creating new knowledge. Faculty actively engaged in this will inculcate new knowledge into teaching so that students are brought to the cutting edge of knowledge and practice. This leads to an overall stimulating environment in which to carry out patient care and educational activities. The progressive increase in research we've seen here represents our recruiting efforts to bring in new faculty. I'm particularly pleased with our strides



in clinical research and training a whole new generation of physician investigators. We've established a Center for Clinical Research and Evidenced-Based Medicine (see page 18) and a new master's degree in clinical research. I am a physician-scientist and am committed to making sure we create a new generation of physician-scientists. I think we're accomplishing this goal at the UT-Houston Medical School.

# Inside TV's "Houston Medical"

This summer, the nation was riveted by "Houston Medical," a six-series, reality drama that aired on ABC. The program showcased UT-Houston Medical School physicians, students, and residents at the School and at Memorial Hermann Hospital, the School's primary teaching hospital in the Texas Medical Center. Here four "cast members" give their behind-the-scenes views of participating in this once-in-a-lifetime event in their own words.

By Colleen O'Brien

**Billy Gill, M.D.**  
**Chief Resident, Trauma**  
**Episode 2**

From the deck of a fishing boat to the crossfire of a medical inquisition, Dr. Gill shone for the cameras as his story played out on "Houston Medical."

**How accurately were you portrayed on "Houston Medical?"**

*I think the film crew from ABC did a pretty good job portraying the different personality types, what motivates people to become doctors, what makes being a doctor difficult, and what makes being a doctor fun.*

**How long a period did the TV crew follow you?**

*Around eight or nine months – I was on camera dozens of times, actually. In a given week, for instance, they would show up maybe 30 times in the trauma room, and I would be on camera for short bits. Sometimes they would follow up and interview me after a shoot.*

**Has being on the show changed your life?**

*No. I mean sometimes I get recognized in the grocery store, for instance and people will come up and talk to me. But (laughing), there's not a whole lot of slack time*

*as a resident. Really, there's no social life. You have to enjoy what you do, because that's pretty much the only time you've got.*

**When do you finish up your residency?**

*End June 2003.*

**Do you have any plans after your residency?**

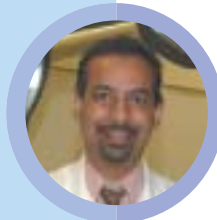
*I want to go into private practice, somewhere in this country. I want to specialize in general surgery. And it has to be somewhere where the weather is warm!*

**What did you think of "Houston Medical?"**

*I was very proud to be a part of the series, and I might be biased, but I thought it was very good. I was surprised how well the show turned out. I guess I was expecting just another medical reality TV show. Instead, I thought the show portrayed the emotional side of real life doctors in a very creative way. Besides (laughing), my mother enjoyed the show!*

**Does she live in town?**

*No, she lives in Montgomery, Alabama, where I grew up. She and her friends would gather around in the living room to watch the series.*



**Ian Butler, M.D.**  
**Professor of Neurology**  
**Director, Division of Child Neurology**  
**Episode 2**

*My TV spot, if you will, involved a little 5-year-old boy with headaches and neck pains. He had Chiari Syndrome, which is a brain malformation, and it was diagnosed with the usual tests, including magnetic resonance imaging. He subsequently went on to see pediatric neurosurgeon Dr. James Baumgartner, who was also filmed in another episode.*

**How were you chosen?**

*The TV crew showed up one day and asked, "Do you have any children?" (Laughing) I have several; but they're all grown and gone away now. Actually the producers were looking for undiagnosed cases. About a week or two later, out at our FM 1960 clinic, this little boy and his family came in to see me. I thought to myself, "They would be perfect for this TV spot." So I later called the parents and asked if they would be interested in appearing on the show and they said yes. I called the TV crew, and the rest, as they say, is history.*

**Has being in the show changed your life?**

*No, no, not really. Except, hmm, except my hair stylist, people in the coffee shop, the staff, people on the street, people in the grocery store. It's the accent, I think. They recognize me when I start to talk.*

**You're from Australia, right.**

*Yes.*

**How did you feel about being asked to be part of "Houston Medical?"**

*You know, it was interesting, but some people were upset, with the approach of, what are they doing HERE, invading our space? But I thought, Memorial Hermann can't get this kind of publicity for love nor money, and all of a sudden ABC wants to come and do a special on us. Nowhere else in the Texas Medical Center, really, with all the Taj Mahals here, are there as many pieces of a great hospital under one roof.*

**What did you think of the series?**

*The series showed doctors as people. Specialists yes, but still, just people. People who get divorced, get married, die, and have children. And that sometimes, in fact, many times, there are no ultimate medical answers.*





**Kevin Coupe, M.D.**  
**Assistant Professor**  
**Department of Orthopaedics**  
**Episode 5**

*I appeared in the fifth episode, and actually it was more like “a day in the life of Lisa Hunt.” It was a real tearjerker. Lisa was involved in a nasty motorcycle accident. She was the rider on a blind date, and the guy – the driver – turned out to be a really nice guy. He was a fireman and was thrown and killed. The camera crew picked up on me doing the surgeries – major reconstruction work on Lisa’s leg. Lisa loves to dance and we did get her back on the dance floor. She’s doing a lot better now.*

**How long a period did the TV crew follow you?**

*Three or four months. After the surgeries on Lisa, they’d come over to the emergency room. They even came to my home to film myself, my wife, and my two kids. I have a boy and a girl, ages 10 and 12. They filmed us playing in the park (laughing). Not exactly exciting news stuff, so I think that ended on the editing floor. We weren’t going through a divorce; we weren’t fighting – but that’s all right with me. I like having a nice family to come home to. I get my adrenaline rush right here, doing trauma pediatric ortho surgeries – repairing open tibias – at 2 a.m.*



**Latricia Thompson,**  
**First-Year Medical Student**  
**Episode 3**

“Houston Medical” viewers got a glimpse of the struggles and triumphs of a first-year medical student in Latricia Thompson, who came to UT-Houston a year ago with her husband, Cedrick, and two daughters, Lanae, 11, and Lelani, 9.

**How long a period did the TV crew follow you?**

*The entire year! They wired me and I thought, “Well, it’s only for a day.” It was really embarrassing sometimes. I had no clue where they were and when I needed to bathe, or whatever, they were nowhere to be found! And they were there for all the embarrassing moments at school, too. The first day of class, my first exam, the RESULTS of my first exam, finding out my grades. Biochemistry, for instance, was a really hard exam, and I had a lot of anxieties about it. But it turned out OK, and the camera crew was there to record my relief!*

**How did you react to being on camera?**

*I guess I’d have to say that after a while, I sort of got used to being in front of the camera and actually started to love it. And my family, they were really encouraging. They’ve always been my biggest fans. My*

**How have you been affected by the show?**

*What being on the show has done for me is to make me reflect on what’s real and what’s important. It has put things in perspective, I guess. That the most important thing in my life – what’s real – is my kids and my wife. Family life is a simple life – and that’s great.*

**Was there a story that didn’t get picked up by the cameras?**

*I think we could have done more with the trauma stories – the ones that involve car accidents, the drinking, the drugs, the partying until 2 a.m. It’s not pretty, but it’s the mainstay of the cases we see. Politicians and philanthropists give a lot of money to cancer and heart diseases. And don’t get me wrong, that’s important. But I think there’s a reticence to put money into trauma prevention because it’s the side of society, of ourselves really, that we don’t want to look at. And yet an executive, or a soccer mom, or a family of four, can be wiped out in an instant, due to the careless habits, the dark underbelly, of others.*

**How did you feel about being asked to be part of “Houston Medical?”**

*I was flabbergasted. I mean maybe it’s because I’m young looking? I don’t know. I talk a lot, and we sing and turn the music up in the operating room. Maybe that’s why they chose me. I loved doing my part.*

*spouse, Cedrick, and I, have been married a year last May.*

**How did you feel about being asked to be a part of “Houston Medical?”**

*Initially I thought, ‘Well, no big deal. It’s just a one-day shoot; maybe they’ll show a glimpse of me.’ Later, when I realized that they were going to stick around for a while, I became “modest.” That all this attention was being focused on me. Internally I think I started to feel shy and quiet. I don’t think being on the show really hit me until after the show came out. Even after it aired, it still seemed unreal. And then, the e-mails came flooding in. People would tell me I was an inspiration, that now, they were going to follow their dreams, that they were inspired to go after their own goals. Also, different people offered to help me. It was just a wonderful, wonderful outpouring of positive response and admiration.*

**Did your hometown pick up on you being on TV?**

*Yes! I don’t know about the Chicago newspapers, but the TV stations did. And my alma mater, Huston Tillotson, in the Austin area, not only picked up on the story, but sent it out to the rest of the college community there, and also asked me, “Why didn’t you TELL us you were going to be on TV?” They were so proud of me.*

## Getting answers about hormone replacement therapy

By DARLA BROWN

When the Women's Health Initiative Study was stopped two years early due to increased health risks associated with the hormone replacement therapy regimen of estrogen and progestin (Prempro®), the phones of obstetrician/gynecologists across the country started ringing off the hook.

"Our physicians have been getting inundated with questions on this subject, and many women can't get in to see their doctors because the advice has been 'talk to your doctor,'" said Larry C. Gilstrap, M.D., chairman of the Department of Obstetrics, Gynecology, and Reproductive Sciences.

The Women's Health Initiative is a 15-year study of the National Institutes of Health whose aim is to reduce coronary heart disease, breast and colorectal cancer, and osteoporotic-fractures among postmenopausal women. The segment of the study that was halted after 5.2 years was due to increased risks seen in women taking the hormone replacement therapy combination in this randomized trial, which involved a group taking Prempro® and a control group.

The study of women taking only estrogen – for those who have had a hysterectomy – is ongoing and the outcome is not yet known. Women who have not had a hysterectomy have been advised to take progestin along with estrogen because there is an increase of cancer of the uterus and endometrial hyperplasia for those who do not take the progestin.

"This is the best study that has been done to date on hormone replacement therapy, and it is long overdue," Dr. Gilstrap said. "Prior to this study, women were on hormone replacement therapy continuously without any thought because of the perceived benefits. Now, because of this study, we are weighing the risks and benefits for each patient and may offer a woman Prempro® for a reduced amount of time, if necessary."

Since the study was stopped in July, questions still abound and conflicting articles continue to fan the flames of uncertainty. Part of the concern may be due to the way the statistics have been presented.

"A 29 percent increase in heart disease if you are on Prempro® doesn't mean that 29 percent of women on this medication will get heart disease. The incidence rate was increased by 29 percent to 37 cases of heart attack per 10,000 women on Prempro® compared with 30 cases of heart attack per 10,000 on the placebo," Dr. Gilstrap explained. (See chart)

The main question women should ask themselves, Dr. Gilstrap said, is why they are on the medication.

"If you are taking this medication to prevent heart disease, get off of it. Previously it was thought to reduce risks, but this study has shown significant risks," he said. "If you are taking it to prevent osteoporosis, there are other medications that can do that that don't carry these risks."

To prevent osteoporosis, Dr. Gilstrap recommends women take calcium supplements of 1,200-1,500 mg. a day, a multivitamin with vitamin D, and exercise. There are also SRMs, synthetics that act like estrogen on the bones without the heart effects, and bisphosphonates that prevent the breakdown of bone,

that can be prescribed.

For those taking the HRT combination for menopausal symptoms, Dr. Gilstrap said there are alternatives such as natural medications, a local estrogen cream, antidepressants, and antihypertensive medications that may help. Women also are advised to avoid spicy foods, caffeine, alcohol, stress, and wear loose clothes and exercise.

"It has taken too long to find these answers," Dr. Gilstrap said. "More research into women's health issues is needed."

Dr. Gilstrap will be a featured speaker on this topic at the next Friends of the Medical School event Nov. 20. For information about the event, call Debbie Gilgor: 713-500-5002, or e-mail, [Debbie.Gilgor@uth.tmc.edu](mailto:Debbie.Gilgor@uth.tmc.edu).

### Women's Health Initiative Study results on hormone replacement therapy (HRT) Estrogen/progestin combination (Prempro®)

#### RISKS:

##### Heart disease:

29 percent increased risk of incidence  
37 cases per 10,000 women on HRT vs. 30 per 10,000 on placebo (risk appeared in first year of HRT use)

##### Breast cancer:

26 percent increased risk of incidence  
38 cases per 10,000 women on HRT vs. 30 per 10,000 on placebo (risk appeared in fourth year of HRT use)

##### Stroke:

41 percent increased risk of incidence  
29 cases per 10,000 women on HRT vs. 21 per 10,000 on placebo (risk appeared in second year of HRT use)

##### Blood clots:

two-fold greater risk of incidence  
34 cases per 10,000 women on HRT vs. 16 per 10,000 on placebo

#### BENEFITS:

##### Colon cancer:

37 percent reduced risk of incidence  
10 cases per 10,000 women on HRT vs. 16 cases per 10,000 on placebo

##### Hip Fractures:

34 percent reduced risk of incidence  
10 cases per 10,000 women on HRT vs. 15 cases per 10,000 women on placebo

In Search of Tomorrow's

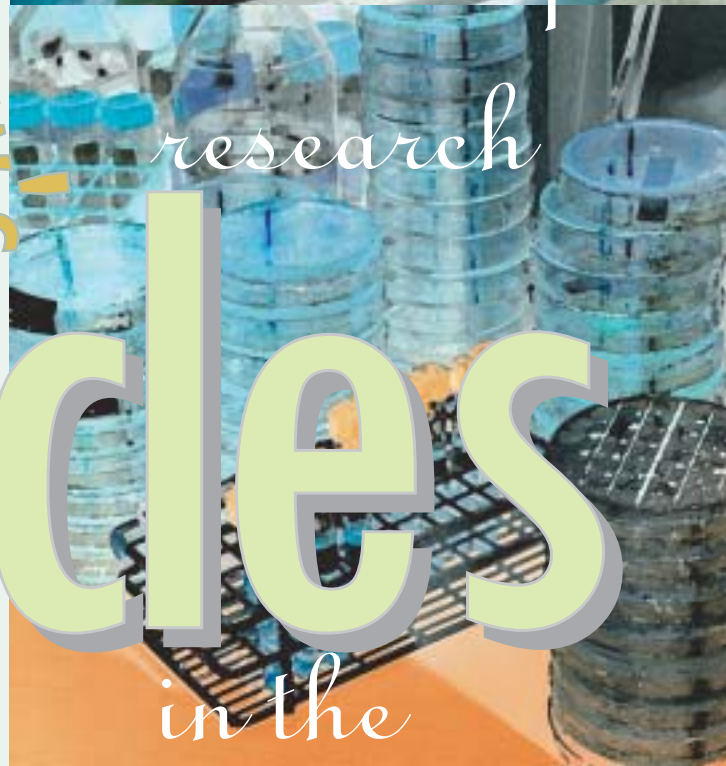


# Miracles

**W**ith a more than 50 percent increase in research dollars over the last six years, the UT-Houston Medical School is multiplying its contribution to scientific and medical studies by engaging in an incredible spectrum of exciting research discoveries and studies. From basic science, to clinical research and bridging these two worlds with translational research, the Medical School is poised to continue improving health and unearthing innovations. This section highlights just a few of our great researchers, who are vital to the successful accomplishment our research mission.



"to conduct  
the highest  
caliber of



research

in the



biomedical  
and health  
sciences"



Center for Membrane Biology:

## Starting at the surface

By SCOTT MERVILLE

One of the frontiers of molecular research runs along the borders of cells.

Understanding the barriers that define both the external limits of cells and their internal organelles is a key to discovering new medications and the goal of the Medical School's new Center for Membrane Biology.

This newest research initiative is supported by funds from one of its oldest and most prestigious endowments. Professor John Spudich, named in 2002 to the Robert A. Welch Distinguished Chair in Chemistry, also is the first director of the new center.

Dr. Spudich, who came on board as a faculty member in 1991, brings a multidisciplinary background to his research. He earned a B.S. in mathematics from the University of Illinois at Urbana, and his Ph.D. in biophysics from the University of California at Berkeley, after which he pursued post-doctoral studies in biochemistry and molecular biology at Harvard Medical School and the University of California, San Francisco. Sabbaticals with Nobel laureate chemist H. Gobind Khorana at MIT in 1990 and in 2000 with structural biologist Richard Henderson at the Medical Research Council in Cambridge, England, have further expanded his expertise in the study of cell membranes. Moving to Houston with his close coworker and wife, molecular biologist Elena Spudich, he joined the faculty of UT in 1991 after 10 years on the faculty of the Albert Einstein College of Medicine in New York.

"Cell membrane surfaces and their exposed proteins are the most accessible targets to treat human tissue or to destroy infectious microbes," Dr. Spudich said. "More than 60 percent of medications target membrane proteins on human cells

and many antibiotics target membranes on the pathogens that the drugs attack."

Yet of all the tens of thousands of proteins at work in human beings, the detailed structure of only about 30 membrane proteins are known, Dr. Spudich said, even though they make up an estimated 30 percent of all proteins. "There's a huge disparity in knowledge between these proteins and the rest of the human proteome. That's what this center will address, and I'm quite excited about its potential. Support from the Welch Chair will help a great deal with our research and in the development of the center," Dr. Spudich said.

Understanding the structure and function of membrane proteins is challenging because these proteins occur in trace amounts and are more difficult than common soluble proteins to isolate and purify in functional form and in the large amounts required for detailed study.

Because the research involves molecular biology, genetics, and biochemistry, the new center will tap the expertise of several Medical School departments. Four new faculty members also will be hired for the center, which is based in the Department of Biochemistry and Molecular Biology. "We are taking several strong programs that we have in membrane biochemistry and membrane protein structure and function and putting them together in a cohesive unit," Dr. Spudich said.

Other initial members of the center are William Dowhan, Ph.D., professor of biochemistry and molecular biology and holder of the John S. Dunn, Sr. Chair; professors Barbara Sanborn, Ph.D., and Henry Strobel, Ph.D., from the same department; Peter Christie, Ph.D., associate professor of microbiology and molecular genetics; Carmen Dessauer, Ph.D., assistant professor of integrative biology and pharmacol-



Dr. John Spudich

ogy; and Nobel laureate Ferid Murad, M.D., Ph.D., director of the Institute of Molecular Medicine. Dr. Spudich said the center will be open as a resource to anyone with membrane research interests.

His own research focuses on rhodopsins – light receptors present in microbes as well as in higher animals. John and Elena Spudich, a senior Medical School research scientist, first discovered rhodopsins that play a sensory role in microbes two decades ago. Recently, with colleagues at the University of California-Irvine, they determined the crystal structure of one sensory member of the now large microbial rhodopsin family, publishing the atomic structure in *Science* last August.

"The rapid pace of research on these proteins should enable us soon to obtain a 'moving picture' at atomic detail of the signaling process in this system, which has become one of the best systems for elucidating the dynamics of protein-protein interaction within the membrane, a ubiquitous phenomenon that is poorly understood," Dr. Spudich said. "I am especially gratified that there is a great deal of excitement over the current rapid progress among the group of excellent young scientists who have joined our laboratory. "



# Stroke research reveals 'time is brain'

BY COLLEEN O'BRIEN

Receiving a 911 call, the Houston Fire Department paramedics rush to the scene, park their vehicle, and hurry into the house. A woman's body lies in a heap on the kitchen floor. The two paramedics quickly ascertain if she has suffered a stroke, a heart attack, a seizure, or possibly a combination. Saving a life begins.

Neurologist James Grotta, M.D., a highly acclaimed national stroke expert and the Roy M. and Phyllis Gough Huffington Distinguished Chair in Neurology, depends on the quick thinking of Houston paramedics to start the life-saving process. "I believe you can measure the effectiveness of a good stroke physician by the expertise and readiness of his stroke team," he said.

Dr. Grotta is the director of the Stroke Treatment Team, which provides comprehensive prevention and treatment of strokes in conjunction with the Hermann Stroke Treatment Center – the only center of its kind in the south central United States. Stroke Team physicians are on call 24 hours a day, and patients are accepted within minutes of the onset of a stroke. "Time is brain," as the team likes to say.

Strokes are due to blockage or rupture of a blood vessel in the brain and can be divided into hemorrhages, which occur in roughly 20 percent of patients, and occlusions, blood clots, or infarcts, which are basically blockages that occur in 80 percent of patients. Strokes, which strike over 600,000 yearly in this country alone, occur mostly in older people, who have hardening of the arteries.

Dr. Grotta has seen dramatic improvements in stroke management

since his career began in the mid 1970s, when there were few treatment or prevention options. Back then, stroke patients were admitted to a general medical floor and treated for blood pressure problems, he said.

"We've made some important advances in stroke prevention over the last two decades, such as aspirin, blood pressure control, lowering cholesterol, and other so-called risk factors," Dr. Grotta said.

Blood thinners for atrial fibrillation, carotid artery surgery, and, done effectively, stenting can reduce the frequency of strokes.

"We've also refined our understanding of different risk factors in various ethnic groups and made initial advances in the genetics of strokes," Dr. Grotta said, adding that a key field over the next 10 years will be determining genetic predispositions for stroke.

The main focus of Dr. Grotta's work has been in treating the acute stroke to reduce brain damage and disability. The biggest success of his group was their work with the clot busting drug tPA, which was approved by the U.S. Food and Drug Administration in 1995 as the first (and still only) effective treatment for stroke. But, tPA is only partially effective and can only be given effectively within the first few hours after stroke onset.

Dr. Grotta, as principal investigator of a new \$5 million grant from the National Institutes of Health's (NIH) National Institute of Neurological Disorders and Stroke, is studying with colleagues, novel methods of dealing with stroke to try to build on the success achieved with tPA (tissue plasminogen activator). Therapies to be researched include: caffeinol (a neuroprotective blend of alcohol and caffeine); hypothermia (lowering a person's body temperature); the anticoagulant Argatroban; and the use of ultrasound to help dissolve blood clots faster and more completely.

Another component of the study is recovery rehabilitation. The concept is that "learned non-use" of the affected limb occurs in stroke victims paralyzed on one side of their

bodies, who compensate by using their unaffected limbs, to the detriment of rehabilitating their impaired limbs. Research has shown that immobilizing the healthy arm in a sling may improve rehabilitation by forcing a patient to use the affected arm.

Kids Defeating Stroke is an educational component of the study aimed at middle-schoolers. "We train them to recognize classic stroke symptoms, such as loss of speech, or loss of sensation, or strength in the limbs," Dr. Grotta explained.

He also is proud of his NIH team, which includes Lemuel Moye, M.D., Ph.D. School of Public Health, who



Dr. James Grotta

heads the statistical core of the program. The clinical component is headed up by Dr. Grotta, with Marc Malkoff, M.D.; Morgan Campbell, M.D.; Andrei Alexandrov, M.D., in ultrasound; Frank Yatsu, M.D.; Anne Wojner, and Lewis Morgenstern, M.D. David Robinson, M.D.; Elizabeth Jones, M.D.; and David Persse, M.D., head up the emergency component. Jarek Aronowski, Ph.D., and Dianna Milewicz, M.D., Ph.D., concentrate on the genetics. Edwin Coacayorin, M.D., and Joon Song, M.D., Department of Radiology, focus on the neuroradiological area. Eva Salmeron, M.D.; Jenny Lai, M.D.; Thao Tran, M.D.; Corwin Boake, Ph.D.; Harvey Levin, Ph.D., of Baylor College of Medicine; and Tony Ro, Ph.D., of Rice University, are involved in the rehabilitation aspect. The project also involves a team of stroke fellows Ken Uchino, M.D.; Lise Labiche, M.D.; Elizabeth Noser, M.D.; and Christiana Hall, M.D.; nurse Sandi Shaw; and support staff Jennifer Lacy.

## Nurturing and growing clinical research

BY DARLA BROWN

It's not easy for faculty members to juggle the three hats of the Medical School: expert clinician, outstanding researcher, and great teacher. Finding the time to dedicate to each part of the School's mission can be overwhelming, especially to a young faculty member.

Enter the Center for Clinical Research and Evidence-Based Medicine, which is helping faculty members balance their duties by providing a structured, nurturing environment in which clinical faculty can learn and grow as clinical researchers.

The goal of the center is to increase the public's healthy years of life by promoting high quality research and advancing the application of research in the care for patients. The center accomplishes this by providing dedicated coursework for fellows and faculty and offering a mentorship program, helping young investigators design their first major clinical study.

"The center's goal is broader than teaching people to be good clinical investigators, it's also teaching people how to be better caregivers in applying the advances from research in treating their patients," said Jon Tyson, M.D., M.P.H., director of the center.

### The need for a center

Even though it is only four years old, the center's impact already has been felt. Last year, center faculty served as the principal investigator for 17 major grants and as investigators on 48 grants. Such grants have contributed to the 50 percent increase in research dollars at the Medical School over the past six years.

The center is the brainchild of Dean L. Maximilian Buja, who realized the need to emphasize clinical research.

"You won't find many medical schools where the dean has given the



*Dr. Jon Tyson, left, mentors Dr. Martin Blakely through the Center for Clinical Research and Evidence-Based Medicine.*

funding and has a high enough priority to recruit someone whose primary responsibility is to promote clinical research across all departments," noted Dr. Tyson, the Michelle Bain Distinguished Professorship in Medicine and Public Health.

Dr. Tyson came to the Medical School in 1998 to head up the center and quickly obtained \$1 million from the National Institutes of Health (NIH) to implement a clinical research curriculum and mentorship program, which went into effect in 1999.

"The common belief used to be that anyone trained to give patient care or laboratory research could do clinical research 'on the side' without any formal training," Dr. Tyson explained. "Now it's generally appreciated that just as you need formal training to be successful in laboratory-based research, you need formal training to be successful in patient-based research."

A renowned researcher – he has

been the principal investigator of the National Institute of Child Health and Human Development Neonatal Research Network since its inception in 1986 – and as a volunteer subject for clinical trials himself, Dr. Tyson appreciates the value of research.

"If faculty members tell me they are not interested in performing research, that's fine. But tell me how are they going to be better in five years than they are today. That's going to take skills in reading the literature, evaluating how their patients fare compared to patients in the past, understanding the effect of doing things differently, measuring the outcomes of their patients, and providing quality control," Dr. Tyson said. "We want to help them fully develop these skills."

### The first step – education

The Clinical Research Curriculum is funded by a five-year NIH grant as a core training program to promote clinical research expertise among



clinical investigators at the fellow and junior faculty level. This program is administered jointly with The University of Texas M. D. Anderson Cancer Center via interactive televised instruction between the institutions. These free classes are open to all clinical researchers and anyone who may want to become a clinical researcher.

“We encourage anyone who wants to come to come – whether they are just observing or taking the curriculum for credit,” Dr. Tyson

said. “Even if someone isn’t going to become a clinical investigator, the fact that they understand clinical research will make that person better in caring for their patients.”

Faculty who successfully complete the year-round Clinical Research Curriculum qualify for 10 credit hours toward the new Master of Science in Clinical Research Degree Program (see page 20).

The center’s 19 faculty members teach the majority of the curriculum.

These faculty members are seasoned investigators whose expertise establishes them as knowledgeable mentors to the up-and-coming researchers.

### Role of the mentor

Those who participate in the curriculum may apply to the center’s intensive mentorship program, which requires a commitment to prepare a grant proposal within 18-

## Study evaluates surgical treatments

**R**igorous testing and trials are integral steps before introducing a new drug on the market. But what kind of testing is done on new surgical treatments?

“There are a lot of new surgical treatments in use today that have never been tested against the old standard,” said Martin Blakely, M.D., associate professor of pediatric surgery. “Basically, if you want to try a new surgical technique, there are no official regulations.”

As a result, physicians often use personal preference when electing to perform one surgery over another, if there are multiple treatment options. This is the case with the surgical treatment of necrotizing enterocolitis (NEC), a rare disease in which part of the intestine is destroyed in premature infants.

Through a National Institutes of Health Clinical Research Career Development (K23) grant that he secured with the help of the Center for Clinical Research and Evidence-Based Medicine, Dr. Blakely is comparing the standard aggressive surgery, which requires general anesthesia and removal of the affected part of the child’s intestine, to a relatively newer surgery that is a simple drain placed in the abdomen, which can be done under local anesthesia.

“We’re trying to collect data regarding these very different operations so there is some rationale for why we choose one over the other – now it’s personal preference based on anecdotal experience, which is not a good way to pick therapies,” Dr. Blakely said. “There are advantages and disadvantages to each.”

Although the disease is rare, it is one of the most common reasons for neonatal surgery. Of the neonates who have NEC, approximately 20 percent will need surgical treatment. For extremely low birth-weight infants who require surgery for NEC, the mortality rate is over 50 percent.

Patients are being enrolled nationwide for this study through the Neonatal Research Network, a 16-center network whose focus is clinical research in newborns. Jon Tyson, M.D., M.P.H., director of the Center for Clinical Research and Evidence-Based Medicine, is the principal investigator for The University of Texas at Houston on this NIH-funded center. Dr. Blakely’s



*Through the assistance of the center, Dr. Blakely has obtained a NIH grant to study surgical treatments of necrotizing enterocolitis.*

project is the first surgical study for the network.

“You need a multicenter, collaborative network to enroll enough patients with these rare problems in clinical studies,” Dr. Blakely said, adding that he has enrolled 153 infants in the study. “It will be three to four months before we have the data on this.”

## In search of tomorrow's miracles

24 months. Mentees have two mentors – a traditional departmental mentor, who is most familiar with the subject they are investigating,



Dr. Jon Tyson

and a mentor from the center, who helps elucidate and tailor the methods of clinical research to the specific project.

“This way they get both topic and methodological expertise,” Dr. Tyson said. “The goal is to help them get their first major grant to help launch their career. We are especially pleased if they are able to obtain a career development award.”

With the help of the center, Martin Blakely, M.D., assistant professor of pediatric surgery, is one of five mentees so far who has received a career development award.

Dr. Blakely came to the Medical School three years ago, attracted, in part, by the center, which was had just been created.

“After I finished my fellowship, I knew I wanted to focus on clinical research. I was recruited by Dr. Tyson and Dr. Kevin Lally, who

would become my mentors,” he explained.

Just one year after he came on board, Dr. Blakely submitted and received an NIH K-23 grant, a clinical research development award that gives junior faculty protected time to engage in clinical research and provides 75 percent of their salary.

“This grant allows me to have two days a week to devote to research instead of seeing patients,” Dr. Blakely said. This protected time also will allow him to be a student in the new master’s degree program.

Dr. Blakely’s grant funds his evaluation of the two surgical therapies of necrotizing enterocolitis in premature infants (page 19).

“Getting such a grant would be possible without the Center, but it would be very difficult. I am certain that I wouldn’t have an NIH grant after being here just one year without the center,” Dr. Blakely said.

## New degree focuses on clinical research

In order to strengthen the supply of expert clinical researchers and ensure the supply is replenished for subsequent generations, this fall the Medical School welcomed its first class into the Master of Science in Clinical Research Degree Program.

“We are very pleased to welcome 16 students to this new degree program – originally, we were hoping to admit between six and 12 students,” said Kathleen A. Kennedy, M.D. M.P.H., program director for the new degree. “But, we had a large number of really good applicants that we didn’t want to turn down.”

The new degree program is the first MS degree program at the Medical School. The coursework is an extension of the Clinical Research Curriculum provided by the Center for Clinical Research and Evidence-Based Medicine:

The curriculum for the new master’s program consists of two tracks – a patient-based clinical research track and a translational research track. In addition to the 10 credit hours for the Clinical Research Curriculum courses, each student

*The main reason this program is necessary is that there has been an increased recognition that high quality clinical research requires advanced training in the methods used in clinical research.*

*Dr. Kathleen Kennedy*

will be required to complete an additional 26 credit hours, including practica and a thesis.

Five years ago, such degree programs did not exist, Dr. Kennedy said, and the Medical School’s program is one of a handful that recently has been created.

“The main reason this program is necessary is that there has been an

increased recognition that high quality clinical research requires advanced training in the methods used in clinical research,” Dr. Kennedy said.

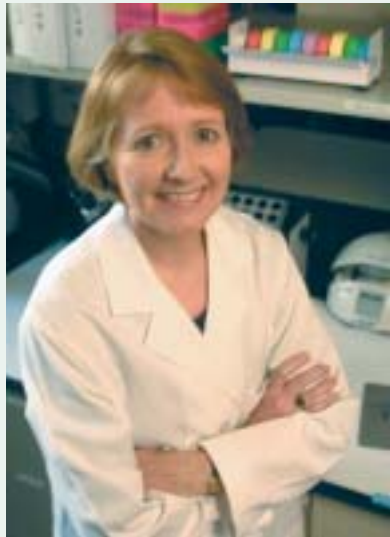
The program is expected to appeal primarily to MDs at the fellow and faculty levels as well as to other clinicians who have not had previous formal training in clinical research.

“Most of the students are already in academic medicine at the Medical School, M. D. Anderson, or the School of Nursing. Our goal is that the students will use this degree to carry out excellent clinical research and that they will ultimately teach others to do outstanding clinical research,” Dr. Kennedy said.

The degree may be completed in two to four years, depending on how much time the student devotes to it.

“This is a very flexible program that is feasible for busy clinicians,” said Jon Tyson, M.D., M.P.H., associate director of the degree program.

For more information, see <http://ped1.med.uth.tmc.edu/neo/center-masters.htm>



Dr. Theresa Koehler

# Unlocking the mysteries of anthrax

By DARLA BROWN

It has now been a year since anthrax entered the public's consciousness. Talk and information about the frightening bacterium were once ubiquitous, but for the most part, the public urgency surrounding anthrax has faded.

Anthrax is still on the mind of Theresa Koehler, Ph.D., associate professor in the Department of Microbiology and Molecular Genetics, whose research has focused on the bacterium for the past 20 years. Long after the headlines have disappeared, she continues to make new discoveries about this bacterium that has been used as a weapon.

"*Bacillus anthracis*, the bacterium that causes anthrax, is a fascinating microbe, and it has been an exciting year. This bacterium serves as a good model to study host-pathogen interactions, and at the same time it exhibits some unique features with regard to gene expression," Dr. Koehler said.

Armed with funding from the

National Institutes of Health, the Central Intelligence Agency, and the U.S. Army Disaster Relief and Emergency Medical Services (DREAMS) Program, Dr. Koehler and her lab are working at the molecular level to unlock the mysteries of *B. anthracis*.

"To me, the most exciting thing our lab has been involved in is looking at gene expression – especially virulence gene expression in *B. anthracis*," Dr. Koehler said.

Two important sets of virulence genes in *B. anthracis* are the anthrax toxin genes and the genes that allow the bacterium to build a protective capsule around itself. Dr. Koehler is investigating the bacterium's full arsenal of potential virulence genes, including many that are not related to toxin and capsule production. "Transcriptional profiling allows us to determine what genes are expressed and at what level," she said. "We can ask which of these genes are actually used to equip the microbe to cause disease."

Using this method, Dr. Koehler and her lab have unlocked one mystery of *B. anthracis*: How can it be virtually genetically identical to other *Bacillus* species that are much less harmful? With the exception of the anthrax toxin and capsule genes, the genome of *B. anthracis* is virtually identical to two less threatening bacteria – *B. thuringiensis*, which is used as an insecticide, and *B. cereus*, some strains of which can cause mild food poisoning.

"Although the three species share multiple apparent virulence genes, expression of these genes differs in the species. The behavior of the species and their ability to cause distinct diseases is in many ways due to key differences in gene expression, as opposed to differences in genetic composition," Dr. Koehler said, adding that she and her post-doctoral research fellow, Agathe Bourgogne, recently submitted this for publication.

Dr. Koehler and her lab also were part of a large consortium led by The Institute for Genomic Research (TIGR), that worked on annotating the complete genome sequence of *B.*

*anthracis*.

The group's basic science research involves several other studies that may have implications for treatment and counter-terrorism measures.

The UT researchers are studying strains of anthrax that are resistant to penicillin, which were sent to them from the Centers for Disease Control. "Although ciprofloxacin was the antibiotic of choice for anthrax infections in the recent U.S. cases, worldwide, penicillin has been the most commonly used antibiotic for anthrax treatment," Dr. Koehler said. "We have isolated a gene that is responsible for making strains penicillin-resistant – a gene that encodes a b-lactamase protein."

With up to 10 percent of *B. anthracis* strains found in nature resistant to penicillin; these findings are the first step to determining secondary antibiotics for human treatment. Dr. Koehler's lab is conducting experiments to determine why the gene is expressed in some strains, but not in others.

The group also is looking at how *B. anthracis* protects itself and thrives in macrophages inside the human body. "It is important to study this early stage of infection because, as everyone knows, if anthrax progresses beyond the early stage, treatment becomes very difficult," Dr. Koehler said. "Once the anthrax toxin proteins build up in the bloodstream, antibiotics are not very useful."

The study of *B. anthracis* is not limited to proliferation in humans – the group is looking at how it acts in the soil. The existing dogma, Dr. Koehler said, says that when *B. anthracis* is in the soil it is in its dormant phase and wakes up and germinates only when it is in an animal host.

In this study, the lab is looking at *B. anthracis* as it colonizes on tomato plant roots – assessing how it grows in the soil and how it can exchange DNA with other bacteria in the ground. "This may give us insight into the differences between bacterial species," Dr. Koehler said. "This is fascinating because it is giving us a peek at evolution without the selective conditions of the mammalian host."

Inventive minds:

# Translating an idea to patient care

By DARLA BROWN

**I**t can happen instantaneously. A thought is triggered, and an invention is conceived.

This spirit of ingenuity has resulted in more than 100 patents, dozens of licenses, six start-up companies, and more than \$14 million in license fees and royalties for The University of Texas Health Science Center at Houston and its inventors since 1986.

"We're in the business of conducting research and saving lives, and some of our faculty are pioneering new treatments and standards of care through inventions. The basic research is essential, the applied research takes it to the next stage, and the commercial development is actually what will bring it to the people – it takes the combination of all of these efforts for us to be successful," said Bruce D. Butler, Ph.D., director of the Office of Technology Management, and holder of nine U.S. patents.

The Office of Technology Management acts as the keystone, bridging the faculty member's idea to the marketplace for all inventors at UT-Houston. The vast majority of the technology developed commercially from The University of Texas Health

Science Center at Houston is created in the Medical School.

Inventions by Medical School faculty members have been saving lives for years – and current research and burgeoning technologies are on the cusp of revolutionizing disease treatment and detection for years to come.

## Some of the Inventions

Thinking about how pH paper changes color revealing acid or base sparked the invention of the **Easy Cap** and the **Pedi Cap**, which can be found on most ambulances throughout the United States. Invented by UT anesthesiologists Jeffrey Katz, M.D.; Bruce Butler, Ph.D.; Basil Leiman, and Henry Salzarulo, the caps change from purple to yellow when carbon dioxide is detected during emergency intubations. "If the endotracheal tube is improperly located in the esophagus, the color of the cap won't change," Dr. Butler explained.

**Impact**, a nutritional supplement for surgical patients invented by Charles VanBuren, M.D., professor of surgery, and Fred Rudolf, Ph.D., from Rice University, has had significant U.S. and international sales. Impact is a high-protein supplement designed to strengthen the immune system for a patient's faster recovery following surgery. It has been licensed since the early 1990s.

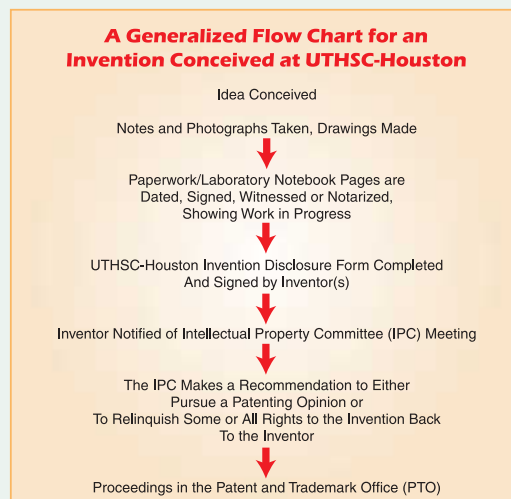
A new technique for soft tissue imaging – **ultrasound elastography** – is technology invented by Jonathan Ophir, Ph.D., radiology professor and director of the Ultrasonics



*Dr. Bruce Butler, an inventor and the director of the Office of Technology Management, displays an Easy Cap.*

Laboratory, and has been licensed to one of the largest ultrasound companies in the world. The technology makes it possible to use noninvasive ultrasonic waves to image the stiffness of soft tissues with high resolution. Among possible applications are the detection and classification of breast and prostate cancers, therapy monitoring, and classification of vulnerable plaque. Research in this area is supported by a 10-year Program Project Grant from the National Cancer Institute to Dr. Ophir's lab, with international collaboration of several other institutions. Dr. Ophir, who was recognized in 1995 as Inventor of the Year by the Houston Intellectual Property Law Association, holds 16 patents in the area of ultrasound instrumentation and measurement techniques.

The work of Steven J. Norris, Ph.D., professor and vice chair for





research in the Department of Pathology and Laboratory Medicine, with Lyme disease bacterium has lead to pending patents that could provide methods to detect and treat the mysterious tick-borne illness. A diagnostic test for veterinary use already is being marketed, and this test also could be applied to livestock and humans. (See Newsworthy, page 5)

**The Texas Primary Reading Inventory** diagnostic assessment tool and intervention activities guide for kindergarten, first- and second-grade teachers recently was licensed for national sales. “We’re targeting every elementary school child in the United States,” Dr. Butler said. Presently, 95 percent of Texas school districts use this technology, developed by Barbara Foorman, Ph.D., and Jack Fletcher, Ph.D., co-founders of the Center for Academic and Reading Skills, an outreach program in the Department of Pediatrics.

## The Process

The UT-Houston Office of Technology Management helps translate a faculty member’s spark of genius to paper to products and ultimately income. Unlike the instantaneous spark, the physical development of an invention, the patent process, the licensing of a patent, and the commercial marketing of a product is a laborious process that involves attorneys, committees, private investors and commercial companies, or the federal government and a thorough internal process as well (see flow chart at left).

“The patent process takes several

months to prepare, and once the application is submitted, it can take one to two years to hear from the U. S. Patent Office and then another one to two years to actually receive the patent,” Dr. Butler explained.

One of the keys to successful technology transfer is ensuring an idea or technology is protected, through a patent or copyright, as venture capitalists and established corporations are not willing to invest in anything unprotected, Dr. Butler said.

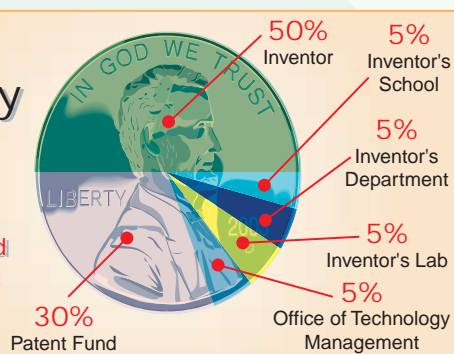
Products tailored to specific research, such as antibodies, cell lines, transgenic mice, and DNA-related technologies, also flow through patent pipeline and may have future treatment and diagnostic implications. The Office of Technology Management also registers copyrights for written work or software to protect faculty members’ work.

“Our office provides all of the negotiating, legal assistance, and contracts, allowing the faculty to do what they do best – research,” Dr. Butler said. “We are the interface between the commercial and academic enterprise and have to speak both languages.”

The number of patents and invention disclosures at UT-Houston has steadily increased since the Office of Technology Management was created in the mid-1980s. This increase is due, in part, to the increasing role academic environments are playing in creating

## The Money Split

Royalties are divided as follows:



introduce three to five new products a year. Their pipeline of development cannot meet this expectation, so they look to academic centers to augment their pipelines and offer up potential drug candidates that already have fundamental research and intellectual property protection,” Dr. Butler explained.

Succinct conflict-of-interest policies are in place to ensure everything is above board – this is especially important in disclosing an inventor’s stake in a start-up company or technology that is in clinical trials. In addition, an oversight committee is assigned to any start-up company.

Revenues are realized after a patent has been licensed to an individual or corporation for use in a manufacturing and marketing effort and products are cleared through the Food and Drug Administration (see above distribution split). UT-Houston inventors have a good track record of creating licensable technologies – approximately 40 percent of the patents issued are licensed. “We are very careful to nurture the invention and inventor from the pre-disclosure stage all the way through fruition,” Dr. Butler said.

The time it takes to realize any revenue from a licensed technology can range from three to nine years.

“We have a number of licenses with companies that are not bringing in any royalties yet,” Dr. Butler said. “There is often less risk involved with licensing a product to an established company that spinning off a start-up company to market and develop a specific technology.

“Start-up companies can fail for a variety of reasons, for instance, they

### UT Patent Statistics

Patents Issued to Date to UT-Houston . . . . .	<b>114</b>
Patent Applications Pending . . . . .	<b>51</b>
Total Licenses in Place . . . . .	<b>49</b>
Patent/Invention Income (fiscal year 2001)	<b>\$857,051</b>

the technology of the future.

“The expectation for drug companies is so high – they are expected to

don't have enough capital, or they bank too heavily on one invention," Dr. Butler said, adding that UT-Houston technology has provided the

foundation for six start-up companies (see below). "There are special benefits to a start-up, however, depending on the

technology involved and the projected timelines for development and valuation, that may well warrant the effort."

## Inventions give rise to start-up companies

An update on some of the start-up companies that have been spawned from UT-Houston inventions:

**Volcano Therapeutics Inc.:** An early stage medical device manufacturer, Volcano Therapeutics recently completed a \$24 million round of private equity financing. Volcano Therapeutics, located in Laguna

Hills, Calif., is focused on the discovery, development, and treatment of vulnerable plaques. Vulnerable plaques are the leading cause of heart attacks, located in the coronary or peripheral arteries, which are caused by inflammation.

The company is building heat-seeking sensors that can enter arteries via a catheter. "These catheters are in people now," said inventor S. Ward Casscells, M.D.

The technology and the company were recently featured in the June 24, 2002 issue of *Fortune Magazine*.

"It's a good prospect to make money for the university," Dr. Casscells said. "It's important to have biotechnology to attract and keep good faculty, and it's good for the community and the economy."

Inventors: James T. Willerson, M.D.; S. Ward Casscells, M.D.; Morteza Naghavi, M.D.

Web site: <http://www.volcanotherapeutics.com/>

**GrassRoots Pharmaceuticals, LLC:** This company is centered around the creation of a pain-relief medication that is easy on the stomach, less expensive than popular alternatives, and appears to work better than ibuprofen or aspirin. The medication contains phosphatidylcholine, which is concentrated in enriched soy lecithin.

A clinical trial has been completed for an aspirin-PC combination, with promising results that were published in the *American Journal of Gastroenterology*. The National Institutes of Health (NIH) has funded a clinical trial for a PC-ibuprofen combination for arthritis patients.

"We have been working on an application for an investigational new drug with the Food and Drug Administration, which we need to secure before this clinical trial can move forward," said inventor Lenard M. Lichtenberger, Ph.D., professor of integrative biology and pharmacology. The company has an option agreement with UT-Houston for an exclusive worldwide license for 14 patents, half developed by Dr. Lichtenberger and half sub-licensed from other companies, and the rights to associated technology. UT-Houston will own a significant share of the company – 25-35 percent.



Dr. Lenard Lichtenberger

The group is now going through the "due-diligence" phase with an investor group in Houston, which is interested in providing funding to the company. Dr. Lichtenberger also has applied for two small business grants from NIH.

"The market situation is changing. Companies that weren't talking to us two years ago are now showing an interest," Dr. Lichtenberger said, adding that the

main competition to his invention, Vioxx and Celebrex, have made headlines recently, with evidence pointing to adverse cardiovascular side effects.

The ultimate goal, Dr. Lichtenberger said, is to license the technology to a drug company and use GrassRoots as an incubator for other applications of this technology.

On the Web: [www.GrassRootsPharma.com](http://www.GrassRootsPharma.com)

**Protein Institute, Inc.** – provides the patented technology to produce different shapes, or isoforms,

of proteins, which may be used as a drug or as a target for human disease.

"Proteins play an essential role in causing disease, and we are looking at ways to block or inhibit these as a result of changing the shape of proteins," explained inventor Rowen J.-Y. Chang, Ph.D., professor of molecular medicine. "Protein has the ability to deform – it's not like DNA, which is one linear strip of information. A protein is a product of the gene and need proper folding to maintain itself. We specialize in managing how to analyze and how to produce different shapes of proteins, which could be very useful."

One of the many proteins this unique company is working on is the prion protein, which is a market of mad cow disease. This group has seed funding of \$2 million from outside investors and has just signed a lease to build a laboratory in a new Houston biotechnology park.

"We expect our lab will be finished by November and will work on hiring employees then," Dr. Chang said.



# Lights... Camera... Student Retreat

BY DARLA BROWN



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## The players:

The Janitors Committee. The King of Hearts. The Schlepper King and Schlepper Prince. The Grand Matrixer. First-year students. Faculty. Camp doctors.

## The setting:

A camp in a remote pine forest northwest of Houston known as Camp Allen. The camp features dormitories, a chapel, meeting rooms, a dining hall, an outdoor pavilion, and plenty of recreation spaces.

Once upon a time, there was a Great Flood. No, not Tropical Storm Allison. This one was simply known as the First Great Flood, and it happened in 1976. The University of Texas Medical School at Houston was only a few years old, but the flood and ensuing damage had dampened spirits and morale.

A group of students had a plan to rejuvenate the depressed atmosphere of the Medical School – and from those early thoughts, the Student Retreat was born.

“The flood delayed the onset of school that year, and students who were part of an ethics discussion group that met at my house began talking about how the flood was influencing students’ attitude of the school,” remembered Henry Strobel, Ph.D., assistant dean for student affairs. “We started organizing and held our first Student Retreat for the incoming class in 1977.”

Sixteen faculty members and students worked to put on that first retreat to provide some camaraderie and goodwill toward the new medical students. “We had fun that first year,” Dr. Strobel said. “But, since we were a small work group, we didn’t have time to do the most important thing – interact with the first-year students.”

At that first retreat, part of the

evening’s entertainment included the showing of a foreign film, “The King of Hearts.” Described by Dr. Strobel as the story of a soldier who inhabits a war-torn French village that has been abandoned and left to be run by mental patients, the film did not go over the way he had planned.

“No one liked the movie, and they all wondered why we had shown that. Out of that, the skit was born,” explained Dr. Strobel, who has taken a leading role in guiding each of the subsequent 25 retreats.

The retreat has evolved since 1977, but its mission has not changed. Today, students arrive as strangers on Friday morning for a full slate of activities, including games, faculty presentations, and small-group discussions, and leave as close friends after lunch on Saturday afternoon.

“The retreat is all about bonding – we show the new students that we’re a part of you, you’re a part of us,” Dr. Strobel said. “The goal is to

get the students to know each other, and the result is that they are having fun.”

In addition to introducing the students to each other and the faculty, the retreat also introduces the students to their new status as medical students.

“The retreat teaches the new students how to survive medical

to acting, lighting, and filming.

This year’s two-hour skit featured dancing faculty members (including Dean Max Buja) in a Britney Spears’ number, a performance by the boy band “98.6 Degrees,” a Medical School game show, and a finale “You Will Survive” (as encouragement to the newbies) sung by second-year student Latricia Thompson to the

significant and very noticeable,” said Craig Messick, president of the second-year class, which is traditionally the leadership role for the retreat. “I actually had two other co-retreat chairs who helped me out in the general organization and to keep my stress level at a minimum.”

The Janitors Committee meets at Dr. Strobel’s house during the



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school in a jovial fashion. It makes students feel comfortable in their environment to optimize their learning,” said Mark Farnie, M.D., ’87, who has attended 13 retreats as both a student and a faculty member.

Another important outcome of the retreat is that it puts the students on equal footing, thereby drawing the class together.

“It’s intimidating to get thrown into this environment, realizing you’re at the top of your class at your respective college, and when you come here you may not be at the top anymore,” Dr. Farnie said. “The retreat is a way for the class to become strong collectively, because the only way they will get through medical school is by relying on each other’s strengths.”

The skit is the pinnacle of the annual retreat and is the culmination of year-round work by volunteer second-year students, who host and plan the retreat for the first-years. A variety show of sorts, the skit highlights the nonmedical talent of the students – from song and dance

Gloria Gaynor tune, “I Will Survive.” The onstage performances were interspersed with taped vignettes, including a UT-Houston Medical School version of the movie “Rudy;” MTV’s “The Osbournes,” featuring faculty members Drs. Roger and Diane Bick in the leading roles; and a tour of Dean Buja’s home for an episode of “MTV Cribs.”

“The dimensions the students are able to tap and bring forward are most heroic,” Dr. Strobel said. “These hidden talents just emerge – everyone has a satchel full of gifts.”

From the skit and Saturday night dance party to the registration and transportation, the entire retreat is led by more than 30 volunteer second-year students known as the Janitors Committee. The members of this committee volunteer part of their spring and summer semesters to head the different committees responsible for each segment of the retreat.

“Every committee is really key because there are such large responsibilities that if even one falters, it is

summer, just as in the earliest days of the retreat. Key positions include the Grand Matrixer, who is in charge of assigning every second-year volunteer a task in every time slot; the Schlepper King, who moves everything, from people to beverages, where it needs to go; and his assistant, the Schlepper Prince. More than 100 second-years volunteer to help out with the retreat.

“The planning, believe it or not, begins the moment the first-years get on the busses and head back to Houston after the retreat. There were several ideas for this retreat that came up from our bus ride home last year,” Messick said. “In February, the Janitors Committee is formed and the organization, planning and general ideas for theme of retreat begin to come together — this is rather time consuming in order to be original. The major part of skit is undertaken in the summer and that is when most people get involved.”

The hard work pays off.

“Every year the retreat and the skit get better – it’s very competitive

among the classes, and each year they raise the stakes,” Dr. Strobel said. “It is organized down to the wire, and the first-years are always surprised to see how much work goes into it.”

Despite all the hours of practicing and planning, the students appreciate this special time.

“Retreat fosters so many friend-

beginning and expanding friendships, fun and excitement, and to time relax and have fun in the sun, or get down and dirty,” Messick explained. “At sports and rec, you can be yourself, or you can be what you are not.” (This must explain the men in women’s wigs and the superhero-costumed students running around with water hoses and squirt guns.)

call that a doctor was needed at the conference center. When I arrived, the woman said her baby had a rash. I asked if she was a first-year medical student and she said no, they were just staying in a different section of Camp Allen and heard there were doctors here,” Dr. Farnie laughed. “That was a first!”

The retreat receives funding from



ships and provides the second-years a wonderful opportunity to welcome the incoming students, laugh on themselves, show the ‘family’ atmosphere the Medical School proudly maintains, and provide the setting for the class to be together for the first time,” Messick said. “This is a great environment that includes energy, excitement, smiles, and laughter.”

Howls of laughter and cheering are the norm at the skit as well as at the sports and recreation segment of the retreat Saturday afternoon. Watching male-female pairs of incoming students pop a shaving-cream-filled-balloon between their bodies is ripe for embarrassing fun, as is observing students trying to run in a straight line after the dizzy bat spin.

The Sports and Recreation group of the Janitors Committee comes up with wacky ideas for the games, which must be approved by the entire Janitors Committee.

“The games provide an opportunity for team unity, a time for

Faculty members are invited to attend the retreat not only to impart wisdom to the new class of Medical School students but also to get to know the students on a more casual level.

“Faculty interaction and participation in the skit and the retreat makes the faculty more approachable and more human,” Dr. Farnie said. “What made me want to come to this school was the approachability of the faculty and the camaraderie of the students.”

Dr. Farnie, who was introduced to the retreat as a first-year student, graduated to Schlepper King his second year and for more than 10 years has served as a camp doctor, speaker, and master adviser of the student volunteers. Joe Bedford, M.D., associate professor of family medicine, is the other reigning camp doctor, who also has played the part for years. Fortunately, the camp docs mostly have had to treat minor incidents, such as allergies, wasp stings, and sprains.

“This year, I received an urgent

several sources, including the Dean’s Office, the Alumni Association, the Parent’s Association, and registration fees from students and faculty.

“Without the students, the Alumni Association, Dean’s Office, and our wonderful, loving, and generous parents, it would be impossible to plan and undertake such an event,” Messick said.

The Alumni Association is in preliminary talks to establish an endowment to provide funding for future student retreats, said Dr. Farnie, who also is president of the Alumni Association.

Although the retreat seems like a natural event for incoming students, UT-Houston is the only Medical School that puts on such a production.

“There is no other school in the nation that does this type of event, and we have been doing this now for 26 years,” Messick said. “This event and unique opportunity can only come from such a great school and be run by 200 of the most unique and talented individuals this world has to offer.”

# NEWS BRIEFS

**Akhil Bidani, M.D., Ph.D.**, is the new director of the Pulmonary and Critical Care and Sleep Medicine, Internal Medicine. He formerly was a professor and chief, Division of Pulmonary Medicine at The University of Texas Medical Branch. He also is adjunct professor of Electrical and Computer Engineering at Rice University and in the Department of Biomedical Engineering at The University of Texas, Austin. Dr. Bidani is an investigator in the areas of the mechanisms and kinetics of microvascular gas and ion transport, intracellular pH and its regulation in lung cells.



• • •  
**Patrick Brosnan, M.D.**, professor of pediatrics and the chief of the Division of Pediatric Endocrinology, is the second recipient of the DuPont Master

Clinical Teaching Award. He received his medical degree at Georgetown University School of Medicine. He is a staff physician at Memorial Hermann Hospital and Lyndon B. Johnson Hospital, as well as a consulting physician at Texas Children's Hospital, St. Joseph's Hospital, Shriners Hospital, and Woman's Hospital. The DuPonts created the endowed award to "recognize the best among our clinical teachers and to reinforce how important they are to the Medical School."



• • •  
**Michele Curtis, M.D.**, associate professor in the Department of Obstetrics Gynecology and Reproductive Sciences, recently started a three-year

fellowship in Washington, D.C., to study and learn how national health policy is developed. The Robert Wood Johnson Health Policy Fellowship was awarded to Curtis and six other health-care professionals after the Institute of Medicine of the National Academies of Science

conducted a national search and interview process. For the last two years of the program, she will return to Houston to work directly for **President James T. Willerson, M.D.** She expects to focus on health-care issues for the uninsured and underinsured.



• • •  
**William H. Donovan, M.D.**, clinical professor and chairman of the Department of Physical Medicine and Rehabilitation,

was selected president-elect at the annual meeting of the IMSoP (now called the International Spinal Cord Society or ISCoS), in Vancouver, British Columbia, Canada. He will automatically assume presidency in 2004. The ISCoS is the only international medical organization dedicated to the treatment of impairments of spinal cord due to injury or disease.



• • •  
The president of the Murcia Regional Government in Spain presented a gold medal this summer to **Francisco Fuentes, M.D.**, professor in the

Division of Cardiology, to recognize his contributions to the prevention, treatment, and understanding of heart disease. Dr. Fuentes, who was born in Murcia and earned his medical degree from the University of Valencia School of Medicine in Spain, accepted the award during a region celebration hosted by Ramon Luis Valcarcel Siso. Dr. Fuentes, the Theodore R. and Maureen O'Driscoll-Levy Professor in Cardiology Research, specializes in general and preventive cardiology.



• • •  
**Irma Gigli, M.D.**, associate director of the Institute of Molecular Medicine for the Prevention of Human Diseases IMM, was elected to the American

Academy of Arts and Sciences, a 222-year-old institution that recognizes creative and intellectual achievement in all scholarly fields and professions. Dr. Gigli, a dermatologist-immunologist and leading researcher of the role that complement proteins play in the body's immune system, also directs the IMM Research Center for Immunology and Autoimmune Diseases.

• • •  
**Harinder S. Juneja, M.D.**, associate professor in the Division of Hematology, has joined the Editorial Board of the journal *Hematology*.



• • •  
**Gene LeSage, M.D.**, has joined the UT-Houston faculty to direct the Division of Gastroenterology, Hepatology, and Nutrition Division,

Internal Medicine. Before joining the UT-H faculty, Dr. LeSage was associate professor of medicine and of medical biochemistry and genetics at the Texas A&M University Health Science Center. He directed the Liver Unit at Scott and White Memorial Hospital in Temple and also was a member of the Center for the Study of Cell Surfaces at the Texas A&M University College of Medicine. Dr. LeSage, who specializes in liver care and research, brings with him a \$1.15M NIH grant to study bile acid regulation of bile duct secretion and proliferation.



• • •  
**Carlos Moreno, M.D., M.S.P.H.**, vice president for Community and Educational Outreach and chairman of the Department of Family Practice and Community Medicine, was

elected president-elect of the Society of Teachers of Family Medicine. The society was founded in 1967 to respond to the needs of family medicine educators.

# NEWS BRIEFS



**Andrew Papanicolaou, Ph.D.**, professor and director of the Division of Clinical Neurosciences in the Department of Neurosurgery,

directed the Vivian L. Smith Advanced Studies Institute in Xylocastro, Greece this past summer. Fifteen professors and 75 graduate students and residents in psychiatry and neurology from around the globe participated in the "Language and the Brain" program, which was underwritten by the Vivian L. Smith Foundation of Houston and is operating under the auspices of The International Neuropsychological Society.

• • •



**C. S. Raman, Ph.D.**, assistant professor in the Department of Biochemistry and Molecular Biology, was one of 20 Pew Scholars in the Biomedical Sciences

for 2002 chosen by Pew Charitable Trusts. The highly competitive national program supports junior faculty chosen from the country's medical schools and research institutions, with \$240,000 over four years. Dr. Raman's laboratory researches cellular signaling pathways involving nitric oxide, carbon monoxide, and molecular oxygen.

• • •



**P. Syamasundar Rao, M.D.**, recently was named director of the Division of Pediatric Cardiology. Dr. Rao came from the Division of Pediatric Cardiology at St. Louis University

School of Medicine. He is a pioneer in using catheter-directed interventional procedures to treat heart problems in children.

• • •

**Pedro Ruiz, M.D.**, professor in the Department of Psychiatry and Behavioral Sciences, recently received the 2001 NAMI Exemplary Psychiatrist Award from the National Alliance for the Mentally Ill during the Annual Convention of the American Psychiatric Association in Philadelphia. He also received this year's "George Tarjan" Award from the American Psychiatric Association in Philadelphia.

• • •

**Michael Saunders, Ph.D.**, a postdoctoral fellow of Kenneth K. Wu, M.D., director of the Division of Hematology, is the recipient on the International Aspirin Young Researcher's Award in 2002. This award was given to Dr. Saunders in recognition of his work on elucidating a new mechanism of aspirin.

• • •



**Agnes Schonbrunn, Ph.D.**, professor in the Department of Integrative Biology and Pharmacology, received the Gerald Aurbach Lecture Award from The

Endocrine Society. She also was appointed chair of the publications committee for The Endocrine Society.

• • •

**Cheves Smythe, M.D.**, professor in the Department of Internal Medicine, was honored with the Alumni Citation of Merit from his high school, The Taft School, in Watertown, Conn. This award is the school's highest award and only one recipient is selected each year. The award recognizes Dr. Smythe for his life work that best typifies the motto of the school, "Not to be ministered unto, but to minister." The recipient must have "accomplished something humanitarian – something above and beyond the ordinary demands of life or of one's chosen occupation." Dr. Smythe, the first dean of the Medical School, is recognized internationally for his leadership in academic medicine and his lifelong dedication to the highest standards of medical education.

• • •

**Henry W. Strobel, Ph.D.**, professor in the Department of Biochemistry & Molecular Biology, received the Graduate School of Biomedical Sciences's John P. McGovern Outstanding Teacher Award.

• • •



**Eugene Toy, M.D.**, clinical assistant professor in the Department of Obstetrics, Gynecology and Reproductive Sciences, is this year's recipient of the John P. McGovern

Award, which is given to the outstanding clinical faculty member as chosen by the senior class. Dr. Toy has served as a clinical assistant professor here for six years, while seeing patients at his practice at St. Joseph Hospital. He also is the academic chief and program director of the residency program at St. Joseph Hospital and the director of the obstetrics and gynecological junior clerkship program there, which is for third-year students. Dr. Toy's innovative approach to clinical learning, which focuses on hands-on problem solving, is the basis for Dr. Toy's soon-to-be published textbook, *Case Files in Obstetrics and Gynecology*. **Patti Ross, M.D.**, and **Larry C. Gilstrap II, M.D.**, are co-authors of this book.

• • •



**UT-Houston President James T. Willerson, M.D.**, received the Phi Beta Kappa Outstanding Alumnus Award from the Houston area alumni chapter.

• • •



**Frank Yatsu, M.D.**, who holds the Roy M. and Phyllis Gough Huffington Chair in Neurology, was the Distinguished Alumnus of the Year at the Case Western Reserve University School of Medicine's commencement.

## Music for MS

The Multiple Sclerosis Society pledged \$60,000, to the UT-Houston Medical School to be used toward the purchase of a 3 Tesla MRI to be housed at Memorial Hermann Hospital. The proceeds from country western singer Clay Walker's sold-out concert at Houston's Arena Theatre on May 16 to the Lone Star Chapter of the Multiple Sclerosis Society went to this effort. The 3 Tesla MRI will provide Jerry Wolinsky, M.D., the Bartels Family Professorship in Neurology, the opportunity to develop new scanning techniques for faster, more precise diagnosis of multiple sclerosis, and it also will be used by other Medical School faculty members in the area of the neurological sciences. A very generous lead gift of \$250,000 was donated by Teva Neuroscience toward this project.



Clay Walker, above left, shows his appreciation to Dr. Jerry Wolinsky, following a concert to raise money for an imaging machine.

## First scholarship luncheon scheduled Nov. 4

The Medical School will host its first annual scholarship luncheon Monday, Nov. 4, honoring donors and student recipients. The luncheon will be held at the John McGovern Museum of Health and Medical Science in Houston.

Eighty-eight percent of Medical School students receive some type of financial aid and graduate with an average indebtedness of nearly \$74,000.

"There is a great need among our students to receive financial assistance, and it is part of our vision for the future to greatly expand fund-

raising efforts in this area," said Debbie Gligor, associate director for development.

"Our goal is to bring together all involved and provide a forum to express gratitude, give recognition, and share personal stories allowing the connection between the donor and student to go beyond a letter of thanks," she added.

To receive more information about the luncheon, or find out how you can become a donor, call Debbie at 713-500-5002, or e-mail: [Debbie.Gligor@uth.tmc.edu](mailto:Debbie.Gligor@uth.tmc.edu).

*Our goal is to bring together all involved and provide a forum to express gratitude, give recognition, and share personal stories allowing the connection between the donor and student to go beyond a letter of thanks.*

Debbie Gligor

# First Boutwell/McGovern scholarship granted

The first Bryant Boutwell, Dr. P.H. and John P. McGovern, M.D. Scholarship has been awarded. The scholarship was created in 1999 to help medical students from disadvantaged backgrounds.

All sales and proceeds from the Boutwell/McGovern book, "Conversation With a Medical School," which chronicles the Medical School's history go to the fund, as do gifts from the authors. The fund now stands at about \$130,000, and the first scholarship,



*Dr. John P. McGovern*

in the amount of \$3,000, was awarded to first-year student Enrique Montemayor.

"It is very rewarding as an author and a faculty member to be able to create this endowed

fund that will continue to grow and assist medical students with from

disadvantaged backgrounds with scholarships," said Dr. Boutwell. "The intention of Dr. McGovern and myself is to continue supporting the corpus of the fund. Happily, sales from our book continue add to the fund."



*Dr. Bryant Boutwell*

# Sterling provides another generous gift

Added a new chapter to her long history of generous giving to the Medical School, Lillie Sterling has announced the Dan and Jay Sterling Fellowship in Gastroenterology.

The fellowship program in the Division of Gastroenterology provides each fellow the opportunity to work in consultation with faculty members that have specific expertise beyond that of a general gastroenterologist. The gift will provide salary funds for a fellowship and is established in memory of

Sterling's son, Jay and husband, Dan.

Sterling's legacy of giving to the Medical School includes the Dan and Lillie Sterling Professorship in Clinical Gastroenterology, an endowed professorship held by John R. Stroehlein, M.D., a professor in the Department of Internal Medicine's Division of Gastroenterology, Hepatology and Nutrition.

Sterling also has funded the Jay Brent Sterling Professorship in Cardiovascular Medicine, which is

held by Richard Smalling, M.D., Ph.D., in the Department of Internal Medicine's Division of Cardiology.

Sterling also has generously funded the Dan Sterling Myocardial Infarction Research Laboratory and the Jay Brent Sterling Research Fund in the Medical School.

"Mrs. Sterling's generous gifts have allowed the Medical School to pursue the highest standards of teaching, research, and patient care," said Debbie Gligor, associate director for development.

# New scholarship fund created

The Patti Jayne Ross Scholarship Fund has been created by the Department of Obstetrics, Gynecology, and Reproductive Services.

The \$21,000 endowment will distribute its first scholarship this year to a deserving third- or fourth-year student.

Larry Gilstrap, M.D., chairman of the Department of Obstetrics, Gynecology, and Reproductive Services, designated the funds to create this new scholarship in the name of Dr. Ross, a professor in the department. "Dr. Ross was the key person who helped raised the money for this fund," Dr. Gilstrap said.



*Dr. Patti Jayne Ross*

UT-Houston wants to be **last in line.**

After you plan a legacy for your loved ones, consider planning one for The University of Texas Health Science Center at Houston. A gift of your residual estate can help UT-Houston lead the way in research, education, and patient care.

Robin Koch Howard, Director of Planned Giving  
713-500-3208, robin.k.howard@uth.tmc.edu

## Reunion 2002 a success

Reunion 2002 was held at the Renaissance Houston Hotel April 26-27. Classes celebrating their 5-, 10-, 20-, and 25-year Medical School graduations were represented, with more than 150 alumni and families attending.

"It was great to see everyone, meet their families, and hear how their practices are going," said Sondra Ives, Alumni Affairs. "We had folks from all around the country returning to see their friends."

Reunion 2003 will be held May 16-17 at the Renaissance Houston Hotel. Call 713-500-5222 for more information.



Class of 1992, (Front left to right) Goran Jezic, Tom Spence, Wendy Lawler Sisler, Kirsten Duncan, Michael Duncan, Frank Lutz, Liesel Lowell Leedy. (Back left to right) Robin Carder, Amy Moreland Wilson, Sandy Treybig, Niles Kotecha, Mark Chassay, Sandi Arca, James Young, Bryan Townsend.



Class of 1997, (Front left to right) Christine Lang, Monica Powers, Clint Long, William Leighton, Kimberly Buenger, Eric Haas, Esther Guy Via, Jeni Bepko. (Back left to right) Shannon Kilgore, Anna Keating, Nancy Davis, Leslie Ledbetter, Partow Kebriaei, Karen Meador, Allison Blazek.



Class of 1982, (Front left to right) Jamie Gardner, Mike McCrady, Carrie Burns, Bob Dowling, Ralph Cox, Stephen Papadopoulos, Chris Farmer. (Back left to right) Andy Watkins, Melanie Mazoom, Jan Evans Patterson, Thinkh Nguyen, Kim Keeland, Barbara Heinrich, George Cathey.



Class of 1977, (Front left to right) Nan Hale, Louise Davis, Lem Arnold, Arlyn Hartfiel. (Back left to right) Tom Mueller, Mary Lee Kott.

## Dr. C. Allen Stringer receives 2002 Distinguished Alumnus Award

The highest honor bestowed on an alumnus of The University of Texas Medical School at Houston, the Distinguished Alumnus Award, recognizes outstanding contributions to medicine and to mankind.

This year's recipient is C. Allen Stringer, M.D., a 1976 graduate of The University of Texas Medical School at Houston and chief of Obstetrics and Gynecology at Baylor University Medical Center in Dallas.

He also is a clinical professor of gynecology at The University of Texas Southwestern Medical Center.

After receiving his medical degree in 1976, Dr. Stringer was a resident in UT-Houston's Obstetrics and Gynecology Department, serving as chief resident in 1979-80. In 1980, he joined the UT-Houston faculty as an assistant professor and served as the director of Obstetrics and Gynecology at Brackenridge Hospital in Austin for two years.

"A shortage of appropriate clinical experiences in Houston necessitated our sending many of our OB clerks to Austin. Dr. Stringer led that program developing an outstanding educational experience for our students," wrote his nominee. "Throughout his career he has excelled in teaching, patient care, administration, and research."

In 1982, Dr. Stringer, a native of Brazoria County, returned to Houston to a fellowship at M. D. Anderson Cancer Center in gynecologic oncology. Upon completion in 1984, he joined the Medical School's Department of Obstetrics, Gynecology & Reproductive Sciences and was promoted to associate professor in 1987. In 1988-89, he served a joint appointment at M. D. Anderson and has been certified and re-certified in Obstetrics and Gynecology and in Gynecologic Oncology.

In 1989, Dr. Stringer moved to Dallas and was quickly named the Outstanding New Faculty Member in Obstetrics-Gynecology. In 1993, he was named the chief of the Department of Obstetrics and Gynecology at Baylor University Medical Center, a

position he still holds.

A member of the Alpha Omega Alpha Honor Medical Society, he has authored more than 40 refereed or invited articles as well as several book chapters. He is a member of the Association of Professors of

Obstetrics and Gynecology and from 1998-2000 was the chair of the Medical Practice and Ethics Committee of the national Society of Gynecologic Oncology and remains a member of that committee.

## Dr. Smythe receives Benjy F. Brooks, M.D., Outstanding Clinical Faculty Award

**D**r. Cheves Mc.C. Smythe has been named the 2001-2002 recipient of the Benjy F. Brooks, M.D. Teaching Award. Established in 1991 by the Alumni Association, this award is presented by the alumni of the Medical School to recognize individuals "who complement and enhance the education program by serving as role models for students." Dr. Benjy Brooks was the first board-certified woman pediatric surgeon in the U.S. and joined the Medical School's faculty in 1973. Until her death in 1998, she remained active in the life of the School and a dedicated student mentor.

An honors graduate of the Harvard Medical School, Dr. Smythe is a professor in the Department of Internal Medicine and chief of service at Lyndon B. Johnson General Hospital, one of the School's two teaching hospitals. As the first dean of the Medical School, 1970-75, and dean pro tem 1995-96, Dr. Smythe has had an active hand in the birth and development of this School throughout its 32-year history. As the senior member of the School's faculty, he has excelled in teaching

students at the bedside and is widely recognized by students and faculty alike for his teaching excellence and diagnostic skills.



Dr. Cheves Smythe

From 1982-85, Dr. Smythe served as the first dean of the Aga Khan Medical College in Karachi, Pakistan. In 1990-91, he returned to Pakistan to be a professor and chairman of the Department of

Medicine, where his dedication to teaching and improving health-care delivery worldwide is now recognized on an international level. In 2000, Dr. Smythe was named an honorary professor emeritus of the Aga Khan University for his many administrative and teaching contributions.

More than 20 years ago, Dr. Smythe foresaw what would be a ballooning demand for health care for the elderly and he has worked to stimulate the quality of geriatric programs in the Houston area. He has the certificate of additional qualifications in geriatrics from the American Board of Internal Medicine, and is a Fellow of the American Geriatric Society.

### Editor's Note:

In an attempt to reduce waste and promote cost savings, every effort has been made to just mail one issue of *UT-Houston Medicine* per address. If you would like your own, individual copy of the magazine, please call 713-500-5112, or send an e-mail to [m.darla.brown@uth.tmc.edu](mailto:m.darla.brown@uth.tmc.edu). Thank you.

## WHAT'S UP DOC?

Help us (and your classmates) keep track of you. Please send us your news for CLASS NOTES. Photos are welcome!

Name \_\_\_\_\_ Graduation Year \_\_\_\_\_

Home Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_ Preferred Address for Mailing:  Home  Business

Business Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Spouse's Name \_\_\_\_\_ Children & Birthdays \_\_\_\_\_

Notes: \_\_\_\_\_

What topics would you be interested in if a CME program was given in your area through the Medical School?

\_\_\_\_\_

\_\_\_\_\_



Return to:  
Office of Alumni Affairs  
The University of Texas-Medical School at Houston  
P.O. Box 20708, Houston, TX 77225  
Fax: 713/500-0606  
E-mail: [Sondra.M.Ives@uth.tmc.edu](mailto:Sondra.M.Ives@uth.tmc.edu)  
Alumni Association Web page: [www.med.uth.tmc.edu](http://www.med.uth.tmc.edu)



## Addressing the issue of resident duty hours

The Accreditation Council for Graduate Medical Education (ACGME) recently addressed a growing national concern about excessive duty hours for medical residents with a plan to reasonably limit duty hours and on-call schedules. This is in direct response to changes in health-care delivery and concerns for resident safety and well-being. In September 2001, a Work Group on Resident Duty Hours and the Learning Environment was created. This group's report and recommendations were released June 11, 2002 and can be found online at [www.acgme.org](http://www.acgme.org).

Specifically, the recommendations call for an 80-hour work week averaged over a four-week period; one day in seven free of patient care responsibilities, and in-house call no more frequently than every third night. Individual programs may apply to the Graduate Medical Education Committee for an increase in the duty hours limit of up to 10 percent, if they can provide a sound educational rationale. The start date for the new requirements is July 1, 2003 for all specialties.

This is a timely topic with implications for physician-residents and academic medical centers alike. At the UT-Houston Medical School, we are addressing these issues carefully, paying specific attention to the delicate balance between the educational needs of residents and patient care. Our position, like that of the Association of American Medical Colleges (AAMC), is to support these new standards, recognizing our professional obligation to provide our residents with an education of the highest quality while protecting resident well-being and the patients for whom they care.

The ACGME Work Group has provided within its report the recommended mechanisms to achieve new goals, including a set of common requirements that define a minimum standard to be met by all accredited programs; enhanced requirements for institutional oversight and support; and a method to strengthening the system of compliance. The common accreditation standards address three areas: 1) placing appropriate limits on duty hours, 2) promoting institutional oversight, and 3) fostering high-quality education and safe patient care. Elaborations of each of these key areas can be found at the online site mentioned above.

Needless to say, the Medical School will work within these requirements while recognizing, like the ACGME, that the implications are far reaching and many will require further elaboration and definition prior to implementation. Fortunately, a number of our specialty residency training programs already have such a work-hour limitation.

The Graduate Medical Education Committee has appointed a subcommittee to explore the ramifications of these new requirements for our programs and the hospitals. The institution will carefully monitor the compliance of all programs with the new duty-hour standards. This column will provide updates and additional information regarding this timely topic and our institutional efforts to address the needs and new guidelines now being implemented nationally.

A handwritten signature in black ink that reads "Patricia M. Butler, M.D." The signature is written in a cursive style.

Patricia M. Butler, M.D.  
Associate Dean for Educational Programs

# CLASS NOTES

**Dr. Michael Burgess**, '77, is the Republican nominee for the 26<sup>th</sup> Congressional District in Texas. He is a Highland Village obstetrician.

**Dr. Melissa Hudson**, '83, has been promoted to full professor of pediatric oncology at St. Jude's Hospital.

**Dr. Whit Howard**, '84, just finished a three-year tour at the Naval Hospital Puerto Rico as the family medicine department head, then director of clinical services. He is now stationed at the Naval Hospital Pensacola as a staff family practitioner at the family practice residency program.

**Dr. Harold A. Condara, Jr.**, '85, recently changed practice location to the Cardiology Associates of Houston, which is located adjacent to Memorial Hermann-Memorial City Hospital.

**Dr. Suzie Snyder**, '87, returned to Kenya last year with her husband, Dave, and daughters, Rebekah, 11, and Lauren, 8, to serve their third term with the Maasai with Christian Missionary Fellowship. Suzie supervises fourth-year medical students and residents who come to work at the missionary from Vanderbilt University Medical Center, where she is an assistant clinical professor in internal medicine and pediatrics.

**Dr. Shervin C. Dean**, '93, who lives in Enfield, New Hampshire, has authored a medical thriller, "Ransoming Hector," about a psychologist who devises a brain treatment for violent criminals. The book may be purchased through Amazon.com.

**Dr. Emily Bacon Dean**, '98, moved to San Antonio to join EPA – a group of 38 emergency physicians staffing the Baptist hospitals. Emily and her husband, Bryan, proudly announce the birth of their son, Parker Elliott Dean, who was born May 20, 2002. He joins big sister Abigail, who is 3.

**Dr. Matt Holland**, '98, and his wife, Eliza, announce the birth of their son, Harris, who was born June 9, 2002. The family is moving to

Tucson, Ariz., now that Matt and Eliza have completed their residences and will join private practices there.



**Dr. Lisa Moore**, '98, of Los Angeles, Calif., is the new mother of twin girls, Abigail and Madeline

Brown, who were born March 3, 2001. She also is the recipient of a 2002 Endocrine Fellows Foundation research grant.

**Dr. Dubravka Milas Tollison**, '98, married Thomas Tollison Nov. 3, 2001. Dubravka works in Phoenix, Ariz., as a family

physician. The wedding was attended by several UT-Houston graduates. Her maid of honor, **Dr. Mira Milas**,



'94, is now an endocrine surgeon at the Cleveland Clinic. Her brother and groomsman, **Dr. Zvonimir Milas**, '00, is a general surgery resident at Emory. Her bridesmaid, **Dr. Veronica Spellings**, '98, has accepted a med/peds private practice in Eugene, Oregon. Also in attendance was **Dr. Annie Khan**, '98, who is doing a pediatric anesthesia fellowship at The Children's Hospital in Dallas; **Dr. Tala Dajani**, '98, who is doing a pediatric endocrinology fellowship in Phoenix, and **Dr. Stephanie Garcia**, '98, who works as a hospitalist in Phoenix.

**Dr. Terry Harper**, '99, is the winner of the 2002 Henry C. Fordham Award, which is given annually to a resident by the Whitehead Medical Society Council in recognition of patience, humility, and devotion to medicine. Dr. Harper joined Surgeon General David Satcher on the stage at the University of North Carolina Medical School graduation. She is doing her residency in obstetrics/gynecology.

**Dr. Theresa Harrington**, resident alumna, '99, was accepted to the Centers for Disease Control's two-year Epidemic Intelligence Service Fellowship. She moved from Austin to Atlanta in July and was assigned to work with the State Health Department in Mississippi in August with the U.S. Public Health Service.

**Dr. Carmen Espinoza Santoyo**, '99, just finished her residency at UT-San Antonio and started private practice with Dr. Isairis Fernandes in Houston in July.

**Dr. Mike McInnis**, '00, was chosen to serve as chief resident for internal medicine at Presbyterian Hospital of Dallas for 2002-2003.

## Lives Lived

**Dr. James Edward Andrew**, '83, died May 21, 2002, in Woodland Hills, Calif., after a motor vehicle accident. He did a residency at Columbia University in New York and was boarded in pathology and dermatopathology.

**Dr. Mary Margaret Poage**, '88, passed away May 7, 2002.

**Dr. Jean Glowacki**, '90, died April 2, 2002, from squamous cell carcinoma. She was living in Menlo Park, Calif., and was an obstetrician/gynecologist at Stanford.

**Dr. Marnie Alexis Rose**, '00, lost her battle with brain cancer Aug. 23, 2002. She was a pediatric resident at UT-Houston.



**Dr. Jason Clay Sefcik**, '89

# Then & NOW

In 1977, the first Student Retreat was organized by Henry Strobel, Ph.D., and a group of 16 ethics discussion group members following the First Great Flood. The French film, "The King of Hearts" was shown, and its lackluster reception lead to the start of the skit, which has reigned as the highlight of the retreat's entertainment ever since.

Now, with the work of 110 second-year students, the retreat is a well-oiled machine, organized down to the smallest of details and featuring a professionally produced skit that features both live and videotaped segments.

A tornado, rain, and electricity failure has never damped the spirit of the retreat's goal to indoctrinate the new students into the fun and spirited side of The University of Texas Medical School at Houston.

The retreat is something looked forward to by every first- and second-year student, and students applying to Medical School are well aware of this highly entertaining tradition that sets UT-Houston apart from every other medical school in the United States.



*In 1977, Dr. Henry Strobel, (left in lab coat), organized the first retreat. Dr. Mark Farnie, above, participated in his first retreat in 1983 and has served as the camp doc for more than 10 years.*



*Today, the retreat skit features choreographed dance routines that include faculty members.*