OUR LEGEND

DR. RED DUKE
ABOUT THE COVER

THE MAN,

THE LEGEND

Dr. James “Red” Duke Jr.’s colorful personality has made a lasting impression on the UTHealth Medical School and our greater community.

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MESSAGE FROM THE DEAN

As we conclude the 2014-2015 fiscal year, I am happy to report that your UTHealth Medical School is stronger than ever. We continue to increase the scope, depth, and quality of our programs, and I would like to thank each and every one of you for your contributions to our school.

Within these pages you will see some highlights of our recent accomplishments – from reinventing our already competitive MD curriculum to the life-changing care provided by our comprehensive team of experts, the innovative models of healthcare delivery, and the national recognition of our primary teaching hospital. The report also showcases our impressive results, with continued expansion in our research and clinical programs and the outstanding scores and placements of our students. And we are featuring one of our true stars - the one and only Dr. James “Red” Duke, Jr.

These are challenging times for medical schools across the country. Traditional funding sources for educational and research programs are contracting, making us increasingly dependent on clinical revenues to support our academic mission. This “new reality” in academic medicine makes the growth of our school even more impressive. Yet, as my friend and colleague Dr. Heinrich Taegtmeyer reminds me, we must never focus on the revenue cycle at the cost of the lifecycle. It is not our charges and collections, or our research expenditures, or the average MCAT score of our student body that define our school. It is the talent, hard work, and dedication of our students, faculty, and staff that comprise our real success. This humanism aspect of our profession was showcased in a special way during our 2015 commencement ceremony, when three of my former patients explained what medicine is like from their perspective. Our McGovern Center for Humanities and Ethics, which celebrates its 10th anniversary this year, reminds our students and faculty every day of the purpose of our calling.

Finally, as I say farewell as dean and devote myself to the position of being president of UTHealth, I am most pleased to welcome our new dean, Dr. Barbara Stoll. Dr. Stoll is a strong and experienced leader with tremendous accomplishments in academic medicine, and I am confident that I am leaving the Medical School in the best possible hands. I am deeply grateful for the opportunity to serve as dean of this great medical school. It has been an honor to work alongside you for these past eight years, and I am so proud of what we have accomplished together. I know there are even greater things to come for our school, and I look forward to continuing to work together in my new role.

Giuseppe N. Colasurdo, M.D., Dean
H. Wayne Hightower Professor in the Medical Sciences
President, UTHealth
Alkek-Williams Distinguished Chair
PATIENTS OFFER INSPIRATIONAL MESSAGE TO GRADUATES

Commencement 2015 was a special day not only for our 221 graduates and their families but three former patients who donned robes and took to the podium as the featured commencement speakers. Angelica Garcia, Jennifer Kerr, and Idalia Rodriguez all were patients of Dean and UTHealth President Giuseppe Colasurdo, M.D., who decided to turn his message to the graduates over to them.

“The message is not about me, it’s not about them, it’s not about the hospital. These amazing young ladies are here today to reveal to us the story of the people behind that simple patient encounter. Theirs is a universal message that I am confident the class of 2015 will keep for the rest of their lives,” Dr. Colasurdo said in his introduction.

Angelica, 16, told the audience how her life has been a medical miracle.

“There are just 500 people like me who have congenital central hypoventilation syndrome, also called CCHS. And when I was born, there were only 160 of us alive in the world.”

Spending the first 11 months of her life in the hospital, Angelica had a trach, g-button, and a ventilator. At age 4 she had a diaphragm pacemaker put in, and at age 5 she was finally able to eat soft foods and get out of the wheelchair and walk.

“That was also when I got a speech valve and first began talking. I haven’t stopped since,” she smiled. Angelica’s mother died of cancer at age 31.

“I wasn’t supposed to outlive my mom. But thanks to lots of love and prayers and the expert hands of my doctors, I’m here and happy and thriving. I’m also grateful to the teaching hospital who had the specialists on hand to help me be...the coolest.”

Angelica ended with a plea to the new graduates: “Find out what the PHOX2B gene does and fix it. I want my pacemaker out. I want to be off the ventilator, and I want my trach out.”

Jennifer, a college student working toward her bachelor’s degree in social work at the University of Houston Downtown-Northwest campus, told how her doctors and her teacher became her family.

“Most kids growing up have friends to play dolls with or play ball with. My best friends were
different, you see, my best friends were the doctors, nurses, and child life specialists at Children’s Memorial Hermann Hospital,” she said.

She explained that how as an 8-year-old with esophageal atresia she was dropped off at the hospital by her birth parents, weighing just 20 lbs. Her parents never returned for her.

“I had very little hair, was severely malnourished, had pneumonia and could hardly breathe, and my G-tube had been pulled out. At that point, the doctors and nurses weren’t sure that I would survive.”

When Jennifer was well enough to leave the hospital, she was placed with a foster family and entered the third grade. Her teacher, Mrs. Kerr, became her mom and was able to bring her home on the last day of school.

“Some doctors treat patient after patient every day and many of those patients are nothing more than a chart or number on a computer screen. However, my UT doctors treat every one of their patients as though they are special and important. They are kind, caring, and compassionate, toward all of their patients and their families. They always have, and always will, hold a special place in my heart,” she said.

Idalia, who received her master’s degree in clinical psychology from Texas Southern University, talked about how she was fragile and fearful as a patient diagnosed with SMA Type II, a neuromuscular condition.

“I wasn’t supposed to outlive my mom. But thanks to lots of love and prayers and the expert hands of my doctors, I’m here and happy and thriving. I’m also grateful to the teaching hospital who had the specialists on hand to help me be...the coolest.”

Angelica Garcia
After a long, national search, UTHealth President Giuseppe Colasurdo announces Barbara J. Stoll, M.D., an internationally known pediatrician who has been a champion for pediatric global health, as the dean of the UTHealth Medical School, effective Oct. 1.

Dr. Stoll comes to UTHealth from Emory University School of Medicine, where she has spent the last decade as the George W. Brumley, Jr., Professor and Chair of the Department of Pediatrics. She also is president and CEO of the Emory-Children’s Center and director of the Pediatric Center of Georgia, a joint venture between Emory and Children’s Healthcare of Atlanta.

Dr. Stoll says her decision to come to UT was primarily based on the people she met and the many opportunities presented. “I am very impressed by the UTHealth Medical School community. Your faculty are smart, mission-driven, and engaged in doing things that matter,” she says.

Dr. Stoll has authored more than 290 papers and has been continuously funded by the National Institutes of Health since 1991. As chair, she has led a department that has more than doubled its faculty, increased research funding by almost 500 percent, and has more than quadrupled named professorships and endowments.

“I feel confident that Dr. Stoll is the ideal person to lead this school to new heights as it continues to grow and flourish with outstanding students, faculty, and staff,” President Colasurdo says.

“I am absolutely thrilled to be joining a wonderful faculty at UTHealth,” Dr. Stoll says. “The most important job of the dean is to help build the institution and help faculty succeed. I am looking forward to meeting all of the people who make the UTHealth Medical School what it is, especially our students and faculty, and understanding their needs.”

Dr. Stoll received her MD degree from Yale Medical School, graduating Cum Laude. Additional training included a pediatric internship and residency at Babies Hospital, Columbia Presbyterian Medical Center and a neonatology fellowship at Emory University School of Medicine. She received her AB degree from Barnard College.

Following her fellowship, she moved to Bangladesh where she was an associate scientist at the International Centre for Diarrhoeal Disease Research, studying infectious causes of diarrhea and developing her interest in global child survival. She then joined the University of Goteborg in Sweden as a visiting scientist, studying the systemic and mucosal immune response to diarrheal agents. Upon returning to the United States in 1984, she became an assistant professor in the Department of Medicine of the Uniformed Services University of the Health Sciences, working on immune mechanisms of infectious disease prevention.

In 1986, Dr. Stoll joined the Division of Neonatal-Perinatal Medicine at the Emory University School of Medicine. To expand her international efforts, she spent a year’s sabbatical at the World Health Organization in Geneva, Switzerland, raising awareness of the importance of neonatal morbidity and mortality in developing countries and developing guidelines for the care of newborns in resource-poor settings.

She was promoted to full professor of pediatrics at Emory in 1997, was named vice-chair for research in
the Department of Pediatrics in 1999, and assumed the role as chair of the Department in 2004. She holds a joint appointment as professor of public health/epidemiology in Emory’s Rollins School of Public Health. Dr. Stoll is the first Emory Chair of Pediatrics to be jointly employed by and hold a senior leadership role at Children’s Healthcare of Atlanta, which is one of the largest pediatric healthcare systems in the country.

Dr. Stoll’s research interests include neonatal clinical trials and the epidemiology, diagnosis, and treatment of neonatal infectious diseases. She has spent over two decades studying the causes of morbidity and mortality among preterm and low birthweight infants, especially infectious diseases.

Dr. Stoll adds that she will be seeking opportunities to collaborate with colleagues in the schools of public health, nursing, dentistry, informatics, and biomedical science to expand programs at UTHealth and to work to improve the health of Houston.

“I can’t wait to get to work. I am grateful for the confidence placed in me by the search committee and the leadership of UTHealth, and I will do my best to exceed those expectations,” Dr. Stoll says.

Dr. Stoll is a fellow of the American Academy of Pediatrics, a member of the AAP Section on Perinatal Pediatrics, and a member of the Board of the Georgia Chapter of the AAP. She was elected to the Society for Pediatric Research in 1986 and to the Infectious Disease Society of America and the American Pediatric Society in 1998. She is a member of the Executive Board of the Atlanta-based WHO Collaborating Center in Maternal and Child Health; member of the Executive and Program Committees of the Association of Pediatric Department Chairs; member of the Steering Committee of the Pediatric Scientist Development Program; and a member of the Steering Committees of the NICHD Neonatal Research Network and the NICHD Stillbirth Collaborative Research Network.

She was elected to the Institute of Medicine in 2009 and served as President of the American Pediatric Society, the oldest academic society in American Pediatrics.

She has served as a consultant to the World Health Organization, CARE, Save the Children, USAID, the March of Dimes, and the Centers for Disease Control and Prevention. In 2004, she chaired an IOM committee to examine ways to improve birth outcomes in the developing world that has played an important role in focusing attention on the 40% of under age 5 mortality that occurs in the newborn period.

She is married to Roger I. Glass, M.D., Ph.D., the director of the Fogarty International Center of the National Institutes of Health and associate director for international research at the NIH, and the mother of three children, Nina, Michael, and Andy Glass.

Dr. Louise McCullough

MCCULLOUGH NAMED NEW CHAIR FOR NEUROLOGY

Concluding a nation search, Dean Giuseppe Colasurdo, M.D., has named Louise McCullough, M.D., the new chair of the Department of Neurology, effective Sept. 1, 2015, making her the department’s fifth chair. She also will be chief of neurology at Memorial Hermann-Texas Medical Center.

“Dr. McCullough is a nationally recognized physician-scientist who is passionate about academic growth. An energetic investigator, she is well-versed in all aspects of cerebral vascular diseases,” Dean Colasurdo says. “I also want to take the opportunity to thank Dr. Jerry Wolinsky for his exceptional leadership as interim chair of the department during this transition.”

Dr. McCullough comes to the UTHealth Medical School from the University of Connecticut Health Center, where she is a professor in the Department of Neurology and Neuroscience and director of stroke research and education at John Dempsey Hospital and Hartford Hospital Stroke Center. She also is an attending vascular neurologist at Hartford Hospital.

Dr. McCullough received her bachelor’s degree in psychology, a master’s in experimental psychology, and
doctorate in neuroscience from the University of Connecticut at Storrs, prior to embarking upon her medical training at the University of Connecticut, School of Medicine in Farmington in 1992. Her postgraduate education includes residency training in neurology at the Johns Hopkins Hospital followed by a fellowship in cerebral vascular disease, neurology, and anesthesiology.

Her first faculty position was as an instructor, Department of Neurology, Stroke Division, at the Johns Hopkins University School of Medicine in 2001, with promotion to assistant professor the next year. She returned to the University of Connecticut in 2004, where she rapidly rose through the ranks to associate professor of neurology by 2007, before assuming her current rank there of professor with tenure, Department of Neurology and Neuroscience in 2012.

“Dr. McCullough is a consummate clinician and investigator, and is well recognized for her work in cerebral vascular disease,” says Dr. Wolinsky, chair of the search committee, who added that there were many highly competitive candidates. “She enjoys extensive support from the National Institutes of Health, American Heart Association, and other competitive funding sources. She is very active in mentoring student and nurturing junior scientists. She has been instrumental in developing stroke research and education programs at the John Dempsey Hospital and the creation of the Hartford Hospital Stroke Center.”

Dr. McCullough is known for her research identifying gender-based differences in cell death pathways during cerebral ischemia using neuronal nitric oxide synthase (nNOS) and poly ADP ribose polymerase-1 (PARP-1) knockout models. She is certified by the American Board of Psychiatry and Neurology and has subspecialty board certification in vascular neurology as well as vascular imaging.

**HUARD APPOINTED VICE CHAIR FOR ORTHOPAEDIC RESEARCH, DIRECTOR OF NEW IMM CENTER**

Dean Giuseppe Colasurdo announces the appointment of Johnny Huard, Ph.D., as the Visiting Distinguished Wallace Professor and Vice Chair for Research, Department of Orthopaedic Surgery, effective May 1, 2015. Dr. Huard also is serving as the director of the Brown Foundation Institute for Molecular Medicine’s Center for Tissue Engineering and Aging Research.

World-renowned scientist Dr. Huard comes to the UTHealth Medical School from the University of Pittsburgh, where he was a professor in the Departments of Orthopaedic Surgery, Microbiology and Molecular Genetics, Bioengineering, Pathology, Pediatrics, and Physical Medicine and Rehabilitation; director of the Stem Cell Research Center; and holder of the Henry J. Mankin, MD, Endowed Chair in Orthopaedic Surgery Research. Additionally, Dr. Huard served as the vice chair for Musculoskeletal Cellular Therapeutics, Department of Orthopaedics, and was deputy director for Cellular Therapeutic Research at the McGowan Institute for Regenerative Medicine. He has served on the University of Pittsburgh faculty since 1996, when he was appointed assistant professor in the departments of Orthopaedic Surgery, Molecular Genetics, and Biochemistry.

Dr. Huard is co-founder of Cook MyoSite, Inc., a biotechnology company, and is the chief scientific officer of the Steadman Philippon Research Institute.

“Dr. Huard is a world-renowned authority in his field and will be a tremendous asset to the research programs at UTHealth and the Texas Medical Center,” says Walter Lowe, M.D., chair of the Department of Orthopaedic Surgery. “I am confident his innovative and translational research programs will provide major scientific contributions related to the mechanism of aging and the future applications of cellular therapy.”

Dr. Huard’s research interests include Duchenne Muscular Dystrophy, muscle injury repair, arthritis and joint injuries, cardiac regeneration, and aging. His work has been continually funded by the National...
Institutes of Health, the Department of Defense, and the Muscular Dystrophy Association.

In his new positions at UTHealth, Dr. Huard is delving further into his research on muscle stem cells and their role in tissue repair. “Muscle stem cells come from blood vessels,” he says. “How can we use muscle stem cells from your own muscle to not only treat damaged muscle but also repair the bone and the brain?”

Dr. Huard says the goal is to create new therapeutics and improve the quality of life.

“We are working with adult stem cells that can be used in clinic today,” he says, explaining that muscle stem cells have been used to treat bladder dysfunction.

Dr. Huard also is looking at the gender differences of muscle stem cells as well as the role stem cells play in aging.

“As we age, our stem cells get tired and tissue repair is significantly delayed. We not only want people to live longer, but healthier,” he says.

Through the use of adult stem cells, Dr. Huard and his team have been able to triple the life expectancy in prematurely aged mice.

Receiving his Ph.D. from Laval University in Quebec, Dr. Huard completed fellowships at McGill University and the University of Pittsburgh.

He has authored/co-authored more than 250 refereed articles; 80 review articles, invited papers, book chapters, and books; and 700 abstracts. His research was featured on the front covers of Stem Cells, the Journal of Orthopaedic Research, and Molecular Therapy.

Dr. Huard is an editorial board member for the Journal of Neuromuscular Diseases (2013-present) and is the treasurer on the Board of Directors of the Cell Transplantation Society (2013-2017). He is also an Academic Editor of PLoS ONE (2011-present), an editor of the Journal of Biomaterials and Tissue Engineering (2011-present), and a founding editorial board member of the American Journal of Stem Cells (2011-present).

He is the recipient of multiple awards and recognition, including from the Kappa Delta Award from the American Academy of Orthopaedic Surgeons, the American Society for Investigative Pathology, the Association of Academic Physiatrists, and the American Society for Bone and Mineral Research.

Two outstanding alumni of the UTHealth Medical School were honored in a special ceremony Friday, Oct. 24, 2014, at Treviso.

Jan Patterson, M.D., ’82, and Carin Hagberg, M.D., ’88, are the 2014 winners of the Distinguished Alumnus Award of The University of Texas Medical School at Houston and were the featured guests of honor at the Distinguished Alumnus Award ceremony.

Established in 1987, the purpose of the award is to recognize outstanding contributions of alumni in the areas of medical science and education, or the prevention and treatment of diseases, as well as continued interests in the UTHealth Medical School and its students.

Dr. Patterson is associate dean for Quality and Lifelong Learning and the director of the Center for Patient Safety & Health Policy at The University of Texas Health Science Center at San Antonio.

Dr. Patterson joined The University of Texas Health Science Center at San Antonio School of Medicine in 1993 as an associate professor of medicine and pathology and director of the Epidemiology Laboratory. She has served as interim chair of the Health Science Center’s Department of Medicine, chief of the VA Medical Service at South Texas Veterans Health Care System in San Antonio, as well as chief of the Section of Infec-

Two alumni named Distinguished Alumnae

Winners of the 2014 Distinguished Alumnus Award are Dr. Carin Hagberg, ’88, and Dr. Jan Patterson, ’82.
NEWS

Update your email address with the Office of Alumni Relations. We want to keep you updated on the Medical School's progress, inform you of alumni events in your area and other news.

Alumni update form: http://www.uth.edu/index/alumni-form.htm
or Email us directly with your updated information at: ms.alumni@uth.tmc.edu

STAY CONNECTED

To submit your nominations for the Distinguished Alumnus Award, please see www.med.uth.edu/alumni/awards

Jan Patterson, M.D., has been named as the UT System Vice Chancellor’s Health Fellow in Clinical Effectiveness; winning the Outstanding Community Leader from UTHSCSA Award from the Bexar County Medical Society; and being inducted into the San Antonio Womens Hall of Fame. While in medical school, she was named the Outstanding Woman Graduate of the Class of 1982 and the Outstanding Student in Internal Medicine.

“What distinguishes Jan is her quiet humility, her never-ending smile and optimism, her resolute ability to bring out the best in her students and peers, and her absolute dedication to the well-being of others. When asked to comment about Jan, everyone says, ‘I want to be exactly like her when I grow up,’” wrote her nominator.

The Joseph C. Gabel Professor, Dr. Hagberg has served the UTHHealth Medical School as the chair of the Department of Anesthesiology since 2008. She also is the medical director of Perioperative Services at Memorial Hermann-Texas Medical Center.

Joining the UTHHealth Medical School faculty as an assistant professor of anesthesiology in 1992, Dr. Hagberg has served as program director of undergraduate education, program director for residency education, as well as vice chair and interim chair of the Department of Anesthesiology.

She received her undergraduate degree from the University of Massachusetts and completed a surgery internship at Methodist Hospital in Dallas, following graduation from medical school. She completed her anesthesiology residency at The University of Texas Southwestern Medical School and Parkland Memorial Hospital, serving as chief resident.

Dr. Hagberg has been a recipient of the Dean’s Teaching Excellence Award numerous times as well as the recipient of the Outstanding Clinical Instructor Award from the department’s residents. She has served as a mentor to multiple fourth-year students who are interested in anesthesiology as a career choice.

She is a member of the UT Academy of Master Educators and has been active in the Texas Society of Anesthesiologists and the Society for Airway Management, which granted her its Distinguished Service Award. Dr. Hagberg serves on the editorial board of two international anesthesia journals.

“Despite all these accomplishments, Carin’s achievements pale in comparison to the major impact she has had since becoming chair of the department,” wrote her nominator. “All of us in the department awaken each morning to find communications, directives, and advice from Carin, which originated sometime long after we went to bed!”

This is not the first time two Distinguished Alumni have been recognized in one year; in 1991, awards went to Jack Holladay, M.D., ’74, and Richard Smalling, M.D., Ph.D., ’75.
Recognizing high-quality patient care at a national level, Memorial Hermann-Texas Medical Center, one of the UTHealth Medical School’s primary teaching hospitals, was one of the recipients of the prestigious 2014 University Healthsystem Consortium (UHC) Quality Leadership Award. The annual award is given to academic medical center members that have demonstrated excellence in delivering high-quality patient care, as measured by the UHC Quality and Accountability Study.

In 2005, UHC launched the study to define attributes associated with high performance in both quality and safety. The study ultimately identified the following five attributes of high-performing organizations: a shared sense of purpose, leadership style, an accountability system, a focus on results, and a culture of collaboration. To determine the Quality Leadership Award winners, UHC completes an extensive, unique evaluation process that ranks member organizations’ performance in six key domains: patient mortality, effectiveness, safety, equity, patient centeredness, and efficiency.

This year the award methodology was refined with enhanced measures related to the safety domain, including hospital-acquired infections from the Centers for Disease Control and Prevention’s National Healthcare Safety Network and new metrics on venous thromboembolism based on The Joint Commission’s National Quality Core Measures.

“There are national rankings tied predominantly to popularity, and then there is true performance as measured by the UHC metrics. Being among the top teaching hospitals in the country makes us very proud and reflects our institution’s new culture, which has been realized by creating a comprehensive structure of vice deans and vice chairs who are focused on quality and safety,” says Dean Giuseppe Colasurdo, M.D., president of UTHealth. “This academic collaboration is a tremendous asset to our community and state, and we are incredibly proud of this recognition.”

Award recipients were announced at the 2014 UHC Annual Conference in Las Vegas. Memorial Hermann-TMC was one of only 12 member hospitals among the 104 hospital participants chosen as a 2014 UHC Quality Leadership Award winner.

“UHC commends these academic medical centers for their strong commitment to providing high-quality patient care throughout their clinical enterprises,” says Irene Thompson, UHC’s president and chief executive officer.

Craig Cordola, then-CEO of Memorial Hermann-TMC and currently president, Central/West Region at Memorial Hermann Health System, is quick to give credit to hospital staff.

“This is one of the most prestigious awards in the industry, and I am thrilled that Memorial Hermann-TMC is included,” he says. “Because our Campus is built on a long-term affiliation with The University of Texas Health Science Center at Houston (UTHealth) Medical School, along with our dedicated private physician partners, we are able to bring together a world-class team of clinicians, researchers, and educators under one roof. I want to personally thank all of the members of that hardworking and talented team for helping us achieve this incredible honor.”

“This honor is the result of shared strategies and tremendous effort from our CEO Craig Cordola and his team, along with our clinical faculty, staff, residents, and students,” Dean Colasurdo adds. “Thanks to our collective commitment to quality and providing excellent care, our UT campus is one of the premier teaching hospitals in the nation.”
BUILDING AN INTEGRATED CURRICULUM TO PRODUCE BETTER DOCTORS

WALK INTO THE UTHEALTH MEDICAL SCHOOL ON A WEEKDAY MORNING, AND YOU’LL FIND FACULTY LEADING A HANDBFUL OF STUDENTS IN NEARLY EMPTY LECTURE HALLS.

Dr. Nachum Dafny, professor of neurobiology and anatomy, conducts class for a sparse in-person audience.
“M ost of our students obtain educational content through recorded lecture videos, and this is dissatisfying to many lecturers who show up to teach to a largely empty auditorium,” observes one medical student. “Moreover, the focus on memorization of facts is not preparing students for the healthcare system of the future.”

Another student describes the current four-year curriculum as two separate parts: the two basic science years and the two clinical clerkship years. “This creates a very divided and almost separate feeling between the first two years and the second two years,” she explains.

Four years ago, the UTHealth Medical School embarked upon a critical review of the curriculum in an attempt to revise it to meet the needs of today’s students and patients. A group of faculty, staff, and students are tasked with assessing, designing, and implementing an integrated curriculum that will start Aug. 1, 2016.

“An integrated curriculum is one which is outcome oriented,” says Len Cleary, Ph.D., chair of the Curriculum Revision Subcommittee and assistant dean for educational programs. “In our case, that means we are focusing on what our graduates are expected to know and do when they graduate and work backwards from there, identifying the different disciplines necessary to provide them with the appropriate knowledge and skills.”

The new curriculum will introduce patient interaction earlier to students, focus on the skill of lifelong learning, and better merge all four years of the curriculum.

Approximately 100 faculty are now participating in the curriculum revision process, with outstanding collaboration between basic science and clinical faculty.

“We anticipate that even more faculty will be involved as the curriculum development proceeds,” says Patricia Butler, M.D., vice dean for educational programs. “Additionally, a dedicated group of students is serving in an important advisory role to the curriculum module groups.”

“My personal goal in changing the curriculum is to help UTHealth remain a part of the national conversation regarding its caliber as a medical school,” says Amy Alexander, a fourth-year student who has been a member of the Curriculum Committee since her first year.

THE NUTS AND BOLTS OF A NEW CURRICULUM

As a result of fine-tuning, the new curriculum will shorten the basic science time by 2 months.

Students will begin their medical education with a Foundations of Medicine module, integrating common themes of all the basic science courses over the first semester.

After Foundations, students will turn their attention to integrated systems-based modules (cardiovascular, pulmonary, renal, neuroscience/behavioral health, etc.) that will present additional concepts of basic science within the context of disease and its treatment.

“This will eliminate redundancy and teach the information in a way that is more relevant to clinical practice,” says David Savage, sixth-year MD/PhD student from Lindale, Texas, and a member of the subcommittee.

One hallmark of the new curriculum will be a student’s earlier introduction to patient care. Starting in January of the first year, students will be assigned to

How the curriculum will change

1. Reducing the pre-clerkship curriculum by 2 months
2. Introducing intersessions: Bringing students back together as a class during the third and fourth years
3. Reducing contact and lecture hours: Maximum of 25 contact hours/week and 10 lecture hours/week
4. Earlier patient care interaction – students will be assigned to a UT Physicians clinic for about a year starting in January of their first year
5. More feedback opportunity – a quiz per week will gauge how students are understanding the material
6. Debuting Career Focus Tracks: Allows students to better prepare for residency through early specialization choice
one of the UT Physicians clinics for about a year. “They will be able to apply what they are learning to their real-life experience in the clinic,” explains Allison Ownby, Ph.D., assistant dean for faculty and educational development. “The new curriculum will be a continuum – bridging the chapters of the students’ education.”

Integration of the foundational and clinical sciences aims to promote comprehension and retention across the four years.

“This structured interaction with real-life patients will allow students to start thinking more like a physician, and I feel this will be great for introducing concepts of professionalism,” Alexander adds.

To eliminate the issue of empty lecture halls, certain lectures will be presented in an online-only format, with most live classes reserved for problem-solving. This follows the “flipped classroom” approach, where students spend time before class learning the more basic material and using time with faculty to work through the salient and challenging aspects of a topic.

“The new schedule will require more work by the students outside of the classroom,” Dr. Ownby explains.

Designed to bring students back together as a class again in the third year, weeklong “intersessions” will be introduced, focusing on essential topics such as ethics, healthcare systems, professional identify formation, and healthcare quality improvement. Intersessions also will be used for revisiting basic science mechanisms in the context of patient care.

WHY CHANGE THINGS NOW?

The UTHealth Medical School’s curriculum was last revised in the 1970s, when it shifted from an integrated curriculum that met six days a week and lasted for 3 years, to a traditional four-year curriculum.

The curriculum has changed incrementally since that time. “The introduction of problem-based learning 20 years ago was a major change. It introduced patient scenarios to teach basic sciences in a small group setting while also teaching critical appraisal of the medical literature,” Dr. Cleary says.

While there are no national standards, or a common core, a medical school’s curriculum is influenced by both the various standardized tests students take throughout their four years of medical school and the Liaison Committee on Medical Education (LCME), which accredits medical schools in the United States and Canada.

As the UTHealth Medical School aims to best prepare its graduates for residency, the Curriculum Subcommittee has been looking ahead to the expecta-
tions and requirements of graduate medical education, which has undergone a gestalt shift in the recent past. The Accreditation Council for Graduate Medical Education (ACGME) developed competencies in 2000, with the focus on feedback and assessing learners as they develop at different rates. (See sidebar below).

“It’s about ongoing quality improvement,” Dr. Ownby says.

Changes in Graduate Medical Education

In 2012, the Accreditation Council for Graduate Medical Education (ACGME) announced changes to accreditation requirements, known as the Next Accreditation System (NAS). UTHealth Graduate Medical Education includes over 100 training programs, including 70 ACGME-accredited residency and fellowship programs, with nearly 1,000 trainees. New requirements in NAS affected the training programs, how trainees are evaluated, and institutional oversight of training. To prepare for these changes, the GME Office has held workshops and informal discussion groups, made available webinars, and included related topics for discussion in the monthly GME Committee (GMEC) meeting.

In previous years, training programs had accreditation site visits by ACGME staff every 3-5 years. Under NAS, the emphasis is on continuous improvement with closer monitoring by the GME Office and GMEC. Each program is required to conduct an annual review of the program, which is in turn, reviewed by a subcommittee of the GMEC. This review of each ACGME program required the effort of numerous faculty and staff, as well as the development of the logistics of sharing a large amount of data among the reviewers. Programs then complete an annual ACGME update electronically, which is reviewed by the ACGME Residency Review Committee for the specialty. Programs receive an accreditation status based on this update each year, rather than every 3-5 years. Programs will still have site visits, but these will occur every 10 years, if no major issues arise with the program.

Evaluation of residents and fellows also changed in the NAS. Twice a year, trainees are assessed on “Milestones” as defined for each specialty. A Clinical Competency Committee in each program reviews each resident. These assessments are also submitted to ACGME electronically.

Another major component of NAS is the Clinical Learning Environment Review (CLER). This type of site visit is focused on the hospital environment where residents receive their training. Our first CLER site visit conducted by ACGME staff in May 2014 was in Memorial Hermann-TMC and included meetings with program directors, other key faculty, hospital administrators, nurses, and residents and “walk-arounds” in the hospital. The CLER site visits concentrate on resident and faculty engagement in patient safety and quality improvement; resident supervision and duty hours; transitions in care (handoffs); and professionalism. Over 200 individuals were involved in this site visit, which resulted in a detailed report identifying areas of strength and areas for improvement. As a result of this site visit, we are instituting a patient safety/quality improvement bootcamp for entering residents and fellows this year.

Although NAS has required additional effort and the development of new systems, we anticipate that once we adjust to these new requirements, the effort will pay off in better feedback to residents and more proactive changes in training programs. The hope is that the CLER requirements will spur greater involvement in safety and quality by the residents during their training, which will continue as they enter practice.

– Margaret Uthman, M.D., is associate dean for educational programs
“UTHealth already has an incredible reputation in preparing its medical students for residency training, and this change in the curriculum is a national trend that we need to be a part of,” says Alexander, who grew up in The Woodlands and graduated from UT Austin.

Changing the way medicine is taught also reflects the public’s demand for a more engaged and integrated medical experience.

“There have been dramatic and rapid changes in the approach to adult education and in the practice of medicine over the last 5-8 years with the introduction of electronic health records and its impact on the doctor-patient relationship,” says Philip Orlander, M.D., associate dean for educational programs. “Our goal is to emphasize the importance of professionalism, compassion, and communication from day one of medical school, while using the most advanced technology to develop evidence-based treatment plans.”

Students say that learning reasoning skills will help them better prepare for the changing landscape of medicine.

“Much of what we learn here will change by the time we graduate and knowing how to find the right information, assess its quality, and decide how it fits the clinical picture for a patient will be essential. I am confident this new curriculum will be a major improvement from what we have currently, and it will help better prepare students to serve their patients well in residency and beyond,” Savage says.

“The goal of the new curriculum is to increase the quality of medical education within a framework that is both innovative and aligned with the changing needs of healthcare,” adds Amy Trott, a nontraditional second-year medical student who was formerly an assistant professor at Paul L. Foster School of Medicine in El Paso.

**RENEWED FOCUS ON CAREER**

With the traditional curriculum, students have cited the lack of time to form a career focus and personalize their education. New career focus tracks will require UTHealth medical students to hone in on a specialty at the end of the third year. From primary care to medical sciences, career focus tracks are designed to better prepare students for residency. (See sidebar, page 12)

Students will still have the opportunity to pursue a scholarly concentration, which starts in the spring of the first year and continues until graduation.

“The goal of the scholarly concentration program is to produce a scholarly product – a research paper or other document that is the culmination of a student’s career interest,” Dr. Cleary explains, adding that successful completion of this program results in a certificate at graduation.

**CONTINUOUS IMPROVEMENT**

A process is in place to continually assess the effectiveness of the new curriculum to assure that the UTHealth Medical School educational objectives are achieved.

“The class of 2020 will be the first class to graduate under the new curriculum,” Dr. Butler says, adding that it will coincide with the 50th anniversary of the UTHealth Medical School.

Current students are confident about the changes.

“I think graduates of the new curriculum will be much better at problem-solving, applying what they know to new or different clinical situations, and will be more independent as adult learners,” Trott says.

Learn how a national conversation on medical curriculum intersected with local plans, watch the video:
go.uth.edu/2015curriculum
In order to give incoming students a breadth of knowledge for a successful start, The University of Texas Graduate School of Biomedical Sciences at Houston (GSBS) has established the Foundations of Biomedical Research Core Course. This 15-week core course combines traditional didactic lectures and interactive critical thinking with problem-solving exercises. The goal is to provide students with a strong background in fundamental graduate-level topics, including genetics, molecular and cellular biology, biochemistry, physiology, developmental biology, and biostatistics.

The course was created as a way to simplify the curriculum while providing the incoming class a testing ground to explore the different research possibilities available at GSBS. Training sessions in teamwork and presentation skills allow students to develop long-lasting relationships with classmates that will continue throughout their careers.

"The 2014 incoming class came from many different specialties: molecular sciences, microbiology, mathematics, anthropology, psychology… I had a chance to get to know every single one of these folks through the course, and I think we all benefited from each other's expertise," says Cavan Bailey, a member of the inaugural core course class. "When times got tough, we struggled together, and ultimately bonded by overcoming whatever individual challenges we had.

"I didn't expect graduate school to be like this, as most of what I was told is it is a very solitary existence. At GSBS, I don't feel that way at all, and I can see our class being friends throughout school and further on into our careers. Never did I feel alone or unsupported, which has made my time here so much more fulfilling!"

The course was developed by a task force lead by GSBS Associate Dean of Graduate Education William Mattox, Ph.D., along with the course director, GSBS faculty member Jill M. Schumacher, Ph.D. More than 70 GSBS faculty taught in the course, which featured weekly practicals, paper discussions, and creative breakout sessions.

Forty-one students enrolled in the course in fall 2015. Importantly, these students were provided several different avenues to evaluate the course in real time. In addition, to a traditional course evaluation at the end of the semester, weekly "clicker poll" evaluations were administered each Friday, with 100 percent student participation. Online polls also were available 24/7 so that students could give immediate feedback regarding individual lectures and activities. This feedback facilitated immediate action and allowed the faculty to improve their lectures.

Dr. Schumacher and the faculty are busily preparing for the incoming class of students who will arrive at GSBS in August.

"The students that took our first-year course, Microbial Genetics and Physiology, were particularly interactive and engaged and a true pleasure to teach," says Danielle Garsin, Ph.D., associate professor, department of Microbiology and Molecular Genetics, UTHealth Medical School. "I believe this to be a result of the high level of engagement and camaraderie fostered by the core course."

GSBS students celebrate at the course’s closing party.
### At A Glance

- **223** Graduating Seniors
- **50 (22%)** Matched to UTHealth
- **92 (41%)** Staying in Texas
- **131 (59%)** Leaving Texas

### Where They’re Going

<table>
<thead>
<tr>
<th>State</th>
<th>Students</th>
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<tr>
<td>Texas</td>
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<td>California</td>
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### Specialty Choices

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<td>Diagnostic Radiology</td>
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<td>Obstetrics-Surgery</td>
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<td>Dermatology</td>
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<td>Internal Medicine-Prelim</td>
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<td>Vascular Surgery</td>
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Sometimes when we look back at our history we overlook the legends amongst us right here and right now. One legend is trauma surgeon James H. “Red” Duke, Jr., M.D. As the nation relived the 50th anniversary of Kennedy’s assassination in Dallas on November 22, 2014, the name Red Duke will not escape the national spotlight.

Dr. Duke was a surgical resident at Parkland Hospital that fateful day in 1963 and tended to the other victim of the moment, Gov. John Connally. Connally (1917-1993) would live another three decades and much credit goes to Dr. Duke who sat by the side of the governor and his wife, Nellie, night after night and modeled the difference between treating a patient and caring for a patient.

With his trademark bristly mustache, wire-rimmed glasses, Texas twang, and colorful stories, Dr. Duke is a one-of-a-kind folk hero with the personality of an old fashioned country doctor and the 24/7 skills of a modern-day trauma surgeon. Should you be walking down the corridors of Memorial Hermann–Texas Medical Center and hear someone call out “hey bud” or “hey babe,” you can be sure Dr. Duke is close by. His trademark “Dukeisms” are classics and could fill more than a few books.

Dr. Duke was born in Ennis, Texas, and his family shortly thereafter moved to Hillsboro where the enterprising young Duke picked cotton, dug ditches, and became the lone paperboy for the Saturday Evening Post and the Dallas Morning News while earning Eagle Boy Scout distinction. He acquired his name, “Red,” from his childhood curly red locks. Hunting and fishing in the surrounding countryside, he would often run across another red-head from nearby Abbott, Texas, who would become a legendary country singer and lifelong friend, Willie Nelson.

Dr. Duke’s office in the UTHealth Medical School has more than a few of Willie’s cassette tapes and CDs scattered about along with prized gifts and mementoes from state and national leaders and his many patients over the years. Some of our enterprising medical students once had the good idea to clean and organize his office for him while he was out only to learn that wasn’t such a good idea. Everything has a place.
As a young boy he asked his mother who made more money, a preacher or a doctor. When she told him a doctor, he decided he would become a preacher. Graduating from Hillsboro High School, he attended Texas A&M and graduated with a bachelor of science degree and school-wide popularity and distinction as an Aggie yell leader.

With his undergraduate degree in hand, he served in Germany for two years as an Army tank commander before enrolling in the Southwestern Baptist Theological Seminary in Fort Worth. His divinity degree was followed by medical school at UT Southwest in Dallas, where he graduated in 1960. To this day both Texas A&M and UT claim him as their own. Medical school was followed by postgraduate training, including a surgical residency that placed him at Dallas’ Parkland Hospital that fateful day when the president and Texas governor arrived.

He pursued additional graduate studies in chemical engineering, biochemistry, and computer sciences at Columbia University in the late 1960s and moved his wife and children to Jalalabad, Afghanistan, as a visiting professor and later chairman of surgery at Nangarhar University School of Medicine from 1970-1972.

In 1972, he joined a burgeoning University of Texas Medical School at Houston in its second year as a professor of surgery and never slowed his pace. In 1976, he helped launch Life Flight; a program that has become one of the premier air ambulance services in the country. By the 1980s, his beloved persona and common sense ability to make the complicated seem simple led him to television shows like the PBS series *Bodywatch* (premiered 1986) and *Dr. Red Duke Texas Health Reports* (syndicated internationally), while inspiring Hollywood to create a short-lived television series, *Buck James* (1987-88) starring Dennis Weaver who shadowed Dr. Duke for two weeks in Houston to develop his persona and style. Dr. Duke actually made a cameo appearance in one episode, not as a doctor but as an oil rig foreman. Additionally Dr. Duke made appearances on *NBC Nightly News, The Today Show,* and *PM Magazine*.

All this work contributed to make him a household name across the country as a one-of-a-kind trauma sur-
For information on the James H. “Red” Duke, Jr., M.D. Endowed Scholarship, please see go.uth.edu/redduke

geon who closed his Health Reports programs with the familiar, “From The University of Texas Health Science Center at Houston…(pause)…I’m Dr. Red Duke.” By the late 1980s his name was even bantered about nationally as a future candidate for Surgeon General. From wildlife conservation (he founded and served as president of the Texas Bighorn Society) to work with the U.S. military to enhance medical technology on the battlefield and surgical techniques supporting the medical needs of our military personnel, Dr. Duke seems to be everywhere. He recently worked with the Texas Workforce Commission to support jobs initiatives for hiring veterans in addition to a new pastime, painting, with some of his landscape art adorning his Life Flight office.

The John B. Holmes Professor of Clinical Sciences, Dr. Duke is as colorful as he is compassionate. From the most complex surgical procedures to a dose of his simple homespun humor, he is a timeless UTHealth legend.
Walking down the pediatrics hallway on the fifth floor of the UT Professional Building, you just might miss the sign pointing you to the High-Risk Clinic. Through a narrow hallway and two doors, you will discover a closet-sized waiting room, with 10 chairs backed up against two walls.

Behind the waiting room door are six exam rooms off of a slender corridor.

In this tiny clinic space, big changes are happening in the way medicine and care are delivered. Here, a dedicated team of pediatric doctors and specialists provide around-the-clock comprehensive care for the most complex young patients in Houston.

This is the UT Physicians High-Risk Children’s Clinic, which was subject of a recent Journal of the American Medical Association (JAMA) article, detailing the results of a three-year randomized clinical trial. About 200 high-risk pediatric patients were randomized to either standard care or enhanced medical home care.

Although a patient-centered medical home had been demonstrated to show value in improving clinical outcomes and reducing health care costs, it had not previously been demonstrated in clinical trials with chronically ill children. High-risk chronically ill children account for .4 percent of children, yet make up 40 percent of pediatric hospital charges.

The High-Risk Clinic enhanced medical care included unprecedented access to providers – parents were given the primary care provider’s cellphone number and encouraged to call at any time. A Spanish-speaking clinician was always available; half of the clinic’s population is bilingual. And, in one location and visit, multiple pediatric specialists were available to provide care in a comprehensive and efficient manner.

“Our nurse practitioners are also very important to
our definition of comprehensive care,” explains Ricardo Mosquera, M.D., medical director of the clinic and assistant professor of pediatrics. “They have the power to fix problems right there. They prescribe medications and are the coordinators of care.”

Providing complete access to clinicians worked. During the clinical trial, the number of high-risk children with a serious illness was decreased by 55 percent, and the total clinic and hospital costs for those in the comprehensive care group were reduced by $10,258 per year.

“The enhanced medical care – after-hours phone access, available specialists in clinic – this is beyond the scope of a typical medical home, and that is what makes the difference,” Dr. Mosquera explains.

Dr. Mosquera adds that the biggest differentiator was the result of a simple concept: getting back to basics.

“I was surprised by how much you can do without fancy medications or devices – it comes back to being available for the patient,” he says.

EXPANDING CARE

Even though the study has ended, the clinic continues, with new goals to further its impact. All of the patients who were in the study’s control group are now part of the clinic’s comprehensive care efforts, with an objective to expand care to 300 chronically ill children.

Children are eligible to be a patient if they have had three or more emergency department visits, at least two hospitalizations, or one or more pediatric intensive care unit (PICU) admissions in the past year. Patients primarily are referred to the clinic from the Memorial Hermann-Texas Medical Center neonatal intensive care unit or PICU, and by current patients.

‘THEY ARE LIKE A FAMILY TO US’

Leonard Munoz, 2, was referred to the high-risk clinic following a six-month stay at Memorial Hermann-TMC.

Munoz was admitted to the PICU with respiratory syncytial virus (RSV) at the age of 2 weeks. “He was almost dead when I brought him in,” says his mom Mariela Munoz.

In the hospital, he was on machines that breathed for him and IVs that provided his nutrients. Since being released home, he has been able to be weaned off the ventilator, is eating through his mouth – instead of the gastrostomy tube – and is walking.
“He’s improving a lot. It’s a miracle,” Mariela says. “When he was in the hospital, they asked me if I wanted to unconnect him many times. I thank God, and then I thank Dr. Mosquera.”

Munoz still needs 24/7 care provided by a home nurse and has a tracheostomy, which his mom is hopeful will be removed in a few months. He arrives to his clinic appointment on a stretcher with all of his equipment via an ambulance.

“I’ve never seen a clinic on call like this, 24/7. They were here to tell us what to do for him when I called in the middle of the night,” Mariela says. “I appreciate everything they do for my son. They are like a family to us.”

Tamica Jackson brings her daughter Taliyah Dent, 6, to the high-risk clinic with a fever. She suffers from asthma, and today she has the flu.

“We’ve been coming to this clinic for two years,” Jackson says. “Instead of going to the ER and sitting all day, I can always call — it’s very convenient.”

Jackson says she calls the clinician cellphone about three times a month, and that Dent has become more stable as a result of the enhanced care.

During her office visit, Dent wheezes and suffers through an asthma attack while taking an albuterol treatment.

“He’s improving a lot. It’s a miracle. When he was in the hospital, they asked me if I wanted to unconnect him many times. I thank God, and then I thank Dr. Mosquera.”

Mariela Munoz, mother of patient
“We are going to give her three or four more treatments here before going home. We’re going to make sure she gets better first,” Dr. Mosquera explains.

Dr. Mosquera also has Dent play an asthma “game.” Using a special device connected to what looks like a tablet, Dent blows a cloud from one side of the screen to the other. The game is actually a device that measures nitric oxide, which is a marker for airway inflammation.

“How she does helps us decide her treatment – how long and how aggressive it needs to be,” Dr. Mosquera explains.

**INCORPORATING TECHNOLOGY**

Telemedicine efforts by the clinic, Dr. Mosquera says, will help improve access to care and ease the challenges faced by the families of chronically ill children.

“Ambulances and ventilators on ambulances are built for adults,” Dr. Mosquera says. “It’s hard for these kids to make routine visits to see us, so to have a laptop in the clinic and one in patients’ homes, would be ideal.”

In addition to telemedicine, more than 30 of the clinic’s patients are enrolled in a new asthma clinical trial testing a new device for asthma patients. Using Bluetooth technology and a GPS, an appendage is attached to the child’s albuterol inhaler, transmitting a signal back to the clinic, alerting when and where the inhaler was used.

“We can see if the patient is using it more at the park or at grandma’s house and call and intervene if needed,” Dr. Mosquera explains.

The clinic also is outfitted with a bronchoscopy machine to look at a patient’s airway through their tracheostomy. In addition, the office has a pulmonary function machine in clinic and distributes hand-held devices for patients to measure their pulmonary function levels at home in conjunction with the asthma trial.

“We not only have incredibly caring and dedicated providers in our clinic, but we have equipment in this office that is not available anywhere else down Fannin Street,” Dr. Mosquera adds.

Find out what inspires Dr. Mosquera to care for high-risk children, watch the video: go.uth.edu/2015highrisk
CHILDREN’S LEARNING INSTITUTE PREPARES KIDS FOR SCHOOL

Ninety percent of human brain development happens in the first four years of life. The skills and knowledge that children acquire before they enter kindergarten have an impact on their later success in school and life. These skills are even more important for at-risk children. The Children’s Learning Institute, part of the UTHealth Medical School, is dedicated to supporting young children and their families through several large-scale implementation programs, including the Texas School Ready! Project.

Since 2003, the Children’s Learning Institute, in its role as the Texas State Center for Early Childhood Development, has implemented the Texas School Ready! Project in local communities across Texas. The goal of Texas School Ready! is simple yet critically important: help at-risk preschool children in Texas be more prepared for kindergarten.

“Many states estimate that half of their students arrive at kindergarten already far behind where they need to be in order to succeed,” says Susan H. Landry, Ph.D., director of the Children’s Learning Institute.

“However, there is a growing consensus that high quality preschool experiences can lay a strong foundation for school readiness even among economically disadvantaged children.”

Texas School Ready! started as a research study with 10 Texas communities and has since grown to positively impact the school readiness of nearly 500,000 at-risk children. For early childhood programs and teachers, being Texas School Ready! shows a commitment to providing quality learning experiences for young children – especially those who are at risk for entering school behind their peers.

Texas School Ready! is a preschool teacher training program that provides tools to help teachers make positive changes in their instructional practices. Teachers who participate in Texas School Ready! are more responsive to the individual learning needs of the children in their classrooms and use more language-building strategies in the classroom. When early childhood teachers master these skills, the children in their classrooms are more likely to be ready for kindergarten.
Teachers in the program receive three years of professional development and one-on-one coaching, as well as classroom materials and activities. These tools have helped more than 25,000 teachers, regardless of their education level, from child-care centers, Head Start programs, and public school pre-k programs, become better teachers and better support the children they educate. *Texas School Ready!,* from its beginnings as a research study, has strived for innovation. In recent years, more online tools and resources, including online, remote coaching have been added to the program to reach teachers in isolated areas of the state.

“We have participated in TSR for three years. As a teacher in this program, I have truly learned a lot, especially with different teaching strategies, hands-on activities, and appropriate learning methods for 3 and 4-year-old children,” says Ethel Mack, a former *Texas School Ready!* participant from Houston. “My students are so excited and eager to learn. The students’ vocabulary is beyond average (I call them my little dictionaries!) I am so pleased and happy to have been a part of this program.”

In 2014, the Children’s Learning Institute received two federal research grants that compare the effectiveness of different instructional approaches and learning environments, both utilizing the *Texas School Ready!* model for teacher training and improvement.

**EDUCATION INTERVENTIONS**

One of these studies, ePATT (Parents and Teachers Together), combines a classroom intervention (*Texas School Ready!*) with a parent intervention through another program developed at the Children’s Learning Institute, Play and Learning Strategies (PALS). Over the next four years, teachers in 66 Head Start classrooms, 528 children, and their parents will work with the Children’s Learning Institute to test the unique combined effects of a classroom-based and home-based program and also provide information on the cost-effectiveness of the in-person versus online delivery of professional development for teachers.

PALS, the parent education component of the ePATT study, was designed as a preventive intervention program to strengthen the bond between parent and child and stimulate early language, cognitive, and social development. From its beginnings at the Children’s Learning Institute, PALS is being successfully implemented in communities across the country. PALS uses videos of real parents and their children to demonstrate specific skills. The parents participating in the ePATT study work one-on-one with a coach who provides supportive feedback on videos of the parents interacting with their children.

“Working with my coach has helped me so much in my parenting skills. At first, it was weird to record myself and talk to my coach about how I talk to my son,” says Tiranica Lopez, who is participating in the ePATT study with her son Aaden. “After a few months, I noticed that I stopped having to think about incorporating the parenting strategies I learned with my coach. Now it just happens naturally!”

While the parents in the ePATT study work with a coach on parenting strategies, the teachers also will work with a coach through the *Texas School Ready!* model on instructional strategies, as well as receive access to the teacher tools and resources available for all *Texas School Ready!* participants.

Thelma Martinez, a teacher with Holbrook Head Start and a participant in the ePATT study, has experienced firsthand how the *Texas School Ready!* resources improve her instruction and her students’ school readiness skills.

“The program has helped me a lot. It has helped me better understand and prepare for daily activities. The program has broadened my knowledge on age-appropriate activities and how to truly group my children according to their needs. I am a new teacher and this program has completely improved my teaching style,” she says.

**LEARNING TO ENGAGE**

Martinez, along with all Texas public schools, Head Start programs, Texas Rising Star-certified childcare providers, and *Texas School Ready!* participants, will have free access to the quality improvement resources of TSR through the launch of CLI’s new integrated, online delivery platform, CLI Engage.

Prior to CLI Engage, the *Texas School Ready!* project
reached approximately 500,000 children over the last 12 years. The technology of CLI Engage and long-standing partnerships with the Texas Education Agency and the Texas Workforce Commission establish a potential to reach 500,000 children with TSR resources every year.

CLI Engage’s innovation can be summed up in one word: integration. Research shows what inputs lead to substantive changes in quality for early childhood classrooms—namely, professional development, classroom observation tools, child progress monitoring, and developmentally-appropriate curriculum. But without a robust technological infrastructure, effectively integrating these components can be time-consuming and costly. CLI Engage houses these tools in a system that is ever connecting: for example, classroom observation tools lead to short-term goal reports that link to professional development modules, and child progress monitoring tools automatically group children based on learning needs and link to intensive, small-group lessons in the platform’s activity collection.

Data are the push behind instructional strategies and professional development. Child progress monitoring results are measured against established benchmarks to identify children falling behind in areas known to be predictors of school readiness. Similarly, through her scores on the classroom observations, Martinez and her coach are able to identify specific instructional practices that need improvement in order to lift the overall quality of her classroom.

“Everyone has seen an improvement in my classroom. My classroom management and teacher observation scores have advanced tremendously... I have seen so many positive outcomes while in the program and it has motivated me to continue with my personal teaching goals,” she adds.

“We know that the best thing we can do for at-risk children is to provide quality early learning experiences that target their least-developed skills areas,” says Dr. Landry, founder of CLI. “CLI Engage provides the tools for teachers to incorporate these instructional strategies in their classrooms. Our goal is to disseminate these resources in a way that is cost effective for the state and for local districts.”

Thelma Martinez, a teacher at Holbrook Head Start in Houston, with her children during circle time.
Gathered in a conference room at LBJ General Hospital’s annex, doctors, doctors-in-training, nurse practitioners, a dietician, nurse case managers, and social workers discuss the health and welfare of more than 100 patients each week. These are not patients in the hospital, and they are not patients who come to the clinics. These are the frail and very complex patients of the LBJ Bridge House Call Program.

A collaborative project of the Harris County Hospital District (now called Harris Health) and UTHealth, the LBJ Bridge House Call Program started in 2007. Baylor College of Medicine and Harris Health have a similar program, with Harris Health and a grant helping to support both programs.

“It has been a ‘bridge to hospice,’” explains John Halphen, M.D., director of the program and associate professor in the Division of Geriatrics and Palliative Medicine. “People needed to be discharged to hospice, but this often was not available to them.”

It also has been a house call program for frail elders and some chronic care patients for whom clinic visits are too difficult. The LBJ Bridge House Call Program accepts patients eligible for Harris Health System services, needing geriatric palliative medicine or some assistance with chronic care, and who have physical or cognitive limitations that make it difficult for them to get to a clinic.

Today there are 128 patients in the program, with
five new referrals announced at this week’s meeting.

Although there are patients who have been with the program for years, some have life-limiting illnesses resulting in death within months. Some are eventually placed in hospice, but this is not always available. Last month, 30 patients left the program, including a 64-year-old man with severe heart disease who after a year with the program was accepted to hospice.

Since the program takes palliative patients, many of the House Call patients are not elderly. One new patient is a 34-year-old woman with a cancerous tumor on her spinal cord. The program has worked with her and her young children to manage her pain and make life easier, including ordering a hospital bed for the home. Another new patient is a 50-year-old man who was diagnosed with West Nile virus and “looks like he is 70.”

COMPREHENSIVE TEAM

As each patient is discussed and evaluated, those around the table offer input, and the patients are picked up by the nurse practitioners and physicians. The multi-disciplinary house call team includes social services, nurse case management, logistics, and other services provided through Harris Health System. Chaplains, dietitians, and pharmacy assistance is available when needed.

These team members help the medical providers keep the patients comfortable and as functional as possible. Home health services, wound care, equipment, medications, and other services, such as Meals on Wheels, are arranged. Sometimes Adult Protective Services are engaged to help those in a state of neglect or exploitation.

Geriatric medicine and palliative medicine both are practiced in multi-disciplinary teams since the needs are great, requiring multiple sources of assistance.

Members of the House Call team make patient visits as frequently as twice a week in cases where symptoms are hard to manage. If the patient is doing well and has no urgent needs, visits may be a few months apart.

“It is useful to see people where they live – things may be happening in the home – a lack of money, a lack of social support, neglect,” Dr. Halphen says. “The home environment shows us what they have to work with, how well they manage things, and what they may need.”

Dr. John Halphen leads a weekly discussion on all of the House Call patients.
As health care becomes more complex, help is needed.

“Even persons who are not sick and confused may have trouble negotiating medical systems,” Dr. Halphphen explains. “Some people fall outside the system, and we get them back into it.”

‘I’VE COME A LONG WAY’

One of those who fell outside the system and needed some help is a patient named Johnny Walker. A former 6-handicap golfer, Walker, 70, today is confined to a wheelchair and rests in a hospital bed in his living room.

House Call has been making visits to Walker since October 2014, following hospitalization and rehab for his fourth concussion in April 2014.

“I was coming in through the garage in the dark, and I forgot some things were on the floor, so I landed headfirst on the concrete,” he recalls.

He lay there for a day and a half until his brother-in-law came by to check on him and found him.

When Walker was referred to the program, clinicians were concerned about his high blood pressure, an infected wound, and his living conditions.

“He wasn’t taking his medicine, and he was having trouble taking care of the house,” explains Jessica Lee, M.D., assistant professor in the Division of Geriatric and Palliative Medicine, who comes by for a monthly visit to check vitals and any other concerns.

On this visit, Dr. Lee checks Walker’s blood pressure, takes his temperature, and listens to his stomach, heart, and lungs.

“She’s checking to see if I have a heart and a brain,” Walker jokes.

In addition to Dr. Lee, a home health provider cares for Walker daily, a home health nurse visits weekly, and a physical therapist does exercises with him twice a week.

“Dr. Lee is dedicated, thorough, cares, and does her job. I call the rehab place I was in after being discharged from the hospital Sing Sing or Alcatraz,” says Walker, a former human resources manager. “I’ve got some really good people who are helping me now. I’ve come a long way.”

Dr. Lee agrees. Walker’s blood pressure is now better controlled and today measures 142 over 68. He can even stand up from the wheelchair and move to the walker, which he uses around the house.

“She’s one of the best support systems in the world.
She’s wonderful,” Walker says of Dr. Lee.

Dr. Lee’s prescription on this visit is for Walker to drink more water, putting a post-it note to that effect on his refrigerator.

“My legs are bad, my teeth need help, my vision is going – I feel like an old horse,” Walker smiles.

“We’re not going to put you out to pasture,” Dr. Lee reassures him.

Dr. Lee says her goal for Walker is to return to the golf course. “I want you to come with me,” he tells Dr. Lee.

“I don’t play, but I will go with you to the course,” she says.

GROWING NEED

For children born in the United States today, the average life expectancy is 78.8 years. But as medical miracles continue and the benefits of healthy living are realized, more and more Americans are surviving and thriving into their 90s and beyond.

In addition to this growing healthy geriatric population, there also is an expanding chronically ill populace that is not only frail but also needs constant medical attention.

Due to increased demand, the House Call team is growing to include six nurse practitioners and three physicians.

Dr. Halphen says he hopes to further expand the program as it shows its worth – preventing unnecessary trips to the hospital and improving patients’ conditions.

“We have kept a lot of people from deteriorating,” he adds.

In addition to the health care professionals, there are learners who assist – geriatric fellows, palliative medicine fellows, residents from family practice and internal medicine, as well as medical students.

Geriatric medicine is now part of the UTHealth Medical School curriculum.

Every third-year medical student spends a weeklong clerkship with the Division of Geriatric and Palliative Medicine, which was established when Carmel Dyer, M.D., joined the UTHealth Medical School in 2007.

“House Calls is important for today and the future,” Dr. Halphen says. “The questions we ask ourselves are, ‘Can we benefit the patient with our house calls, and how do we meet the patients’ needs?’”

Specialized clinic offers complete care to seniors

The Center for Healthy Aging at Bellaire is the flagship location of the UTHealth Medical School’s outpatient geriatric services. The location provides comprehensive health care assessments and treatment plans specifically tailored to the older patient.

Specialties include:
- Memory and depression screening
- Functional assessments
- Medication reviews
- Assistance with linking seniors to local services
- Advanced care planning

The clinic is staffed by primary care physicians trained in geriatrics and gerontological nurse practitioners.

Other specialties that are provided by experts who have a focused interest in the care of older adults includes cardiology, psychiatry, neurology, gastroenterology, orthopaedics, and palliative medicine.

To make an appointment or refer a patient, please call 713.486.5150.
ANESTHESIOLOGY

The Department of Anesthesiology is highly committed to achieve and demonstrate excellence in the clinical care of patients and in academics both through innovative research and by offering a stellar educational program. Our diverse faculty provide clinical expertise at multiple clinical sites in both ambulatory and inpatient settings, including Memorial Hermann-Texas Medical Center, Memorial Hermann Ambulatory Surgery Center, the Memorial Hermann Heart and Vascular Institute, as well as Lyndon B. Johnson General Hospital. Anesthesiology is a technology driven field, and we have been able to apply the latest technological advances in the care we provide for our patients.

Anesthesiology faculty members are respected for their dedication to clinical training, education, and research. This past year, we had the highest acceptance of scientific abstracts and presentations at the American Society of Anesthesiologists meeting in the history of this department. The number of research publications generated by the department has increased as well.

Clinical research is being performed in areas of airway management, coagulation abnormalities, as well as cardiac, pediatric, obstetric, regional, and trauma anesthesia. Additionally, we have basic science faculty dedicated to research related to the development of pharmacological strategies to improve endothelial dysfunction and hypertension. Our research team is also assessing the mechanisms of chronic edema and chronic inflammation during prolonged heart failure. Lastly, our team is currently testing a new medical technology “Low Intensity Laser Ablation” to create lesions in target issues that produce pain.

BIOCHEMISTRY AND MOLECULAR BIOLOGY

As a basic science department in a research intensive medical school, the major mission of the Department of Biochemistry and Molecular Biology (BMB) is to conduct innovative and important biomedical research.

BMB is host to a diverse array of multidisciplinary research programs ranging from basic biomedical research in cell biology, structural biology, genetics, immunology, microbiology, and neurobiology to preclinical and translational research in pulmonary disease, cardiovascular disease, hypertension, visual disorders, and sickle cell anemia.

BMB is home to two research centers, the Center for Membrane Biology and the Structural Biology Center.

During this past year, BMB faculty members reported major accomplishments in areas of structural biology and cancer research. Dr. Pawel Penczek, Director of the Structural Biology Center, co-authored two papers in Nature and two in Cell. Information reported in three of these manuscripts provides detailed structural and functional studies of important cellular components such as membrane receptors, muscle fibers, and the major molecular machines responsible for protein synthesis. A fourth paper, an invited review, describes how cryo-electron microscopy is revolutionizing structural biology.

Research supported by a multi-PI CPRIT grant awarded to Dr. Ann-Bin Shyu (Jesse Jones Chair in Molecular Biology) and Dr. Eric Wagner (Director of the BMB Graduate program) is reported in a Nature paper, where they describe the discovery of a protein (CFlm25) that plays a critical role in regulating the size of mRNAs, a poorly understood aspect of regulating gene expression.
CARDIOTHORACIC AND VASCULAR SURGERY

Our faculty care for patients at Memorial Hermann Heart & Vascular Institute and are world leaders in the treatment of heart and blood vessel problems, including heart valves, heart blood supply, and blood circulation throughout the body.

Our innovative techniques have resulted in critical advancements in the repair of ballooning blood vessels – preventing rupture and significantly improving outcomes. Surgeons of the department have been leaders in the field of aortic surgery for three decades, developing and perfecting all aspects of aortic disease management. Procedures involve clinical investigation with the goal of optimizing techniques of repairs of the ascending, transverse, arch, and thoracoabdominal aorta. Refinement in techniques are being investigated to provide multiorgan protection. Also we have first-class thoracic surgeons dedicated to thoracic diseases, benign and malignant esophageal, lung, and mediastinal disease.

We are actively involved in the NIH-funded specialized center grant (SCCOR) in collaboration with Dr. Dianna Milewicz in the Department of Internal Medicine. Faculty in our department collaborate actively with the educational and research programs of the UTHHealth Medical School’s Center for Clinical Research and Evidence-Based Medicine in teaching and mentorship programs as well as in the administration of the NIH-funded K12 program in connection with the Center for Clinical and Translational Sciences.

DERMATOLOGY

Dermatology is an integrated department between the UTHHealth Medical School and MD Anderson Cancer Center. Activities also involve Memorial Hermann-Texas Medical Center and Harris Health System.

The department was ranked as one of the top eight dermatology clinical centers of excellence in the nation according to Medical Economics and Dermatology Times. The combined research funding is at $2.5 million per year, particularly emphasizing pediatric dermatology, cutaneous lymphoma, skin cancer, dermatopathology, and skin molecular virology.

There are 22 salaried faculty, 18 dermatology residents, a surgical dermatology fellow, a dermatopathology fellow, and two clinical research fellows. The training programs are extremely competitive. We are one of the larger dermatology programs in the nation.

Senior faculty have held major national offices, such as president of the American Board of Dermatology, president of the American Society of Dermatopathology, and president of the Society for Pediatric Dermatology.

Electives for medical students are popular among students from our own school and outside institutions.

Dermatology operates a very busy clinical dermatopathology and immunofluorescence laboratory for processing patient biopsies.

Research figure includes direct and indirect costs of endowments, gift funds, federal grants, state contracts, and private service for fiscal year 2014.
The Department of Emergency Medicine is proud of its commitment to outstanding clinical care, educational excellence, and academic rigor. Education of the next generation of leaders in emergency medicine will continue to be a core pillar of our mission. With our 18 new residents arriving each July, we have become one of the largest Emergency Medicine training programs in the country. With our strong hospital partners and core faculty we offer an unparalleled training experience — unmatched in Texas and on par with the best in the nation. We currently support fellowships in Emergency Medical Services, Pediatric Emergency Medicine, Quality/Administration, Informatics, Ultrasound, and Global Health.

In an effort to promote collaboration among our faculty and our colleagues at UTHealth, we focus our department’s research on the clinical strengths of our emergency departments. To that end, our primary research foci include: the acute care of the injured heart, brain, and vascular system; public health and prevention research; research involving the medical or traumatic presentation of shock; and research involving health informatics and emergency medicine processes.

The heart of any clinical department will always be the care it provides the patients who entrust their health and life to our doctors. We continue to strive for clinical excellence with our quality assurance process and push to deliver state-of-the-art care in a compassionate and patient-centric delivery model. We provide clinical emergency expertise at Lyndon B. Johnson General Hospital, Memorial Hermann-Texas Medical Center, Children’s Memorial Hermann Hospital, Memorial Herman Sugar Land Pediatric, and Memorial Hermann Memorial City Pediatric Emergency centers.
FAMILY AND COMMUNITY MEDICINE

We have a diverse faculty and staff committed to excellence in patient care, teaching, research, and community service.

Our faculty are involved in a wide range of activities, including medical student education and family medicine residency training.

We offer multiple sites for comprehensive family care, including screening and prevention of disease and ambulatory procedures, such as flexible sigmoidoscopy and colonoscopy, exercise stress testing and exercise prescription, vasectomy, and skin procedures. Our faculty and residents provide low-risk maternity care, care for newborns and children, as well as adult medical care covering a wide spectrum of common diseases. Several of our faculty have special expertise in geriatrics and sports medicine. Faculty and residents provide inpatient management of patients at both Memorial Hermann-TMC and LBJ General Hospital.

One of our residency program’s strengths is its training of physicians to care for urban underserved populations. We also emphasize the bio-psycho-social approach to medical care. Our residents also are trained to use the transtheoretical model of behavior change to encourage their patients to make healthy lifestyle changes.

Our Community Health Program coordinates medical services, educational activities, research, community outreach, and health profession interdisciplinary endeavors at the Harris Health community health centers.

We deliver high quality patient care at multiple sites in both ambulatory and inpatient settings that include UT Physicians and Harris Health locations.

INTEGRATIVE BIOLOGY AND PHARMACOLOGY

The Department of Integrative Biology and Pharmacology (IBP) is interested in the cell biology, physiology, and pharmacology of cell regulation and communication.

Our major research themes include the molecular mechanisms and spatiotemporal dynamics of membrane signaling; intracellular and metabolic signaling; the biology and physiology of cell-cell interactions; and the use of computational, structural, and systems approaches to decipher signaling networks.

These efforts are aimed at understanding how normal and abnormal cell function translates into whole animal physiology and pathophysiology, and exploring the molecular pharmacology of existing and novel therapeutics.

In this context, IBP has research programs in cancer cell biology, cardiovascular biology, tissue regeneration and plasticity (especially in nerve and muscle), and neuronal signaling in injury, inflammation, and pain.

IBP faculty teach Physiology and Pharmacology to medical students.

We run an active graduate studies program in Cell and Regulatory Biology, and we participate in the University Centers for Membrane Biology and Clinical and Translation Sciences within the UTHealth Medical School and in several training grants, including those in Pharmacological Sciences and Computational Cancer Biology.

Carlos A. Moreno, M.D., M.S.P.H.

John F. Hancock, M.A., M.B., B.Chir., Ph.D., Sc.D.
**INTERNAL MEDICINE**

The Department of Internal Medicine strives to improve the quality of health care through excellence in the education of students, residents, physicians, and the public; the advancement of biomedical knowledge through discovery, integration, and translation to the clinical setting; and the provision of state-of-the-art comprehensive, compassionate, and accessible patient care.

The department has undergone exponential growth over the last few years in basic and clinical research as well as clinical patient care to become one of the largest academic departments of medicine in the country.

The scope of our department is best illustrated through our 15 divisions: Cardiovascular Medicine; Center for Clinical and Translational Sciences; Critical Care; Endocrinology and Diabetes; Gastroenterology and Hepatology; General Internal Medicine; Geriatric and Palliative Medicine; Hematology; Hyperbaric Medicine; Infectious Diseases; Medical Genetics; Oncology; Pulmonary and Sleep Medicine; Renal Diseases and Hypertension; and Rheumatology.

The department’s clinical services span the continuum of primary care to subspecialty care. Excellent clinical care is provided at UT Physicians-Texas Medical Center, Bellaire, Sienna, Cinco Ranch, and Bayshore; Memorial Hermann-Texas Medical Center; Memorial Hermann Northeast; Memorial Hermann Southeast; Memorial Hermann Southwest; TIRR Memorial Hermann; and Lyndon B. Johnson General Hospital.

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**MICROBIOLOGY AND MOLECULAR GENETICS**

The faculty of the Department of Microbiology and Molecular Genetics are highly committed to excellence in research and education. The nationally recognized research program of the department has five areas of excellence: cell cycle and development, gene regulation, host-pathogen interactions, microbial stress response, and molecular machines.

Investigations include a wide variety of disease-causing and environmental bacteria, fungi, and parasites.

In addition to its strong research program, the department offers the Medical Microbiology course for first-year medical students and is home to the Graduate Program in Microbiology and Molecular Genetics, a model program of the Graduate School of Biomedical Sciences. The department provides didactic and experiential training to medical students, graduate students, and postdoctoral fellows.

During the past year, faculty have been recipients of prestigious teaching and research honors. Dr. William Margolin was named a Distinguished Lecturer of the American Society for Microbiology, Dr. R. Chris Mackenzie won the John Freeman Award for Outstanding Teaching in the Basic Sciences, and Dr. Kevin Morano was inducted into the Kenneth Shine, M.D. Academy of Health Science Education.
Neurobiology and Anatomy

Neuroscience is considered to be one of the last frontiers of the biomedical sciences. The Department of Neurobiology and Anatomy is committed to being at the forefront of these discoveries.

One of the largest neuroscience departments in North America, the department’s missions include biomedical research in cellular and molecular neuroscience, computational neuroscience, and systems and cognitive neuroscience. We have strengths in the areas of learning and memory, and vision. Our faculty teach medical and graduate courses in neuroscience, gross anatomy, and developmental anatomy, as well as some dental courses.

The department manages the Neuroscience Research Center, the W. M. Keck Center for the Neurobiology of Learning and Memory, the Willed Body Program and Human Structure Facility, and several of the UTHealth Medical School’s core research facilities.

Dr. David Marshak and his colleagues discovered that one type of local circuit neuron in the primate retina makes two distinct types of synapses. Dr. Andrey Tsvetkov, who joined the department at the beginning of FY14, received an award from the Hereditary Disease Foundation to study the mechanisms of Huntington’s disease. The teaching accomplishments of the department were highlighted by Dr. John Byrne’s receipt of the President’s Scholar Award for Teaching and the election of Dr. Len Cleary to UT System Academy of Health Science Educators. Drs. Byrne, Ruth Heidelberger and Neal Waxham co-edited the third edition of the textbook, “From Molecules to Networks; an introduction to cellular and molecular neuroscience.” Our online open access textbook, Neuroscience Online Electronic Textbook, had more than 3 million page views during FY14.

Nanomedicine and Biomedical Engineering

The objective of the Department of NanoMedicine and Biomedical Engineering is focused on inter-disciplinary research to combine nanomedicine, biomedical engineering, and computational sciences to develop novel therapeutic and diagnostic platforms for combating diseases, including cancer, cardiovascular diseases, and infectious diseases.

In partnership with UT MD Anderson Cancer Center, a number of major initiatives are being brought together in the South Campus Center for Advanced Biomedical Imaging research building, including a new multi-institutional NCI Center on NanoMedicine and a GE, UTHealth, and MD Anderson partnership to create a new, state-of-the-art imaging center.

A NanoMedicine and Biomedical Engineering Scholarly Concentration is designed to offer students the opportunity to learn emerging new technologies in biomedical nanotechnology and engineering.

A series of cross-appointments with faculty in other departments, divisions, and units and adjunct appointments with faculty in collaborating institutions through The Alliance for NanoHealth and other Texas Medical Center institutions are utilized to enhance multidisciplinary research and expand the available opportunities for the training and teaching of students.

Several ongoing research projects include:
- Injectable NanoVectors for Directed (Targeted personalized) Therapeutics
- Novel Targeted Imaging Technologies
- Early Detection of Disease from Blood Proteomic Signatures

David G. Gorenstein, Ph.D.
Faculty 19
Research $3,866,860

John H. Byrne, Ph.D.
Faculty 25
Fellows 17
Research $6,924,714
Central to the mission of the UTHealth Department of Neurology is to provide a comprehensive learning environment for students in the clinical neurosciences throughout their careers. Our specialty programs focus on the clinical applications of the latest neurological research. The Stroke Program translates new therapies from laboratories to bedside testing and is a national leader in treatment and research of acute stroke.

The Multiple Sclerosis Research Group focuses on fundamental and applied research approaches in neuroimmunology and advanced magnetic resonance imaging to better understand the pathogenesis and treatment of multiple sclerosis.

The Neuromuscular Program is focused on providing the latest state-of-the-art clinical care to patients with neuromuscular disorders. The Texas Comprehensive Epilepsy Program and its Epilepsy Monitoring Unit at Memorial Hermann-Texas Medical Center offer a comprehensive diagnostic and therapeutic program for pediatric and adult epilepsy patients and their physicians. The movement disorders program (UT MOVE) provides comprehensive diagnostic and therapeutic programs for patients with Parkinson’s disease and similar disorders, and both the movement and epilepsy programs collaborate with our neurosurgical colleagues to treat refractory cases.

Our program in cognitive disorders and dementia includes a multidisciplinary clinical diagnostic and treatment program and groundbreaking research. Our Diagnostic Neurology team of expert clinicians is always available for evaluating and treating new patients referred for any sort of neurological condition.

We are currently the largest neurosurgery group in Houston in terms of numbers of faculty, NIH grants received, and total research expenditure. We are the #1 neurosurgery program in terms of market share. We also have started robust educational programs.

Our clinical program, run through the Mischer Neuroscience Institute (MNI) of Memorial Hermann in collaboration with the Department of Neurology, has grown significantly in the past four years, more than doubling in size. At the same time, our quality has improved. Our mortality rates are below the benchmark of our peers in the University HealthSystem Consortium (UHC). In addition, complication rates at the MNI also are below national standards as compared to UHC and Healthgrades organizations.

We are proud of our educational activities. Currently, about a quarter of UTHealth medical students rotate through neurosurgery during the third year, a dramatic increase from prior years. The Neurosurgery Residency Training Program was begun in July 2008. In July 2011, we were given an unconditional 5-year certification after review, and our resident complement was approved to increase to 2 per year (for a total of 14). Most neurosurgery residencies nationally support 1 resident per year. We have three fellowships, in cerebrovascular and skull-base surgery, neuro-critical care, and endovascular neurosurgery.

Research is a high priority for us. In 2010, we were #11 in NIH grant funding among neurosurgery departments nationally. We have 9 PhD faculty, and many clinicians are involved in research projects. Current direct spending exceeds $5 million per year.
OBSTETRICS, GYNECOLOGY, AND REPRODUCTIVE SCIENCES

Our department has undergone substantial growth over the last few years, with expansion of both general obstetrics and gynecology and subspecialty practices across the Greater Houston area, as well as an increased academic footprint within the Texas Medical Center.

Subspecialty services include Gynecology Oncology, Female Pelvic Medicine and Reconstructive Surgery, Maternal-Fetal Medicine, and Fetal Intervention.

Our physicians provide services and care across the Memorial Hermann Health System as well as at Lyndon B. Johnson General Hospital, St. Joseph Hospital, and Cypress Fairbanks Medical Center.

Our faculty offer special expertise to women across their life, including minimally invasive and robotic surgery. Our gynecology sub-specialists are experts in gynecologic oncology and urology. Our high-risk pregnancy specialists care for women with underlying medical complications, multiple gestations, and fetal abnormalities. The department also includes The Fetal Center, where our fetal medicine physicians perform fetal surgery, including selective laser photoocoagulation of placenta vessels in treatment of Twin-Twin Transfusion Syndrome and in utero repair for spinal bifida, as well as treat fetal medical conditions requiring intrauterine transfusion.

The educational program includes medical student rotations for third- and fourth-year students, OB/GYN residency program, and fellowships in maternal fetal medicine and fetal intervention.

Research within the department is a combination of basic and translational sciences, and patient-oriented research.

RUIZ, M.D.
DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCE

The Ruiz, M.D., Department of Ophthalmology and Visual Science provides a full complement of inpatient and outpatient clinical services through its primary teaching facilities: the Cizik Eye Clinic, Memorial Hermann-Texas Medical Center, Children’s Memorial Hermann Hospital, Lyndon B. Johnson General Hospital, Settegast Community Health Center, Baytown Community Clinic, and Acres Home Community Health Center. Our physicians also provide outpatient care at UT Physicians’ Cinco Ranch and the Bayshore Multispecialty clinics.

The ophthalmic subspecialties represented in the Cizik Eye Clinic include ophthalmic plastic, reconstructive, and orbital surgery; corneal and external disease, refractive surgery, glaucoma, retina, vitreous, and uveitis; pediatric ophthalmology; and neuro-ophthalmology. All of the physicians at the Cizik Eye Clinic are faculty members in the department, are board certified by the American Board of Ophthalmology, and are on the medical staffs of numerous facilities, most notably that of Memorial Hermann-Texas Medical Center.

In addition to clinical care, ophthalmology and visual science faculty are at the forefront of research into anatomy and physiology of the eye as well as the causes and treatments of ocular disease. The department is known as a leading center for the design and development of clinical trials in ophthalmology.

The Department of Ophthalmology and Visual Science is involved in the education of undergraduate, graduate, and post-graduate students as well as residents and fellows in a variety of fields of medicine.
The Department of Orthopaedic Surgery continues to grow while fulfilling our mission to provide expert medical care in a professional, effective, and cost-conscious manner as we encourage a multi-disciplinary team approach to address the needs of the patient as a whole person.

To accomplish this goal, we engage our students, residents, and faculty in providing both medical care and health education to members of our community; we stimulate and foster scholarly research in both basic and applied medical science as we continue to create and evaluate new knowledge, particularly as it relates to the cause, prevention, and treatment of musculoskeletal conditions; we provide the best possible educational experience for both students and faculty as we empower them to effectively apply their orthopaedic knowledge; and we will seek to develop in our students, faculty, and staff those qualities that will be critical to leadership as we meet the challenges of healthcare in the 21st century – integrity, professionalism, scholarship, collegiality, creativity, and compassion.

Our research mission is to apply basic science and implement it into the clinical setting to better serve patients. Our faculty continue to focus on funding for their research and making advances in the field of musculoskeletal medicine and orthopaedic surgery. Our research facilities include the Orthopaedic Biomechanics Laboratory, a Bone Histomorphometry Laboratory, and a Dual Energy X-Ray Absorptiometry (DXA) lab.

Our department comprises 52 faculty with training and experience in joint replacement, spine, oncology, trauma, sports medicine, shoulder and elbow, hand, foot and ankle, and pediatrics.

The Department of Otorhinolaryngology–Head and Neck Surgery focuses on the care of patients with complex diseases and disorders of the ears, nose, and throat. The department’s full-time faculty members provide world-class patient care and participate in a variety of academic activities for education and research. Their knowledge and expertise has earned them regional, national, and international recognition.

The Department of Otorhinolaryngology–Head & Neck Surgery’s mission is to provide the best possible ear, nose, and throat care for our patients. Patient care is provided at Memorial Hermann Medical Plaza, Memorial Hermann-Texas Medical Center, and Children’s Memorial Hermann Hospital.

Specialized programs within the department include the Texas Sinus Institute, the Texas Skull Base Physicians, and the Texas Voice Performance Institute. In addition, the department has established programs for facial plastic surgery, pediatric ENT, otology, ENT sleep disorders, and head and neck surgery.

The department sponsors a robust educational program, which includes an otorhinolaryngology residency training program as well as two clinical fellowships (rhinology and facial plastic surgery). The department’s CME programs include Lone Star Rhinology, Otorhinolaryngology Frontiers, Texas Hill Country ENT Symposium, and departmental grand rounds. In addition, the department publishes ORL Progress Notes.

Physicians from the department perform clinical and basic science projects since the faculty members strongly believe that the department’s research efforts drive the innovation necessary to provide tomorrow’s advances.
PEDIATRIC SURGERY

The Department of Pediatric Surgery was established in 2007.

The Department has 6 divisions: General & Thoracic Surgery, Neurosurgery, Plastic & Craniofacial Surgery, Cardiovascular Surgery, Acute Care Practitioners, and Regenerative Medicine. Our divisions are composed of outstanding clinicians and researchers whose skills and expertise cover all major areas of pediatric surgery and different fields of scientific investigation.

We provide educational opportunities for students and residents in many areas. Residents in most of the core surgical training programs receive their pediatric training in one of the divisions.

There is also an ACGME training program in pediatric surgery. The goal of the pediatric surgery residency training program is to prepare residents to become safe, qualified, and board-certified pediatric surgeons and to be the teachers, researchers, and future leaders in the field of pediatric surgery.

The UTHealth pediatric surgical team partners with the Children’s Memorial Hermann Hospital (CMHH), the Children’s Cancer Hospital at MD Anderson, Harris Health/LBJ Hospital, and Woman’s Hospital.

Our research programs include multiple Phase I and Phase II clinical trials and research in cellular therapies, gut function, and hospital safety. We have other research programs in pediatric brain tumors, advanced neural imaging and new techniques for management of cleft lip and palate.

PATHOLOGY AND LABORATORY MEDICINE

The goal of the Department of Pathology and Laboratory Medicine is to combine the traditional values of academic pathology – excellence in service, teaching, and research – with innovative approaches to the new challenges of medicine and science. We strive to become a model of excellence in the changing world of medicine.

The department includes 56 full-time clinical and research faculty as well as many joint appointment, part-time, and adjunct faculty.

Clinical and basic research are major aspects of the department’s programs. Almost all faculty are engaged in research with the aim of discovering new knowledge and/or developing ways to apply new knowledge to improve diagnosis and management of disease.

Centers and facilities include the Imaging Core Lab, the Chemical Immunology Research Center, the Treponema Molecular Genetics Server, the Electron Microscopy Laboratory, and Research Training in the Molecular Basis of Infectious Disease.

The Outreach Laboratory is fully accredited and staffed by pathologists with subspecialty expertise in many areas. Our goal is to provide the specialized expertise of UTHealth pathologists to practicing physicians in an efficient, cost-effective, and user-friendly manner.

The department directs a fully accredited residency training program, is extensively involved in the UTHealth Medical School curriculum, and plays an active role in the training of graduate students in the affiliated Graduate School of Biomedical Sciences.

Our teaching hospitals provide a diverse patient population and exposure to a wide spectrum of human disease.
**PEDIATRICS**

The mission of Department of Pediatrics is to provide the highest quality of medical care; to advance the knowledge in biomedical and behavioral sciences through the expansion of our research programs; and to provide excellence and innovation in the training of students, residents, fellows, and physicians.

As one of the sites of the National Institutes of Health Multicenter Neonatal Intensive Care Network grants, our faculty have contributed to a variety of major advances in the care of newborn infants. The department also has a Pediatric Research Center whose investigators are involved in clinical, basic, and translational research.

The department’s specialized centers include the Center for Clinical Research and Evidence-Based Medicine, which promotes high-quality clinical research to increase the public’s healthy years of life. The goal of our Children’s Learning Institute is to be the pre-eminent source for proven clinical and educational programs covering early childhood through late teens. The department also directs the Forensic Assessment Center Network whose mission is to correct the disparities in Texas in the availability of quality medical assessment for suspected child abuse and neglect victims and to improve the outcomes for all Texas child abuse victims.

Fellowships are offered in the disciplines of Adolescent Medicine, Pediatric Cardiology, Infectious Diseases, Interventional Pediatric Cardiology, Critical Care, Gastroenterology, Neonatology, Nephrology, Pulmonology, and Endocrinology.

First-rate inpatient care is provided at Children’s Memorial Hermann Hospital, Lyndon B. Johnson General Hospital, MD Anderson Cancer Center, and Shriners Hospital.

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**PHYSICAL MEDICINE AND REHABILITATION**

The Department of Physical Medicine and Rehabilitation (PM&R) is dedicated to providing outstanding healthcare in the areas of musculoskeletal and pain medicine, electrodiagnosis, and rehabilitation of persons with spinal cord injury, traumatic brain injury, stroke, multiple sclerosis, and other neurologic and medical conditions, in Houston and the surrounding community.

We are dedicated to the training, education, and research in these areas in cooperation with TIRR Memorial Hermann and the Memorial Hermann Rehabilitation Network, the Lyndon B. Johnson General Hospital, and Shriners Hospital for Children.

The department is also committed to providing the highest quality of graduate and postgraduate training for future physiatrists, and disability and rehabilitation management for medical students.

The PM&R department operates the NeuroRecovery Research Center based at TIRR Memorial Hermann. The faculty direct various laboratories in this center, including the UTHealth Motor Recovery Laboratory, the Center for Wearable Exoskeletons, Rehabilitation Robotics, Neuromodulation and Neural Interfaces, Neuromyo engineering, and Neurorehabilitation.

They are dedicated to discovering novel methods of enhancing functional recovery from neurological and physical disorders, such as stroke, spinal cord injury, and traumatic brain injury and their rapid clinical translation.

Faculty members are recognized leaders in international and national PM&R and multi-specialty organizations, and have been strong advocates for persons with disabilities.
PSYCHIATRY AND BEHAVIORAL SCIENCES

The Department of Psychiatry and Behavioral Sciences is dedicated to the mission of education, research, and patient care.

Our educational programs train students, residents, and fellows of today to become the mental healthcare leaders of tomorrow – whether in public or private sectors, in solo or group practice, as researchers, educators, or clinicians.

Our faculty and staff are at the forefront of the exploration of the causes and treatments of mental illnesses, with a total of over $6 million in grant support. We have centers focused on both mood disorders research and addiction research. In addition, our faculty members have a wide variety of mental health research interests that they pursue in conjunction with their clinical and educational involvement with the department.

The Department of Psychiatry and Behavioral Sciences provides innovative approaches to the treatment of patients in public and private hospitals. Speciality units at Harris County Psychiatric Center include a beautifully renovated Mood Disorders Unit, with additional unit renovations underway. Its new ECT Clinic began serving outpatients in April 2015. We also have ambulatory care programs. Our skills and technology are balanced with compassion and respect for the patients we serve.

We make the mental healthcare of the community a priority. We reach out to the community by providing educational programs and supporting the public service activities of our faculty and staff who volunteer in many capacities for community-based professional and mental health advocacy organizations.

SURGERY

The Department of Surgery and its divisions are committed to excellence in patient care, innovative research, and mentoring the next generation of surgeons.

Our divisions include Acute Care Surgery, General Surgery, Immunology and Organ Transplantation, Minimally Invasive and Elective General Surgery, Plastic and Reconstructive Surgery, and Urology.

Our location within the Texas Medical Center, the largest medical center in the world, gives our surgeons, researchers, and residents unique opportunities for collaboration and clinical experience.

Our department offers residency programs in General Surgery, Plastic and Reconstructive Surgery, Urology, and Colon and Rectal Surgery. Fellowships are offered in Surgical Critical Care, Trauma Research, Female Urology and Urodynamics, Minimally Invasive Surgery, Renal Transplantation, and Plastic and Burns.

The Department of Surgery and its divisions are involved in collaborative research efforts throughout the Texas Medical Center, including the Center for Translational Injury Research, the Trauma Research Center, and Nutritional Research.

Excellent clinical services are provided at Memorial Hermann-Texas Medical Center, Lyndon B. Johnson General Hospital, St. Luke’s Episcopal Hospital, MD Anderson Cancer Center, Triumph Hospital, Park Plaza, Spring Branch Medical Center, TIRR Memorial Hermann, UT Physicians at Bellaire, Christus St. Catherine's, Healthsouth, Pedi Woodlands Clinic, Smith Tower, Texas Liver Center, Twelve Oaks Medical Center, Ambulatory Surgery Center, and Bayshore Medical Center.
Gabriel Aisenberg, M.D., assistant professor of internal medicine and director of general internal medicine at LBJ Hospital, has been named the winner of the 2014 John P. McGovern Award as the exceptional clinical teacher. This is his second time to win the McGovern award – the first was in 2012.

Cesar Arias, M.D., Ph.D., associate professor in the Division of Infectious Diseases, was elected to the American Society for Clinical Investigation, an honor society comprised of more than 3,000 physician scientists. He also received the Oswald Avery Award for Early Achievement from the Infectious Diseases Society of America, which recognizes outstanding achievement in an area of infectious diseases by a member of the IDSA who is 45 years of age or younger.

Prakash Balan, M.D., J.D., assistant professor of internal medicine, cardiology, affiliated with Memorial Hermann-TMC, and Alfredo Gei, M.D., associate professor of obstetrics, gynecology and reproductive sciences affiliated with Children’s Memorial Hermann Hospital, recently were honored as the Memorial Hermann-Texas Medical Center Physicians of the Year.

In January 2014, Avinash Bapat, M.D., professor of internal medicine, was the sole recipient of the Sword of Honor Award, which was bestowed during an awards ceremony at the Annual Congress from the NRI Welfare Society of India. The award honors nonresident Indians living in different countries around the world, who have brought recognition to their Indian roots through their achievements.

Four Medical School faculty members have received The University of Texas System Regents’ Outstanding Teaching Award, which recognizes those who deliver the highest quality of instruction in the classroom, the laboratory, the field, or online. They are: Michelle Barratt, M.D., M.P.H., professor of pediatrics; Lillian Kao, M.D., professor of surgery; Patricia Butler, M.D., professor of psychiatry and behavioral sciences and vice dean for Educational Programs; and Kevin Morano, Ph.D., professor of microbiology and molecular genetics and a faculty member of The University of Texas Graduate School of Biomedical Sciences at Houston.

John Breinholt, M.D., was named director of the Division of Pediatric Cardiology, effective June 1, 2014. Dr. Breinholt also serves as the chief of pediatric cardiology at Children’s Memorial Hermann Hospital.

Jason Burnett, Ph.D., assistant professor of internal medicine in the Division of Geriatric and Palliative Medicine, was appointed co-director of the Texas Elder Abuse and Mistreatment (TEAM) Institute. Dr. Burnett succeeds Carmel Dyer, M.D., professor and director of the Division of Geriatric and Palliative Medicine and director of UTHealth’s Consortium on Aging, who founded TEAM and led it for 17 years.

John Byrne, Ph.D., professor and chair of the Department of Neurobiology and Anatomy, was honored for excellence in teaching with the UTHealth President’s Scholar Awards for Teaching.

The Italian Cultural & Community Center of Houston honored four UTHealth Medical School faculty with the Italian Flame Award for distinction in the health care field: Davide Cattano, M.D., Ph.D., associate professor of anesthesiology and medical director of the Preoperative Anesthesia Clinic at the Memorial Hermann-Texas Medical Center; Giuseppe Colasurdo, M.D., Ph.D., president and Alkek-Williams Distinguished Chair at UTHealth, as well as UTHealth Medical
School dean and H. Wayne Hightower Distinguished Professor in the Medical Sciences; Stefano Sdringola-Maranga, M.D., M.H.A., professor of medicine, Weatherhead Distinguished Chair of Heart Disease, and Weatherhead P.E.T. Center for Preventing and Reversing Atherosclerosis associate director, as well as a member of the medical staff of the Memorial Hermann Heart & Vascular Institute; Fabio Triolo, D.d.R., M.Phil., Ph.D., associate professor of pediatric surgery and cellular therapy core director.

Mark Chassay, M.D., was named associate dean for Alumni Relations and assistant dean for Admissions and Student Affairs, effective March 1, 2014. Dr. Chassay succeeds Dr. Henry Strobel, Ph.D., who retired from the UTHealth Medical School after 42 years.

Kim Cheung, M.D., Ph.D., associate professor of pediatrics, was one of two winners of the 2014 Superior HealthPlan Community Champions for Children Award.

Dean and President Giuseppe Colasurdo, M.D., was the honoree at the 2014 Memorial Hermann Foundation Under the Boardwalk.

Charles Cox, Jr., M.D., Children’s Fund Inc. Distinguished Professor in Pediatric Surgery, was an invited speaker to Stem Cell Summit 2014 in Cambridge, Mass.

Arthur Day, M.D., professor of neurosurgery and a neurosurgeon at the Mischer Neuroscience Institute at Memorial Hermann-Texas Medical Center, received the Founders’ Laurel Award in recognition of his exceptional service, lifelong dedication, and meritorious accomplishments in the field of medical education from the Congress of Neurological Surgeons.

Renowned surgeon James H. “Red” Duke, Jr., M.D., the John B. Holmes Professor of Clinical Sciences and professor of surgery, was knighted into the Order of Saint George during a special ceremony, at Texas A&M University’s Sanders Corps of Cadets Center. The 15th elementary campus in the Alvin ISD, the Dr. James “Red” Duke Elementary School was named in honor of Dr. Duke, professor of surgery and founder and medical director of Memorial Hermann Life Flight. Dr. Duke also was one of four recipients of Lifetime Achievement Awards from the Houston Technology Center at its “A Celebration of Entrepreneurs” gala May 15 in Houston.

Wallace “Skip” Gleason, M.D., associate dean for admissions and student affairs, has been named chair of the Joint Admission Medical Program Council.

Millicent “Mimi” Goldschmidt, Ph.D., has been selected as the recipient of the Distinguished Professional Woman Award by the Committee on the Status of Women at UTHealth.

Department of Otorhinolaryngology faculty Tang Ho, M.D., and Etan Weinstock, M.D., were selected for fellowship status in the American College of Surgeons.

Mark Hormann, M.D., associate professor of pediatrics, was the recipient of the 2014 Herbert L. and Margaret W. DuPont Master Clinical Teaching Award. Established in 2001 and made possible by a gift from the DuPonts, the award recognizes and preserves the essence and quality of the master clinical teacher, reflecting the Medical School’s top priority of quality clinical medical education.

Ankur Kamdar, M.D., assistant professor of pediatrics, was appointed to the Houston Board of Directors for the Arthritis Foundation.
Theresa Koehler, Ph.D., professor and chair of the Department of Microbiology and Molecular Genetics, has been selected for induction into the new College of Science Hall of Distinction at Virginia Tech College of Science. She also was selected to lead one of the Scientific Review Groups, the Bacterial Pathogenesis Study Section, that reviews grant applications for the National Institutes of Health.

Bruce Kone, M.D., professor in the Division of Renal Diseases and Hypertension, has been named chairman of the “Kidney, Urologic, and Hematologic Diseases –D” Scientific Review Groups that evaluates training grants and career development award applications for the National Institutes of Health. His term extends through June 30, 2017.

Anil Kulkarni, Ph.D., professor of surgery, was awarded a highly competitive Fulbright-Nehru Scholarship Award for Academic and Professional Experience to travel to India to teach on immunonutrition and functional foods in the global health era. He also received the ‘Hind Rattan’ (Jewel of India) Award from the Non-Resident Indian Welfare Society of India, an organization under the umbrella of the Indian government.

Walt Lowe, M.D., chair of the Department of Orthopaedic Surgery and chief of orthopaedics at Memorial Hermann-Texas Medical Center, has been recognized for his contributions to sports medicine by the American Physical Therapy Association with the Jack C. Hugheston Sports Physician Award.

William Margolin, Ph.D., professor of microbiology and molecular genetics, was selected to serve as a distinguished lecturer for the American Society for Microbiology.

Kevin Morano, Ph.D., professor of microbiology and molecular genetics and director of the UTHealth New Investigator Development Program, was appointed the associate dean for Faculty Affairs, effective March 1, 2015. Dr. Morano succeeds Henry Strobel, Ph.D., professor emeritus of biochemistry and molecular biology, who led Faculty Affairs since the office’s inception in 1995 until his retirement. Dr. Morano also was elected as a fellow in the American Association for the Advancement of Science, the world’s largest general scientific society and publisher of the journal Science.

Ricardo Mosquera, M.D., assistant professor of pediatrics, was an invited speaker to the National Hispanic Medical Association’s 18th Annual Conference in Washington, D.C.

John Munz, M.D., assistant professor of orthopaedic surgery, received the Howard Rosen Table Instructor Award from the AO Trauma North America.

Barbara Murray, M.D., professor and director of the Division of Infectious Diseases, was elected the 2014 president of the Infectious Diseases Society of America.

Philip Orlander, M.D., director of the Division of Endocrinology, Diabetes and Metabolism, was named the 2014 Physician of the Year by the Houston Chapter of the American Diabetes Association.

John Riggs, M.D., associate professor in the Department of Obstetrics, Gynecology and Reproductive Sciences, was named chief of service for obstetrics and gynecology at Harris Health System’s Lyndon B. Johnson Hospital.

Hazim Safi, M.D., chair of the Department of Cardiothoracic and Vascular Surgery, was unanimously elected fellow of the Royal College of Surgeons of England. Fellowship of the Royal College of
Surgeons is a professional qualification allowing surgeons to practice as a senior surgeon in Ireland or the United Kingdom. Dr. Safi also was named president-elect of the Texas Surgical Society.

**Dawnelle Schatte, M.D.,** assistant professor of psychiatry and behavioral sciences, is the 2014 winner of the John H. Freeman Award for Faculty Teaching. Chosen by the senior class, the Freeman Award is given annually to recognize the Medical School’s outstanding basic science faculty member.

**Mya Schiess, M.D.,** professor of neurology and the Adriana Blood Chair in Neurology, was the keynote speaker at the Pennington Biomedical Research Center’s third annual Parkinson’s Conference in Baton Rouge, LA.

**Baha Sibai, M.D.,** professor of obstetrics, gynecology and reproductive sciences, received the Lifetime Achievement Award by the Society for Maternal-Fetal Medicine. Dr. Sibai directs UTHealth’s maternal-fetal medicine fellowship program and has active clinical practices at Memorial Hermann-Texas Medical Center and Lyndon B. Johnson General Hospital.

**Heinrich Taegmeyer, M.D., D.Phil.,** professor of internal medicine, was reappointed to the editorial board of *Circulation Research,* the world’s top journal for cardiovascular research, Dr. Taegmeyer has served on its editorial board since 1991 without interruption.

**Jon Tyson, M.D., M.P.H.,** vice dean for clinical research and healthcare quality and holder of the Michelle Bain Distinguished Professor of Medicine and Public Health, received the 2014 APGAR Award for his lifelong contributions to perinatal medicine and education. The award is considered the highest honor bestowed by the American Academy of Pediatrics for perinatal care. Dr. Tyson also was named the medical honoree at the March of Dimes Signature Chefs Gala, “Cirque du Cuisine” Oct. 16, 2014, at Silver Street Studios.

**Run Wang, M.D.,** professor of surgery and the Cecil M. Crigler, MD Chair in Urology, was unanimously elected president-elect of the Sexual Medicine Society of North America.

**Arlo Weltge, M.D., Ph.D.,** professor of emergency medicine, has received the John A. Rupke Legacy Award for his lifelong commitment to the American College of Emergency Physicians.

**Robert Yetman, M.D.,** professor of pediatrics; **Noranna Warner, M.D., Ph.D.,** professor of internal medicine; **Sozos Papasozamenos, M.D.;** and **John Teichgraeber, M.D.,** professor of surgery; were recognized as Distinguished Physicians during the annual medical staff meeting at Memorial Hermann-Texas Medical Center Dec. 15, 2014.

**Mohammad Zare, M.D.,** assistant professor of family medicine, was named chief of staff for Harris Health System’s Community Health Program, a network of integrated neighborhood health centers, school-based clinics, and mobile health units, and a major provider of the more than 1.8 million outpatient visits served annually by Harris Health.
Stanley G. Schultz, M.D., a world-renowned investigator, educator, and administrator at the UTHealth Medical School, died Thursday, Oct. 23, 2014. He was 82 years old.

Dr. Schultz, former dean and professor emeritus, was a key contributor to the discovery, introduction, and widespread use of oral rehydration therapy. This treatment for severe fluid loss caused by diarrheal diseases is estimated to have saved more than 40 million lives in the past 35 years.

“Beloved as a teacher, mentor, and a friend, he was also internationally known as a brilliant scientist whose work saved many lives,” says Giuseppe Colasurdo, M.D., UTHealth Medical School dean and president of UTHealth. “He was the heart of the UTHealth Medical School while he was here and long after he had ceased to have an active role. He will be deeply missed.”

A native of New York City, Dr. Schultz graduated from Stuyvesant High School in 1949, received his baccalaureate, summa cum laude, from Columbia University in 1952, and received his medical degree from New York University College of Medicine. He did postgraduate training at NYU-Bellevue Hospital and Harvard Medical School.

While at Harvard Medical School, Dr. Schultz took a two-year leave of absence for military service. In 1962, he was inducted into the U.S. Air Force as a captain in the medical corps and was stationed at the U.S. Air Force Aerospace School of Medicine at Brooks Air Force Base in San Antonio. Dr. Schultz taught radiation biology, monitored research contracts, and conducted research on the biological effects of radiation. This sparked his lifelong interest in intestinal absorption.

Dr. Schultz returned to Harvard Medical School in 1964. Three years later, he joined the Department of Physiology at the University of Pittsburgh School of Medicine as an associate professor and was promoted to the rank of professor in 1970. After developing a highly productive research program at Pittsburgh, which included a sabbatical at the University of Cambridge in England, he joined the UTHealth Medical School as professor and chairman of the Department of Physiology in 1979.

John H. “Jack” Byrne, Ph.D., chair of the Department of Neurobiology and Anatomy, first met Dr. Schultz in the early 1970s when they worked at the University of Pittsburgh School of Medicine. Dr. Schultz later recruited Dr. Byrne to join him at UTHealth.

“Dr. Schultz was an outstanding scientist who made fundamental discoveries about the ways in which molecules cross membranes,” says Dr. Byrne, noting that this information furthered the understanding of conditions such as cystic fibrosis.

Dr. Byrne, holder of the June and Virgil Waggoner Chair, adds, “He had a profound impact when it came to mentoring and developing the faculty of the UTHealth Medical School. I was fortunate enough to be one such person.”

Norman Weisbrodt, Ph.D., adjunct professor in the Department of Integrative Biology and Pharmacology, also lauds Dr. Schultz’s contribution to the development of faculty and students.

“He was a great mentor. I learned a great deal from him about conducting research and teaching,” Dr.
Weisbrodt says. "He was a role model – not just in what he said – but by leading by example."

Patricia Butler, M.D., professor in the Department of Psychiatry and Behavioral Sciences and vice dean for educational programs, described Dr. Schultz as an "outstanding teacher beloved by students."

While at the UTHealth Medical School, Dr. Schultz held the Fondren Chair in Cellular Signaling and the H. Wayne Hightower Distinguished Professorship in the Medical Sciences. In 2004, he was named dean of the UTHealth Medical School after serving as interim dean the previous year. Dr. Schultz described the opportunity to lead the school as "the opportunity of a lifetime." He played a major role in helping the UTHealth Medical School recover from Tropical Storm Allison, which involved overseeing the design and construction of a new research facility.

In 2007, Dr. Schultz was recognized by the Houston chapter of RESULTS with a Seeds of Hope Award for research that led to improved health conditions for people living in poverty. The local award is one of numerous honors Dr. Schultz received for his lifelong work on the mechanism of sodium and glucose-coupled absorption in the small intestine. Dr. Schultz’s work also was recognized internationally, notably in 2006, when he received the Prince Mahidol Award in Medicine by King Bhumibol Adulyadej of Thailand.

“He was a highly regarded investigator who made breakthrough discoveries. As an administrative leader, his contributions were crucial to the growth and stature of the Department of Physiology during an important phase of the medical school,” says George Stancel, Ph.D., executive vice president of Academic and Research Affairs at UTHealth. "He was just as widely considered a gentleman and a scholar in the truest sense of the word."

Dr. Schultz had recently moved to Mountain View, Calif., to be close to his beloved children and their families, including five grandchildren. He is survived by Harriet, his wife of 53 years; his sons Jeffrey and Kenneth; their wives Carol and Heather; and his grandchildren: Aaron, Colin, Kelly, Julian, and Keira.

Gifts in the memory of Dr. Schultz may be made to the Stanley G. Schultz, M.D. Student Travel Award in Global Health or The Doris Simon Student Fund, go.uth.edu/Schultz. Checks can be made out to UTHealth, Office of Development, P.O. Box 1321, Houston, TX 77251-1321.
ROBERT JAHRSDOERFER, M.D.

Robert Jahrsdoerfer, M.D., the first chair of the UTHealth Medical School's Department of Otorhinolaryngology and professor emeritus, passed away peacefully at his home in Virginia on March 17, 2014.

After receiving his bachelor's degree from George Washington University in 1957, Dr. Jahrsdoerfer was accepted to the University of Virginia School of Medicine, from which he received his medical degree in 1961. He completed an otolaryngology residency at the Yale-New Haven Hospital and returned to the University of Virginia, becoming full professor in 1979. Dr. Jahrsdoerfer joined the UTHealth Medical School in 1982, where he held a professorship and was appointed the first chair of the Department of Otolaryngology—Head and Neck Surgery. He left the UTHealth Medical School to serve the University of Virginia Department of Otolaryngology in 1995 to continue his passion evaluating and helping children with congenital ear disease until his retirement in 2009.

Dr. Jahrsdoerfer was a member of numerous prestigious medical societies, including the Society of University Otolaryngologists, the American Academy of Otolaryngology-Head and Neck Surgery, the Triological Society (past president, 2004), American Neurotology Society (past president, 1988-9), American Otological Society (past president, 1994-5), and American College of Surgeons.

Dr. Jahrsdoerfer pioneered surgery to open the ear canal and restore the natural sound conducting mechanism of the ear canal and middle ear, helping hundreds of children and adults to hear. The surgical technique he developed remains the standard of care for children with congenital aural atresia who are candidates for canalplasty surgery.

Throughout his career, Dr. Jahrsdoerfer was the recipient of many honors and awards. He was given the Triological Society’s Mosher Award in 1978 for his work on congenital middle ear malformations, was selected as one of “The Best Medical Specialists in the United States” by Town and Country in 1984 and 1989, and was included in the 1991, 1992, and 1993 editions of Best Doctors in America.

ROBERT LASKY, PH.D.

Robert Lasky, Ph.D., professor in the Department of Pediatrics and director of the Design and Analysis Support Services in the Center for Clinical Research and Evidence Based Medicine, died April 15, 2014.

With more than 35 years of experience in biomedical research, Dr. Lasky joined the UTHealth Medical School’s faculty in 1999. His primary research interests concerned developmental neuroscience, but his collaborations included research with adults and other organ systems. His he conducted clinical work in hospitals and clinics, field settings (rural Guatemala), and the laboratory. A theme of that research was reliably assessing functional capabilities predictive of long-term outcome in challenging settings.

Dr. Lasky received his bachelor’s degree from Duke University and earned his Ph.D. in developmental psychology at the University of Minnesota. He was a multiple recipient of the Dean’s Teaching Excellence Award.

EZZAT ABOULEISH, M.D.

Dr. Ezzat Abouleish, professor emeritus of anesthesia, passed away suddenly in the early hours of February 20, 2014.

Dr. Abouleish joined the Medical School in 1982 and served as professor and director of obstetrical anesthesia in the Department of Anesthesiology. He retired in 2000.

He was the recipient of the Gertie Marx Medal and Award and was a fellow at the Royal College of Surgeons in Great Britain.

He is survived by his wife, Ariya Abouleish of Clear Lake; his children and their spouses: Hassan and Yvette Abouleish of Houston, Maine; Amr Abouleish and Lamia Elerian-Abouleish of Clear Lake; Reda and John Lyle of Sandbanks, England; and his eight grandchildren.
NANCY GUINEE GIVES BACK TO THE CONSORTIUM ON AGING

UTHealth supporter Nancy Guinee is no stranger to the health care profession. Her late husband, Vincent Guinee, M.D., chaired M.D. Anderson Cancer Center’s Department of Epidemiology for many years.

For a native Houstonian and wife of a physician, finding a personal physician would seem like a simple task. Yet Guinee was looking for a very special physician—one not satisfied just to treat just symptoms but also focused on caring for the whole person. She wanted a physician who really listened to her personal goals as she aged and gave solid recommendations in a confident, consistent, and straight talking way.

“I was looking for a new physician when Lynn Cutrer, manager of patient and community relations at the UTHealth Medical School, suggested I might want to meet a highly respected gerontologist named Dr. Carmel Dyer. I went to see her, and she was exactly what I was looking for,” Guinee notes.

Through Dr. Dyer, Guinee says she gained new insights and understanding about the aging process—a process involving physical, mental, and social well-being changes that occur to each of us.

When Nancy’s husband Vince became ill, he also went to see Dr. Dyer and could not have been happier. Dr. Dyer and her team guided both husband and wife carefully through difficult times as Vince’s medical needs increased—providing the exceptional care, compassion, and follow-up for which Dr. Dyer and her team are known.

Through it all, Guinee said she has gained a renewed appreciation for the special skills of gerontologists and the teams of expert caregivers and educators needed to provide quality care to older patients.

In recent years, Guinee has focused on making a difference. She became involved with UTHealth’s Consortium on Aging—a very special program led by Dr. Dyer that brings together experts in geriatric care from several institutions in the Texas Medical Center and city/county agencies to address the needs of medical care for our growing elderly population with innovative and integrated new approaches for care.

Nationwide there is a shortage of trained professionals addressing the special needs of elder care. As Guinee puts it, “People are banging on the door for personalized care, sensitive to the needs of aging Americans. This is a national problem, and UTHealth is in the right place at the right time to become a trendsetter and model for addressing elder care.

“I’m just fortunate to have the means to get involved and help UTHealth through several gifts I’ve made over the years to support Dr. Dyer’s work,” she adds.

Through her generosity a large-scale strategic planning initiative has been launched involving nearly 50 community-wide professionals—each with specific expertise in key areas of elder care including elder abuse, mental health, cancer, trauma care, and palliative care.
REMEMBERING MEDICINE’S ROOTS

The UTHealth Medical School honored medicine’s past with a special tree planting ceremony April 23, from the original Hippocrates plane tree and the unveiling of a bronze bust of Hippocrates.

“We are honored and grateful that our medical school will share this important piece of history with the birthplace of medicine,” says Giuseppe Colasurdo, M.D., president of UTHealth and dean of its medical school. “I envision a day when our medical students will be able to learn and share medical knowledge beneath this tree, which holds such significance for our profession.

“Just as the Hippocratic school of thought served as the seed for modern-day medicine, this cutting from the ancient plane tree from the Island of Kos will grow to inspire and guide medical students through their training and into the noble, enduring practice of medicine.”

These two symbols of medicine’s beginnings vault the UTHealth Medical School into a unique position – only one other medical school has such a tree, and none have both the tree and a bust, which is the official likeness of the Father of Medicine.

Dimitrios Housakos, an artist from Athens, cast the bust from the original cast licensed by and preserved at the Archaeological Receipt Fund of Greece.

The original 500-year-old plane tree grows near the temple in Kos, where Hippocrates educated his students and practiced medicine. Hippocrates was said to teach his students under the shade of a similar tree 2,500 years ago.

“I had often wondered what it was like to study medicine under a plane tree in Kos, and now I will have the pleasure to see a plane tree grow,” says Margaret McNeese, M.D., vice dean of admissions and student affairs.

The tree is a gift from the Consulate of Greece in Houston represented by Consul Georgios Papanikolaou. The bronze bust and marble pillar were generously donated by the Hellenic Cultural Center of the Southwest and its member organizations.

“This is one of those days that make you proud to be Greek,” Papanikolaou says. “This creates a link – a bridge between our past and future.”

The idea to bring a piece of the Hippocrates Tree to UTHealth took root during a conversation between Papanikolaou and his friend, Theodoros Voloyiannis, M.D., F.A.C.S., F.A.S.C.R.S.

Grateful for the training he received during his fellowship at UTHealth, Dr. Voloyiannis, a Greek American surgeon who now serves on the volunteer faculty of the Department of Surgery and on the surgical staff at Memorial Hermann Medical Group, was instrumental in working with Papanikolaou to secure the gifts on behalf of the Hellenic Cultural Center of the Southwest and its member organizations.

Several members of the Greek community were on hand for the unveiling, including speakers Consul Papanikolaou; Yannis Remediakis, president of the Hellenic Cultural Center of the Southwest; and Nicholas Checkles, M.D., member of the Board of Directors of the Hellenic Cultural Center of the Southwest.

“We plant this tree to grow and hopefully flourish so that students can have some connection with ancient medicine and the fathers of their profession,” Dr. Checkles says.
UT Physicians

UT Physicians is the medical group practice of the UTHealth Medical School.

Physicians, residents, fellows, and students provide exemplary clinical services at UT Physicians offices located throughout the Texas Medical Center and Houston, with a focus on patient safety and quality.

The fastest-growing academic clinical practice in the nation, UT Physicians includes more than 1,000 physicians certified in 80 medical specialties and subspecialties, providing care for the entire family.

The majority of the outpatient care provided by UTHealth Medical School faculty takes place in UT Physicians clinics located in The University of Texas Health Science Center Professional Building, across the street from the UTHealth Medical School. Other locations exist around the Houston region to better serve the community, including locations in Bellaire, Katy, and Missouri City.

UT Physicians
A Part of UTHealth

Children’s Memorial Hermann Hospital

Children’s Memorial Hermann Hospital has been serving the community for over 20 years and is the primary teaching hospital for the pediatrics and obstetrics/gynecology programs at the UTHealth Medical School.

A recent facility expansion increased its capacity to 240 beds, making Children’s one of the country’s largest pediatric hospitals. Its Women’s Center operates an additional 68 beds. The facility offers colorful decor and special play areas for children. Education and support services for families are also available, as are services for international patients.

The hospital includes a dedicated pediatric emergency center and the largest Level I trauma center in Houston fully equipped to treat pediatric patients. Neonatal critical care services are available for infants and premature babies born as early as 23 weeks’ gestation.

Children’s Memorial Hermann Hospital

UT MD Anderson Cancer Center

The University of Texas MD Anderson Cancer Center, located in the Texas Medical Center, is widely regarded as one of the world’s foremost centers for cancer care, research, education, and prevention. Since its opening in 1944, MD Anderson has treated more than 900,000 patients with cancer and allied diseases in its inpatient and outpatient services.

The institution also houses a large clinical and basic science research program devoted to the investigation of the biology of cancer and includes active units in biochemistry, biological response modifiers, biophysics, molecular biology, pathology, pharmacology, cell biology, and cancer prevention.

MD Anderson Cancer Center offers in a wide range of training programs involving more than 10,000 students annually in the sciences and health professions.

The University of Texas MD Anderson Cancer Center
**MEMORIAL HERMANN-TEXAS MEDICAL CENTER**

Memorial Hermann-Texas Medical Center, the flagship hospital for the Memorial Hermann Health System, is the primary teaching hospital of the UTHealth Medical School in the Texas Medical Center.

Founded in 1925, this large metropolitan hospital, licensed for 736 beds, has a long-standing record of distinction in postgraduate teaching.

It offers a broad range of inpatient services with exceptional care in heart, neuroscience, orthopedics, women's health, general surgery, and organ transplantation.

As one of only two certified Level I trauma centers in the greater Houston area, the hospital provides 24-hour emergency and trauma care to more than 40,000 patients a year. Memorial Hermann Life Flight air ambulance service operates a fleet of six helicopters, providing emergency rescue and air transport services to a multi-county area.

The 165,000-square-foot Memorial Hermann Heart & Vascular Institute-Texas Medical Center offers the latest innovations in cardiology programs and treatment.

The hospital serves as the center of inpatient clinical activity for the UTHealth Medical School's faculty.

**LYNDON B. JOHNSON GENERAL HOSPITAL**

The Lyndon B. Johnson (LBJ) General Hospital, owned and operated by Harris Health System, is the second primary teaching facility for the UTHealth Medical School.

This 328 licensed bed acute-care hospital features a newly expanded Level III trauma center and a distinguished regional center for neonatal intensive care for high-risk deliveries.

Harris Health is the first accredited healthcare institution in Harris County to be designated by the National Committee for Quality Assurance as a Patient-Centered Medical Home and is one of the largest systems in the country to achieve the quality standard.

Health care services for Harris Health are provided by Affiliated Medical Services, a nonprofit organization composed of UT faculty, which staffs LBJ, and Baylor College of Medicine, which staffs Ben Taub General Hospital.

**UT HARRIS COUNTY PSYCHIATRIC CENTER**

The UT Harris County Psychiatric Center (HCPC), which opened in 1986, is a 222-bed public acute care psychiatric hospital that delivers a comprehensive program of psychiatric and clinical social services to more than 6,000 inpatients and 14,000 outpatients annually.

The center plays an important role as a teaching facility for medical and nursing schools across Texas and Louisiana.

Patients, including children, adolescents, and adults, suffer from mental illness, including bipolar disorder (manic depression), depression, schizophrenia, behavioral disorders, and adjustment disorders.

Operated by The University of Texas Health Science Center at Houston (UTHealth), the facility is jointly supported by the State of Texas and Harris County under the auspices of the Texas Department of State Health Services and the Mental Health and Mental Retardation Authority of Harris County, respectively. The UTHealth Medical School’s Department of Psychiatry and Behavioral Sciences provides administrative leadership and medical services for the center.
### 2014 DATA

<table>
<thead>
<tr>
<th>Total Full-Time Basic Science Faculty</th>
<th>Total Full-Time Clinical Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>147</td>
<td>1,004</td>
</tr>
<tr>
<td>+6.5% from 2012-13</td>
<td>+11% from 2012-13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total M.D. Graduates</th>
<th>Total Medical Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,954</td>
<td>1,045</td>
</tr>
</tbody>
</table>

### FALL 2014 ENTERING CLASS

<table>
<thead>
<tr>
<th>Total Initial Med Student Applications</th>
<th>Total Interviewed</th>
<th>Total Admitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,433</td>
<td>842</td>
<td>240</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Average GPA</th>
<th>Average MCAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.77</td>
<td>31.50</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>128</td>
<td>112</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tuition and Fees (Hith. Ins. Inc.)</th>
<th>Resident</th>
<th>Non-resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>$16,076</td>
<td>$28,176</td>
<td></td>
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</tbody>
</table>
RESIDENTS AND FELLOWS

Total Residents 756
+5% from 2012-13

Total Fellows 160
-1% from 2012-13

% of Grads Satisfied with Ed. Program 95.6%

2014 Graduates’ Top 5 Specialty Choices
13% Internal Medicine
10.8% Pediatrics
9.1% Anesthesiology
8.2% Surgery
7.4% Diagnostic Radiology

PATIENT CARE

Total Outpatient Visits

Unsponsored Charity Care

UT Harris County Psychiatric Center Admissions
RESEARCH

Medical School Research Expenditures*

$126,391,448
$127,687,758
$129,939,638
FY12 FY13 FY14

*Includes operating expense, indirect cost recoveries and capital purchased

Total Grant Proposals

882
877
957
FY12 FY13 FY14

Total Contract and Grant Awards

624
628
618
FY12 FY13 FY14

DISCOVERIES

Invention Disclosures

56
51
46
FY12 FY13 FY14

New US Patent Applications

29
46
40
FY12 FY13 FY14

Licenses/Options Executed

18
12
25
FY12 FY13 FY14

Licenses and Options Generating Income

77
75
84
FY12 FY13 FY14

US Patents Issued

5
7
20
FY12 FY13 FY14

Startup Companies Formed

2
2
3
FY12 FY13 FY14
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Assistant Dean for Community Affairs and Health Policy

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Assistant Dean for Educational Programs

Allison Ownby, Ph.D.
Assistant Dean for Educational Programs

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Assistant Dean for Healthcare Quality

Pamela Promecene-Cook, M.D.
Assistant Dean for Graduate Medical Education

Julia Shelburne, M.D.
Assistant Dean for Graduate Medical Education

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UTHealth Development Board
Wendy Bernstein, Chair,
Medical School Advisory Council

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Kirt Walker, M.D., ’78, Treasurer
Victoria Regan, M.D., ’87, Past-President
Lisa Armitige, M.D., ’98, Secretary
Incoming Dean Dr. Barbara Stoll leads 2015 commencement speakers Jennifer Kerr and Angelica Garcia as UTHealth President and Medical School Dean Giuseppe Colasurdo follows.