History and Legacy: University of Tennessee Graduate School of Medicine

Spirit of exploration... Passion for teaching... Compassion that restores

Dr. Joe Johnson

President Emeritus, University of Tennessee



No substitute can be found for extraordinary people who diagnose, treat, research and teach.

The UT Graduate School of Medicine is its people. It is not a building. It's not an effort. It's not even its own mission.

The Graduate School of Medicine is a group of people whose combined efforts continue to be an asset to

this community, even in a challenging economy and changing healthcare environment. They adapt to change and are aggressive in recruiting eager, intelligent and devoted resident and fellow physicians. They are forward thinking and plan for the future of medicine. The people at the UT Graduate School of Medicine have walked across history to build a legacy of compassion and exploration.

What is the UT Graduate School of Medicine? It is the faculty physicians, dentists, residents and fellows who provide high quality care to us, the people of East Tennessee. It is the doctors who choose to stay in the region to practice medicine after they've completed their residency or fellowship training here. It is the researchers who are active in projects that yield new and promising diagnostic procedures and treatment processes.

The Graduate School of Medicine is no more and no less than its reputation, which garners respect by the performance of its people. It is an irreplaceable healthcare, research and teaching resource for our region.

Welcome to the UT Graduate School of Medicine.



INTRODUCTION

Legacies are gifts. Some fit into boxes, but most are intangible. Legacies can be inheritance or influence. Expectation or experience. Power or the power of knowledge.

A legacy reflects the past and influences the future. It lives in spotlights on building fronts and in the eyes of a newborn. Even without a tangible presence, a legacy directs us. It moves us.

Legacies shape the world and our own communities, but legacies aren't simply given. They're created. Hewn. They are forged through the heat of life with a cool eye toward tomorrow.

The legacy of the University of Tennessee Graduate School of Medicine is the spirit of exploration, passion for teaching and compassion that restores. It is demonstrated through improving the health of our neighbors, influencing the direction of healthcare and impacting the lives of people around the world.

The legacy is decades in the making. For more than 50 years, the men and women at the Graduate School of Medicine have sought answers to medical mysteries. We've educated thousands of young physicians and dentists who are now caring for their own patients. Our medical professionals reach out to provide assistance locally and all over the globe, and they manage busy practices right here.

The Mission of the University of Tennessee Graduate School of Medicine

As part of the University of Tennessee Health Science Center, the University of Tennessee Graduate School of Medicine subscribes to a four-fold mission of excellence in education, patient care, research and service.



OUR HISTORY: THE BUILDING OF A LEGACY

The legacy we are building in medical education and research at the University of Tennessee Graduate School of Medicine spans decades and will impact generations. We use our mission of education, research, patient care and public service as a foundation to continually strengthen our legacy of exploration, teaching and compassion.

1800s-1960s: Early Medical Education and Successful Research

In the late 1800s, a young University of Tennessee opened a medical college, and decades later, in 1956, the University of Tennessee Memorial Research Center and Hospital unboxed its first microscope. Not many years passed before we began educating others. In 1963, the Memorial Research Center and Hospital was designated a graduate and postgraduate training center. Our researchers made international headlines with their groundbreaking research in cancer, heart disease, birth defects and blood disorders and became one of a few centers in the nation to test L-Dopa for the control of Parkinson's disease symptoms.

1970s: Changes in Research and A First for Tennessee

In the 1970s, we garnered lessons from our past and expanded our research techniques to reach closer to the patient. During this decade, our research emphasis added clinically applied research to our biomedical efforts. We also continued to build on our history of educational excellence, and in 1973, the predecessor to the UT Graduate School of Medicine, called the Clinical Education Center, accepted its first students to support an effort to train physicians for rural areas. We broke new ground by offering the state's first Family Medicine residency education program.

1990s-Today: The Legacy Continues

This legacy of progressive research and education was strengthened in 1991, when the UT Board of Trustees approved establishment of the UT Graduate School of Medicine to combine clinical medicine and translational research to become an academic medical center. Today, we use methods in education and research that we've honed over the past five decades to pursue excellence in medical education and research that impacts the quality of the nation's healthcare...and quality of life for each of us.

Debbie L. Diddle

Deborah Diddle, CPA



My history with the UT Graduate School of Medicine spans three generations. A.W. Diddle, M.D., was my fatherin-law. In 1956, he started the obstetrics/gynecology residency program at the Graduate School of Medicine. A.W. believed deeply in the value of education and taught resident physicians for more than four decades.

Years later, my son, Wes Diddle, completed clinical rotations at the UT Graduate School of Medicine, and even my husband benefits in

his orthodontic practice from the ability to interact with the dental and oral and maxillofacial surgery residency programs.

So you see, three generations connect me to the UT Graduate School of Medicine. The institution has been a part of my family every day for more than 40 years.

And it is a part of your family, too. The Graduate School of Medicine brings to our area promising young doctors, skilled teaching physicians and inquisitive researchers, who combine their unique perspectives to provide better healthcare for you, your family and neighbors. In fact, there's a good chance your physician learned or teaches at the UT Graduate School of Medicine. The institution also enriches our community through advanced research funding and collaboration with Oak Ridge National Laboratory and the University of Tennessee, all to improve healthcare for you.

Today's UT Graduate School of Medicine brings together the best of many worlds...and many minds, which means better healthcare for you. It has touched my family for three generations. Today, it touches yours.

THE LEGACY UNFOLDS

Our legacy is grounded in our mission, and we are as committed today to our mission of education, research, patient care and public service as we were in our early years. Our legacy becomes more deeply rooted as we use the lessons of the past five decades to enrich our instructional methods, research skills and care for our patients.

Just look how our mission is woven throughout our legacy:

Education

More than 200 faculty physicians and about 180 volunteer faculty embrace their responsibility to provide the best possible education to our 250 or so students and resident and fellow physicians. This incredible education is carried out every day in 12 residency programs and nine fellowship programs, including

Residency Programs

Anesthesiology Family Medicine General Dentistry General Surgery Internal Medicine Nuclear Medicine Obstetrics and Gynecology Oral and Maxillofacial Surgery Pathology Radiology Transitional Year Urology

Fellowship Programs

Cardiovascular Disease Cytopathology Emergency Medicine Oral/Head and Neck Surgery Pulmonary Medicine Sports Medicine Surgical Pathology Surgical Critical Care Vascular Surgery

Lectures as the only means of instruction are a thing of the past. Today, our teaching faculty build on decades of knowledge and experience and use not only discourse but also the most effective tools of instruction, including simulation and electronic media. The result is a richer education experience for students, residents and fellows and ultimately better prepared physicians and dentists.

The UT Graduate School of Medicine is committed to attracting the most talented faculty, residents, fellows and researchers for its programs. Funding through academic endowments, including endowed chairs and fellowships, helps us remain dedicated to development of academic advancements and continuous research resources.

Alfred D. Beasley, M.D.

Professor Emeritus



In 1956, when the University of Tennessee Memorial Research Center and Hospital opened, the physicians who were recruited chose to leave established institutions to face need and opportunity in Knoxville. They were pioneers of medicine. They were physicians who brought an extraordinary level of dedication to teach others to provide exceptional care to the people of this region and who wanted to make a difference in the field of They sacrificed medicine.

financial riches for wealth of knowledge and achievement. They practiced medicine for noble causes.

These early pioneers of medicine introduced what makes today's UT Graduate School of Medicine a unique resource in healthcare: Education. Because of their skill in education, research and clinical expertise, they were recognized as faculty, and the legacy of education was established. Today, no other medical institution in our area matches our commitment to teaching and learning.

I arrived here as an intern more than 50 years ago, and since that day, it has been my pleasure to witness and participate in the evolution of the UT Memorial Research Center and Hospital to the dynamic academic institution of today. The pioneering spirit that brought the first medical professionals to a fledgling enterprise in East Tennessee is thriving, and the pioneer mantra continues: Discover. Educate. Persevere.

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Education (continued) Medical Simulation Center

Simulation has become a significant component of the education and training of healthcare teams, including physicians, nurses, fellows, residents and others. At the UT Graduate School of Medicine Medical Simulation Center, simulation presents a risk-free environment where the welfare of patients is not at stake and allows learners to be immersed in the challenges of patient care under the supervision of expert staff physicians. Using virtual reality, complex operations are simulated and surgeons objectively evaluated. Simulation provides performance metrics and feedback to learners to assist in assessment and improvement of clinical and technical skills.

Furthering its legacy, the UT Graduate School of Medicine is committed to this rapidly evolving component of healthcare training. We know the brightest and best medical students are attracted to the availability of simulation training when choosing a residency or fellowship program. And equally important, we understand that it ultimately enhances the quality and safety of care for the entire community and region.

Research

From our beginnings in 1956 through today, our research endeavors have remained as rigorous as they are personal. Strengthening our legacy, we research to help people. To give voices and faces to diseases that ravage families and steal hope.

Because our practicing physicians, residents, fellows and students are involved in research, we are able to provide more advanced and new medical treatments, attract brighter physicians, advance mankind's health and tackle the most difficult of medical problems. We have grown in our knowledge and skills and today conduct research that does not stop in the laboratory. The legacy we are building in research is of influencing healthcare by moving findings from the lab to the patient.

Through our spirit of exploration, we are

- Looking for better ways to manage pain
- Finding how to control blood clotting
- Understanding how aspirin works on the heart and blood vessels
- Learning how cancer therapy stops and kills cancer cells
- Identifying medicines that can slow or stop the destruction of Huntington's chorea, amyloidosis and Alzheimer's diseases
- Improving the way people understand information the medical community provides

Scott Stevens, M.D.

Professor, Department of Surgery



After completing my surgical residency at the UT Graduate School of Medicine in 1989, I decided to pursue fellowship training in the field of vascular surgery. The comprehensive care of damaged and diseased blood vessels is a challenging specialty and allows for unique and far-reaching research opportunities.

I returned to the UT Graduate School of Medicine and University of Tennessee Medical Center in 1992 to begin my surgical practice. I

knew the institutions would encourage development of better treatments for vascular injury and disease, and I knew that here, I could lay ground for a legacy I hope to leave.

I was appointed director of the Vascular Research Laboratory, and through the continued support of the Graduate School of Medicine, the laboratory is rapidly becoming a leader in the development of cutting-edge technology and gaining national recognition in the field of vascular medicine.

Similarly, the divisions of Vascular and Endovascular Surgery as well as the UT Aortic Center maintain a tradition of clinical and research excellence, continually striving for improved treatment outcomes and quality of life for our patients. It's a tradition decades in the making.

Through this work, I strive to build a legacy of unsurpassed excellence in the care of patients with vascular pathology. With the UT Graduate School of Medicine's continued financial support, medical training, educational programs and community outreach, this legacy hopefully will affect generations to come.

Research (continued)

- Applying advances in medical genetics to today's patient problems
- Using animal- and computer-based models to bring therapies to patients faster
- Discovering biomarkers to help PET and CT scans identify problems earlier and more accurately
- Defining and treating what causes blood vessels to block
- Providing evidence-based care for critically ill patients using information discovered in the laboratory
- Building new organs and tissues using nanotechnology and engineering and
- Impacting the causes, complications and treatments of obesity in East Tennessee.

Our diverse research reflects the healthcare needs of our community, country and world, and it's conducted right here in East Tennessee. This small pocket of the globe is rich in research expertise, and we engage in that fertile soil of discovery. For more than 50 years, the dedicated physician scientists and basicscience researchers at the UT Graduate School of Medicine have partnered with those at the University of Tennessee, Knoxville, the UT College of Veterinary Medicine and Oak Ridge National Laboratory to translate the discoveries made in the laboratories into solutions for us all. To us, it's personal.

Patient Care

An important part of the mission of the UT Graduate School of Medicine is providing compassionate and experienced patient care. In creating a legacy of compassion that leads to improved health for the people we serve, we provide that care using the experience of our past combined with technologies and treatments of today. We believe the best practicing



physicians and dental professionals never stop learning.

The UT Graduate School of Medicine provides patient care in a variety of specialties that annually provide more than 35,000 patient visits. These specialties include

- Family Medicine
- Obstetrics/Gynecology

• Genetics

• Internal Medicine

Our patient care settings offer comprehensive services and programs under one roof within the University of Tennessee Medical Center. Our department of Family Medicine has embarked on constructing a new, multidisciplinary facility to meet the needs of our region.

The Obstetrics/Gynecology and Internal Medicine patient centers provide for about 9,000 patient visits each year, supported by close to 70 physicians, residents and other medical professionals. Specialty services include colposcopy, contraception and high-risk OB.

The UT Genetics Center is the only metabolic center for the 34 counties of East Tennessee, and it serves as the Sickle Cell Center for middle and upper East Tennessee. The Genetics Center offers specialized laboratory services and clinical genetic care.

Public Service



Public service is just part of the norm for our faculty and something essential to a strong legacy. Physicians, residents and fellows use their expertise to help families across town and across the globe as one way to impact the lives of our fellow man. As medical and dental professionals, we see the need and ardently meet it:

- Our Sports Medicine fellows pace the sidelines of many Knoxville-area high school football and basketball games and give medical attention when the need arises.
- Each August, UT Lady Vol players choose the colors of their mouthguards, made exclusively for them by dentists in the General Dentistry residency program.

- Our faculty physicians volunteer at Knoxville Area Project Access, the InterFaith Clinic, Middle East Tennessee Emergency Response System and other regional organizations.
- Our dedicated faculty also go when the need arises to help people in all parts of the world, such as Indonesia, China, Brazil, Guyana, Albania, Haiti and El Salvador. When possible, residents and fellows accompany the faculty physicians and come home having gained a wider world view of medicine.

Preston Medical Library

Our community support doesn't just extend to physicians giving freely of their expertise. It also includes an invaluable resource offered right here that reaches across all economic and geographic boundaries. Preston Medical Library

assists healthcare professionals at the UT Graduate School of Medicine and the University of Tennessee Medical Center as well as those from hospitals and medical groups across the region and nation. This nationally recognized academic medical library also is an invaluable resource for other professional groups, including researchers, pharmacists and attorneys.



For more than 20 years, Preston Medical Library has offered a unique service to the community—the Consumer and Patient Health Information Service. Those seeking health information need only contact the library, and our professional medical librarians will conduct confidential research on their behalf free of charge.

Soon, Preston Medical Library will expand to open the Health Information Library. Located in the University of Tennessee Medical Center's Heart Hospital, the center will be a regional resource for health-related information, education and scholarly research and assistance. On-site services will be free of charge to all patrons, including patients and their families, physicians, nurses, residents and fellows and community members.

Mike Edwards

President, Knoxville Chamber



An economically healthy region has sophisticated and broad healthcare resources. Our region has that through the UT Graduate School of Medicine, and it's in part because of the legacy of the Graduate School of Medicine that the future of our region continues to be vibrant.

For 50 years, the Graduate School of Medicine has attracted the best specialists and subspecialists through its education programs, research initiatives and patient care opportunities. During their residency and fellowship training, young doctors

experience what this region has to offer, and many fall in love with it. They choose to establish medical practices right here, and as a result, the healthcare options in our region continue to grow and expand.

As its doctors and dentists work to improve our health, the Graduate School of Medicine also impacts the health of our economy. It creates jobs, tax revenue and direct spending; plus, it attracts employers to our region, bringing yet more jobs, opportunities and a stronger economy.

We choose to live here for our own personal reasons. The beauty. The climate. The sports. For me, I love all of the above but mostly the people. I also appreciate the incredible healthcare resources we have. Although the health of a community can be revealed in many ways, few are more important than its economic health and healthcare resources. The UT Graduate School of Medicine helps ensure a healthy future for our much beloved region.

Economic Impact



The UT Graduate School of Medicine is aggressively building a legacy of spirit of exploration, passion for teaching and compassion that restores shown through improved health in the region, influence on the direction of healthcare and impact on the lives of people. How does that legacy affect the people of East Tennessee and the southeast? Why is the UT Graduate School of Medicine important to you and to this region?

You might say it provides you and friends or family with quality healthcare. You'd be right.

You might say researchers here continually investigate cures and treatments for today's healthcare struggles. You'd be right.

You might mention the public service our physicians, dentists and medical librarians give to our region every day. You'd be right.

You might think of the many talented physicians who come here to practice medicine. You'd be right again.

Would you mention economic impact?

In naming reasons the UT Graduate School of Medicine is important to you, would its impact on the economy of the region be one?

Wesley White, M.D.

Director, Laparoscopic and Robotic Urologic Surgery



I was 19 years old when I took a summer job and met the people who would change my life. That summer, Drs. Daniel Green, Robert Bertoli and John Bell welcomed an inquisitive teenager who was assigned as a summer employee to their radiation oncology and surgical oncology departments at the UT Graduate School of Medicine. Their generosity opened my mind and many doors that made my career in medicine possible.

I spent time throughout college with Dr. Bell and others here. One day, I met Dr. Fred Klein, chief of the division of Urologic Surgery, and I knew my place in medicine was in that specialty. Dr. Klein encouraged me to have a voice in the development of the first urology residency program at the Graduate School of Medicine.

After fellowship, I returned to the Graduate School of Medicine to practice medicine in urology and continue to grow the residency program. I like that this institution both fulfills an academic mission and cares for patients. It's a legacy I want to be part of, while building my own.

I view my legacy as one of cultivation. The mentors of my early years fostered my growth in medicine, and this experience engendered in me a degree of ownership and pride. Giving back to the Graduate School of Medicine is both my obligation and my reward.

Economic Impact (continued)

The impact we have on our region is immense. Look at the results of our physician training programs: Almost one-half of the physicians and dentists who train in our residency and fellowship programs stay in Tennessee to practice. And more than 90% of those practice medicine in the field of Primary Care. The UT Graduate School of Medicine gives healthcare resources to communities in this state. We impact the lives of our neighbors by giving them doctors and dentists who provide experienced care in their communities.

In sheer numbers, the economic impact of the UT Graduate School of Medicine is possibly surprising, positively impressive:

- The UT Graduate School of Medicine generates a \$40 million economic impact in our community and state every year, as a result of our physician and dentist graduates.
- The institution yields an additional \$20 million annually through our research endeavor.
- Combined with our hospital partner, the Graduate School of Medicine generates a total economic impact to the region of \$615 million.

This economic impact breathes life into our communities through

- Job creation
- Tax revenues and
- Direct spending.



LEGACY AND FUTURE

We believe "excellence" is not a destination but a continual journey. We believe every year that we strive for excellence adds another rich laver to our legacy. Through our history of passionate research. dedicated education, experienced patient care and devoted public service, the people of the University of Tennessee Graduate School of Medicine have planted the seeds of an enduring legacy that is growing and strengthening and changing the face of healthcare for our region.



We bring together the best that medical education has to offer:

- Close to 400 faculty and volunteer physicians who practice medicine every day but also have a passion for teaching
- A total of 12 residency education programs
- Fellowship opportunities in nine subspecialties
- Continuing education programs that serve more than 600 professionals every year
- Medical Simulation Center, which offers immersive hands-on skills training
- Preston Medical Library and its new Health Information Library, both of which assist professionals and families, alike.

To enhance these important programs and ensure continued impact on healthcare for our region, the UT Graduate School of Medicine has embarked on several endeavors that will allow community-minded individuals to fund key areas within our institution. We've created opportunities for support through funding of

- Endowments of chairs and fellowships
- Modernization of technology and facilities
- Research initiatives
- Learning resources and capabilities and
- Certified educational opportunities.

Everything we do, every choice we make, impacts the legacy we are creating. For more than 50 years, the UT Graduate School of Medicine has chosen to build a legacy of spirit of exploration, passion for teaching and compassion that restores demonstrated through improved health for our neighbors, influence on healthcare and impact on the lives of people near and far. We're accomplishing that through quality education for physicians, important research that brings healing, experienced patient care and community support at a grassroots level.

We've lived a history of changing healthcare for our region's benefit. We're proud that our legacy has been and will be evident for generations.

The people at the UT Graduate School of Medicine would be happy to discuss our programs and how you can help them continue and improve.

For more information about the opportunities you have to support this legacy, please contact the Office of Development at the UT Graduate School of Medicine, 865-305-6611, development@utmck.edu, http://gsm.utmck.edu/legacy.

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