

SPRING 2014

Frontiers

The University of Tennessee Medical Center & the University of Tennessee Graduate School of Medicine

Advanced Orthopaedic Center of Excellence

Orthopaedic Services and
Expertise at the Region's
Only Academic
Medical Center



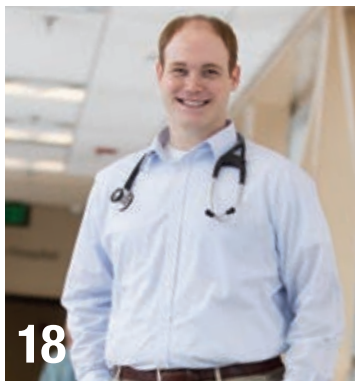
Tom Palmer, Orthopaedic Patient



4 **Cover Story**
The Advanced Orthopaedic Center of Excellence
Joins The University of Tennessee Medical Center's Elite Centers of Excellence



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The University of Tennessee Medical Center and the University of Tennessee Graduate School of Medicine *Frontiers*

Spring Issue 2014

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Frontiers is a magazine produced by The University of Tennessee Medical Center and the University of Tennessee Graduate School of Medicine. It is designed to showcase the unique benefits of having an academic medical center in East Tennessee.

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Dear Alumni & Friends,

The University of Tennessee Medical Center and UT Graduate School of Medicine are committed to providing the people of East Tennessee with unparalleled patient care and a comprehensive array of services, from sophisticated medical treatment to education and advanced scientific research.

As an academic medical center, educating physicians who are about to begin their medical practice as well as physicians who have practiced for years is a central part of what we do through residency training programs and continuing medical education. We recently established a community of faculty physicians known as the Academy of Scholars whose goals are to promote excellence in education, patient safety and lifelong learning.

Also at the medical center you'll find people dedicated to our values, people driven by our vision and by an unflagging passion for the work they do. To honor them, we've produced a televised tribute to the tremendous difference they make in the life of the community. This issue of *Frontiers* also shares with you some of the remarkable stories of patient care, community education and research that unfold here.

We are pleased to announce our sixth Center of Excellence. Launched early this year, the Advanced Orthopaedic Center will expand, coordinate and develop the orthopaedic care and treatment we provide. Among much else, it will help meet the community's growing need for joint replacements and will continue to work in partnership with our Level I Trauma Center.

In every aspect of what we do, we're committed to enhancing our patient care and associated services so they're of the greatest benefit to all our patients, those in the communities we currently serve and those farther away. As healthcare needs evolve, the medical center will continue to look for innovative ways to expand and improve the services we offer.

With gratitude and pleasure we thank you, our patients, families and community members, for allowing our dedicated team of professionals to do what they do best: provide care you can count on.

We appreciate your support and look forward to providing you and your family with the healthcare you need.

Sincerely,

Joseph R. Landsman, Jr.
President and Chief Executive Officer
University Health System, Inc.

James J. Neutens, PhD
Dean
UT Graduate School of Medicine



Tribute

To learn more
about our tribute
to those who
serve every
day, visit
bit.ly/UTTribute

Our Mission | To serve through healing,
education and discovery

We Value | Integrity • Excellence • Compassion
Innovation • Collaboration • Dedication

Our Vision | To be nationally recognized for excellence in patient
care, medical education and biomedical research.



Scott Smith, MD, medical director of the Advanced Orthopaedic Center and Ryan Childress, PT, discuss with a patient possible treatment options.



Advanced Orthopaedic Center of Excellence

Joins The University of Tennessee Medical Center

To meet the fast-growing needs in East Tennessee for joint replacements, fractures, traumatic injuries and sports-related issues, The University of Tennessee Medical Center recently announced the formation of the Advanced Orthopaedic Center.

The center represents an expansion of the medical center's nationally recognized orthopaedic services. It will provide a full spectrum of patient care, community education, and diagnostic and treatment modalities for orthopaedic concerns.



For more information, visit
utmedicalcenter.org



“We’re pleased to announce the expansion of our orthopaedic services to the Knoxville community through new programs and community outreach. The need in our region for orthopaedic care continues to increase. The Advanced Orthopaedic Center’s multidisciplinary approach includes collaboration between physicians and patients throughout diagnosis, treatment and recovery.”

- Becky Ashin, vice president of the Advanced Orthopaedic Center





“The Advanced Orthopaedic Center at The University of Tennessee Medical Center will allow us to improve the quality of life for so many in our community who have orthopaedic needs,” says Joseph R. Landsman, Jr., president and CEO of The University of Tennessee Medical Center. “We’ll do this by dedicating a team that works closely together to analyze the latest research, advances and treatments in the field to determine the best care plan for our patients.”

The medical center has more than doubled the number of knee and hip replacements it performs in the past five years and has encountered a sharp rise in the number of patients suffering from arthritis, traumas, sports injuries and broken bones. Over the past year several specialists have been added to the orthopaedic group. These surgeons are specially trained in trauma care and work seamlessly with the medical center’s Level I Trauma Center. The University of Tennessee Medical Center now has five operating room suites dedicated to orthopaedics, and nationally recognized preoperative education classes have reduced patient infections to well below the national average. The new Center of Excellence was the first orthopaedic center in East Tennessee to be awarded certification for knee and hip replacement by The Joint Commission and designated by BlueCross BlueShield as a Blue Distinction Center for Knee and Hip Replacement for demonstrating a commitment to the highest quality of care and better outcomes.

“The center’s vision is to improve quality, enhance access, reduce costs and expand services for patients seeking care of musculoskeletal injuries or disease,” says Becky Ashin, vice president of the Advanced Orthopaedic Center.

An enhanced orthopaedic center will allow The University of Tennessee Medical Center to achieve its mission of providing patients with healing, comfort and personalized orthopaedic care.

The Advanced Orthopaedic Center is comprised of the following:

- The University Joint Replacement Center
- The University Fracture Care Center
- The Orthopaedic Trauma Service
- Outpatient and arthroscopy surgery services

Specialty services offered include the following:

- Foot and ankle
- Fracture care
- Hand and upper extremity
- Hip resurfacing
- Total hip replacement
- Total knee replacement
- Orthopaedic trauma
- Education and prevention services (osteoporosis, falls prevention and surgery preparation)

Getting Back to Life

Tom Palmer Took the Next Step, Helped by the Advanced Orthopaedic Center By Bonnie Horner

Six months ago, Tom Palmer relied on crutches to walk. He even started to consider life from a wheelchair after his arthritis worsened by the day. Tom came to the realization this would be the extent of his life moving forward if something wasn't done to relieve his arthritic pain. Tom's lack of mobility was a far cry from the life he once lived as an active outdoorsman and competitive athlete. Basketball, baseball, skiing, diving, football, biking, triathlon... you name it, he lived to be active. But as the years went by, he developed severe arthritis in his joints which made simple tasks like walking very painful.

Tom and his family always loved the outdoors and frequently hiked in the nearby Great Smoky Mountains. The Palmer family's once active life had been replaced by a sedentary routine and watching movies.

At age 53, Tom visited the Advanced Orthopaedic Center at The University of Tennessee Medical Center, which would ultimately give him back the life he remembered.

"When I hobbled in to see Michael Holt, MD, at the Advanced Orthopaedic Center last October, I didn't want to get my hopes up that my knees could be fixed," says Tom. "Less than two years earlier I'd been told that I wasn't a candidate for knee replacement surgery. As each month passed, my pain and ability to get around had gotten significantly worse. I'll never forget the flood of relief and the teary-eyed smile my wife and I shared when Holt told us he could perform double knee replacement surgery." At their first consultation, Holt realized the severity of Tom's condition and made special arrangements to get him into surgery as soon as possible.

After a few days in the dedicated Joint Replacement Center and a little more than a week of rehabilitation, Tom was back at home in Maryville continuing physical therapy appointments.

Five weeks after double knee replacement surgery, Tom and his son hiked more than five miles up to Elkmont. Of course, his competitive spirit had a part in his success! "They were very proud to show off their pictures crossing streams and climbing boulders," his wife recalls.

Experience Excellence: You'll Feel the Difference

The holidays were an extra treat for Tom and his family as they enjoyed walking around Dollywood—something they weren't able to enjoy in a long time. New Year's Day was a great start to 2014. Tom and Janelle Palmer hiked the Abrams Falls trail in the Great Smoky Mountains National Park in less than two hours. "The sign at the trailhead said, 'Plan on taking three to four hours to complete this round-trip hike,'" Tom recalls. Needless to say, they reveled in their achievement.

Tom's life picked up where it left off. He exercises five times a week and swims at least three miles. "Hiking, biking, swimming, working out, dancing...I've got my life back! Not only am I able to enjoy life again, they've given our whole family our life back! Thank you! Thank you! Thank you!"



“Hiking, biking, swimming, working out, dancing...I’ve got my life back! Not only am I able to enjoy life again, they’ve given our whole family our life back! Thank you! Thank you! Thank you!”

Our Experts Answer Your Important Medical Questions

ask the EXPERT

The Weekend Warrior's Guide to Preventing Injuries

Philip McDowell, MD, is an orthopaedic surgeon who specializes in restoring joint function and returning patients to their best possible lifestyles. His professional interests within the field include sports medicine (particularly arthroscopy); total knee, hip and shoulder replacement; and trauma.

Get hurt playing ball last weekend? Or moving boxes from the attic? You're not alone. People with tendon tears, joint sprains, bone fractures and other fitness-related injuries are increasingly walking into emergency rooms across the country. Often these patients are referred to as "weekend warriors."

According to the American Academy of Orthopaedic Surgeons, one in seven Americans suffers from an orthopaedic impairment.

We asked one of our specialists to offer advice on how to avoid the most common injuries and what to do if you're sidelined by one.

Q: How can I tell whether I have sore muscles or an injury?

A: As a rule of thumb, if you feel sharp or stabbing pain (as opposed to muscle soreness) during activity—stop! If the pain doesn't go away after you've applied ice and taken a few days off, seek medical advice.

Q: How should I prepare for exercise or strenuous activity?

A: If you're planning a Saturday afternoon filled with 18 holes of golf, a game of basketball with friends, or walking or cycling, make sure to do warm-up exercises first and then cool down afterward. If your exercise goal is to increase your flexibility, perform stretches after the warm-up but before the strenuous exercise. If your goal is to maintain your flexibility, stretch after the strenuous exercise. Use good body mechanics when stretching to prevent injury. Typically, you want to hold the stretch for 20 to 30 seconds and repeat it three or more times.

Q: How do I protect my elbow joints if I play a repetitive sport such as golf, tennis or racquetball?

A: Repetitive motion can cause tendinitis (inflammation) on either side of the elbow. First, ask a coach or a pro to make sure your technique is correct. One wrong move repeated hundreds of times can easily cause injury. It usually doesn't require surgery, but you may need physical therapy and possibly a brace or splint while you're taking time off to heal.

Q: How do I protect my knees when I'm lifting something heavy?

A: The cartilage in your knees is sensitive and can tear if proper lifting routines are not used. Anyone who squats repeatedly or moves boxes over the weekend can be susceptible to torn knee cartilage. Protect your knees by building up your quadriceps with cycling or strengthening exercises. You should also avoid any turning or twisting of your knees when carrying heavy objects.

Words of Wisdom

Orthopaedic injuries can affect individuals of any age, gender or physical condition. Listen to your body - if something hurts, stop and rest. Orthopaedic complaints are the top reason patients seek medical care.

Speak with your primary care physician if you have questions related to your health. If you need a primary care physician, call 865-305-6970.

Health Insurance MARKETPLACE

Breaking Down the Pieces

Here's a quick rundown on the most important things to know about the Health Insurance Marketplace, sometimes known as the health insurance exchange.

These benefits include coverage for things like:

- Doctor visits
- Prescription drugs
- Hospitalization
- Maternity and newborn care
- Preventive care

March 31, 2014, is when marketplace open enrollment for 2014 ends. Open enrollment for 2015 is from November 15, 2014, to January 15, 2015.

Penalty

What's the penalty for not signing up for health care coverage? In 2014 you'll pay a penalty of \$95 per adult and \$47.50 per child or 1% of your income, whichever is higher. That will climb to \$695 per adult or 2.5% of income by 2016.

Plans can offer other benefits, like vision, dental, or medical management programs for a specific disease or condition. As you compare plans, you'll see what benefits each plan covers.

How the exchanges will work. Plans will be grouped by tier—platinum, gold, silver, and bronze. The average cost of a silver plan will be \$328 per month, but the government will kick in subsidies for those in need.

If you enroll by March 31, 2014, you won't have to pay the penalty for the period before your coverage began.

People who would have to pay more than 8% of their income for health insurance, and low-income adults who live in states that aren't expanding Medicaid, need not pay the penalty.

You're considered covered if you have Medicare, Medicaid, CHIP, any job-based plan, any plan you bought yourself, COBRA, retiree coverage, Tricare, VA health coverage or certain other kinds of health coverage.

To Enroll:

Visit the Health Insurance Marketplace at www.healthcare.gov or call the 24-hour CMS consumer call center at 800-318-2596.

The Medical Center participates in two of the available marketplace insurance plans:

- BlueCross BlueShield of Tennessee
- Humana

Vincent,
Patient Transport



LaStacia, Staff Nurse



Recognizing Those Who Serve

and Are Committed to Helping Shape the
Lives of Patients and Families Every Day



Alex,
Student Researcher



**Haley,
Catering**



**Rebecca, Volunteer
18 years of service**



**Tyler,
Maintenance**

The mission of The University of Tennessee Medical Center is to deliver excellent patient care. Without our team members, this would not be possible. We're grateful for those health professionals whose compassion and dedication to healing go above and beyond the demands of a job, invest their hearts, minds and years of training in a commitment few people would be willing to make.


Tribute
To learn more about our tribute to those who serve every day, visit bit.ly/UTTribute

Together we look forward to continuing our journey of providing excellence.



Tommie, Security



**Katie,
Patient Access Clerk**



An Evening In Orange

The sixth An Evening in Orange raised more than \$600,000 for the medical center's Emergency and Trauma Services. A record 750 friends and supporters were in attendance on January 11, and Cherokee Country Club's tennis courts were transformed into the streets of Paris at midnight. The cocktail reception included famous Parisian storefronts like Shakespeare & Co., Ladurée and Le Dôme, and the dinner scene was set with grand monuments such as the Arc de Triomphe, the Moulin Rouge and the Eiffel Tower. The event would not have been possible without our chairs, Terry and Regina Turner, and our Visionary Sponsors, All Occasions Party Rentals, Bandit Lites and University General Surgeons. We would like to thank them as well as our many other sponsors and guests. Proceeds will help expand our emergency department, including doubling the number of trauma beds in the region's only Level I Trauma Center.



To see more photos from the AEIO event, visit bit.ly/AEIO2014

News & Events



Betsey B. Creekmore is this year's recipient of the prestigious 1956 Award. The 1956 Award recognizes a community member who has not only made gifts to the medical center but also has helped to serve our mission and advocate our cause. Ms. Creekmore, a native Knoxville and associate vice chancellor emeritus of the University of Tennessee, was pivotal in the establishment of an endowment for the medical center's Pastoral Care Department and is a longtime patient and proponent of our family medicine program. When asked why she gives back to the medical center, Creekmore says, "The University of Tennessee Medical Center has become a model of the medical research facility it was envisioned to be when it opened in 1956. As an academic medical center it encourages great new ideas and bright young minds, and I truly believe in its distinction in this and as our region's Level I Trauma Center."

Volunteer Ambassadors Hit the Country Roads

There are many wonderful advocates for our campus in Knoxville, but in the truest sense The University of Tennessee Medical Center is a community institution, serving the healthcare needs of people in 21 counties of East Tennessee and training future physicians located across the state and beyond. Eddie Jessup and Debbie Diddle, both members of UT Graduate School of Medicine's Board of Visitors, have spearheaded a program to take the medical center's message beyond Knox County with the help of Volunteer Ambassadors. Our Volunteer Ambassadors will speak at community meetings and with leaders of their chosen counties to help the people in those areas understand the medical center's mission and how they can contribute. If you would like to become a Volunteer Ambassador, please contact the Office of Development at 865-305-6611 or development@utmck.edu.

Last June the medical center's Pastoral Care department was awarded a grant totaling \$165,000 to provide educational opportunities for community religious leaders addressing issues of faith and healthcare. Many spiritual leaders in the community find it difficult to guide their congregation members through the complexities of the medical process. With the use of the funds awarded it by the Trinity Health Foundation, the Pastoral Care Department will soon be offering seminars that address the spiritual and medical issues in topics such as trauma, cancer, cardiovascular disease, and self-care for the caregiver. The staff of the Pastoral Care Department is always available to serve patients and family members in need within the medical center, and it is their hope that through this program they can become a significant educational resource for spiritual caregivers and the broader community.



2014 Events

UT Graduate School of Medicine will host its inaugural Alumni Reunion April 25-26. The weekend will feature special guest speakers UT football coach Butch Jones and UT president Joe DiPietro as well as CME courses and social events.

The ninth annual TEE Up for Trauma Golf Tournament takes place on May 12 at Cherokee Country Club. In the course of its history, the event has raised more than \$300,000 for the region's only Level I Trauma Center. Event chair Andy Venable hopes to raise more than \$50,000 this year and host more than 120 golfers comprised of the community's leaders.


Support
To support these or any of our philanthropic efforts, visit bit.ly/dotheremarkable


Tickets
For more information and to purchase tickets, go to <http://gsm.utmck.edu/alumni2014> and bit.ly/UTTEEUP

5 minutes with a pharmacist

Expert advice from Troy Rebert, DPh



Troy Rebert, DPh, assistant director of Pharmacy; manager of University Pharmacy; and assistant professor at UT College of Pharmacy.

Pain is one of the most common reasons for patients to seek medical care, yet millions of Americans live with chronic pain. The most commonly used prescription for chronic pain is some form of opioid (narcotic). Because those effective pain medications also have side effects and the potential for abuse, it is often difficult for patients to get access to those medications. In 2011, Tennessee had the second highest prescription rate per capita for opioids in the country. It is important that opioid prescriptions balance improving quality of life against minimizing addiction, abuse and side effects.

As members of a multidisciplinary team, pharmacists are easily accessible to chronic pain patients who want to know how to properly take medications, what to expect and what questions to ask at their next appointment.

Pain Management Clinics

Q: What is a pain management clinic?

A: Tennessee state law defines a pain management clinic as a privately owned facility in which a physician or nurse practitioner under the supervision of a physician provide pain management services to patients. The prescriptions largely include narcotics, benzodiazepines and barbiturates and last for a period of more than 90 days.

Q: When is it appropriate for a patient to seek treatment from a pain clinic?

A: After a reasonable non-opioid-containing regimen has been tried

without pain relief, and medications such as acetaminophen (Tylenol), NSAIDs such as ibuprofen (Advil) or corticosteroids such as prednisone have proved insufficient.

- When the patient is diagnosed with chronic pain and no curative treatment is available. The pain can be characterized as chronic when it has caused a longer than expected healing time, has lasted for many months, or is associated with other chronic disorders, including arthritis, diabetes or cancer.
- When the patient is in need of a multidisciplinary assessment with access to clinical specialists.

Q: What are some characteristics of a high-quality pain management clinic?

A: The management of pain should feature a multimodal approach that includes many interventions, both pharmacological and non-pharmacological. Psychological and environmental aspects of each case should be examined.

When therapy begins, the provider should discuss goals in regard to the four A's: analgesia (pain control), activities of daily living, adverse effects and aberrant drug-taking behavior

5 Minutes with a Pharmacist provides clear advice about medication issues of interest to the people of East Tennessee.



UNIVERSITY PHARMACY

Your convenient, full-service hospital pharmacy available to patients and visitors.

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For your convenience:

- Fast, friendly service
- On-site delivery to patients leaving the hospital
- We bill most insurance and major medical plans
- Private counseling available from a pharmacist
- Medication therapy management services



Training & Education

Helps Physicians Give Back to Local Communities By Kandi Hodges

Jonathan Laymance, MD, is fulfilling his dream of being a rural family doctor while meeting the healthcare needs of East Tennesseans.

Jonathan Laymance, MD, grew up in Wartburg, in Morgan County, and always dreamed of being a family doctor. Now he's a board-certified physician, having completed the three-year family medicine residency program at UT Graduate School of Medicine.

While Laymance didn't return home to practice, he did join Roane County Family Practice in Harriman, near Wartburg, with four other physicians who are graduates of UT programs. As part of his residency training, he completed his four-week rural rotation there. He also rotated through other practices four weeks at a time for hands-on experience with pediatrics, surgery, psychiatry and many other specialties.

"The rural rotation allowed me to see firsthand that by practicing in Roane County I would still be able to meet the healthcare needs of people from Morgan County, and my dream would be realized," Laymance says.

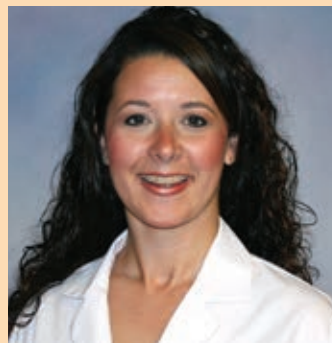
The patient population at his practice is primarily composed of residents from Roane, Morgan and Rhea counties—places that, according to statistics from the Tennessee Department of Health, are "health professional shortage areas" for primary and pediatric care. "The great thing about family medicine," Laymance notes, "is that we have the skills to care for all ages, from newborn to geriatric."

Reflecting on his training, he says, "I would say that the entire faculty had a hand in shaping me into the physician I am today. An efficient foundational curriculum was essential to mastering the breadth of knowledge required of a family physician." He feels well prepared for the cases he encounters in his rural practice: "My clinic training at University Family Physicians, as well as my hospital training, has been invaluable as I continue to practice in both the inpatient and outpatient settings."

The University of Tennessee Medical Center trains more than 200 physicians each year in 18 residency and fellowship programs. Graduates often stay in the East Tennessee region to practice; many simply enjoy the unique benefits of living and working here, and others want to give back to the communities where they were raised. Some stay even closer, practicing at the medical center and taking faculty positions with UT Graduate School of Medicine.

Alumni

Educating at an Academic Medical Center



Brigitte Messenger, MD, graduated from the anesthesiology residency program and is now an assistant professor in the Department of Anesthesiology. "I always thought I wanted my professional career to be within an academic medical center," she says.

"But it wasn't until I came here and was part of a great program that I thought, 'Yes, this is where I need to be.'"



Jaclyn van Nes, MD, a graduate of the obstetrics and gynecology residency program and now an assistant professor in the program, had a similar experience. She says she always felt the call to teach, and the faculty members who trained her shaped

her decision to teach here. "I saw how they were able to balance a busy private practice and a successful academic career, and I felt like working at the medical center would be my dream job," she says.



George Sneed, DO, an assistant professor in the Department of Pathology after completing both the pathology residency program and the cytopathology fellowship program, says the call to teach came when he realized how much he

enjoyed teaching as a resident.

"I liked teaching," he says. "The different opportunities, including tumor boards and working with medical students and other residents, felt comfortable. I knew I wanted teaching to be a part of my career as a pathologist."



To learn more about our Family Medicine campaign please visit bit.ly/FMCampaign

The Academy of Scholars

Advances the Boundaries of Medical Education By Kandi Hodges

The University of Tennessee Medical Center does more than provide cutting-edge treatment options performed by highly skilled physicians. Many of these doctors are also educators for the University of Tennessee Graduate School of Medicine, making us the only academic medical center in the region. These faculty physicians educate residents who are training within their specialties to be physicians. These individuals are capable of giving back their knowledge and skills to serve as role models to medical students and junior residents.



James Lewis, MD, Chair

is a surgical oncologist specializing in skin cancer, sarcoma and breast cancer. An associate professor in the Department of Surgery, he is also clerkship director for medical students and assistant program director of the general surgery residency.



Robert Craft, MD

is a professor in the Department of Anesthesiology. He is the department's vice chair and residency program director, and he directs departmental research, the neuroanesthesia section and the preoperative clinic.

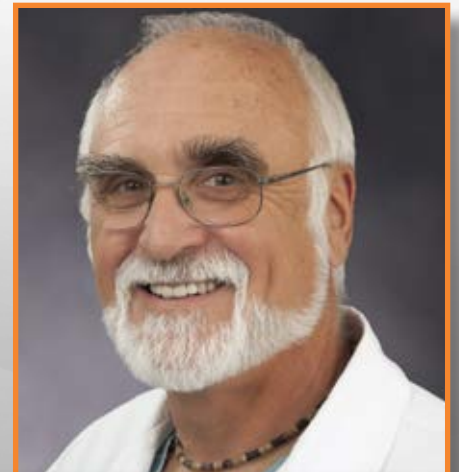
“I believe the importance of the Academy is that it serves to distinguish and recognize faculty members who have contributed greatly to the educational and investigative environment of the Graduate School of Medicine. Previously these individuals have been recognized at their departmental levels, but doing so at the institutional level serves to illuminate the importance of these roles to the success of the medical center.”

- Robert Craft, MD



Brian Daley, MD

is a professor in the Department of Surgery and a practicing surgeon in general surgery, nutrition, trauma and critical care at the medical center, a tertiary Level I Trauma Center. In addition, he serves as program director of the general surgery residency and surgical critical care fellowship programs.



Mitchell Goldman, MD

is a surgeon specializing in vascular and transplant surgery. A professor in the Department of Surgery, he is also the department's chair and assistant dean of research.

As part of our mission to be among the best in healing, education and discovery, the UT Graduate School of Medicine has formed an Academy of Scholars, a fellowship of faculty physicians who have shown leadership in medical education and research, such as Robert Craft, MD, an anesthesiologist who has been practicing and instructing at the medical center for more than 20 years and has directed the department's residency program since 2008.

He says, "I believe the importance of the Academy is that it serves to distinguish and recognize faculty members who have contributed greatly to the educational and investigative environment of the Graduate School of Medicine. Previously these individuals have been recognized at their departmental levels, but doing so at the institutional level serves to illuminate the importance of these roles to the success of the medical center."

The inaugural group of physicians earned membership through a review process by peers at other medical institutions to determine who best exemplified academic leadership on our campus. They are the beginning of a community of scholars dedicated to promoting excellence in medical education by establishing more and better opportunities to talk about scholarship and learning. These physicians find the benefits of preparing future healthcare providers rewarding and are driven to continue learning themselves by developing new curriculum or training on new technologies for training.

Mark Rasnake, MD, internist and program director of the internal medicine residency, says, "Being part of the Academy of Scholars gives me the ability to impact the care of so many people by ensuring a steady stream of well-trained physicians entering practice in our community. It enables me to shape the quality of healthcare delivered to far more people than I would ever be able to see as a non-teaching physician."

The inaugural members are charged with setting the Academy's direction—a task that includes inspiring all faculty physicians on our campus to join this community of educators as they advance instructional and learning methods, ultimately to provide the highest-quality medical education.

The first initiatives of the Academy are to focus on:

- Enhancing patient safety and quality of care
- Promoting scholarly activity, both internally and externally
- Developing new educational approaches to lifelong learning in medicine
- Recognizing and promoting excellence in teaching among faculty and residents

Academy member Daphne Norwood, MD, internist and director of the transitional year residency, says, "I want to promote the idea that what we do at the medical center in terms of patient care, research and educational methods is vital and should be shared with the world."



Kathleen Hudson, MD

is residency program director and an associate professor in the Department of Radiology. She specializes in women-related imaging such as mammography and is medical director of the University Breast Center.

Acade



Daphne Norwood, MD

practices internal medicine through inpatient care. She is an assistant professor in the Department of Medicine and director of the transitional year residency program.



Larry Kilgore, MD

is a professor and interim chair in the Department of Obstetrics and Gynecology and serves as director of the division of gynecologic oncology at the Cancer Institute. He specializes in services for patients with gynecologic malignancies.



Patrick McConville, MD

is an instructor in the Department of Anesthesiology and is involved in clinical care, resident education and research. He is also section head of the division of obstetrical anesthesiology.

my of Scholars

The Academy of Scholars has been founded on prior work by the Carnegie Foundation for the Advancement of Teaching, which is a U.S.-based education policy and research center.



Mark Rasnake, MD

is an assistant professor in the Department of Medicine, and the internal medicine residency program director. He specializes in infectious diseases and leads simulation training in preventing central-line-associated bloodstream infection.



Nikki Zite, MD

is an associate professor in the Department of Obstetrics and Gynecology and is program director of the OB/GYN residency program. She also directs resident education in contraception and family planning and is director of the complicated-contraception program at the resident clinic.



Protecting your skin with sunscreen can help reduce your risk of skin cancer.

Sun Screeners Program

Promoting Skin Cancer Awareness and Detection

By Kandi Hodges

A research study led by surgeons at The University of Tennessee Medical Center has resulted in an ongoing program to strengthen melanoma awareness and encourage East Tennesseans to get medical attention for skin lesions that may be cancerous.

The study sought to evaluate digital photography of skin lesions as an effective method of screening in the community. Participants provided brief health histories and then targeted lesions were photographed by a staff member and later were reviewed by a physician at the medical center. The study successfully identified patients who needed further medical attention for possible melanoma and, in some cases, led to proper diagnosis and treatment of skin cancer.

The study was conducted through SunScreeners, a program that provides skin cancer screening in more than 24 counties in East Tennessee. Georgette Samaras, education coordinator, says the goal of the program is to educate the community about skin cancer prevention and detection and screen

those who don't have the resources or the time to get checked for skin cancer. Samaras says, "In any given month, we screen at churches, schools and businesses, including the uninsured and the underserved. It is not unusual to see us at UT football and baseball games—anywhere we can travel to create skin cancer awareness."

In less than three years, more than 2,000 community members have been screened, and in some cases melanoma has been detected while at early stages. James Lewis, MD, an associate professor in the Department of Surgery, is director of SunScreeners and oversees the team including James McLoughlin, associate professor of Surgery; Andrew Ward, FNP; Kathy Whaley, RN; residents at UT Graduate School of Medicine; and several administrative staff.

Upcoming

Continuing Education Course Calendar

The University of Tennessee Graduate School of Medicine offers these educational courses this year for physicians, researchers, allied health providers and other healthcare professionals seeking continuing education.

April 9-13, 2014

State of the Art in Facial Aesthetics

InterContinental Hotel Buckhead, Atlanta, Georgia (Contact: Mike Spikes, 901-756-5400)

Jointly provided by UT Graduate School of Medicine and the Foundation for Facial Aesthetic Surgery. AMA credits available.

September 5-6, 2014

Heart, Lung, Vascular Update for Primary Care Providers

UT Conference Center, Knoxville, Tennessee

Jointly provided by UT Graduate School of Medicine and The University of Tennessee Medical Center Heart, Lung, Vascular Institute. AMA, AAPA and ACPE credits and CEUs available.

May 6, 2014

Sixth Annual Stroke Symposium

UT Conference Center, Knoxville, Tennessee

Jointly provided by UT Graduate School of Medicine and South College. AMA and AAPA credits and CEUs available.

October 24-25, 2014

Cancer Big Four Conference

UT Conference Center, Knoxville, Tennessee

Jointly provided by UT Graduate School of Medicine and South College. AMA and AAPA credits and CEUs available.

August 9, 2014

Best Practices and Principles for Utilizing Physician Assistants Within Group Practices and Healthcare

UT Conference Center, Knoxville, Tennessee

Jointly provided by UT Graduate School of Medicine and South College. AMA and AAPA credits and CEUs available.

November 8, 2014

10th Regional Diabetes Conference

UT Conference Center, Knoxville, Tennessee

Provided by UT Graduate School of Medicine Department of Family Medicine. AMA, AAFP, AAPA and ACPE credits and CEUs available.

To register or for more information about these courses, visit our website at www.tennessee.edu/cme.

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Athletes' Hearts

The Role **EKG** Plays in Athletic Performance

By Kandi Hodges



Thanks to research at The University of Tennessee Medical Center, athletes may soon have access to safeguards that could save their lives, or at the very least provide them with peace of mind. Irfan M. Asif, MD, director of the UT Graduate School of Medicine sports medicine fellowship program and assistant professor in the Department of Family Medicine, has been investigating a screening method designed to accurately diagnose heart problems in athletes. He has also taken his research a step further to look at the psychological impact of these screenings and at how to provide affected athletes with emotional support.

To play sports at any level, including high school, college and professional sports, athletes must first be screened for heart abnormalities that could be predictors of sudden cardiac arrest. This is a condition in which the heart unexpectedly fails to contract effectively and normal blood circulation stops. It is serious and often deadly. In fact, sudden cardiac death is the leading cause of death on the playing field; it's considered a

greater danger than sports-related concussion, also a hot topic in sports medicine.

"Sudden cardiac arrest is the first sign of disease in as many as 60 percent to 80 percent of people with an underlying heart problem," Asif says. "By the time you know about it, it may be too late."

So how do you predict a condition that's defined as unexpected? Currently the standard practice is to screen athletes by means of medical histories and physical exams. But this misses the majority of those who are at risk of sudden cardiac arrest, because most athletes with heart problems show no symptoms.

About eight years ago, Asif began developing a more reliable screening strategy for athletes using electrocardiograms (EKGs). His technique involves searching for athlete-specific criteria, which is necessary, Asif says, because athletes' hearts perform differently from those of the average person.



Through research by Irfan Asif, MD, better screenings are available to athletes for use in predicting heart problems.

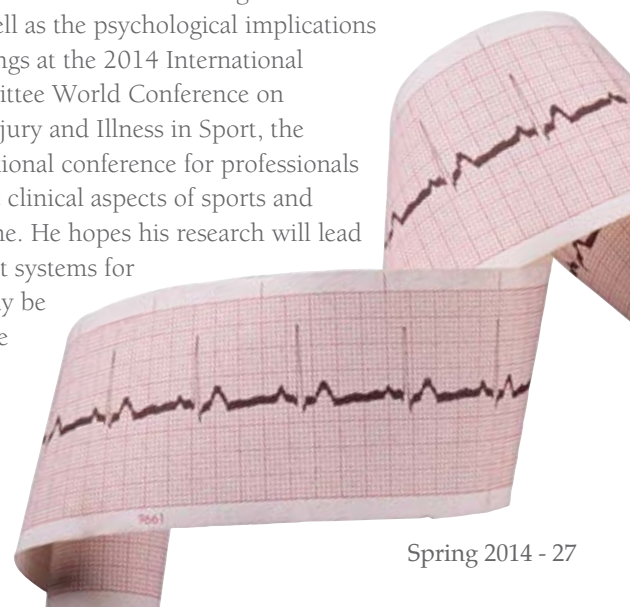
Previously, the mass use of EKG screenings on athletes has been protested, for several reasons. Some opponents say it might even increase the anxiety athletes feel. So three years ago, Asif expanded his research to include the psychological implications of requiring athletes to have EKGs. What he found is the additional layer of information actually improves mental well-being because athletes who pass the screening feel more confident on the playing field. While EKG screenings have led to a reduction in false positives, their use is still not considered standard nationwide owing to the need to train people in the new EKG interpretation standards.

Asif continues to explore the mental well-being of athletes, and he's working to develop programs for those diagnosed with heart conditions.

"Primary care physicians play a unique role in that they are trained to provide both physical and emotional support, so

it's important for them to consider emotional well-being when caring for patients," he says. "College athletes are especially unique because they're often away from home and don't have emotional support nearby."

Asif's research is garnering attention at the international level. He presented his research findings on the use of EKG screenings as well as the psychological implications of those screenings at the 2014 International Olympic Committee World Conference on Prevention of Injury and Illness in Sport, the premier international conference for professionals interested in the clinical aspects of sports and exercise medicine. He hopes his research will lead to better support systems for athletes who may be at risk of adverse consequences.



Research Targets

Liver Tumor Diagnosis and Treatment

By Kandi Hodges



Laura Findeiss, MD, is searching for better liver tumor diagnosis and therapy options.



Jonathan Wall, PhD, and his team created a protein to image amyloidosis that may also be useful for imaging liver tumors.

A new protein generated by researchers at The University of Tennessee Medical Center to image amyloid, a substance associated with Alzheimer's and type 2 diabetes, may be put to another novel use as a tool in an investigation to more accurately diagnose, and potentially treat, liver tumors.

The protein, named p5, was developed by a team of researchers led by Jonathan Wall, PhD, director of the Preclinical and Diagnostic Molecular Imaging Laboratory. It is being researched with the help of funding from the National Institutes of Health. P5 and related peptides have now gained the attention of Laura Findeiss, MD, an interventional radiologist and chair of the Department of Radiology at UT Graduate School of Medicine.

Findeiss says she and Wall are examining the protein as a way to diagnose types of liver tumors using PET imaging. Several distinct types of tumors can develop on this organ, either metastasizing from another part of the body or evolving in the



New Leadership Joins Radiology Team By Kandi Hodges

Laura Findeiss, MD, FSIR, FAHA, an interventional radiologist with a diverse professional background that includes training in surgery at the University of Tennessee Graduate School of Medicine as well as practicing emergency medicine in rural Tennessee, now serves as chair of UT Graduate School of Medicine's Department of Radiology at The University of Tennessee Medical Center.

Findeiss, a noted vascular and interventional radiologist, comes from the University of California Irvine Medical Center, where she was division chief of vascular and interventional radiology and co-director of UC Irvine's Ablative Oncology Center.

As chair, Findeiss says, she plans to use her varied medical experience to further integrate radiology with the work of multidisciplinary teams at The University of Tennessee Medical Center. "My goal is to determine how we can best support the institution and the exciting work the clinics are doing here," she says. "Radiology is an important part of the healing component of our mission, and we work with a lot of referring physicians. I hope to use the department as a hub so that diverse medical professionals work together to support patient care."

As an interventional radiologist, Findeiss uses minimally invasive image-guided procedures to diagnose and treat disease. She specializes in treatment options for peripheral arterial disease and other vascular disorders. One such technique she practices is liver-directed therapy, a method of delivering anticancer drugs directly to the liver through an artery. She also specializes in reconstructing vascular pathways in patients whose limbs are at risk of amputation because of arterial obstruction, and in treating vascular malformations and anomalies.

Findeiss brings with her a desire to expand the boundaries of interventional radiology through research that will provide new therapy options. She has experience and interest in clinical trials related to peripheral interventions and response of tumors to directed therapy, specifically in the area of liver cancer.

liver cells themselves. Knowing a liver tumor's type is critical to treating it, and Findeiss is searching for minimally invasive image-guided techniques to help in diagnosis.

If the effort is successful, p5 will bind to tumor cells so the cells light up in PET scans. This will allow radiologists to diagnose the type of liver tumor a patient has more accurately and to prescribe the most effective treatment plan.

In addition to imaging tumors, p5 may also enable Findeiss and doctors like her to better treat patients by "microtargeting" tumors with radiation. Traditionally, chemotherapy is delivered through the bloodstream, but the problem is the chemicals are carried throughout the body, not just to the affected tumor tissue. Using agents, such as p5, that bind to tumor cells, physicians can target cancer therapy directly to malignant tissue, saving healthy tissue throughout the body and providing a better outcome for the patient.

Breathing Easier

Investigating a Nonsurgical Option for Severe Emphysema

By Kristen Bass

Physicians at The University of Tennessee Medical Center are participating in a clinical trial to provide a new treatment option for patients affected by emphysema, a major health concern in Tennessee that is often preventable and has no cure. Emphysema, most often caused by smoking, is a condition in which air sacs in the lungs are damaged and enlarged, causing breathlessness.

While emphysema can't be cured, there are treatment options to help relieve the symptoms and slow the disease's progression, including medications

such as smoking cessation drugs, inhaled steroids and antibiotics. When medical therapy is no longer effective, doctors must consider surgical interventions such as lung volume reduction or lung transplantation. Lung volume reduction is a procedure removing the most severely damaged and overinflated areas of the lung, allowing the healthier lung tissue to expand. It is considered major invasive surgery, and most emphysema patients are not optimal candidates.

The University of Tennessee Medical Center is one of fewer than 20 medical centers in the country, and the only one in Tennessee, participating in the Emprove clinical trial, which is evaluating a new device to provide lung volume reduction for patients without requiring surgery. Using a bronchoscope, the physician places a small, umbrella-shaped, one-way valve in the airways leading to the damaged lung. The valve allows air and secretions to come out of the target lobe when the patient exhales but prevents air from reentering on inhalation. The damaged part of the lung deflates, allowing the healthier portion to expand.

Pulmonologists Paul Branca, MD; James Shamiyeh, MD; and Michael McCormack, MD, who are also faculty in the Department of Medicine, are leading the clinical trial at the medical center. It is now open and recruiting patients who have daily symptoms. Patients must have completed pulmonary rehabilitation and must have refrained from smoking for at least four months. To learn more, contact the trial coordinator, Lauren Davis, at 865-305-7975.



Physicians are looking for new treatment options for emphysema to improve the quality of life for East Tennesseans.



Study of New Treatment During **UT LIFESTAR** Flights May Reduce Trauma Deaths

By Jim Ragonese

The University of Tennessee Medical Center is participating in a clinical trial aimed at saving the lives of trauma patients who have uncontrolled bleeding. The treatment involves administering plasma, which has clotting capabilities, to patients while they are aboard UT LIFESTAR helicopters. This is a standard process of care, but it typically occurs several minutes later, once patients have arrived at the trauma center.

In previous trials, giving plasma to patients more quickly has resulted in improved survival rates of injured soldiers in combat zones such as Afghanistan. This study will bring the battlefield-tested process to the East Tennessee community.

“We utilize UT LIFESTAR as an integral extension of the trauma center at The University of Tennessee Medical Center,” says Brian J. Daley, MD, professor and trauma medical director at The University of Tennessee Medical Center and its principal investigator for the study. “On the helicopters we carry lifesaving resuscitation techniques proven on the battlefield and in our domestic trauma centers to the patient, rather than simply having the aircraft serve as a transport mechanism for patients. This study enables us to see if the known benefits of plasma treatment, normally delivered in the Emergency Department, are improved by delivering it at the earliest possible

moment through our flight nurses and paramedics.”

Significant blood loss can lead to multiple organ failure and is a leading cause of death among trauma patients. The plasma study, known as the Prehospital Air Medical Plasma Trial (PAMPer), will be conducted at six trauma centers throughout the nation.

It is sponsored by the U.S. Department of Defense, the University of Pittsburgh and the University of Pittsburgh Medical Center.

UT LIFESTAR medical helicopters are already stocked with red blood cells for in-flight transfusion, but plasma has not been available on the aircraft previously.

Severe-trauma patients are generally unable to give their consent to participation in a study of this nature. According to Daley, this is believed to be the first community consent study conducted in the Knoxville region, which means that the plasma can be administered for lifesaving purposes without specific consent from trauma patients. Any member of the community not wanting to receive plasma or take part in the study can opt out of it. For more information or to opt out, contact Meghan Buck at TFN: 855-730-8140 or buckml@upmc.edu.



For more information, visit <http://pamperstudy.com>

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