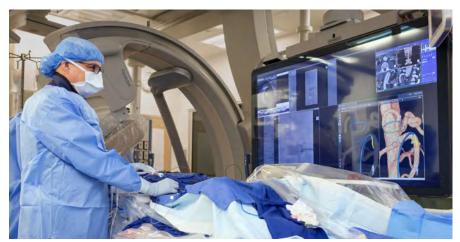
May 2022

A Publication of The University of Texas Southwestern Medical Center

**CAMPUS EDITION** 

# Safer imaging technology for complex aortic repairs

UTSW is among seven centers worldwide to use fiber-optic system that decreases radiation exposure



Carlos Timaran, M.D., performs an aortic repair at William P. Clements Jr. University Hospital using a novel imaging device that utilizes light rather than X-rays to visualize blood vessels.

By Christen Brownlee

novel imaging device recently rolled out at UT Southwestern is making complex aortic repairs safer for patients and operating room staff by dramatically reducing their exposure to radiation.

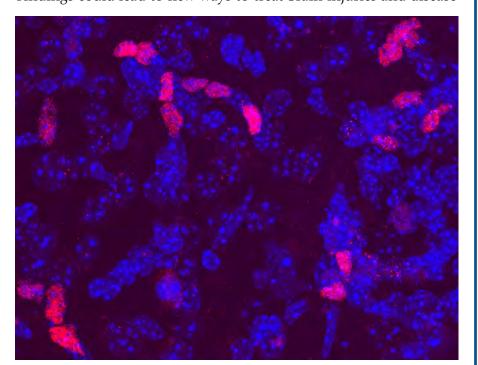
The device, known as Fiber Optic RealShape (FORS) and manufactured by Philips, uses light to visualize blood vessels, nearly eliminating the need for X-rays typically used during minimally invasive vascular procedures.

"Complex aortic repairs tend to be long operations that require frequent in-procedure imaging. Every time a surgeon presses on the X-ray pedal, the patient and staff including assistants, nurses, scrub techs, anesthetists, and X-ray techs - get a dose of radiation," said Carlos Timaran, M.D., Professor of Surgery and Chief of Endovascular Surgery. "The safety of each of these individuals is paramount, so reducing radiation exposure during these procedures is an

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### Protein prompts mature brain cells to regenerate multiple cell types

Findings could lead to new ways to treat brain injuries and disease



Stem-like cells (red) are generated from adult brain astrocytes. Courtesy: Zhang lab

By Christen Brownlee

A single protein can reverse the developmental clock on adult brain cells called astrocytes, morphing them into stem-like cells that produce neurons and other cell types, UT Southwestern researchers report. The findings, published in PNAS, might someday lead to a way to regenerate brain

tissue after disease or injury.

"We're showing that it may be possible to reprogram the fate of this subset of brain cells, giving them the potential to rebuild the damaged brain," said study leader and co-corresponding author Chun-Li Zhang, Ph.D., Professor of Molecular Biology and a member of the Peter O'Donnell Jr. Brain Institute.

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#### **COMMENCEMENT CELEBRATION**

# A year to rejoice

Congresswoman is keynote for Medical School graduation; Former Dean of Research to speak at Graduate School event

By Carol Marie Cropper

T Southwestern Medical School will return to the Morton H. Meyerson Symphony Center after a two-year hiatus and will host U.S. Rep. Eddie Bernice Johnson as its commencement speaker. The ceremony for this year's 211 Medical School graduates is scheduled for 11 a.m. Thursday, May 12.

Commencement for the Graduate School of Biomedical Sciences is scheduled for 7 p.m. Thursday, May 19, at the Tom and Lula Gooch Auditorium on campus. Of the 92 students who received their degrees in summer and fall of 2021 and spring of 2022, 51 will

ment ceremony. Both events will be available to watch live online and also be recorded for later viewing.

participate in the commence-

COMMENCEMENT "The Medical School Class of EXERCISES 2022 has the unique experience of completing their medical education during a time in which the world is facing a public health crisis," said Angela Mihalic, M.D., Dean of Medical Students, Associate Dean of Student Affairs, and Professor of Pediatrics. "They have had incredibly unique opportunities to witness role models in medicine who have sacrificed everything to serve patients and put themselves in harm's way to care for others. The front-line

workers and their incredible resilience, compassion, and self-sacrifice despite the challenges of medical misinformation created such an inspiring example to these developing clinicians."

The Class of 2022 has seen what it truly means to be physicians and dedicate their lives to the service of the public health, she added, emphasizing, "I know that they have the tools to make a great impact on countless patients in the future."

"The Graduate School is very proud of how our students soldiered through the pandemic to complete their studies," said Andrew

Zinn, M.D., Ph.D., Dean of the Graduate School. "We are so excited to celebrate their accomplishments in person, together with their families, friends, and loved ones, and help rebuild the social connections that we have all been missing for the

past two years." This year's group of Medical School graduates includes 21 graduating with distinction, 16 who completed a yearlong research

fellowship, 19 who earned a Master of Public Health degree in addition, and dozens of others who volunteered to support William P. Clements Jr. University Hospital during the pandemic, administering COVID-19 vaccines and assisting the Dallas County Health Department

Please see COMMENCEMENT on page 11

### Ho Din Award winner lured to medicine by the magic of anesthesiology

By Carol Marie Cropper

s a competitive dancer and gymnast in elementary school, Cayenne Price, M.D., had always been fascinated by how the human body works – she'd seen athletes push themselves to amazing extremes. In eighth grade, a human anatomy class convinced her to pursue a health care career.

But it wasn't until college, as she watched her first surgery while shadowing an anesthesiologist, that she fully recognized her calling.

To my naive eyes at the time, it seemed that in just a few motions of the anesthesiologist's hands, the patient, who just moments ago was completely dependent on us to support her basic life functions such as ventilation, was awake and breathing on her own. In that instant, I knew one thing to be true: Anesthesiology is magical, and I wanted to be - not just watch - the magician."

The North Texan, who graduated summa cum laude from Southern Methodist University - while also being a cheerleader and student government senator – just graduated near the top of her class at UT Southwestern Medical School. She also received the highest medical student honor given at UTSW, the Ho Din Award.

The Ho Din is awarded each year by Southwestern Medical Foundation to recognize a graduating medical student with attributes inherent in great physicians. It was established in 1943 and comes with a medal, certificate, and \$10,000 scholarship.

"It is a great pleasure to celebrate Cayenne Price for her devotion to medicine and service to



Cayenne Price, M.D.

community," said Kathleen M. Gibson, President and CEO of Southwestern Medical Foundation. "Cayenne, like the Ho Din Award winners before her, exemplifies the qualities of medical wisdom and scholarship, service, and leadership inherent

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#### LEADERSHIP APPOINTMENT

Cerebral palsy specialist Heakyung Kim, M.D., joins UTSW as Chair of Physical Medicine and Rehabilitation.

#### CARDIOVASCULAR CONNECTION

UT Southwestern faculty weigh in on metabolic-immune reactions as a factor in one form of heart failure.

#### PUBLIC HEALTH SUPPORT

Separate gifts from Lyda Hill and Richard E. Hoffman, M.D., establish endowments for the new School of Public Health.

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# Cerebral palsy specialist Kim appointed Chair of PM&R

By Carol Marie Cropper

Heakyung Kim, M.D., a physician-investigator known for research and treatment of cerebral palsy in children, has been appointed Professor and Chair of the Department of Physical Medicine and Rehabilitation (PM&R). Dr. Kim, who joined UTSW on May 1, holds the Kimberly-Clark Distinguished Chair in Mobility Research.

Dr. Kim came to UTSW from Columbia University Irving Medical Center, where she was Vice Chair and Professor of Rehabilitation, Pediatrics, and Orthopedic Surgery. She also served as Director of Pediatric Physical Medicine and Rehabilitation at New York-Presbyterian Morgan Stanley Children's Hospital and was the founding Director of the Pediatric Rehabilitation Medicine Fellowship Program at Columbia University Irving Medical Center-New York Presbyterian Hospital.

As a clinician, Dr. Kim is considered an expert in a highly specialized procedure known as single-event multilevel chemoneurolysis (SEMLC) in which both botulinum toxin (also used in Botox) and phenol or concentrated alcohol are used to relax the stiff, weak muscles seen in cerebral palsy patients.

"Dr. Kim's clinical expertise, research interests, and proven leadership record integrating physical medicine and rehabilitation in key areas of health care to improve patient care and increase efficiencies will further elevate our PM&R Department in clinical excellence and innovation," said W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs, Provost and Dean of UT Southwestern Medical School.



Heakyung Kim, M.D.

Dr. Kim received her medical degree from Ewha Womans University College of Medicine in Seoul, South Korea, and completed a fellowship in neuroscience and rehabilitation medicine at Yonsei University College of Medicine, also in Seoul. In the U.S., she completed a research fellowship in neuroscience at Rutgers Biomedical and Health Sciences in New Jersey, followed by a residency in combined pediatric and physical medicine and rehabilitation.

We spoke with the new Chair about her research, background, and plans for the PM&R Department.

What will be your main focus or goal as Chair?

I will be working to build a highly regarded and top-ranking PM&R Department that provides physiatrist-led, team-based, and patient-centered care, along with outstanding teaching, robust research, and specialized clinical programs.

#### What strategies will you use to achieve this goal?

First is education. We must have a strong residency program to be considered a topranking department. I seek to hire additional faculty to diversify the care we provide to the community and to offer resources to our current faculty to bolster their practice. This will allow us to attract medical students who are dedicated to not only patient care, but to expanding medical knowledge through research. Second, we must build a well-developed research infrastructure that can consistently bring in funding via grants from organizations such as the National Institutes of Health (NIH). Third, and the backbone of medicine, is clinical work. By bringing in additional faculty, we can increase our community outreach and provide quality care to more people.

#### Can you describe some of your current research?

My clinical research currently focuses on spasticity management as well as pain in adults with cerebral palsy. Spastic muscles cause impairment of function, pain, and musculoskeletal complications. I have been working on efficacy of long-term care with SEMLC on children with cerebral palsy and pain management with botulinum toxin for adults with cerebral palsy.

I am involved in developing robotic therapy to improve ambulatory function in cerebral palsy patients. I sat down with engineers and discussed the problems these patients have walking, and they came up with a robot, the Tethered Pelvic Assist Device (TPAD), to improve muscle strength, balance, and gait.

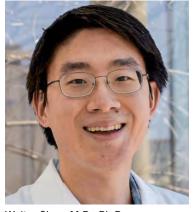
I also research cognitive function in patients with cerebral palsy, who sometimes have intellectual disabilities as well. Right now, I'm conducting a pilot study that looks at an existing medication that may help cerebral palsy patients.

#### What motivated you to go into medicine?

I became a doctor because of my grandmother. She always wanted to have a child with an M.D. degree, but because of the Korean War during that time, none of her children could go for an M.D. When I went to medical school, I decided I wanted to be a rehab doctor to take care of people with special needs.

This appointment affords me the chance to expand PM&R's presence in the medical community. It absolutely will help not only patients' quality of life - by preventing unnecessary complications caused by being less mobile and promoting early detection and intervention of chronic and complex medical conditions - but will establish an ideal care model by a multidisciplinary team. I am so happy to have a leadership role to work on those goals.

Dr. Lee holds the Atticus James Gill, M.D. Chair in Medical Science.



Walter Chen, M.D., Ph.D.

**CRI** researcher receives ASCI **Emerging Generation Award** 

Walter Chen, M.D., Ph.D., a postdoctoral fellow in the DeBerardinis lab at Children's Medical Center Research Institute at UT Southwestern (CRI), been selected to receive the American Society for Clinical N E W S

Investigation's (ASCI) Emerging Generation Award. This honor is given to early career physicianscientists who are meaningfully engaged in immersive research. Dr. Chen is being recognized for his pioneering achievements and work in organellar biology.

"I am incredibly excited and honored to have won the Emerging Generation Award. The ASCI is one of the oldest and most respected medical honor societies and is composed of leading physician-scientists that I have looked up to throughout my career. I appreciate the opportunity to interact with and learn from these

brilliant minds through the mechanisms of this award," Dr. Chen said. "I am also very grateful to my PI, Ralph DeBerardinis, for nominating me and for all his invaluable support. I am truly excited continuing my scientific journey here at CRI."

Dr. Chen is currently studying uncharacterized human proteins in metabolic organelles and working to understand how these organelles contribute to fetal development and neonatal health. Organelles are specialized entities that function like little organs within cells and carry out distinct functions essential for life. A number of diseases are driven

by organellar dysfunction, ranging from inherited metabolic disorders in children to Parkinson's disease in adults. Organelles rely on proteins to function, and characterizing them is a critical step to uncover how organelles contribute to human health and disease.

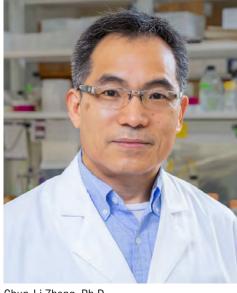
"Walter is an exceptionally creative young physician-scientist who is determined to discover new principles in metabolic regulation. His focus on uncharacterized proteins localized to organelles like the mitochondria has the potential to change how we diagnose and treat metabolic diseases in newborns," said Ralph DeBerardinis, M.D., Ph.D., a Professor at CRI, Chief

of the Division of Pediatric Genetics and Metabolism at UT Southwetern, and a Howard Hughes Medical Institute Investigator, who nominated Dr. Chen for the honor.

Dr. Chen has already identified several important proteins and is investigating their functions utilizing cultured cells, mice, and human patients. His pioneering of new techniques to examine the metabolic contents of organelles led to this award. His work will provide important insights for both neonatal-perinatal medicine and general biomedical research.

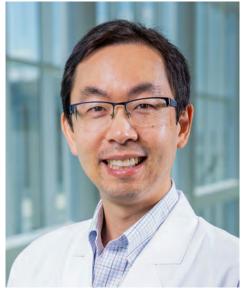
Dr. DeBerardinis holds the Joel B. Steinberg, M.D. Distinguished Chair in Pediatrics and is a Sowell Family Scholar in Medical Research. At CRI, he is the Robert L. Moody, Sr., Faculty Scholar.

#### Astrocytes Continued from page 1



Chun-Li Zhang, Ph.D.

During development, mammalian stem cells readily proliferate to produce neurons throughout the brain and glia cells that help support them. Glia help maintain optimal brain function by performing essential jobs like cleaning up waste and insulating nerve



Gary Hon, Ph.D.

fibers. However, the mature brain largely loses that stem cell capacity. Only two small regenerative zones, or niches, remain in the adult brain, Dr. Zhang explained, leaving it with extremely limited capacity to heal following injury or disease.

Recent research has suggested that glia can be prompted to produce neurons in some models of brain injury or after genetic manipulation. Although these findings are promising, regenerating healthy brain tissue will require production of multiple cell types rather than only neurons, Dr. Zhang said.

Looking for a way to spur this "multipotent" regeneration, Dr. Zhang and his colleagues used a genetic engineering technique in adult mouse brains to induce astrocytes, a subset of glia, to produce different transcription factors, proteins pivotal for controlling cell identity. These experiments showed that a single transcription factor – the protein  $\ensuremath{\mathsf{DLX2}}$ - appeared to reprogram astrocytes into neural stem-like cells capable of producing neurons and multiple subtypes of glial cells.

The researchers confirmed these findings using lineage tracing - a technique in which they followed progeny of the altered astrocytes as they multiplied - as well as marker analysis that showed that these new cells had the expected identities of neurons or glia.

Working with the team of co-corresponding author Gary Hon, Ph.D., Assistant Professor of Obstetrics and Gynecology and in the Cecil H. and Ida Green Center for Reproductive Biology Sciences and the Lyda Hill Department of Bioinformatics, global gene expression analysis showed that prompting astrocytes to produce DLX2 appeared to reprogram them into stem-like

cells with features of both immature brain cells found earlier in development and cells found in the regenerative niches of the adult brain. Dr. Hon is also a Cancer Prevention and Research Institute of Texas (CPRIT) Scholar.

Dr. Zhang and his colleagues suggest that DLX2 might someday be used as a tool to treat traumatic brain injuries, stroke, and degenerative conditions such as Huntington's disease. Researchers in the Zhang lab are planning to study this approach in animal models.

This research was supported by funding from The Welch Foundation, the Decherd Foundation, the Texas Alzheimer's Research and Care Consortium, the Kent Waldrep Foundation Center for Basic Research on Nerve Growth and Regeneration, the National Institutes of Health, CPRIT, the Department of Defense, the Burroughs Wellcome Fund, the Harold C. Simmons Comprehensive Cancer Center, and the Green Center for Reproductive Biology Sciences.

Dr. Zhang is a W.W. Caruth, Jr. Scholar in Biomedical Research.

More online: Read the full story in the newsroom at utsouthwestern.edu/newsroom.

#### **CENTERTIMES**

Center Times is published by the Office of Communications, Marketing, and Public Affairs at UT Southwestern Medical Center. UT Southwestern is an Affirmative Action/Equal Opportunity Employer. Women, minorities, veterans, and individuals with disabilities are encouraged to apply.

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# STUDENT



# AWARDS

#### Sarah Prickett, M.D.:

latros Award

This past year, Dr. Sarah Prickett had the terrifying and life-changing opportunity to become a caregiver herself when one of her sisters suffered a massive stroke. The experience solidified her commitment to become a doctor and support patient families.

What this award means: The Iatros Award is particularly meaningful to me because it is peer-nominated and selected; to have received this recognition from my colleagues is an indescribable honor.

Class of 2022 student comments: Sarah's little sister suffered from a stroke in 2021. She never once used this horrible circumstance and piece of her life that required a lot of time as an excuse to not put forth anything than her best effort in all other aspects of her life, especially medical school. ... Sarah continually goes above and beyond for patient care, addressing not only the needs of her patients, but their families as well. ... She cares for patients so deeply. She takes their stories and their suffering with her. On multiple occasions she has cried to me about her patients, laughed with me about something that happened at the hospital that day, and simply just wanted to share their stories with me. ... She is a quiet leader, remaining thoughtful and listening carefully to what everyone has to say.

Background and family: My father had a career in the military, and my mother worked in ministry and social work. My two younger sisters inspire me every day with their perseverance, resilience, and joy in the face of difficulty. I met my husband, Sam, in college. He is a chemical engineer, a fly fisherman, and my biggest supporter.

What led to your career path: From a young age, I wanted to become a teacher. My senior year of high school, a scheduling error placed me in an anatomy class, and I fell in love with the study of the human body. I enjoyed the science, but even more, I liked having information that could benefit others. Pediatrics offered rich opportunities to treat young patients while caring for the whole family.

College: I graduated summa cum laude from the University of Alabama in 2014 with a major in biology and minors in psychology and studio art. I volunteered at the local Veterans Affairs Medical Center, organized campus fundraising efforts benefiting St. Jude Children's Research Hospital, and mentored high school students.

UTSW activities: With United to Serve, I volun-

teered as a booth coordinator during my first year. I helped organize the first virtual fair as the graphic design chair in 2021 and ultimately was selected as a director in 2022. I also served on the PRE+OP Committee and as a peer mentor for the Colleges program.

Surprising fact: While no one would be surprised that I've seen every Disney movie, they might be shocked to learn I've been just as devoted to James Bond films.

Ultimate career goal: I have always felt called to tend to the emotional needs of my patients and their families as comprehensively as their physical needs. This past year, one of my sisters suffered a massive stroke. Experiencing the excruciating hours of waiting at the bedside, feeling helpless and afraid, renewed my perspective and solidified my desire to listen, be present with, and support my patient families. My ultimate goal as a physician is to provide the highest level care for my patients while helping families to feel encouraged, knowledgeable, and confident in their care.

Future plans: I will continue my medical training through a residency in pediatrics at the University of Alabama - Birmingham.



Sarah Prickett, M.D.

About the award: The Iatros Award was established by the UT Southwestern Medical School Class of 1984 to honor a graduate who most emulates the complete qualities of a physician.

#### Rodolfo Fernandez-Criado, M.D.:

Class of 2022 Leadership Award

As a child, doctor visits and learning about medicine fascinated Dr. Rodolfo "Rudy" Fernandez-Criado. With the support of his family, this firstgeneration Cuban American student leader is now realizing his dream, aspiring to practice in obstetrics and gynecology.

What this award means: It has been such an honor to have been a part of student government for the Class of 2022. I never imagined I would be assuming the role of Class President in medical school. I am beyond thankful for my experience, because it taught me how critical a leadership role is and how much of an impact you can truly have. This award is a testament to me having fulfilled my role and making my fellow classmates feel included in all decisions during our time in medical school.

Mentor comment: Over the past four years, Rudy Fernandez-Criado has served as Class co-President and has led his peers through a number of significant challenges. His support and leadership were important in adapting to all of the various necessary curricular changes due to the pandemic. Rudy's positive upbeat attitude, deep care and concern for his peers, and strong advocacy supported his success as a leader and in providing a boost in morale during difficult

times. Rudy has provided valuable input on campus strategic planning initiatives, curriculum innovations, and student services. Rudy is an excellent communicator, provides valuable insights, and has been a support to underclassmen in a similar role. - Angela Mihalic, M.D., Dean of Medical Students and Associate Dean for Student Affairs

Background and family: I was born and raised in Miami, Florida, to a Cuban American family. My grandmother left Cuba for the U.S. when she was in her early 40s, and my parents met in Florida. My mother, who became a registered nurse later in life, has been a continued source of motivation to pursue my dreams.

What led to your career path: As a first-generation student, deciphering the appropriate path in medicine was quite the feat. Although there weren't physicians in my family, they always provided a nurturing environment and reminded me of the potential I had when I would lose sight of it. I always found going to the pediatrician quite exciting, and learning about medicine always intrigued me. I wanted to grasp how intricate and delicate the human body was. Upon completing my Ob/Gyn rotation and maternal-fetal medicine selective, I found my calling in medicine.



Rodolfo Fernandez-Criado, M.D.

College: I received my Bachelor of Arts in neuroscience from Johns Hopkins University. I found myself taking time off and worked at the Kennedy Krieger Institute at the JHU medical campus for a year. I then received a Master of Science in physiology and biophysics from Georgetown University and worked as an intern in a wellness clinic to

learn about various aspects of health care.

UTSW activities: Besides being Class President for four years, I was also involved in the Lymph Notes, the on-campus a cappella group. I was also active with the Student Leadership Committee, PRE+OP counseling, Latino Medical Student Association, COVID-19 volunteering efforts, MS0 welcoming committee, and global health services trips.

Surprising fact: I was two rounds away from being a contestant on "The Voice"!

Ultimate career goal: I want to provide equitable, responsible, and comprehensive care to my future patients regardless of race, gender, or socioeconomic status.

Future plans: The next stop on my journey is taking me to Providence, Rhode Island, where I will complete my Ob/Gyn residency at Brown University/Women & Infants Hospital. I am open to the possibility of a fellowship. So far, I have loved my time in maternal-fetal medicine and can see myself as a specialist in the future.

About the award: The Leadership Award annually goes to a student officer of the graduating class and includes a \$1,000 award.

#### Esha Hansoti, M.D.:

North Texas Society of Psychiatric Physicians Award for Outstanding Medical Student in Psychiatry

The humble beginnings and sacrifices of Dr. Esha Hansoti's family from India influenced her desire to become a physician. She chose to specialize in psychiatry to empower patients, especially the underserved, with strategies to manage their mental illness and the socioeconomic impacts on their lives.

What this award means: As the daughter of immigrants, I have always been mindful of the generations prior who laid a foundation for me to succeed. From both my grandmothers receiving master's degrees after coming from difficult backgrounds to my parents traversing continents to a foreign land, many sacrifices were made before I was born. This award is not only a symbol of my hard work, but a recognition of the sweat and struggles of those before me.

Mentor comment: Esha is a thoughtful student with a deep love of psychiatry. Her advocacy work in women's mental health, LGBTQ communities, and underserved populations is evidenced by her Albert Schweitzer Fellowship and her membership in the Gold Humanism Honor Society. - Lia Thomas, M.D., Professor of Psychiatry



Esha Hansoti, M.D.

What led to your career path: I was influenced by time spent in India with my grandparents. My grandmother always taught me to be thoughtful of those around me who weren't granted the same privileges that I was. As a teacher and principal, she dedicated her life to providing education to underserved girls in her community. This motivation of addressing disparities led me to medical school.

Background and family: I grew up in Flower Mound, Texas, with my parents, younger sister, grandmother, and aunt. My parents emigrated from India, and I have learned a lot about navigating two cultures and understanding human experiences from them.

College: I majored in honors neuroscience and sociology at UT Austin. I volunteered as an advocate for survivors of sexual assault with The SAFE Alliance and worked with the organization Baal Dan Charities to send food to orphans in India. I took a vear off after college to work with the nonprofit Action Research in Community Health in Dharampur, India, providing reproductive health and nutrition education to women in rural tribal communities.

UTSW activities: As a first-year medical student, I helped found the student-run Gender Affirming Care Clinic in partnership with the Resource Center in Dallas to provide medical care to transgender and gender-nonbinary individuals. Later, through the Schweitzer Fellowship, I started the Strengths Based Gender-Affirming Care Program to provide case management to transgender individuals. I further served as the 2022 medical student class representative on the Women in Science and Medicine Advisory Committee to promote gender equity on the UTSW campus.

Surprising fact: I am a black belt in karate!

Ultimate career goal: My ultimate goal is to train as a community psychiatrist and found a community center for immigrant and refugee populations, providing mental illness care, social support, and legal resources.

Future plans: I plan to continue learning and growing as a psychiatrist in residency at Zucker School of Medicine at Hofstra/Northwell in New York. I also want to stay connected with community work wherever I end up and continue assisting underserved individuals.

**About the award:** The award honors a student for excellent work in psychiatry and mental health.

#### Samantha Lopez, M.D.:

Roland C. Reynolds Pathology Award



Samantha Lopez, M.D.

As the child of a primary care doctor, Dr. Samantha Lopez witnessed humanitarian medical care early in life. At age 12, she went on medical mission trips with her parents to Central and South America, nurturing her passion to follow in their footsteps.

What this award means: Throughout medical school, the Pathology Department's teaching and dedication to students was incredibly impactful to me. I am so grateful to have the honor of being selected for this award in honor of Dr. Reynolds and humbled to be recognized for service to my community and colleagues.

Mentor comment: Samantha's humanitarian efforts throughout her medical training have been exemplary. She has participated in multiple overseas medical service trips to Colombia, Nicaragua, and the Dominican Republic. She has volunteered in underserved clinics throughout Dallas-Fort Worth and participated in COVID-19 efforts at William P. Clements Jr. University Hospital. – James Malter, M.D., Professor and Chair of Pathology, who holds The Senator Betty and Dr. Andy Andujar Distinguished Chairmanship of Pathology

**Background and family:** I was raised in Rockwall, Texas, where my father practices internal medicine. My father is a primary care doctor, and my mother was his practice manager for 20 years.

What led to your career path: At age 12, I started joining my parents on medical service trips to Central and South America. Seeing the impact that my dad, a primary care physician, was able to provide to patients inspired me to pursue medicine.

**College:** I majored in biology at Baylor University, where I was a member of the Baylor Crew team, Zeta Tau Alpha Sorority, and President of the Alpha Omega Alpha Honor Medical Society.

**UTSW activities:** I have served in multiple free clinics for underserved populations in Dallas, led a medical service trip to the Dominican Republic, served as treasurer for the Latino Medical Student Association, was a founding leader of the Student Initiative in Medical Simulations elective, taught the Spanish Interpreter Apprenticeship Program, and volunteered with programs aiming to increase diversity in medicine. I also have published dermatology research in multiple journals.

**Surprising fact:** I am a yoga teacher! I earned my 200-hour yoga teacher certification in 2020.

**Ultimate career goal:** I want to provide exceptional care to patients, both on a day-to-day basis and on a larger scale working to decrease disparities in health care.

**Future plans:** My training will continue here at UT Southwestern for a dermatology residency. I hope to become an academic inpatient dermatologist and continue my work in advocacy and community health.

**About the award:** The award, which includes \$1,500, honors the late Dr. Reynolds, a UT Southwestern alumnus and faculty member remembered as a gifted pathologist and a generous person. The recipient is selected based on humanitarian qualities.

#### Kyle Goodman, M.D., Ph.D.:

Vernie A. Stembridge Scholarship Award in Pathology



Kyle Goodman, M.D., Ph.D.

Dr. Kyle Goodman initially studied chemical engineering as an undergrad. But his interest in basic science steered him down a different path, one that would include completing both medical school and graduate school.

What this award means: I was thrilled when I received notification that I was selected for this award. Everyone that I have met in the Department of Pathology has been welcoming and invested in my education.

**Mentor comment:** Kyle has authored or co-authored numerous articles related to his research interests, which focus on microbiota-derived short-chain fatty acids influencing processes important for the intestinal health of hosts and the activities of resident bacteria. – James Malter, M.D., Professor and Chair of Pathology, who holds The Senator Betty and Dr. Andy Andujar Distinguished Chairmanship of Pathology

**Background and family:** I am originally from upstate New York, but grew up mostly in Cary, North Carolina, or as we lightheartedly like to

say, the Containment Area of Relocated Yankees.

What led to your career path: My family is devoid of scientists and physicians. Influenced by my father who is an engineer, I studied chemical engineering as an undergraduate. I pursued my interest in basic science research and eventually landed a position in a translational research laboratory at the National Institutes of Health.

**College:** I graduated summa cum laude from North Carolina State University with degrees in chemical engineering and psychology.

**UTSW activities:** I have been actively involved in research at UTSW as a student in the Medical Scientist Training Program (MSTP). I conducted my dissertation research with Professor of Microbiology David Hendrixson, Ph.D., on bacterial signal transduction pathways in *Campylobacter jejuni* that modulate host colonization.

**Surprising fact:** I have been an avid bowler since my preteen years and have bowled a half-dozen or so perfect games.

**Ultimate career goal:** An exciting but also challenging aspect of pathology is the advent of new and rapidly changing technologies, including molecular diagnostics. Information from these tools has allowed us to differentiate and clarify disease processes. As a future pathologist, my goal is to continually develop and utilize these methods to help clinicians identify the best treatments for their patients.

**Future plans:** I will persue training in pathology at Washington University in St. Louis, with interests in medical microbiology, hematopathology, and transfusion medicine. I hope to stay in academia to continue research, teaching, and mentoring the next generation of physicians.

**About the award:** The award honors Dr. Stembridge, a former Chair of Pathology, who died in 2000. The \$1,500 award is given to a student entering the field of pathology who has exhibited exemplary academic performance.

#### Kathryn Gallaway, M.D.:

Vanatta, Hesser, Schmalstieg Excellence in Tutoring Award



Kathryn Gallaway, M.D.

Unrelated, rare neurological disorders diagnosed in her grandfather and a sister prompted Dr. Kathryn Gallaway to pursue a career in medicine. Those memories of her family members continue to drive her to serve patients and families facing long-term, potentially devastating diagnoses.

What this award means: At UT Southwestern, no activity brought me more joy or inspiration than tutoring junior medical students. It has been a true privilege to help so many amazing future doctors get through those challenging early years of medical school.

**Mentor comment:** In addition to her excellent tutoring skills, which Kathryn has shared so generously with us over the last four years in myriad courses, she has created a legacy of younger tutors. So many recent applicants have pointed to her sessions as inspiration for the kind of quality and impact they hope to have. – Carol Wortham, Student Academic Support Services Manager

**Background and family:** I grew up in Huntsville, Alabama, where my dad still works as a NASA engineer. My mom also was an engineer, but she dedicated her life to raising me and my younger sisters. I have two amazing daughters, Alexa, 10, and Sophie, 9.

What led to your career path: My youngest sister

was born with a rare disorder called linear nevus sebaceous syndrome that caused severe brain malformations and seizures. Around the same time, my grandfather was diagnosed with a rare neurodegenerative disease called multiple system atrophy that slowly eroded his physical autonomy. Experiencing these two spectrums of neurologic disease – malformations at the beginning of life and degeneration at the end – inspired me to pursue a career in medicine.

**College:** I earned a Bachelor of Arts in philosophy from Rice University, where I competed on the club sailing team and sang in the Rice Chorale.

**UTSW activities:** In addition to tutoring, I served as a peer mentor with my Colleges group. I have also been very involved in orthopedic oncology research. I have presented our research at multiple conferences and completed a research fellowship last year. One of our most exciting projects is using Fitbits to track functional outcomes of young patients who have undergone limb-sparing surgery for lower extremity bone tumors.

**Surprising fact:** Up until high school, I wanted to be an astronaut. I planned to major in aerospace engineering and apply for the astronaut training program.

**Ultimate career goal:** I want to give each of my patients – and their families – the compassion and empathy they need to persevere when the journey becomes difficult. I believe a challenge we all face as scientists is remembering that there are unique individuals behind the facade of disease. Seeing, appreciating, and advocating for those unique individuals is key to becoming an excellent physician.

**Future plans:** I am deferring residency for a year to pursue a master's degree in public health. I plan to use this knowledge to improve delivery of patient care in communities disproportionately affected by social and structural determinants of health. I hope to work in academic medicine so that teaching remains a part of my career.

**About the award:** The award recognizes graduating medical students who have made outstanding contributions to serve fellow medical students in need of academic assistance.

#### Won Jae Jeong, M.D.:

Karen Kowalske Outstanding PM&R Undergraduate Award



Won Jae Jeong, M.D.

The odds did not seem to be in Dr. Won Jae Jeong's favor to become a doctor – especially since he failed all classes except biology in middle school. But he improved his learning skills and eventually pursued his passion to help restore patients' physical abilities as a rehabilitation specialist.

What this award means: This award is meaningful to me because Dr. Kowalske is my mentor who taught me not only a vast amount of medical knowledge, but most importantly the virtuous attitude I need when caring for patients.

**Mentor comment:** Won Jae is an outstanding student. His intellectual curiosity challenged me to stay up to date. He is kind, funny, and always has a smile on his face. Lastly, he co-wrote a paper with me that the reviewers accepted with almost no edits, which is certainly rare. He will be an excellent physiatrist. – Karen Kowalske, M.D., Professor of Physical Medicine and Rehabilitation, who holds the Charles and Peggy Galvin Professorship in Physical Medicine

**Background and family:** I was born and raised in Seoul, South Korea. Interestingly, I failed all my classes (except biology) in middle school. I came to the U.S. when I was 13 years old to attend a Texas boarding school. My parents gave me unconditional love through their

incredible support and sacrifices.

What led to your career path: My parents, both physicians, showed me how incredibly rewarding it is to take care of patients. Their passion motivated me to explore becoming a doctor, a decision I never regretted. In my first year of medical school, I got curious about PM&R, a specialty that aims to restore functional ability based heavily on patients' goals. I enjoyed every moment of exploring the field and immediately knew that this was for me.

**College:** I majored in molecular and cell biology at UC Berkeley. I graduated with honors through my research thesis on cell regeneration. I also volunteered as a CPR instructor and taught science on elementary school field trips.

**UTSW activities:** I served as an officer for the Physical Medicine and Rehabilitation Student Interest Group and mentored a 12-year-old little brother for three years through Big Brothers Big Sisters.

Surprising fact: I have a peculiar hobby – I am a hardcore student of Warren Buffett and Charlie Munger for their incredible philosophy and wisdom of life that enlightened me tremendously. Also, I make the best cheesecake (self-proclaimed) in Texas. As my love for cheesecake continuously challenges my physical health, I lift weights so that I can bake and eat more cheesecake! So far, the balance has worked out well.

**Ultimate career goal:** I want to make lasting impacts in my patients' lives. I jokingly say my goal is to retire 80 years after I die because my patients will be able to play again with their grandkids after I restore their functional abilities, and those grandkids will still be alive 80 years after I die.

**Future plans:** My plan is to become a medical educator to provide great education to learners interested in PM&R. My short-term plan is to learn as much as I can during residency at Baylor College of Medicine in Houston and to survive it!

**About the award:** Started in 2011, the award is named in honor of the Department's past Chair, Dr. Kowalske. The honoree receives a plaque and a \$250 gift certificate.

#### Ahneesh Mohanty, M.D.:

Excellence in Plastic Surgery Award



Ahneesh Mohanty, M.D.

As a child, Dr. Ahneesh Mohanty was hospitalized with Kawasaki disease. Amazed at the care UT Southwestern physicians provided and how their efforts could positively transform lives, Dr. Mohanty came to realize medicine as his calling.

What this award means: This award represents a recognition of years of hard work in a field that I am so passionate about. I have been inspired by the impact that plastic and reconstructive surgery has on the quality of life for patients.

**Mentor comment:** One of the most unique aspects about Ahneesh is his insatiable curiosity combined with an unwavering work ethic, ability to execute at an extraordinary level, and very high intelligence. I have very little doubt as to his future contributions to medicine. – Shai Rozen, M.D., Professor of Plastic Surgery

Background and family: I was born and raised in Plano, Texas. My father is a first-generation immigrant from India, and my mother is a first-generation immigrant from Sri Lanka. Being a child of immigrant parents, they taught me the importance of working hard to achieve your dreams. They also did a tremendous job of making sure my brother and I stayed grounded by taking us home to India and Sri Lanka and showing us some of the poverty that exists

there. These experiences additionally helped inspire me to pursue medicine.

What led to your career path: When I was a young child, I was hospitalized with Kawasaki disease here at UT Southwestern. I remember being amazed at how physicians had the capacity to change lives, and I knew from an early age that medicine was my calling.

**College:** I was accepted to the seven-year B.A./M.D. program with UT Dallas and UT Southwestern as a high school student. I graduated summa cum laude from UT Dallas with a Bachelor of Arts in biology and a minor in economics before matriculating at UT Southwestern.

**UTSW activities:** My first year at UT Southwestern, I served as President of the Plastic and Reconstructive Surgery Interest Group. I also became involved in DFW Hepatitis B/C Free, an organization dedicated to performing free hepatitis B and C virus screening to underserved populations. I became a director of the organization during my third year.

**Surprising fact**: I competed in geography bees throughout elementary and middle school, even going as far as the state level!

**Ultimate career goal:** A career in medicine has been a lifelong goal, and it still gives me chills that this dream is finally coming true. I want to impact the lives of patients for the better. I know I most likely won't change the world someday, but if I can change someone's world, that makes all the difference for me.

**Future plans:** I will be going to the University of Michigan, Ann Arbor, for my plastic surgery training. I hope to one day specialize in either craniofacial surgery, microsurgery, or peripheral nerve surgery; however, my ultimate goal is to become an academic plastic surgeon. I want to continue to do research and be involved in the education and mentorship of medical students and residents.

**About the award:** This annual award is presented by the Department of Plastic Surgery to a fourth-year medical student who has exemplified excellence in clinical care, integrity, compassion, ingenuity, and scholarly activity.

#### Rohit Badia, M.D.:

John D. McConnell Award for Excellence in Urology



Rohit Badia, M.D.

Shadowing a urology team, Dr. Rohit Badia observed a surgery to treat cancer using laser technology and became fascinated. His interest in urology checked all the boxes he was looking for: using emerging technology, performing both quick and complex procedures, and caring for patients with quality-of-life issues.

What this award means: I have been fortunate to learn from the amazing faculty and residents in the Department of Urology ever since I expressed interest in the specialty as a second-year student. I am humbled to be recognized for the hard work and passion I have demonstrated for the field.

**Mentor comment:** Rohit exhibited tremendous scientific curiosity, an indefatigable work ethic, and an enthusiasm that enriched all those around him. We feel very fortunate to have matched Rohit here at UT Southwestern and look forward to guiding him through the next aspect of his urological journey. – Gary Lemack, M.D., Professor of Urology and Neurology, who holds the Helen J. and Robert S. Strauss Professorship in Urology, and the Rose Mary Haggar Professorship in Urology

**Background and family:** I was born in India and immigrated to the United States with my parents

when I was 9 years old. We are now proud American citizens but continue to hold onto our cultural roots. My immigrant background has helped me relate to the diversity of patients I interact with.

What led to your career path: When I shadowed the Urology team, I was immediately captivated. I had the opportunity to witness a surgeon use a laser to treat cancer. After spending time in clinic and doing urology research, I was certain I had found the specialty for me.

**College:** I graduated summa cum laude from UT Dallas with a Bachelor of Science in biology. I was heavily involved with the undergraduate tutoring program and led sessions in general and organic chemistry.

**UTSW activities:** As a curriculum representative for my class, I was a liaison between the student body and faculty to recommend changes to the curriculum based on student feedback. I also held leadership positions in United to Serve.

**Surprising fact**: I enjoy acting! It's a hobby I picked up in college and have been able to continue in medical school.

**Ultimate career goal:** This is a tough one. I am interested in the triple threat of academic medicine: clinical care, research, and teaching. I aspire to provide high-quality care to all patients, engage in novel research, and inspire future generations of physicians.

**Future plans:** I will be pursuing my urology residency at UTSW starting in July. My interest in the field was piqued by the attendings and residents here, so I am thrilled to begin my training alongside their mentorship.

**About the award:** The award honors Dr. McConnell, a former UTSW faculty member who led Urology from a Division into a Department. He is now Executive Director of Wake Forest Healthcare Ventures in North Carolina, which develops and commercializes health care products and services.

### Beatrice Secheli, M.D., M.P.H:

Annelle M. Ahmed, M.D. Women's Health Care Award



Beatrice Secheli, M.D., M.P.H.

As an immigrant from Romania, Dr. Beatrice Secheli is passionate about helping others adjust to new cultures. She has aided refugees in Thailand and even organized a service trip to Guatemala. Now her sights are set on obstetrics and gynecology and public health opportunities in women's health.

**What this award means:** I'm honored to receive this award and aspire to be the caring physician and colleague that Dr. Ahmed was.

**Mentor comment:** Beatrice displays empathy and compassion while simultaneously seeking to provide the best care to all of her patients. Through her M.P.H. degree and volunteer work for charity clinics, she cares for the underserved community throughout DFW. Beatrice will be a future resident at Parkland Memorial Hospital, where she will thrive and be a model to others. – Alicia Kiszka, M.D., Assistant Professor of Obstetrics and Gynecology

What led to your career path: I was drawn to the

fields of medicine and public health when I began to take note of the inequalities that exist in accessing health care not only abroad, but locally as well. I knew that my purpose would be to care for, partner with, and advocate for patients.

**Background and family:** I emigrated with my parents and younger brother from Romania to Dallas, and I'm fluent in Romanian and Hungarian.

**College:** I went to Emory University in Atlanta for undergrad, where I majored in neuroscience and behavioral biology and minored in global health. I had the opportunity to assist with research projects on neglected tropical diseases at the Centers for Disease Control and Prevention. I also spent two summers working with a nonprofit in northern Thailand that assists migrants and refugees from Myanmar.

**UTSW activities:** While at UT Southwestern, I concurrently obtained an M.P.H. through the UT Houston School of Public Health. I started a series of monthly health education sessions at a women's shelter near campus and helped organize a service trip to Guatemala.

**Surprising fact:** I think daily movement and a nutritious diet are paramount to good health.

**Ultimate career goal:** My ultimate goal is to help my patients be the healthiest they can be! I also want my colleagues to feel supported and valued.

**Future plans:** I'm so excited to become an obstetrician and gynecologist at Parkland Hospital! I'm interested in pediatric and adolescent gynecology and the public health opportunities within the field of women's health.

**About the award:** The award honors Dr. Ahmed, an Obstetrics and Gynecology faculty member who died of breast cancer at age 39. The recipient demonstrates exemplary women's health care and epitomizes the clinician that Dr. Ahmed was – caring, intelligent, and involved in her community.

### Madyson Kuo, M.D.:

Southwestern Gynecologic Assembly Award



Madyson Kuo, M.D.

For a research project examining why women with children missed their health appointments, Dr. Madyson Kuo interviewed hundreds of women. Her efforts went on to inform the creation of Annie's Place, a free child care center for patients of Parkland Health. That same passion for women's health will carry her forward in her career as a practicing Ob/Gyn.

What this award means: I absolutely loved my clerkship experiences on Ob/Gyn and am thrilled to be entering an Ob/Gyn residency in July. The attendings that I worked with while on rotations are such incredible faculty members with an immense dedication to women's health. To be chosen by them to receive this award is such an honor.

**Mentor comment:** Madyson is a passionate advocate for women's health. She possesses all the qualities of a future leader in obstetrics and gynecology – empathy for patients, passion for the field, and an inquisitive intellect that ranges from pathophysiology to public health.

I have no doubt that she will continue to touch and improve lives for so many in the next stages of her career. – Kimberly Kho, M.D., Associate Professor of Obstetrics and Gynecology, who holds the Helen J. and Robert S. Strauss and Diana K. and Richard C. Strauss Chair in Women's Health.

**Background and family:** I grew up in Sugar Land, Texas, which is a southwest suburb of Houston. I'm the oldest of four siblings and I come from a family of teachers. I'm the first person in my family to go to medical school! I am married to my wonderful husband and am mom to my 1-year-old son.

What led to your career path: I had the opportunity to volunteer in college at a free prenatal clinic for low-income women. After one day of shadowing the Ob/Gyns there, I was hooked – I knew that's what I wanted to do with the rest of my life.

**College:** I majored in biomedical sciences at Texas A&M University (Gig 'em!).

**UTSW activities:** I was a course coordinator for the Women's Health Enrichment elective and co-President of the American Medical Women's Association. I also was inducted into the Gold Humanism Honor Society, through which I've been able to co-lead this year's Humanism elective.

**Surprising fact:** I love watching trash TV shows, but only if I can knit while watching them!

**Ultimate career goal:** I want every patient that I encounter to feel educated and empowered to take ownership of their body and their health.

**Future plans:** I will be attending Methodist Health System Dallas for my Ob/Gyn residency and plan on practicing as an Ob/Gyn generalist.

**About the award:** The award is given annually to an outstanding UT Southwestern Medical School graduate pursuing a career in obstetrics and gynecology.

#### Nicholas Campalans, M.D., and Patrick Lynch, M.D.:

Dr. Richard Mays Smith Award



Nicholas Campalans, M.D.

During his medical school training, Dr. Nicholas "Nico" Campalans spent hours at the bedside of one patient who insisted on leaving the hospital against medical advice. Only after talking with Dr. Campalans did the person agree to stay, demonstrating the new doctor's patient-centered care approach.

What this award means to you: I am so deeply humbled and grateful to have been chosen for this award. I am thankful for the support of my incredible mentors and peers at UTSW who have role modeled wonderful patient advocacy and care.

**Mentor comment:** Nico has been involved in many initiatives: a student-led patient navigator program, which he created; a Community Health Research Fellowship, in which he worked with current or formerly incarcerated people with mental health needs; and the Texas Medical Association Medical Student Section, serving as Director of Policy. Overall, Nico's leadership capabilities, humanistic approach to medicine, and exemplary clinical competency make him a well-rounded physician. – Reeni Abraham, M.D.,

Associate Professor of Internal Medicine

**Background and family:** My family and I are from Caracas, Venezuela, and we arrived in the U.S. when I was 5 years old. I am so grateful for their support throughout my journey in medicine, and I am excited to pass it forward to my sister, who is completing her M.P.H./P.A. degree at George Washington University, Washington, D.C.

What led to your career path: My exploration of medicine grew out of an interest in neuroscience. In college, this quickly became informed by my experience working with incarcerated students through the Cornell Prison Education Program. I subsequently served as a care coordinator for justice-involved clients through Ameri-Corps at a medical case management agency.

**College:** I graduated from Cornell University with a Bachelor of Science in biological sciences with a Distinction in Research. I also served as a teaching assistant and developed a biology curriculum with the Cornell Prison Education Program.

**UTSW activities:** I served with the student chapters of the Texas and American Medical Associations. I was involved in research through the Community Health Fellowship Program overseen by the Department of Family and Community Medicine. I also helped create a student-led patient navigator program and led ethics discussions through the Gold Humanism Honor Society.

**Surprising fact:** I recorded a cover of "Golden Hour" by Kacey Musgraves that was played at my friend's wedding.

**Future plans**: I am excited to begin my internal medicine residency at the University of California, San Francisco. I have a growing interest in addiction medicine and infectious diseases, and I hope to develop interventions that improve the capacity of our health care system to meet the needs of vulnerable patient populations.

**Ultimate career goal:** My ultimate goal as a new physician is to never stop learning from my patients, students, and peers!



Patrick Lynch, M.D.

A college physics course unleashed Dr. Patrick Lynch's passion for science. He thought about becoming a scientist until he watched his grandparents navigate hospital care toward the ends of their lives, reinforcing for him how meaningful medicine could be.

What this award means to you: I feel that this award recognizes my commitment to provide exceptional care to all of my patients by going beyond the knowledge found in a textbook and addressing each one's individual values and concerns.

**Mentor comment:** Patrick is a cerebral, compassionate student who enjoys cultivating long-term relationships. During his clerkship, he viewed his patients holistically, caring for many with terminal illnesses. He treated all his patients with the utmost respect and made them feel at ease. – Reeni Abraham, M.D., Associate Professor of Internal Medicine

**Background and family:** I was born and raised in College Station, Texas, where my mother worked as a history professor. I grew up with an

interest in reading, writing, and history, intent to study liberal arts in college. However, after my first college physics course, I discovered a passion for science and later developed my love for medicine.

What led to your career path: Initially, I planned to become a scientist, but after watching my grandparents navigate their final days through the hospital and hospice care, I realized how meaningful the practice of medicine could be. I switched careers and matriculated at UT Southwestern

**College:** At Cornell University, I majored in physics with a concentration in biochemistry. I worked as a tutor and teaching assistant for introductory physics, chemistry, and biology courses.

**UTSW activities:** I served as co-Director of DFW HepBFree (a hepatitis B and hepatitis C screening organization), as an officer for No One Dies Alone (a volunteer organization that holds vigils for those dying without family or friends at bedside), as a member of UT Southwestern's student government, as a volunteer at the Monday Clinic for uninsured individuals, and as an occasional member of the UT Southwestern Heartstrings Orchestra.

**Surprising fact:** I am addicted to bubble tea! My favorite boba shop in Dallas is Fat Straws, and my favorite tea to drink is Thai Tea.

**Future plans:** I am excited to start my residency in internal medicine at Baylor College of Medicine, where I hope to learn how to better provide high-quality and cost-efficient care to patients with limited resources and poor health literacy.

**Ultimate career goal:** During the first half of my career, I will strive to provide compassionate, personalized care to each and every patient that I see. However, as I learn more about health care delivery systems, I ultimately plan to become a physician leader who implements policies that improve the quality of care for my community with a focus on the underserved.

#### Heather Elizabeth Postma, M.D., and Sanaa Tejani, M.D.:

Dr. Richard Mays Smith Award



Heather Elizabeth Postma, M.D.

Volunteering at Scottish Rite for Children since the age of 14, Dr. Heather Elizabeth Postma is inspired to pursue medicine from a desire to serve and lead. She relishes working in teambased environments and focusing on the holistic care of patients.

What this award means to you: I am honored to be recognized with this award and see it as a reflection of those who surround me. It is a privilege to be part of a community that values clinical excellence and humanistic values in equal measure.

Mentor comment: After going through her clerkships, Heather decided to take a year off to earn an M.B.A. She was motivated to learn more about the drivers of health care to position herself to advocate on behalf of patients. Grounded, yet with a visionary outlook, Heather will no doubt be a leader in the field of internal medicine. – Reeni Abraham, M.D., Associate Professor of Internal Medicine

**Background and family:** I was born and raised in Dallas, Texas, with my parents and two brothers. I grew up in a family of physicians in various fields, including radiology, orthopedic surgery,

ENT, dermatology, and Ob/Gyn.

What led to your career path: I grew up with strong role models who inspired me by demonstrating the value of empathy, compassion, and intellectual curiosity. In medical school, I was motivated by rich patient interaction, intellectual challenges, and collaborative teamwork. I also became aware of the various challenges in accessing and delivering high-quality care, which motivated me to pursue an M.B.A. to acquire skills and knowledge to better advocate for patients and participate in health care system transformation.

**College:** I graduated summa cum laude from the University of Oklahoma with a Bachelor of Arts in economics and a minor in medical humanities. I was honored to be a member of the President's Leadership Class, Phi Beta Kappa, and the Medical Humanities Scholars Program. I was also actively involved in Kappa Alpha Theta, Heartland Hospice, and Global Medical Brigades.

UTSW activities: I enjoyed serving my community through various avenues, including student-run free clinics, United to Serve, and Scottish Rite for Children. I also nurtured a passion for mentorship while serving as an Academic Colleges peer mentor, AOA Step Up to Clerkships Committee member, Health Professions Recruitment and Exposure Program mentor, and PRE+OP orientation counselor.

**Surprising fact:** I have always loved ice cream and recently learned that my great-grandfather, Clarence Vogt, invented the continuous freezer in the 1920s. It is still used today to produce ice cream without interruption.

**Future plans:** I envision a future where I never stop learning, growing, and transforming. I plan to pursue a residency in internal medicine and have an interest in general internal medicine. I am excited for what the future holds, both personally and professionally.

**Ultimate career goal:** Ultimately, my goal is to positively impact the health and well-being of individuals and society. I hope to bring together outstanding medical and business education to better advocate for patients and work toward positive transformation in the health care system.



Sanaa Tejani, M.D.

Selected for an Archer Fellowship as an undergraduate, Dr. Sanaa Tejani interned at the United Nations and developed a database to assist refugees with low-cost medical and legal aid. She took these experiences in setting advocacy in motion and applied them to medical school and beyond.

What this award means to you: Over the past four years, I have been fortunate to work with incredible mentors who inspire me with their compassion, empathy, academic curiosity, and clinical excellence. I hope that I can carry forward these values throughout my career.

**Mentor comment:** I was really impressed by how Sanaa practiced evidence-based medicine. She did not just propose tests and workups for intellectual curiosity – she always based her clinical decisions on what would best help the patient. – Stephanie Brinker, M.D., Assistant Professor of Internal Medicine

**Background and family:** My parents are both immigrants from Pakistan. They left everything behind in their home country to come here in hopes of building a better future for their family. I am constantly inspired by their grit and resil-

ience in the face of any challenge.

What led to your career path: Growing up, I saw many members of my community struggle with chronic diseases, such as heart disease or diabetes. Their health concerns were further exacerbated by issues of access and availability of health care, resulting in severe complications of their illnesses. This motivated me to seek out a career where I could combine my passions for science, advocacy, service, and public health.

**College:** I graduated from UT Dallas with a major in biology and a minor in political science. I sought out opportunities to develop my passion for public health and policy, including completing internships with the U.S. Department of Health and Human Services and the United Nations High Commissioner for Refugees. I was also able to cultivate my research interests through a project I developed on understanding barriers to women's health care for refugee and immigrant women in Dallas.

**UTSW activities:** I served as the Clinic Operations Manager at the Monday Clinic, one of UT Southwestern's student-run free clinics. I have also been involved as a peer mentor for Estabrook College, a Health Professions Recruitment and Exposure Program mentor, and an Internal Medicine clerkship reflections session facilitator.

**Surprising fact:** I love learning new languages. Growing up, I was able to learn my parents' native language of Urdu, and over the years I've had the chance to spend time learning varying amounts of Spanish, French, and Italian.

**Future plans:** I will be pursuing my residency in internal medicine here at UT Southwestern! I hope to remain in academic medicine, working primarily with underserved populations. Ultimately, I would love to work in a setting where I can combine my interests in clinical medicine, advocacy, service, and education.

**About the award:** The award is given annually to one or more graduating medical students who excel academically during clinical rotations and exhibit an interest in and compassion for patients.

#### Isabel Wees, M.D.:

Dr. Richard Mays Smith Award



Isabel Wees, M.D.

During medical school, Dr. Isabel Wees took on very complex cases, such as a cirrhotic patient with cholangiocarcinoma and multiorgan failure. Dr. Wees played a key role in helping this patient and their family navigate difficult end-of-life decisions and now aspires to assist others as an internal medicine physician.

What this award means: I am humbled to receive this honor and feel privileged to have worked alongside such distinguished Internal Medicine faculty and residents.

**Mentorcomment:** Isabel received the highest praises for her ability to connect with patients, function well in a team environment, and synthesize medical information. She brings a sophisticated wisdom, immense talent, and unique skill set to our profession. – Reeni Abraham, M.D., Associate Professor of Internal Medicine

**Background and family:** In making frequent trips to Trinidad and Tobago, the birthplace of my father, I was exposed to a different way of life and approach to health care. The struggles with

the health care system experienced by many of my relatives and their neighbors inspired me to become an internal medicine physician to address health care disparities.

What led to your career path: In high school, I volunteered at a food pantry and wrote a bilingual newsletter to provide basic nutrition information for the food pantry recipients. This led to my becoming a registered dietitian. However, as an internal medicine physician, I felt I could utilize my skill set to treat the whole patient rather than just a single aspect of their care.

**College:** I graduated from UT Austin in 2018 with an honors nutrition degree. I volunteered at food pantries and assisted with nutrition education at elementary schools and senior centers during my college years.

**UTSW activities:** My first year at UTSW, I was introduced to quality improvement research and completed the Distinction in Quality Improvement and Patient Safety program through a research project at the Parkland Diabetes Clinic. As part of the United to Serve Carnaval de Salud Science Zone Committee, I loved sharing my passion for science and medicine with children.

**Surprising fact**: During my middle and high school years, I spent most weekends at my grandparents' ranch where we raised chickens and cattle and tended a large garden and orchard.

**Future plans:** I will complete an internal medicine residency at UT Southwestern and then pursue a gastroenterology fellowship with a focus on hepatology. I would like to stay in academic medicine, working with underserved populations as well as continue my work in quality improvement research.

**About the award:** The award is given annually to one or more graduating medical students who excel academically during clinical rotations and exhibit an interest in and compassion for patients.

### Nikita Agarwal, M.D.:

Herbert S. Salomon, M.D., Class of 1967, Memorial Scholarship Award



Nikita Agarwal, M.D.

As a clinician, Dr. Nikita Agarwal hopes to provide high-quality and compassionate care to her patients. Ultimately, she aspires to use her knowledge of medicine and public health to challenge the systems that make access to health care inequitable for patients.

**What this award means:** To be recognized in memory of a beloved and dedicated physician is an honor.

**Mentor comment:** Nikita Agarwal is tireless in her advocacy for patients and humble in her approach to learning. She has focused her leadership talents into health policy and quality improvement work, which includes working with the American Cancer Society and earning a selective internship at the Archer Center Graduate Program in Public Policy in Washington, D.C. – Reeni Abraham, M.D., Associate Professor of Internal Medicine

**Background and family:** I grew up in Dallas with my parents and sister. My parents emigrated from India, where my dad went to medical school. Watching my dad treat cancer patients as an

oncologist gave me early and close exposure to the realities of clinical practice and the importance of innovation in all facets of medicine.

What led to your career path: In college, I thought I would become a basic science researcher. Ultimately I found more joy in interacting with patients at a student-run free clinic in West Philadelphia. That began my journey to the intersection of medicine and public health. Rotating at Parkland and working with free clinics around DFW solidified my desire to pursue an M.P.H. in health policy and improve care for those with serious pathology made worse by socioeconomic barriers to health. Internal medicine excites me because it uniquely merges my policy goals with my clinical goals in becoming a patient advocate.

**College:** I went to the University of Pennsylvania where I was a Vagelos Molecular Life Sciences Scholar, which allowed me to complete a master's degree in chemistry while getting my bachelor's degree in biochemistry and biophysics.

**UTSW activities:** At UTSW, I was a Monday Clinic Manager and Chair of United to Serve's Health Awareness Program, a longitudinal study of the health fair's impact on participants' ability to access follow-up care.

**Surprising fact:** People may not be *surprised* to know this about me, but I routinely get certified to be a deputy voter registrar in Dallas County, which makes it easy to help people register to vote or update their voter registration (especially for those of us who spend so much time in the hospital).

**Future plans:** I'm very excited to start my internal medicine residency at Beth Israel Deaconess Medical Center in Boston!

**About the award:** The award recognizes a UT Southwestern medical student who demonstrates excellence in internal medicine. It is named after Dr. Herbert Salomon, who graduated from UT Southwestern in 1967 and died shortly after graduation.

### Hector Filizola, M.D., and Ashley Phillips, M.D.:

Hemphill-Gojer Award in Internal Medicine



Hector Filizola, M.D.

When a back injury derailed Dr. Hector Filizola's dream to play football, coaches and family members told him everything happens for a reason. Little did he know then that the experience and medical care he received would inspire him to become a physician.

**What this award means:** Being selected for this honor by my role models means the world to me. The Internal Medicine faculty and residents taught through example and mentorship what humanistic, patient-centered care means.

**Mentor comment:** Hector's ability to build rapport with his patients and their family transcends his level of training. Having demonstrated a sophisticated ability to manage patients, Hector would be an exceptional addition to any residency program and the physician you would want at your own or your family member's bedside. – Kehinde Odedosu, M.D., Assistant Professor of Internal Medicine

**Background and family:** I was born and raised in Brownsville, Texas. My father is a financial consultant, and my mom owns a dance academy. I also just got married to my best friend!

What led to your career path: My interaction with doctors after experiencing a back injury that prevented me from playing my dream sport led me to medicine as my calling. Coaches and family always told me everything happens for a reason, and it is not until now that I am discovering that reason. This experience, in combination with growing up in a city that is medically underserved and seeing how Hispanics are disproportionately affected, helped me find my passion – medicine.

**College:** I graduated summa cum laude from UT Rio Grande Valley. My biggest accomplishments there were establishing and leading two student organizations, Tutor for All (T4A) and Live to Serve (L2S). T4A is an organization of volunteers that tutors children in an underserved community. L2S provides volunteers to Rio Nursing Home at Fox Hollow.

**UTSW activities:** In my spare time, I volunteer in free clinics and health fairs as a Spanish interpreter. During COVID-19 vaccination efforts, I volunteered to help administer vaccines. I am also a peer mentor for second-year medical students and was a Latino Medical Student Association officer.

**Surprising fact:** I once tried out for a role in a movie and got the part! Look me up in IMDb (one-hit wonder)!

**Ultimate career goal:** I want to work every day to help mitigate the disparities and communication barriers that underserved Hispanics face in medicine. I plan to move back to South Texas or work with a similar patient population once I conclude my training.

Future plans: I plan to take the tools and knowledge I gained here at UT Southwestern while I continue to grow and learn during my internal medicine residency at UCLA. Currently, I am most interested in specializing in pulmonary and critical care. In this specialty, I believe I can use the internal medicine principles that I have been educated in and at the same time give the patients and especially their loved ones the compassion and communication they deserve.



Ashley Phillips, M.D.

When Dr. Ashley Phillips began medical school, she envisioned becoming an Ob/Gyn until her very last rotation – internal medicine. Within days she felt excitement, camaraderie, connection, and joy unlike any she had experienced in other clinical settings.

**What this award means:** This award is validation that I have truly found my home in internal medicine. I have a deep passion for the field.

Mentor comment: Ashley is a rising star and will have an incredible career in internal medicine. She has dedicated herself to understanding principles of public health and health disparities and is committed to health care for the underserved and ensuring that care delivery is optimized. – Rachel Bonnema, M.D., Associate Professor of Internal Medicine

**Background and family:** I was born in Irving, Texas, but my family is from the Caribbean. My parents and extended family have embedded West Indian culture into our family events and everyday life.

**What led to your career path:** My interest in becoming a physician stems from my mother's experience living with heart failure and, on Jan.

22, as a heart transplant recipient. Through my mother, I learned about the complexity of living with chronic disease and decided to pursue a career that allowed me to care and advocate for individuals like her. After college, I earned my master's in public health, learning to improve health care for patients at the community level before attending medical school to learn how to care for them at the individual level.

**College:** At Rice University, I was a dual major in policy studies and anthropology, with a self-directed focus on the intersection of culture and medicine. It was my own way of incorporating public health into my undergraduate education. As a graduate student in public health at Emory University, my area of focus was behavioral sciences and health education.

**UTSW activities:** At UTSW, I had the privilege of helping start and serve as co-President of the Preventive and Lifestyle Medicine Student Interest Group, educating students on nutrition and motivational interviewing and organizing student volunteer events at food pantries in the Dallas community.

**Surprising fact:** As a dog lover and part-time dog sitter, most people assume I either grew up with dogs or had my own pup at home. March 2020 is when I finally gave in and foster failed my little buddy, Jack Jack.

**Future plans:** I will be completing my internal medicine residency at Johns Hopkins Hospital through their Urban Health Primary Care Track. I intend to become a primary care provider for underserved patients and to continue conducting public health research to improve health care systems in my community.

**About the award:** The award, presented to one or more top medical students in internal medicine, was established by Ross H. and Anne Seymour Hemphill in honor of their son and daughter-in-law, Dr. and Mrs. Seymour Hemphill; their daughter and sonin-law, Dr. and Mrs. Bernard Gojer; and Anne Hemphill's parents, E. Clyde and Florine Allen Seymour. Dr. Hemphill and Dr. Gojer are both UTSW Medical School alumni.

#### Laila Abbas, M.D., and Adrienne Joseph, M.D.:

Award for Excellence in Dermatology



Laila Abbas, M.D.

As an undergrad, Dr. Laila Abbas set her sights on dermatology. She volunteered at a UTSW dermatology clinic and then began participating in research once she enrolled as a medical student. Dr. Abbas said the impact that a dermatologist can have on helping patients with complex skin diseases solidified her focus.

**What this award means:** It has been my dream for years to be a dermatologist, and I am so grateful for the excellent mentorship and exciting opportunities I have had at UT Southwestern.

Mentor comment: Laila has a long-standing commitment to dermatology dating back to her days as an undergraduate when she began volunteering in my clinic. After starting medical school, Laila maintained consistent contact by shadowing in the clinic and participating in research projects. This evolved into a yearlong fellowship. Throughout, Laila has been a joy to work with, exhibiting a true desire to learn,

persevere, and get things done. – Heidi Jacobe, M.D., Professor of Dermatology, who holds the James N. Gilliam, M.D. Chair in Dermatology

**Background and family:** My parents are first-generation immigrants from Pakistan. My mom is an elementary school special education teacher, and my father is an engineer. I got married about a year ago, and my husband is currently completing his fellowship in cardiology.

What led to your career path: I became interested in dermatology as an undergraduate student when I volunteered as a research assistant in Dr. Jacobe's morphea clinic. I was fascinated by the complex skin diseases managed by dermatologists and the profound impact a dermatologist can have on patients' quality of life. I particularly loved caring for patients with complex medical dermatologic issues and autoimmune skin disorders. During medical school, I pursued a clinical/translational research fellowship funded by the Pediatric Dermatology Research Alliance and the UTSW Dean's Research Scholars Program studying rheumatologic dermatology.

**College:** I graduated summa cum laude with a Bachelor of Arts in biology from UT Dallas and was part of a seven-year B.A./M.D. program with UT Dallas and UT Southwestern.

UTSW activities: I served as an Agape Dermatology Clinic volunteer, Agape Multidisciplinary Clinic Manager, SASS tutor, AOA Step Up to Clerkships Committee founder and chair, Medical Education I/II course director, Dean's Research Scholar, and Pediatric Dermatology Research Alliance Fellow.

**Surprising fact:** I really enjoy weightlifting, especially leg day!

**Future plans:** I plan to build on my existing work in dermatology and medical education in residency and beyond. I hope to one day make a positive impact in the care of patients with complex dermatologic diseases as both a clinician and educator while also conducting clinical/translational research.



Adrienne Joseph, M.D.

A misunderstanding of her family's culture resulted in poor outcomes and mistrust of the health care system among some members of Dr. Adrienne Joseph's family. This led to her decision to pursue medicine to provide culturally and socially conscious care to patients from historically neglected groups.

**What this award means:** This award serves as motivation for me to contribute meaningfully to the field of dermatology.

Mentor comment: Adrienne was very productive as my research fellow, publishing two first-author manuscripts, one review, one case report, and one quiz with me. With Dr. Heidi Jacobe, she obtained a melanoma research grant award. She also worked on community health projects, researching diseases impacting skin color, and spearheaded a teledermatology initiative for the homeless. Adrienne has a bright future ahead in dermatology! – Benjamin Chong, M.D., Associate

Professor of Dermatology, who holds the Anita C. Gilliam, M.D., Ph.D. Professorship in Dermatology

**Background and family:** My parents taught me to work hard, be compassionate, and never settle. Thanks to the sacrifices made by my family, I will be the first person in my family to become a doctor.

What led to your career path: Many members of my family struggled with chronic diseases. A lack of understanding of my family's culture by some medical professionals resulted in poor outcomes and mistrust of the health care system by my family. I chose to pursue dermatology for two reasons. First was my interest in learning about skin and hair disease. Second was a recognition of the importance of increasing access to care, cultural competency, and diversity within dermatology.

**College:** I graduated magna cum laude from UCLA with a Bachelor of Science in microbiology, immunology, and molecular genetics. College volunteer activities included assisting at a primary care clinic that served patients from low-income backgrounds and educating high school students about reproductive health.

**UTSW activities:** I served as a community service chair for the Student National Medical Association, co-President of the Palliative Care Interest Group, and mentor for the Health Professions Recruitment and Exposure Program. Additionally, I regularly volunteered at UTSW student-run free clinics and published research related to dermatology in underrepresented populations.

**Surprising fact:** I love crafts. I mostly enjoy drawing or painting, but I have picked up knitting as an end-of-med-school hobby.

**Future plans:** I will return to Houston, my hometown, to complete a transitional year at HCA Kingwood and a dermatology residency at UT Houston.

**About the award:** The award is given to students who have advanced dermatological patient care, research, or teaching in a special way, or who show promise for leadership in these areas.

#### Lauren Day, M.D.:

Society for Academic Emergency Medicine Award



Lauren Day, M.D.

A competitive swimmer in college, Dr. Lauren Day developed the drive and discipline to achieve a goal. A spinal fusion at age 12 and the care she received from her doctor inspired her to pursue medicine as a career.

What this award means: To be recognized is a huge honor. I am striving to eventually make a lasting impact within the field of emergency medicine (EM), and this feels like an amazing first step toward achieving that goal.

Mentor comment: Lauren's the whole package – she's had excellent performance on clinical rotations, developed educational sessions in quality improvement (QI) and management of emergencies outside the hospital, contributed to multiple research projects, and served in student government. We anticipate she will have a successful career in academic medicine. – Christine Kulstad, M.D., Associate Professor of Emergency Medicine

**What led to your career path**: I had a spinal fusion for scoliosis when I was 12 years old, and seeing how my doctor cared for me and his other patients really inspired me to pursue medicine as a career.

EM found me through scribing; before that I had no idea what kind of doctors staffed the emergency department (ED), but once I got to work with them, I was hooked. I tried to keep an open mind going into medical school, but I found that I loved everything, and EM was the perfect mix of every specialty.

**College:** I attended the University of Maryland, Baltimore County, majoring in biological sciences with minors in economics and psychology. A competitive swimmer, I was a scoring team member in Division I and both an America East Conference individual and relay finalist and champion. I won the America East Presidential Scholar Athlete award as a senior and hold a record at my college in medley relays.

**UTSW activities:** I served as president of the Emergency Medicine Interest Group and conducted quality improvement research in the Departments of Surgery and Emergency Medicine.

**Surprising fact:** I have a twin sister who is graduating from veterinary school this year and plans to be a zoo veterinarian. She also swam with me at our undergrad, but we did different strokes (she was a butterflier and I was a backstroker).

**Future plans:** I am hoping to continue doing QI work, specifically dealing with substance use disorder and getting patients plugged in with follow-up resources from the emergency department. I would like to pursue a fellowship in critical care or addiction, but am open to whichever direction life pulls me in.

**Ultimate career goal:** I want to continue my work on substance use disorders. My current project is about instituting published outpatient surgery-prescribing guidelines at our institution, but I would love to shift my focus to establishing a pipeline from the ED to follow-up resources through addiction specialists and/or buprenorphine clinics. In addition to this, I would ultimately like to split time between an ICU and the ED and hope to participate in critical-care research.

**About the award:** The award is given annually to a senior medical student for demonstrating excellence and commitment to emergency medicine.

### Anthony Han, M.D.:

Texas College of Emergency Physicians Award



Anthony Han, M.D.

The struggles and sacrifices that Dr. Anthony Han's parents made as immigrants to the U.S. so that he could have a good education imprinted on him the desire to help others. This led to his interest in becoming a physician, and emergency medicine in particular.

**What this award means:** I'm honored that others have noticed my passion and are recognizing me for it.

Mentor comment: Anthony has been an excellent student with superb clinical skills, but stands out through his involvement in teaching and advocacy – from simulation interest groups to teaching CPR at health fairs to leadership in our school's student Texas Medical Association (TMA) chapter. We expect him to become a leader in his future residency program. – Christine Kulstad, M.D., Associate Professor of Emergency Medicine

**Background and family:** I am an only child and first-generation American, immigrating to the U.S. when I was 3 years old with my parents. My father teaches aerospace engineering at UT Arlington.

What led to your career path: I grew up with immi-

grant parents who instilled the value of hard work in me from an early age. Like many other immigrant parents, I watched mine save every penny, turning down chance after chance to purchase things for themselves, so *my* education might not be limited by financial burdens. As I grew older and realized the scale of that sacrifice, I felt compelled to use it to positively impact as many others as possible. I love working in the ER, as I can treat the most acute, sick patients, and be the first line in their care on their worst days.

**College:** I attended Washington University in St. Louis, Missouri, majoring in biomedical engineering. A cellist, I played musical gigs part time during college while also serving as a resident adviser and volunteer at Barnes-Jewish Hospital.

**UTSW activities:** I co-wrote, co-produced and acted in the senior movie. Other activities included serving as instructor for a student-run simulations elective, Stop the Bleed, and Texas Two Step CPR programs; co-manager of the Agape student-run musculoskeletal clinic; vice president of UT Southwestern's TMA student chapter; volunteer for United to Serve and COVID-19 vaccine efforts; and MS1 orientation counselor.

**Surprising fact:** In my free time, I train in Brazilian jiu-jitsu and boxing at the GracieOne Academy in North Dallas. Additionally, I do West Coast swing dance with my fiancé.

**Future plans:** I will continue my training in emergency medicine here at UT Southwestern. I have an interest in EMS, event medicine, and ringside medicine, so I hope to be involved in those areas to some capacity.

**Ultimate career goal:** I believe we in medicine have the privilege to tangibly better the lives of those in our community, and in doing so create a ripple effect of good. As an emergency physician, I'd like to take people on days they are sick or frightened and be the first step in turning those days around.

**About the award:** The award is presented to a medical student who demonstrates excellence in emergency medicine, with special dedication to Texans who need emergency care.

#### Yue "Alice" Gao, M.D.:

William F. Ross, M.D., Scholarship Award in Family Medicine



Yue "Alice" Gao, M.D.

Although science had always fascinated Dr. Yue "Alice" Gao, the field of medicine had a stronger pull that finally reeled her in. She hopes to work as a physician helping underserved populations, applying her passion for community and public health.

What this award means: Winning this award has helped me to reflect on the work that I've put into this passion and the support I've had from mentors, reinforcing my decision to pursue family medicine as a career.

Mentor comment: Alice has worked on many community-based projects, always demonstrated a high level of enthusiasm, and implemented the projects very effectively. - Nora Gimpel, M.D., Professor of Family and Community Medicine, Distinguished Teaching Professor, and holder of the Dr. John L. and Louise Roan Professorship in Family Medicine

Background and family: I'm going to be the first physician in my family (my siblings all decided computer science was their calling), although my mother is an avid practitioner of Chinese medicine.

What led to your career path: My fascination with science and the desire to help people guided my career toward health care. I chose family medicine because this field teaches you to see patients in a humanistic way, at every stage of life, and consider the social, financial, behavioral, cultural, and other factors that influence health decisions and outcomes. As a dual M.D./M.P.H. student, it's also the perfect field for me to apply my love for community health and public health.

College: I majored in biochemistry at Northeastern University in Boston, Massachusetts, with a full tuition scholarship as a University Scholar. I joined a student group that worked to learn more about health disparities, which sparked my interest in underserved medicine and community health. I also co-founded a club that recruited students to volunteer in nursing homes and memory care facilities.

UTSW activities: I was in the Department of Family and Community Medicine's Community Health Fellowship Program and the Community Action Research Track. I am also co-President of the Brown Bag Initiative, a group that collects toiletries for donation to local homeless shelters. I was a founding member of a student group that works with Brother Bill's Helping Hand, a community food pantry and clinic.

Surprising fact: I dabble in arts and crafts. Currently I've been into (very amateur) watercolor painting of nature scenes or animals.

Future plans: I'm very excited to have matched at the Drexel University College of Medicine/Tower Health Family Medicine residency program.

About the award: Named after the Chair of Family and Community Medicine at UT Southwestern from 1984 to 1993, the Ross Award includes a \$1,000 scholarship from the Dallas Chapter of the Texas Academy of Family Physicians Foundation.

#### Merin John, M.D.:

Minnie Lancaster, M.D., Scholarship Award in Family Medicine



Merin John, M.D.

As the first female physician in her family, Dr. Merin John wants to fulfill what she considers a divine calling to help others. She aspires to practice in an urban, underserved community, providing primary care and emphasizing preventive health strategies.

What this award means: It is an absolute honor to be chosen for this award, as it recognizes how integral community service is in the field of medicine. I'm especially glad because this award is in memory of an incredible physician, Dr. Minnie Lancaster, who deeply valued family and community and was a true role model for women in medicine.

Mentor comment: Merin is one of the best students I have worked with so far. She is a great student, easy to work with, attentive, and takes initiative. She has a bright future ahead of her and would be an asset to any residency program. - Tamara McGregor, M.D., Associate Professor of Family

and Community Medicine and Internal Medicine, who holds the Ozora F. Young, M.D. Professorship in Family Medicine

Background and family: My parents moved from Delhi, India, when I was 13 years old, and we've lived in a small town near Galveston ever since.

What led to your career path: I was inspired to pursue a career in health care, following in the footsteps of many women in my family who were nurses, pharmacists, and so on. However, becoming the first female physician in my family was truly a divine calling that I only came to realize during my final year of college. It was only then that I found medicine to be a meaningful way for me to accomplish my true passion, which is to spread the love of Jesus by serving those most in need.

College: I'm a proud Longhorn (Hook 'em Horns!) from UT Austin. I completed my bachelor's degree in public health, which taught me to view patients within the context of the communities they live in and better understand their barriers to care.

UTSW activities: As a medical student at UTSW, I've been involved in Family Medicine and Preventive Lifestyle Medicine interest groups. I've also enjoyed serving as a free clinic manager, smoking cessation clinic officer, and led the Women's Health Enrichment elective.

Surprising fact: I am fluent in three languages (English, Hindi, and Malayalam) and love watching NFL highlights or sports documentaries during my free time.

Future plans: I hope to live in an urban, underserved community where I can provide primary care and emphasize prevention by focusing on health education, nutrition, and other barriers to care.

About the award: The award honors Dr. Lancaster and her husband, Dr. Edgar Lancaster, who in 1953 opened the Grapevine Clinic and Hospital, the first clinic in Grapevine and the forerunner of Baylor Scott & White Medical Center at Grapevine.

# **Leah Carter Smith, M.D.:**

TAFP Dallas Chapter Outstanding Graduate Award



Leah Carter Smith, M.D.

When her dad suffered a stroke, Dr. Leah Carter Smith witnessed the compassionate care he received in the ICU. That experience convinced Dr. Smith to pursue medicine and become an advocate for patients and families through all stages of their lives.

What this award means: Starting the studentrun clinic at Brother Bill's Helping Hand was a huge effort that required the help of passionate students, dedicated faculty, and the clinic staff. I am so proud of the clinic and honored to have the opportunity to expand the already extensive footprint of Brother Bill's and UTSW in serving the community. This award reminds me of the work we have done and how much potential there is for future students to continue our initiatives.

**Mentor comment:** Leah was my mentee during her Schweitzer Fellowship, implementing a project at Brother Bill's Helping Hand clinic. Since then, we have worked together on many communitybased projects. Leah loves people! She is very mature and a compassionate learner. Her positive attitude is contagious, and her commitment and professionalism are outstanding. - Nora Gimpel, M.D., Professor of Family and Community Medi-

cine, Distinguished Teaching Professor, and holder of the Dr. John L. and Louise Roan Professorship in Family Medicine

Background and family: Growing up in Fort Worth, Texas, I loved being outside, riding bikes with my sisters, playing sports, and visiting my family in Tennessee. I met my husband in college, and we have been together for eight years.

What led to your career path: I never considered becoming a doctor until I sat in the ICU with my dad after he suffered a stroke. His doctors, nurses, and therapist were brilliant and compassionate, and I saw how their decisions to go above and beyond each day directly affected my family. I chose a career in family medicine because it allows me to build lasting relationships and advocate for my patients and their families.

College: I graduated from UT Austin summa cum laude with a degree in biomedical engineering and worked as a researcher in two different labs. I served as a volunteer tutor for the Texas School for the Blind and Visually Impaired and was a member of the Biomedical Engineering Honor Society.

UTSW activities: Besides serving as co-founder of the Brother Bill's student-run free clinic, I founded a girls' leadership program through a Schweitzer Fellowship and completed a research project on contraceptive access. I also was women's health director for a Health Literacy Group and served as a coach and facilitator two summers at a sports camp.

Surprising fact: My life dream would be to play Olympic doubles sand volleyball with my younger sister.

Ultimate career goal: My ultimate goal is to grow every day to become a more compassionate and knowledgeable physician. I want to keep my patients at the center of my work and treat them like members of my own family.

Future plans: I have the awesome opportunity to return to my hometown and train at John Peter Smith Hospital!

About the award: The TAFP (Texas Academy of Family Physicians) Outstanding Graduate Award is given by the Dallas Chapter to one student annually.

# James Tran, M.D.:

Eliot Goldings Award in Rheumatology



James Tran, M.D.

The selfless dedication of medical professionals who treated his grandmother for a heart attack following a hurricane years ago always stuck in Dr. James Tran's mind. Even with many roads still flooded at the time, they came to her rescue, inspiring Dr. Tran to eventually follow in their footsteps.

What this award means: After the first week of a rheumatology rotation, I came to appreciate the breadth and complexity of this field. This rotation pushed and challenged me not only to think broadly, but also to become comfortable with uncertainty as some diseases are not simply black and white. I am exceedingly thankful for the Eliot Goldings Award, as it recognizes my love of learning, and rheumatology is undoubtedly a treasure trove of knowledge.

Mentor comment: James told me he enjoyed the rotation because rheumatology is a cognitive specialty. He was very skilled in his analysis of patients and felt very comfortable asking questions and discussing the cases. Under his own initiative, he took on new patients and presented sophisticated diagnosis and treatment plans. I

appreciated not only how smart he is, but also his motivation to learn and the passion he showed. -Guillermo Quiceno, M.D., Associate Professor of Internal Medicine

**Background and family:** I was born and raised in Port Arthur, Texas, a town on the Gulf Coast where I survived more hurricanes than I have fingers to count. Both of my parents were refugees of the Vietnam War and came to Texas as kids with no money or belongings. I am immensely grateful for my parents' hard work to provide me with an opportunity to pursue my dreams.

What led to your career path: I aspired to a career in medicine after losing two aunts to heart disease and stroke, as well as watching other family members struggle with chronic heart disease. I can recall the fear and powerlessness of when my grandmother had a heart attack right after a hurricane. Even with most roads still flooded, the cardiologist and cardiothoracic surgeon came to her rescue. These experiences pushed me toward medicine, where I found fulfillment of my desire to learn constantly, be consistently challenged, and navigate complex human interactions.

College: I was the first of my family to pursue higher education and attended the University of Houston, earning a Bachelor of Science in biology. Then I took two gap years, working as a home health aide and as a chief medical scribe, which reinforced my decision to become a doctor.

**UTSW activities:** As co-President of the Cardiology Interest Group, I worked to increase awareness and education in cardiology.

Surprising fact: I have amazing balance and love anything with wheels - from bikes to skateboards to electric unicycles.

**Future plans:** I plan to pursue a career in cardiology. I hope to stay in Texas and take care of Texans.

About the award: The award, presented to the most outstanding medical student in rheumatology, is named for Dr. Eliot A. Goldings, a former Division of Rheumatic Diseases faculty member who died in 1988. Dr. Goldings distinguished himself as a scholar, teacher, and clinician.

#### Dominique Cooper, M.D.:

Award for Excellence in Neurology



Dominique Cooper, M.D.

The experiences of family members affected by epilepsy and autism spectrum disorder led Dr. Dominique Cooper to her interest in the brain and neurology. This inspired her to focus on helping those with neurological diagnoses.

**What this award means:** I have wanted to be a child neurologist for almost a decade now, so I am deeply honored to be recognized for my passion for caring for patients with neurological conditions.

**Mentor comment:** Dominique is one of the most enthusiastic students I have ever met who was a ray of sunshine during COVID-19. She was very polite and respectful with patients, a diligent worker, and well-organized in her presentations in rounds. She will be an exceptional physician. – Shanan Munoz, M.D., Assistant Professor of Neurology

**Background and family:** I am from Houston, Texas, but I spent a lot of my childhood living in Lagos, Nigeria, and Luanda, Angola.

What led to your career path: I first became interested in the brain through family members' experiences involving neurological disorders. My interest was furthered when I attended a neuroscience research camp in high school where I learned about health disparities in neurology affecting the Black community.

**College:** I graduated with honors from Stanford University with a degree in neurobiology. In college, I participated in childhood brain tumor research and published my first article.

**UTSW activities:** I served as the chapter president of the Student National Medical Association and on the leadership board for the Student Interest Group in Neurology. I also conducted clinical and basic science research in epilepsy and autism spectrum disorders. My third year, I served on an American Academy of Neurology workgroup focused on increasing diversity in neurology.

**Surprising fact**: I competitively recited poetry when I was in high school, and I still participate in acting and poetry activities for fun.

**Ultimate career goal:** In child neurology, some patients have very complex diagnoses that affect both their brain and quality of life. I want to ensure that these patients and their families feel well cared for and supported. My goal is to decrease the health disparities affecting patients with neurological conditions.

Future plans: I will complete my residency training at Children's Hospital of Philadelphia. Currently, I am considering a fellowship in epilepsy genetics. I want to combine my interests in clinical research and advocacy to effect policy changes and continue to work to increase diversity in the field.

**About the award:** This award is presented to a student who is deemed worthy of special distinction by the Medical School Awards Committee of the Department of Neurology and is beginning a career in pediatric neurology.

#### Sarah Greenfield, M.D.:

Kurt Ian Wey, M.D., Senior Pediatric Award



Sarah Greenfield, M.D.

For Dr. Sarah Greenfield, the choice to pursue medicine came from a passion to serve. She is grateful for early work and volunteer experiences – tutoring and mentoring children living in government-assisted housing, serving weekly meals to the homeless, and working at a camp for childhood burn survivors – for igniting the curiosity and empathy that eventually led her to medicine.

What this award means: It means the world to receive this honor from the teachers and mentors who have impacted me so deeply during my time in medical school. I will strive to honor the memory of Kurt Ian Wey by learning to practice medicine with empathy, humility, and a determination to further the causes of child health.

**Mentor comment:** Sarah's phenomenal. Many members of our faculty have commented on how her combination of sharp clinical reasoning, gentle communication style, and nonjudgmental nature makes her an inspiring person to be

around and a future leader. – Soumya Adhikari, M.D., Associate Professor of Pediatrics

**Background and family:** I come from a family of dedicated medical professionals who modeled passion and commitment. My father is a surgical oncologist, and my mother is an immunologist who worked tirelessly to support local free clinics and raise funds to help open a free-standing children's hospital in my hometown of Belton, Texas. My husband is a nurse.

What led to your career path: I was drawn to the field of pediatrics because of the opportunities to interact with and serve families from all walks of life, and the specialtywide commitment to patient education, preventive care, and betterment of child health.

**College:** I graduated from Baylor University with a Bachelor of Arts in medical humanities. I had the opportunity to study with Baylor's public health department in Brazil, which involved delivering interactive health lessons in schools and organizing community health fairs.

**UTSW activities:** I became a student leader of the Advancement Via Individual Determination (AVID) program, which provides monthly science lessons to middle school students. Through a preceptorship at the Rees-Jones Center for Foster Care Excellence, I became involved in research about laboratory screening practices in this vulnerable population.

**Future plans:** I will start residency here at UTSW this summer. I have an interest in hospital medicine and intensive care and envision myself participating in global health service.

**About the award:** The award recognizes a fourth-year medical student who shows empathy and compassion for sick children, has significant knowledge, and maintains a good sense of humor. Dr. Wey was a 1998 UT Southwestern graduate who died in a car accident. The award was established by family and friends to honor his life.

#### Aman Narayan, M.D.:

Lorraine Sulkin-Schein Medical Student Award in Geriatric Medicine



Aman Narayan, M.D.

While working at Texas Children's Hospital in Houston, Dr. Aman Narayan researched the social determinants of health. He learned that physicians can help patients in two ways: medically and through advocacy for the health of communities.

What this award means: I rotated on the geriatrics service during my internal medicine clerkship. It was there where I learned about several specific considerations necessary for caring for elderly patients. In addition, I had the opportunity to build strong relationships with several UTSW Geriatrics faculty. I'm honored to be recognized for my work and interests.

Mentor comment: I have been very impressed with Aman's focus, sense of responsibility, initiative, and commitment. He clearly enjoys teaching, and I have received very positive feedback from other trainees regarding his interest and skill as an educator. He easily establishes a strong rapport with his patients. His patients will feel most fortunate to have him as their provider. – Vivyenne Roche, M.D., Professor of Internal Medicine and a Distinguished Teaching Professor

**Background and family:** I grew up in Houston, Texas. Being in Dallas has been nice because it has afforded me the ability to travel back home for big events – or frankly, whenever I have a few days off and miss my mom's food!

What led to your career path: I was always interested in the intersection of health and economics and held several positions that delved into the realm of health policy and public health. While working at Texas Children's Hospital in Houston, I had the opportunity to thoroughly research the social determinants of health. I realized then that physicians have the unique capability to help our patients medically but *also* have the power to advocate for the health of our communities on a more macroscopic level.

**College:** I attended Rice University, earning bachelor's degrees in economics and policy studies. I was named a Health, Humanism, and Society Scholar; and a Law, Justice, and Society Scholar.

**UTSW activities:** I spent significant time working with the Texas Medical Association (TMA). I sit on the statewide medical student leadership board, where I oversee all of the resolutions that medical students ask the TMA to adopt. This role allows me to work with nearly 100 students across the state to find policy issues that they are passionate about and effectively defend them in front of hundreds of physicians at the annual legislative conference.

**Surprising fact:** I was debating between attending medical school and law school up until the summer before school started!

**Future plans:** I'll be pursuing my residency in internal medicine here at UTSW! I know that I want to incorporate the care of marginalized communities into my practice.

**About the award:** The Sulkin-Schein Award recognizes a medical student who has demonstrated compassion, keen interest, and commitment to the care of older adults. The award is named in honor of Mrs. Schein, a longtime supporter of UT Southwestern who bequeathed funds to promote geriatrics as a career path for medical students. She died in 2007 at the age of 89.

# Virginia Wang, M.D.: Hudson-Penn Award for Excellence in Surgery



Virginia Wang, M.D.

As a child, Dr. Virginia Wang witnessed the care her brother received following a serious car accident. The selfless work of the surgical team to save her brother's life impacted Dr. Wang, as did a later service trip to Guatemala. Seeing firsthand how surgery can impact a patient's life led her to this specialty.

What this award means: I am incredibly honored to have been selected to receive this award, especially as a first-generation medical student, a child of immigrants, and the first surgeon in my family. This award represents the unconditional support of my wonderful family and the mentorship of the many excellent surgeons I have had the privilege to meet at UT Southwestern.

**Mentor comment:** Virginia is a highly accomplished individual who epitomizes the ideals on which this award was founded. We look forward to seeing her progress through her surgical career and believe she is poised to excel as an outstanding surgeon. – Rohit Sharma, M.D., Associate Professor of Surgery

**What led to your career path:** When I was a child, my younger brother was in a terrible car accident. He was severely injured and almost died on

the operating table because he had lost so much blood by the time he arrived at the hospital. The surgery team worked tirelessly to stabilize him and manage his injuries, and he miraculously survived. Many years later, I participated in a service trip to Sarstún, Guatemala, during my first-year spring break at UTSW. Seeing again the enormous impact that surgery has on patients' lives – and the definitive treatment surgeons can provide for conditions to drastically improve patients' quality of life – solidified my desire to pursue a career in surgery.

**College:** I earned my Bachelor of Science in biology with honors and my Master of Science in biology at Stanford University. I also minored in Spanish and had volunteered at the studentrun free clinics as a Spanish and Mandarin interpreter.

**UTSW activities:** I served as a student manager at The Monday Clinic. I was a member of the 2019, 2020, and 2021 teams representing UTSW at the Emory Global Health Case Competition, United to Serve booth coordinator, a volunteer instructor for the Surgery clerkship, and executive officer for the Wilson Surgical Society, Trauma Surgery Student Society, and Cardiothoracic Surgery Interest Group.

**Future plans:** Worldwide, more than 5 billion people lack access to safe surgical care. While many are in underresourced low- and middle-income countries, some live only a few miles from our own communities. I hope to pursue a career in global surgery, amplifying the voices of marginalized populations and addressing health disparities in the U.S. and around the world.

**Ultimate career goal:** I will serve and advocate for my patients and continue to bring awareness to issues in health equity, both at home and abroad.

**About the award:** The award recognizes a student who has demonstrated excellence in the surgical specialty, academic achievement, and has a caring attitude. It is named for Dr. Lee Hudson, Chief of Surgery at Parkland Memorial Hospital when UT Southwestern was founded, and for Robert Penn, Dr. Hudson's brother-in-law.

#### Rachel Green, M.D.:

American Academy of Neurology Medical Student Prize for Excellence in Neurology



Rachel Green, M.D.

Growing up, conversations with Dr. Rachel Green's parents often turned to big-picture questions such as what makes people human. The nervous system was a key part of the answer for Dr. Green, who fell in love with the problemsolving and patient-care aspects of neurology.

**What this award means:** Neurology is one of the most exciting fields of medicine. To be acknowledged as a participant in this field is such an honor and truly spurs me on to become the best neurologist I can be.

**Mentor comment:** Rachel did a good job on the inpatient consult neurology service. She was hardworking and interacted well with the patients and team. She will make a very good neurologist if she decides to pursue this specialty. – Meredith Bryarly, M.D., Assistant Professor of Neurology

**Background and family:** I grew up in a multicultural home in Dallas – my mother is an immigrant from Malaysia, and my father is from Kansas City, Missouri. I was home-schooled for most of my life so that my family had the flexibility to travel to Malaysia to see relatives. I met my

husband here in Dallas.

What led to your career path: My dad is a philosophy professor, so as I was growing up, we would have conversations around the dinner table about questions such as "what makes people human?" From a biological perspective, the nervous system was always on my mind as a part of us that makes us unique, and I have always been intrigued by it. In college, I participated in the Special Olympics program. I was struck by the impact of neurological disease and drawn to helping these individuals either regain function or cope with their limitations.

**College:** I majored in biology, chemistry, and psychology at Southern Methodist University. I was a member of Phi Beta Kappa and Psi Chi Psychology Honor Society and won academic awards from the biology and chemistry departments.

**UTSW activities:** I served in leadership roles with the Student Interest Groups in neurology and psychiatry. I also volunteered with the student-run free clinic and health fair and served as a Colleges peer mentor and a peer advocate with Student Wellness and Counseling.

**Surprising fact:** I was a musician for many years. I took 11 years of piano lessons and went to an arts magnet high school in downtown Dallas for voice, where I competed in choir competitions and even made state a couple of years!

**Ultimate career goal:** My goal is to use the tools I've been given to humbly yet confidently provide the best care I can to my patients with knowledge, respect, and a good bedside manner.

**Future plans:** After neurology residency, I plan to spend most of my career as a clinical physician and neurologist. I will be beginning my neurology residency at Vanderbilt University in Nashville this summer. I am planning to complete a fellowship in neuroimmunology and am also interested in academic medicine, given my love for teaching.

**About the award:** This award is presented to a graduating medical student who has promising career potential in neurology as determined by faculty and residents.

#### Madeline Sparks, M.D.:

Pediatric Society of Greater Dallas Award for Excellence in Pediatric Medicine



Madeline Sparks, M.D.

Dr. Madeline Sparks' passion for helping children grew after experiences tutoring middle school students and working as a nanny. Then in medical school, her rotations in pediatrics solidified her interest in the specialty and her desire to be an advocate for the youngest of patients.

**What this award means:** I am so honored and humbled to be a recipient of an award that highlights characteristics that I hope to uphold in my career. I feel inspired to continue to work with my colleagues to be an active voice for children and to serve the community.

**Mentor comment:** Madeline has a passion for service-based learning and child advocacy that sets her apart. She's already distinguished herself through her work on childhood injury prevention on this campus, which is emblematic of how she has a heart for the most vulnerable. – Soumya Adhikari, M.D., Associate Professor of Pediatrics

**Background and family:** I grew up in Baton Rouge, Louisiana, with my parents and two brothers. I was first exposed to medicine through my dad, who is a radiologist. I'm so grateful for the support of my family.

What led to your career path: I discovered the joy of working with children when I tutored middle school students and worked as a nanny. In medical school, I had fun teaching children about health at an after-school program. Continuing into my clinical rotations, I enjoyed working with families in the clinical setting and found my passion for pediatric advocacy. Through all of these experiences, I knew pediatrics was the right field of medicine for me.

**College:** I graduated summa cum laude from the University of Georgia with a Bachelor of Science in genetics. I volunteered with Relay for Life, an organization that benefits the American Cancer Society, and served with the Clark County Mentoring Program, which pairs college students with youth for mentorship.

**UTSW activities:** Throughout medical school, I enjoyed learning and teaching about nutrition. I served as the Culinary Medicine elective coordinator and volunteered with the Food as Medicine Interest Group, teaching people about nutrition at food pantries. I also got involved in pediatric advocacy as a medical student delegate for the American Academy of Pediatrics and as a member of Trainees 4 Child Injury Prevention (T4CIP).

**Surprising fact:** I enjoy weekend trips out on the water. My boyfriend and I like to take trips to Lake Texoma to fish for striped bass.

**Ultimate career goal:** As a new doctor, my ultimate goal is to be a compassionate listener and active advocate for each patient and family I serve.

**Future plans:** I will be starting my pediatric residency at UT Southwestern. Throughout my career, I want to be an active pediatric advocate and continue to work with patients and the community in the realm of nutrition.

**About the award:** The award recognizes an outstanding graduate who has the personal character and dedication to serve, as well as be an advocate for, children.

#### Commencement Continued from page 1 \_

with contact tracing.

The Graduate School candidates for degrees include an NCAA Division I track and field athlete and Academic All-American, an

AmeriCorps volunteer, and a fellow of the UT System Archer

Center in Washington, D.C. One student started a nonprofit while in graduate school to provide access to fresh groceries and combat food insecurity. Other students completed fellowships with the national Think-Lab Startup Accelerator program. Nine graduates will receive dual M.D./Ph.D. degrees.

Daniel K. Podolsky, M.D., President of UT Southwestern, will confer degrees on the Medical School graduates, followed by a presentation of the candidates by W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs, Provost, and Dean of the Medical School.

Medical School commencement speaker

become Chief Psychiatric Nurse.

Congresswoman Johnson, who represents a large portion of Dallas as well as Dallas County towns to the south, was the first nurse elected to Congress when she took office in 1993. She began working in nursing after receiving a diploma from St. Mary's College in Indiana in 1956, later returning to school for a Bachelor of Science in nursing from Texas Christian University and a master's in public administration from Southern Methodist University. She spent 16 years at the Dallas VA Medical Center, rising to

She left nursing in the 1970s to pursue a career in politics, serving in the Texas House of Representatives and the Texas Senate as well as Regional Director of the Department of Health, Education, and Welfare under President Jimmy Carter. She was elected to Congress in 1992, and in 2019, became the first Black and the first woman to chair the House Committee on Science, Space and Technology. She plans to retire when her term ends in January. Throughout her tenure in Congress, Rep. Johnson has made significant contributions to public health and mental health, including leading the effort to establish the National Suicide Hotline. She has been an ardent supporter of UT Southwestern working to secure vital research funding and helping to attract the best and the brightest students and faculty to UTSW.

At the Graduate School commencement, students, faculty, and guests will hear from David Russell, Ph.D., Professor Emeritus of Molecular Genetics and former Dean of Research at UT South-

western. He was Vice Provost from 2010 to 2021.

Dr. Russell arrived at UTSW in 1982 as an Assistant Professor of

Molecular Genetics after completing a fellowship at the University of British Columbia with Michael Smith, Ph.D., the Nobel Laureate who developed technology that allows

scientists to make artificial mutations in DNA.

At UT Southwestern, Dr. Russell first worked with Michael Brown, M.D., and Joseph Goldstein, M.D., Professors of Molecular Genetics and Internal Medicine who shared

the Nobel Prize in Physiology or Medicine in 1985 for their discoveries on the regulation of cholesterol metabolism. After collaborating with Drs.

Brown and Goldstein for several years, Dr. Russell launched his own research into the enzymatic pathways that dispose of cholesterol. His laboratory identified the molecular bases of nine human genetic diseases characterized by abnormal lipid metabolism.

Dr. Russell is a graduate of the University of Texas at Austin and received his Ph.D. in chemistry from the University of North Carolina at Chapel Hill. He is a member of the National Academy of Sciences

and the American Academy of Arts & Sciences.

Dr. Brown, a Regental Professor, holds The W. A. (Monty) Moncrief Distinguished Chair in Cholesterol and Arteriosclerosis Research and the Paul J. Thomas Chair in Medicine.

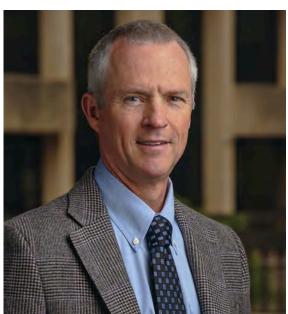
Dr. Goldstein, a Regental Professor, holds the Julie and Louis A. Beecherl, Jr. Distinguished Chair in Biomedical Research and the Paul J. Thomas Chair in Medicine.

Dr. Lee holds the Atticus James Gill, M.D. Chair in Medical Science. Dr. Podolsky holds the Philip O'Bryan Montgomery, Jr., M.D. Distinguished Presidential Chair in Academic Administration, and the Doris and Bryan Wildenthal Distinguished Chair in Medical Science.

Dr. Zinn holds the Rolf Haberecht and Ute Schwarz Haberecht Deanship of the UT Southwestern Graduate School of Biomedical Sciences.



U.S. Rep. Eddie Bernice Johnson will deliver the Medical School keynote address.



David Russell, Ph.D., Professor Emeritus of Molecular Genetics, will speak at the Graduate School commencement.

### **AOA Honor Medical Society welcomes 58 new members**

Fifty-eight new members were inducted recently into the UT Southwestern Medical School chapter of the Alpha Omega Alpha Honor Medical Society (AOA). The Gamma Chapter of Texas' Annual Induction and Awards Ceremony banquet took place March 17 at the A.W. Harris Faculty-Alumni Center.

Members are selected based upon high academic standing, leadership among peers, professionalism, a firm sense of ethics, promise of future success in medicine, and a commitment to serve in the school and community.

#### AOA inducted nine faculty members in 2022:

Ravi Bhoja, M.D., Associate Professor of Anesthesiology and Pain Management and a Distinguished Teaching Professor

Walter Green, M.D., Associate Professor of Emergency Medicine

Syed Kazmi, M.D., Assistant Professor of Internal Medicine

Benjamin Lee, M.D., Associate Professor of Pediatrics

David McDonagh, M.D., Professor of Anesthesiology and Pain Management, Neurological Surgery, and Neurology

Henry Quinones, M.D., Professor of Internal Medicine

Shai Rozen, M.D., Professor of Plastic Surgery

Joseph Schaffer, M.D., Professor of Obstetrics and Gynecology

Yu-Min Shen, M.D., Professor of Internal Medicine

Alpha Omega Alpha Class of 2022 inductees are (asterisk denotes Junior AOA recognition):

Laila Fatima Abbas\* Andrew James Aboujaoude\* Dhiraj Nitin Ankolekar

Patrick Nadim Arraj\* Rohit R. Badia

Brad Kasimir Bradshaw Grayden Cook

Palvasha Reddy Deme

Manasa Dutta

Farzam Farahani\*

Eliza Ferrari

Kathryn Elise Gallaway\*

Roberto Gonzalez

Kyle Nicholas Goodman

Rachel Barnes Green

Sarah Lairmore Greenfield

Silas P. Henderson\* Mehraban Kavoussi\*

Elysha Kolitz\*

Madyson Lee Kuo

Emily Elizabeth Limmer\* Charles Ruohua Liu

Samantha N. Lopez\*

Patrick Lynch

William Elliott McAlpine\*

Paige Leigh McKenzie

Ahneesh Jayant Mohanty\*

Austin Moore\*

Caroline Murchison\*

Juliana Pineider

Heather Elizabeth Postma Roma Vivek Pradhan

Courtney Ann Prestwood\*

Cayenne L. Price

Madeline Elizabeth Sparks

Sanaa Tejani

Dharani Rohit Thota Brandon Winward

Eleven residents or fellows were inducted into AOA:

Sarah Capelouto, M.D.

Prakash Gajera, M.D.

Austin Samuel Hembd, M.D.

Steven Blaine Holloway, M.D.

Darlene King, M.D.

Allison Mootz, M.D.

Vicente Morales Oyarvide, M.D.

Tung "Tom" Phan, M.D.

Luis R. Taveras, M.D.

Lindsey Nicole Urquia, M.D.

Matthew Yung, M.D.



Dr. Bhoja holds the Anesthesiology Alumni Professorship. Dr. Kazmi is a Eugene P. Frenkel, M.D. Scholar in Clinical Medicine.

Dr. McDonagh holds the M.T. "Pepper" Jenkins Professorship in Anesthesiology.

Dr. Schaffer holds the Frank C. Erwin Jr. Professorship in Obstetrics and Gynecology.

### **Gold Humanism Honor Society inducts 83 new members**

The Arnold P. Gold Foundation Gold Humanism Honor Society (GHHS) recently inducted 67 medical student members, eight faculty members, and eight residents into the ranks of its UT Southwestern Medical Center chapter. The pinning ceremony for the Classes of 2022 and 2023 was held March 16 at the A.W. Harris Faculty-Alumni Center. (Due to the pandemic, the Class of 2022 ceremony was postponed from 2021 to this year.)

#### Resident inductees for 2022 and 2023:

Caitlin Helm, M.D. Emily Hoff, M.D. Ramez Kouzy, M.D. Fiza Laheji, M.D. Emily May, M.D. Ali Mohamedi, M.D. Mridula Nadamuni, M.D.

Samuel Phen, M.D.

Dr. Camp holds the Jake Tobolowsky Professorship in Psychiatry, in Memory of Helen B. Tobolowsky and in Honor

of Dr. David M. Tobolowsky. Dr. Goodspeed is a Dedman Family Scholar in Clinical Care.

Dr. David Johnson holds the R. Ellwood Jones, M.D. Distinguished Professorship in Clinical Education.

Dr. Sendelbach holds the Nadine and Tom Craddick Professorship in Medical Education.

#### Medical School Class of 2022 inductees:

Patrick Nadim Arraj Rohit R. Badia

Natalie Ann Bonner Nicholas Alfonso Campalans

Grayden Cook

Esha Hansoti

I-Chun Lin

Ahneesh Mohanty

Stephanie Ngo

Isabel Cristina Garcia

Sarah Lairmore Greenfield

Keri Ann Janowiak

Won Jae Jeong

Benjamin Kroger

Madyson Kuo

Alana Leigh Carrasco

Steven Gary Duncan\*

Hector Webber Filizola

Ami Kapadia

(\* indicates Class of 2022 co-Presidents)

Samantha N. Lopez

Cayenne L. Price

Sarah Alexandria Prickett

Jenny N. Raman Rasika Reddy

Alejandro Rodriguez Hasan Seede

Gabriele Slaughter

Leah Michelle Smith Madeline Elizabeth Sparks

Cameron Dakota Ward\*

Hersh Trivedi Kristie Thao Pham Tu

Angela Wang

**Medical School Class of 2023 inductees:** (\* indicates Class of 2023 co-Presidents)

Claire Anne Beltran Abijay

Lauren Elizabeth Friedrich Black

Jennifer Cardona Christine Lynn Chen

Alexa Ann Ciarolla

Richard "Trey" Joseph Cinclair III Ashley Lynne Ciosek Ashley Elizabeth Farley

Antonio De Jesus Garcia Priyanka Garigipati

Madhuri Gottam Malvika Govil Kaitlin Darlene Jones\*

William Craig Kemper\*

Fawwad Khan Sarah Koshy

Ashlyn Kennard Lafferty

Alison Liu

Santiago Olaechea

Sydney Kathryn Mulqueen Ofelia Negrete Vasquez

Eli Reynolds Aji Fatou Sahor Devin Jaydeep Shah Arlen Suarez Ares Abhinav R. Thummala Ava Michelle Wilson Brianna Wilson

Keonnie Parrilla

Hiren A. Patel

Akshat Maneesh Patel

William Holt Garner Avery Lind Young

Jaime Almandoz, M.D., Associate Professor of Internal Medicine Molly Camp, M.D., Associate Professor of Psychiatry

Shanup Dalal, M.D., Assistant Professor of Internal Medicine

Kimberly Goodspeed, M.D., Assistant Professor of Pediatrics, Neurology, and Psychiatry

Andrea Johnson, M.D., Assistant Professor of Obstetrics and Gynecology David Johnson, M.D., Professor of Internal Medicine

GHHS faculty inductees for 2022 and 2023:

Dorothy M. Sendelbach, M.D., Professor of Pediatrics, Assistant Dean for Undergraduate Medical

Education, and a Distinguished Teaching Professor Elizabeth Kaili Stehel, M.D., Associate Professor of Pediatrics

### Ho Din Award Continued from page 1 -

in all great physicians. Her passion and commitment to the underserved are an inspiring example to all of us who are seeking to address disparities in health care. I have no doubt that she will help us change the world for

the better." "Cayenne embodies all of the qualities we hope for in our students and aspire to as fellow physicians," added Blake Barker, M.D., Associate Dean of Students, Associate Professor of Internal Medicine, and Chair of the Student Awards Committee. "She is a true servant to her community and a role model in everything she does. We could not be more proud to see Cavenne receive this honor."

As a teenager, Dr. Price was fascinated by the care she witnessed inside a physical therapy clinic where her mother taught Pilates classes. The day she turned 16 years old, Dr. Price

applied for and got a job as a physical therapy technician there, helping patients with exercises.

Initially, Dr. Price thought about becoming a physical therapist, and she earned a Bachelor of Science in applied physiology and health management at SMU. But a job at a DNA testing firm her junior year led her in a different direction as she interacted with physicians who sent in samples. When she shared her dream of becoming a doctor with a pharmacist at the company, he

encouraged her to go for it. Four years of medical school later, Dr. Price has built an impressive resume. Not only was she inducted into the Alpha Omega Alpha Honor Medical Society and the Gold Humanism Honor Society, but she worked as a tutor and served on committees to welcome new medical students to UT Southwestern. Dr. Price

also helped plan a medical service trip to the Dominican Republic and participated in a study that examined ways to improve pain management for pediatric burn patients while lowering opioid use.

She has also been active in the community outside of medical school. After George Floyd was murdered in 2020 under the knee of a Minneapolis police officer, Dr. Price and her husband made a short film titled "What is Systemic Racism and What Can We Do About It?" presenting their thoughts on how to make a difference and sharing resources for more information. The Facebook and Instagram posts have

garnered almost 7,000 views. While staying active in the community and completing medical school with distinction, she also gave birth to her first child, a son, on

"It was very challenging," Dr. Price said of the experience juggling pregnancy and the rigors of medical school. "I was first-trimester pregnant - nauseous and tired. But it's kind of a difficult thing to do no matter what time of life you're in. I think it worked out really well. I didn't really miss a beat in medical school. ... I'm actually very passionate about living your life in the meantime."

As for winning the Ho Din Award, she called the experience "completely humbling, because there are so many incredible people in my class."

Dr. Price also received the MT "Pepper" Jenkins Outstanding Medical Student Award in Anesthesiology and Pain Management, which recognizes a student seeking a career in anesthesiology who excels academically. is empathetic with patients, and exhibits leadership, scholarship, and a thirst for knowledge. The award is named after the late M.T. "Pepper" Jenkins, M.D., who established and served as

Chairman of the Department of Anesthesiology and Pain Management from 1948 to 1981.

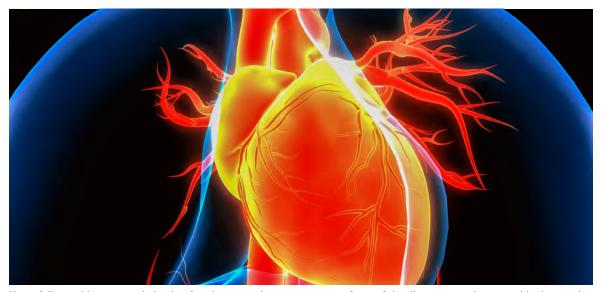
"Cayenne is an extraordinary young woman," said Charles Whitten, M.D., Professor and Chair of Anesthesiology and Pain Management. "She has a true care and concern for those she interacts with each day - this defined Dr. Jenkins' legacy and will define Cayenne in the coming years.

We expect great things from her." Dr. Price, who grew up in McKinney, will begin her residency in anesthesiology at UT Southwestern this summer. She hopes to later complete a fellowship in pain management and one day work in an academic setting, practicing both anesthesiology and pain management.

Dr. Whitten holds the Margaret Milam McDermott Distinguished Chair in Anesthesiology and Pain Management.

# Type of heart failure likely caused by metabolic-immune interaction

Review article by UTSW cardiology faculty sheds light on disease factors, need for effective treatments



Heart failure with preserved ejection fraction, now the most common form of the disease, may be caused by interaction between response to metabolic stress and the immune system, UT Southwestern researchers say.

By Christen Brownlee

The dominant form of heart failure worldwide appears to be caused by a strong, bidirectional interaction between the body's response to metabolic stress and the immune system, according to a review article written by UT Southwestern researchers and colleagues. The article, published in *Nature Cardiovascular Research*, argues for more research into this root cause to develop truly effective treatments.

"Heart failure with preserved ejection fraction affects millions of people around the globe, but we currently have little to offer these patients because the mechanisms behind it have been unknown. It's been called

the single greatest unmet need in cardiovascular medicine," said the article's senior author, Joseph Hill, M.D., Ph.D., Professor of Internal Medicine and Molecular Biology, Chief of Cardiology, and Director of the Harry S. Moss Heart Center. "We now have insight into this condition that we didn't have even five years ago, observations that could lead to viable clinical targets."

Dr. Hill explained that heart failure – the heart's inability to effectively pump blood – comes in two broad types: heart failure with reduced ejection fraction (HFrEF), in which the amount of blood that leaves the heart with each beat declines, and heart failure with

preserved ejection fraction (HFpEF), in which the heart is unable to fill with blood to capacity. While HFrEF has long been the most common form, HFpEF – which is associated with obesity, diabetes, and other components of metabolic syndrome – has grown in prevalence over the last several decades and overtaken HFrEF as the most common form.

Numerous treatments exist for various types of HFrEF, but these interventions have no discernible effect on HFpEF. This is because the two conditions are caused by different underlying mechanisms, said Dr. Hill, a topic that his lab has studied for years. Although HFpEF can be improved through weight loss, losing weight



Dr. Joseph Hill, M.D., Ph.D.,

is something that many individuals struggle with, he added, prompting the need for treatments.

In the article, Dr. Hill and his colleagues outline findings made over the past several years that point to joint metabolic and immune dysfunction as the root cause of HFpEF. For example, fat tissue secretes inflammatory molecules that migrate to the heart, recruiting immune cells evident in heart biopsy samples from individuals with HFpEF. At the same time, heart toxicity caused by overuse of fatty acids as fuel in individuals with metabolic syndrome appears to stimulate an immune response, leading to a vicious cycle.

Crosstalk between fat tissue, the immune system, and the heart appears to amplify both immune and metabolic stress, ultimately causing the heart to fail over time. But how this crosstalk occurs, the effects it produces, and how to block them remain unclear, Dr. Hill said. Research into this new field of immunometabolism is shedding some light on these questions, but more research will be necessary to produce effective interventions for HFpEF patients, he added.

"Research from our lab and others is raising possibilities of therapeutic targets that need to be investigated," Dr. Hill said. "There's a reasonable chance that we could have therapies available for this intractable condition within the next decade."

U.S. News & World Report ranks UT Southwestern as the No. 1 hospital in Texas for cardiology and heart surgery and No. 11 in the nation.

Thomas G. Gillette, Ph.D., Associate Professor of Internal Medicine at UT Southwestern, contributed to the review article.

This work was supported by grants from the DZHK (German Centre for Cardiovascular Research), the Deutsche Forschungsgemeinschaft (German Research Foundation), the Netherlands Cardiovascular Research Initiative, Dutch Cardiovascular Alliance, National Institutes of Health, and the American Heart Association.

Dr. Hill holds the James T. Willerson, M.D. Distinguished Chair in Cardiovascular Diseases and the Frank M. Ryburn Jr. Chair in Heart Research.

# International team solves decades-old structural mystery

#### Seipin protein structure modeled, revealing clues about improper fat storage in disease

By Deborah Wormser

In humans, virtually every cell stores fat. However, patients with a rare condition called congenital lipodystrophy cannot properly store fat, which accumulates in the body's organs and increases the risk of early death from heart or liver disease. In 2001, a transmembrane protein called seipin was identified as a molecule essential for proper fat storage, although its mechanism has remained unknown.

An international study published in *Nature Structural and Molecular Biology* is the first to solve and model virtually the entire structure of seipin, revealing it exists in two conformations and pointing to the mechanism for birthing the lipid droplets used for fat storage in healthy cells.

"Lipid droplets (LDs) have been described since the invention of microscopes that could show the inside of cells. For about a century, lipid droplets (LDs) have been known to store lipids, or fats, but they were considered inactive. During the

past 20 years, lipid droplets have been shown to be very dynamic," said Joel M. Goodman, Ph.D., Professor of Pharmacology at UT Southwestern, a Distinguished Teaching Professor, and one of the study's three corresponding authors.

Dr. Goodman has played a key role in seipin biology, discovering in 2007 that seipin is responsible for packaging fat into LDs and that the same mechanism occurs in animals, plants, and fungi. In 2010, the Goodman lab was the first to purify seipin and reported that it was composed of about

cryo-EM facility.

Cryo-EM uses flash-frozen samples, electron beams, and an electron detector rather than a camera to gather data on biological structures at near-atomic scale. Using cryo-EM enabled the researchers to determine that the "donut" they hypothesized was actually a 10-unit cage, functioning as an incubator to create and grow lipid droplets. The second conformation showed seipin opening to release the lipid droplet onto the surface of the endoplasmic reticulum. Once on the surface, the LDs face the cell's soupy interior (the cytoplasm), where passing enzymes can break down the LDs and free the fatty acids inside to provide energy such as during times of starvation, Dr. Goodman said.

"Getting two conformations was amazing, totally unexpected," Dr. Goodman said, adding that previous research teams had gotten a partial solution showing the lower layer of the seipin complex contained within the tube-like endoplasmic reticulum. The two conformations in the current investigation solve the elusive upper part of the structure, which extends across the organelle's membrane

"Cryo-EM made it possible," Dr. Goodman said. "We hope that this structure will lead to a way of connecting seipin's role in lipid-droplet creation to whatever goes wrong in lipodystrophy as well as help us better understand lipid-droplet formation in general. There are likely several other proteins involved in the creation of lipid droplets, but seipin appears to be the main one. It seems to be a machine that generates lipid droplets."

Current and former UTSW co-authors include Brayden Folger and Xiao Chen. The lead author is Henning Arlt, Ph.D., of Harvard and HHMI. Researchers from the University of Washington, Seattle, and Heidelberg University, Germany, also participated.

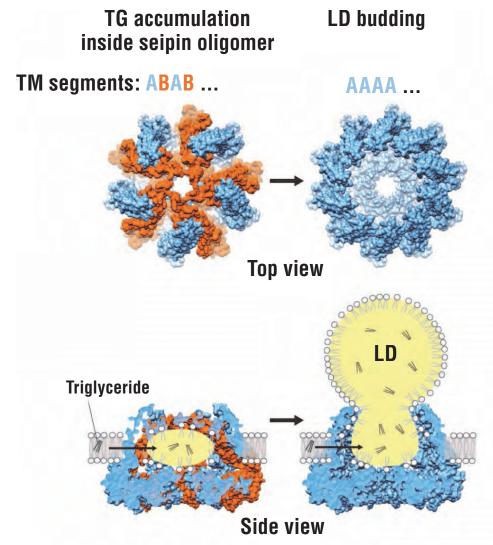
The study received support from the National Institutes of Health (R01GM124348, R01GM084210), the German Research Foundation, the American Heart Association, and the HHMI.

Joel M. Goodman, Ph.D.

nine identical subunits that resembled a donut.

Ever since, scientists around the world had tried to solve the structure, which proved very difficult because seipin stretches across the membrane of the endoplasmic reticulum, an organelle within the cell. That transmembrane placement made the complex resistant to X-ray crystallography, the longtime gold standard for such studies. Membrane proteins are notoriously difficult to crystallize, a requirement for that technique.

To tackle the problem, Dr. Goodman turned to cryogenic electron microscopy (cryo-EM) after discussions with Boston cell biologist Tobias C. Walther, Ph.D., at a scientific conference. Dr. Walther, a Howard Hughes Medical Institute Investigator, and his colleague, Robert V. Farese Jr., M.D., are the study's other corresponding authors. They both have appointments at Harvard Medical School, the T.H. Chan School of Public Health, and the Broad Institute of MIT and Harvard. The study used the Harvard



This illustration shows the seipin complex from top (above) and side views. The 10-unit seipin cage, made of A- and B-shaped units, may become 10 A-shaped units right before and during budding of the lipid droplet. Triglycerides (yellow) are the fat components of the lipid droplet.

Dr. Goodman holds the Jan and Bob Bullock Distinguished Chair for Science Education.

### Gifts establish endowments for Peter O'Donnell Jr. School of Public Health

Donations from philanthropist, alumnus will provide student scholarships and a deanship

By Andrew Marton

As the world struggled with the realities of a pandemic brought on by COVID-19, UT Southwestern saw an opportunity to confront the crisis head-on, creating its newest school in more than half a century.

The state of Texas saw potential in the School of Public Health from the start, appropriating \$10 million in startup funds. It had one caveat, however: UT Southwestern would be asked to match those funds 2-to-1 with private contributions. With recent gifts totaling more than \$106 million, UTSW has met the \$20 million goal and more.

The first gift, a \$5 million donation from Dallas philanthropist Lyda Hill to Southwestern Medical Foundation, will establish the Lyda Hill Deanship of the School of Public Health at UT Southwestern. The endowment will support the school's Dean and accelerate recruitment efforts. In the second donation, Richard E. Hoffman, M.D., M.P.H., an Adjunct Associate Professor of Epidemiology at the Colorado School of Public Health, pledged \$1.5 million to the Foundation to establish the Richard E. Hoffman, M.D., M.P.H. Scholarship Fund for Public Health to provide scholarships for the new school's students. Both gifts represent strategic and significant backing for UT Southwestern's fourth school, which joins the Medical School, School of Health Professions, and Graduate School of Biomedical Sciences.

"There has never been a moment in our lifetimes when the need to advance public health science and the education of public health professionals has been more critical," said Daniel K. Podolsky, M.D., President of UT Southwestern. "We are grateful for the incredible generosity of our longtime friends, Lyda Hill and Dr. Richard Hoffman, who share our vision for an expanded



Lyda Hill

public health workforce in Texas and stepped forward to continue our momentum by investing in our students and faculty."

UT Southwestern also recently received a \$100 million gift from the O'Donnell Foundation to endow the school - the largest gift to a school of public health at a public university in the U.S. In recognition of this gift, UT Southwestern has named the new school the Peter O'Donnell Jr. School of Public Health.

Plans for the new school were approved by the UT System Board of Regents in February 2021. Following the state's commitment of support, the institution named Celette Sugg Skinner, Ph.D., as the school's Interim Dean. Dr. Skinner also serves as Chair of Population and Data Sciences. A national search for a permanent Dean is now underway, and the school expects to welcome the first class of Master of Public Health students in the fall of 2023, followed by Ph.D. students in 2024.

"It is truly inspiring to see leaders

who have invested for many years in bettering the health of the public step forward so quickly and so generously to support UT Southwestern's new School of Public Health," said Kathleen M. Gibson, President and CEO of Southwestern Medical Foundation. "Lyda Hill and Richard Hoffman are remarkable and insightful leaders who understand that communities are built and made better by those who see critical needs and match vision with the right solutions. Both of them do this time and again, and it serves as a beacon to others who are encouraged by both their humanity and strategic vision."

Establishing a deanship in public health continues Miss Hill's longstanding contributions to UT Southwestern, which most notably include a 2015 gift to name the Lyda Hill Department of Bioinformatics. Dedicated to funding game-changing advances in science and nature, espeand healthy communities," said Miss Hill, founder of Lyda Hill Philanthropies. "By stepping forward to create the state's newest School of Public Health, UT Southwestern is addressing a critical need for North Texas and the entire state."

Although the school won't begin classes for another 18 months, Dr. Hoffman understood that making a gift now would help UT Southwestern "attract the best students." A nationally recognized epidemiologist who graduated from UT Southwestern with an M.D. degree in 1975 and from Johns Hopkins University with a Master of Public Health degree in 1983, he has dedicated his career to public health, working for five years with the Centers for Disease Control and Prevention on communicable disease outbreaks, injury prevention, and environmental health.

After serving nearly 15 years as Chief Epidemiologist for the Colorado



Richard E. Hoffman, M.D., M.P.H.

Foundation established the Hoffman Family Center for Genetics and Epidemiology at UT Southwestern.

"I wanted to fund students because we want students who are very diverse to be the leaders of public health in the future." said Dr. Hoffman, who serves on Southwestern Medical Foundation's Board of Trustees. "Rather than addressing a gift toward a particular disease, I wanted to help students just as I had been helped when I was starting my career. I have confidence that the Medical Center can produce outstanding, quality graduates who go on to serve in their community."

There has never been a moment in our lifetimes when the need to advance public health science and the education of public health professionals has been more critical."

- Daniel K. Podolsky, M.D., President of **UT Southwestern** 

cially in the communities of Texas and Colorado that hold great importance for her, the renowned Dallas entrepreneur is one of the few women to make the 2013 Philanthropy list of most generous donors and Forbes' 2014 list of top 15 entrepreneurs who give back to the community.

"Health promotion and disease prevention are key to building strong

Department of Public Health and Environment, he was appointed the state's Chief Medical Officer and was subsequently reappointed by the following administration, helping to write the Colorado law that prepared the state for pandemic influenza, bioterrorist attacks, and epidemics caused by novel viruses. In 2012, a gift from his family to Southwestern Medical

Dr. Podolsky holds the Philip O'Bryan Montgomery, Jr., M.D. Distinguished Presidential Chair in Academic Administration, and the Doris and Bryan Wildenthal Distinguished Chair in Medical Science.

Dr. Skinner holds the Parkland Community Medicine Professorship.

## Epidemiologist, data scientist appointed inaugural Associate Deans

By Carol Marie Cropper

L. Joseph Su, Ph.D., M.P.H., a nutritional epidemiologist who researches links between diet and contaminants in food to cancer and health, and Yang Xie, Ph.D., an expert in the field of data science, have been appointed Associate Deans at UT Southwestern.

Dr. Su is Associate Dean for Academic Affairs in the Peter O'Donnell Ir. School of Public Health, which will enroll its first class of students in late 2023. In this new role, Dr. Su will work with faculty at the School of Public Health to establish a solid foundation of innovative curriculum backed by evidence-based research and to attract a diverse student body.

Dr. Xie, Professor of Population and Data Sciences and in the Lyda Hill Department of Bioinformatics, is Associate Dean for Data Sciences. In this role, also new to the University, she will work with the Provost's office and other academic leaders to expand quantitative and data science capabilities and expertise at UTSW, establishing an initiative in data science for precision health.

"Drs. Su and Xie bring expertise that will help launch a strong School of Public Health," said UTSW Medical School Dean W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs and Provost. "The ability to analyze the large amounts of data now available in order to uncover medical and treatment insights and tailor medicine to individual patients is becoming a bigger component of health care practice. And the work of epidemiologists to discover the health impacts of diet, lifestyle, and environment is a fundamental need in public health."

Dr. Su comes to UTSW from the University of Arkansas for Medical



L. Joseph Su, Ph.D., M.P.H.



Yang Xie, Ph.D.

Carolina at Chapel Hill.

He plans to continue research into what dietary components affect aggressive growth or predisposition to cancer. One study found an increased risk for pancreatic cancer in those with exposure to cadmium, a heavy metal that has been detected in rice. He has also researched why African American males are more likely to suffer from prostate cancer and are twice as likely to die from the disease.

Dr. Xie, who joined UTSW in 2006, was the founding Director of the Quantitative Biomedical Research Center. She is also the founding Director of the Data Science Shared Resource core that provides informatics and data management and analytics support for Harold C.

uate degree in medicine from Peking University Health Science Center in Beijing and a master's degree in epidemiology from Peking Union Medical College, also in Beijing. She received a Ph.D. in biostatistics from the University of Minnesota Twin Cities.

"I feel honored to serve as the inaugural Associate Dean of Data Sciences because data science is playing increasing roles in all aspects of medical research," Dr. Xie said. "How to analyze, interpret, and utilize this data to understand biology to help with patient care and public health - that has become more and more important."

One hope for using data science is to predict an individual patient's treatment response to the available drugs she said. Combining data science analytics of patient genomics, clinical and lab data - along with imaging and artificial intelligence that lets algorithms predict patients' responses to therapy - may soon lead to such tailored treatment strategies, Dr. Xie added.

Her goals are to promote or develop innovative data science and artificial intelligence research for biomedicine and population health; close collaboration among data science and biomedical, clinical, and population research and practice; data science infrastructure development for biomedical research; and data science education programs.

•• The ability to analyze the large amounts of data now available in order to uncover medical and treatment insights and tailor medicine to individual patients is becoming a bigger component of health care practice. And the work of epidemiologists to discover the health impacts of diet, lifestyle, and environment is a fundamental need in public health.

> - W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs, Provost and Dean of the Medical School

Sciences, where he was a founding member of the Center for Dietary Supplements Research; Associate Director of Population Sciences and co-Director of Cancer Control and Population Sciences at the Winthrop P. Rockefeller Cancer Institute; and Professor in the Fay W. Boozman

College of Public Health. He received undergraduate degrees from Chung Yuan Christian University in Taiwan and the University of Minnesota. Dr. Su received his M.P.H. in public health nutrition at the University of Minnesota and a Ph.D. in nutritional epidemiology from the University of North

Simmons Comprehensive Cancer Center researchers. She was named Principal Investigator and Director of a \$5.4 million Cancer Prevention and Research Institute of Texas grant to establish and support data science research for pediatric cancer.

Dr. Xie received her undergrad-

Dr. Lee holds the Atticus James Gill, M.D. Chair in Medical Science.

Dr. Xie holds the Raymond D. and Patsy R. Nasher Distinguished Chair in Cancer Research, in Honor of Eugene P. Frenkel, M.D.

#### Surgery Continued from page 1 \_\_\_\_\_

UT Southwestern was one of less than a dozen medical centers in the U.S. and Europe chosen to participate in the early implementation of FORS due to its expertise and high volume of complex aortic repairs, said Dr. Timaran, who specializes in this procedure. He recently completed his 300th fenestrated endovascular aortic repair as part of his physician-sponsored investigational device exemption study, in which a patient-specific graft is used to support the aorta and its main branches.

As an alternative to conventional imaging, the FORS device uses light traveling through hair-thin optical fibers built in specially designed catheters and wires to display its position and shape inside the body. Once this device is placed within a blood vessel, the strain on the optical fibers changes the light's pathway. By analyzing how light reflects along the fibers, a computer algorithm reconstructs and visualizes the full shape of the device. The result is a real-time, three-dimensional view of the blood vessel that surgeons can overlay on computed tomography images taken before the procedure, providing a roadmap that surgeons can view from any angle to guide the surgery. Dr. Timaran said that far fewer X-rays are necessary when using FORS, significantly reducing exposure to patients and staff.

He expects FORS use to expand to other vascular applications over time.

"This technology could potentially be used for any cardiovascular procedure," said Dr. Timaran, who is a

#### What is FORS?

Fiber Optic RealShape (FORS) is a technology platform that enables real-time 3D visualization of devices inside the body. Pulses of light are sent through hair-thin optical fibers that run within minimally invasive devices. This platform integrates with interventional X-ray systems. Features include:

- 3D display of devices during surgery
- · Colored images in real time
- Surgeon control of the device from multiple viewing angles
- Images provide context of the patient's anatomy using overlays from pre-operative data or X-rays

consultant for Philips. "This will eventually be the goal."

UT Southwestern is ranked No. 11 in the nation for cardiology and heart surgery by *U.S. News & World Report* and nationally rated for its expertise in abdominal aortic aneurysm repair.

Dr. Timaran holds the Sam. H. Phillips, Jr. M.D. Distinguished Chair in Surgery.



Dr. Timaran has completed more than 300 endovascular aortic repairs using Fiber Optic RealShape (FORS) technology.



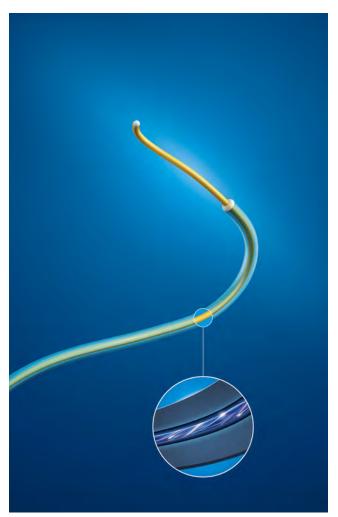
Cardiac surgery staff monitor screens that display blood vessels using the FORS device.



The FORS technology platform enables real-time 3D visualization of devices inside the body. Credit: Philips







The FORS 3D device that is inserted into the body during surgery is powered by Fiber Optic RealShape technology. Credit: Phillips

# UTSW experts say diagnosing heart attacks post-surgery remains difficult

NEJM editorial outlines shortcomings of current diagnostic tools to detect levels of proteins called troponins



Michael Jessen, M.D.

By Patrick McGee

iagnosing heart attacks after heart surgery remains difficult due to shortcomings of current diagnostic tools, including the electrocardiogram and blood tests to detect levels of cardiac troponins, according to an editorial in the New England Journal of Medicine written by UTSW faculty.

A study in the same *NEJM* issue details postsurgery attempts to identify abnormal levels of heart muscle proteins called troponins. But the editorial written by James de Lemos, M.D., Professor of Internal Medicine, and Michael Jessen, M.D., Professor and Chair of Cardiovascular and Thoracic Surgery, points out that the new tests lack clarity. In addition, they said, the use of many different assays to measure troponins makes clinical application of the findings problematic.

They argue that more innovation is needed to determine how best to interpret troponin levels after heart surgery. To improve surgical outcomes, the UTSW Professors wrote, it will be necessary to sort out high troponin levels that are due to specific and modifiable



UTSW experts say implementing high-sensitivity troponin tests with an accelerated diagnostic pathway enables clinicians to safely exclude heart attacks in an hour in most patients who arrive at an emergency department with chest pain.

complications of surgery from those due to the normal manipulation of the heart during the operation.

The two faculty members were invited to write the editorial because of Dr. de Lemos' distinguished research into high-sensitivity troponins and Dr. Jessen's national expertise on surgical techniques designed to improve safety and outcomes of heart surgery.

Dr. de Lemos helps lead UT Southwestern's effort to incorporate high-sensitivity troponin assays to better diagnose heart attacks. In a multidisciplinary collaboration involving emergency medicine, lab medicine, cardiology, and hospitalist medicine, UTSW was among the first U.S. institutions to implement these

tests. They have shown that implementing high-sensitivity troponin tests together with an accelerated diagnostic pathway enables clinicians to safely exclude heart attacks in an hour in most patients who arrive at an emergency department (ED) with chest pain. This shortens time spent in the hospital and reduces ED crowding.

Dr. de Lemos has published in *JAMA* about the prevalence of detectable levels of cardiac troponin T, a novel protocol for minimizing ED dwell times, and associations of high-sensitivity troponin with outcomes after intensive blood pressure lowering.

Under the leadership of Dr. Jessen's UT Southwestern achieves elite levels of patient



James de Lemos, M.D.

care in cardiac surgery. According to data from the Society of Thoracic Surgeons Adult Cardiac Surgery Database, UTSW performed 269 aortic valve operations from July 2018 to June 2021 with a mortality rate of 0.74% – better than 94% of all heart surgery programs in the U.S. For surgeries to repair the mitral valve, UTSW results are better than 97% of all programs.

Dr. Jessen was part of the American College of Cardiology Foundation/American Heart Association Task Force that produced the 2011 Guideline for Coronary Artery Bypass Graft Surgery.

U.S. News & World Report ranks UT Southwestern as the No. 1 hospital in Texas for cardiology and heart surgery and No. 11 in the nation. Conflict of interest disclosures are made in the manuscript.

Dr. de Lemos holds the Sweetheart Ball-Kern Wildenthal, M.D., Ph.D. Distinguished Chair in Cardiology.

Dr. Jessen holds the Frank M. Ryburn, Jr., Distinguished Chair in Cardiothoracic Surgery and Transplantation.

### Experimental drug could spur cancer immunotherapy response

Study suggests promising results in treatment-resistant non-small cell lung cancer

By Christen Brownlee

Research led by UT Southwestern scientists suggests that an investigational drug could restore the ability of some non-small cell lung cancers (NSCLCs) to respond to immune checkpoint blockade (ICB), a type of therapy that harnesses the body's immune system to fight malignant tumors.

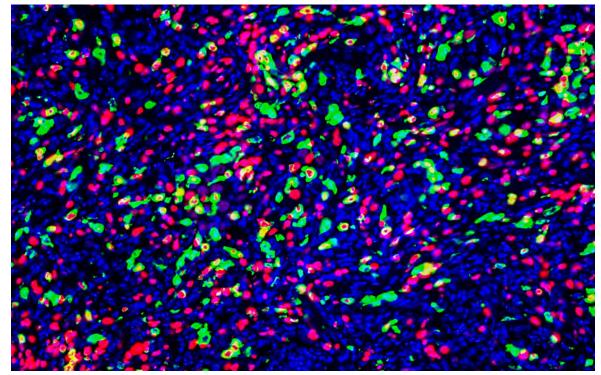
The findings, derived from a preclinical lab model and published in *Cell Reports Medicine*, could lead to more effective treatments for this subset of NSCLCs.

"These results provide hope that we can significantly enhance the efficacy of immune checkpoint blockade in non-small cell lung cancer patients for whom immunotherapies have not previously been effective," said study leader Rolf Brekken, Ph.D., Professor of Surgery, Deputy Director of the Hamon Center for Therapeutic Oncology Research, and a member of the Harold C. Simmons Comprehensive Cancer Center.

ICB has had a significant impact on outcomes in a variety of cancers since the first in this class of immunotherapies was approved by the Food and Drug Administration in 2011. Patients who respond to these treatments tend to survive significantly longer compared with those treated with chemotherapy, radiation, and/or surgery.

NSCLC patients whose cancers are driven by mutations in the gene *KRAS* usually have a high response rate to ICBs. However, Dr. Brekken explained, about 20% of NSCLC tumors also carry mutations in the gene *STK11/LKB1*, which is associated with poor response to ICB therapy. The reason for this phenomenon has been unclear.

The new study shows that in mice with NSCLC carrying *KRAS* and *STK11/LKB1* mutations, these



Detection of Tcf1-positive "stem-like" T cells in mouse non-small cell lung cancer tumors after inhibition of the protein AXL and blockade of the protein PD-1. These stem-like T cells are required for response to immune checkpoint blockade therapy. Absent AXL inhibition, significantly fewer Tcf1-positive stem-like T cells are present.

tumors lacked a specific population of immune cells known as TCF1-expressing CD8+ T cells. These cells are key for effective response to ICBs known as PD-1/PD-L1 inhibitors that are commonly used to treat NSCLCs. Additional experiments showed that these immune cells were also largely absent in human NSCLC tumors carrying *STK11/LKB1* mutations, suggesting that the lack of ICB response in these patients stemmed from a deficiency of these cells.

The key finding from the study came when the UT Southwestern group found that inhibiting the protein AXL boosted the numbers of TCF1-expressing CD8+ T cells. This

intervention restored the ability of mice harboring *STK11/LKB1*-mutated NSCLC tumors to respond to PD-1/PD-L1 inhibitors.

"While immune checkpoint blockade immunotherapy has revolutionized the treatment of lung cancer, unfortunately the majority of lung cancer patients still do not have long-term benefit from such therapy. This discovery of the addition of AXL-targeted therapy to immunotherapy provides an important clue and path forward to enhance the benefits of immunotherapy for more patients with lung cancer," said study co-leader John D. Minna, M.D., Professor of Internal Medicine and

Pharmacology and Director of the Hamon Center.

To corroborate the preclinical findings, Dr. Brekken noted that an ongoing phase two clinical trial testing the AXL inhibitor used in this study – bemcentinib, produced by BerGenBio ASA – showed promising results in NSCLC patients carrying the *STK11/LKB1* mutation who are being co-treated with PD-1/PD-L1 inhibitors. The results from three of these patients are reported in the new study

This work was supported by a sponsored research agreement from BerGenBio ASA and grants from the National Institutes of Health, the



Rolf Brekken, Ph.D.

Cancer Prevention and Research Institute of Texas, and the Effie Marie Cain Foundation.

Dr. Minna receives licensing royalties from the NIH and UTSW for distribution of human tumor lines. Both he and Dr. Brekken are among authors of a patent related to this study. Other researchers' financial interests are disclosed in the study manuscript.

Dr. Brekken is an Effie Marie Cain Research Scholar.

Dr. Minna holds the Max. L. Thomas Distinguished Chair in Molecular Pulmonary Oncology and the Sarah M. and Charles E. Seay Distinguished Chair in Cancer Research.

**More online:** Read the full story in the newsroom at **utsouthwestern. edu/newsroom**.