CenterTimes

May 2021 | A Publication of The University of Texas Southwestern Medical Center | Campus Edition

COMMENCEMENT CELEBRATION

Reunited and triumphant

Medical School, Graduate School to celebrate with in-person commencement exercises after a year of pandemic challenges

By Carol Marie Cropper

UT Southwestern's Medical School and Graduate School of Biomedical Sciences will bring graduating students and their families to campus this month for commencement ceremonies celebrating the joy and pride of graduation – made even more poignant due to the past year's COVID-19 challenges.

The outdoor ceremony for 210 graduates of the Medical School is scheduled for 1 p.m. Saturday, May 8, on Eugene McDermott Plaza and will move into the Tom and Lula Gooch Auditorium if needed due to weather. The Graduate School commencement is scheduled for 6 p.m. Thursday, May 20, also on McDermott Plaza.

THE 2021 COMMENCEMENT EXERCISES

Graduates at both commencements will be limited to two guests, and visitors attending will be required to wear masks and remain socially distanced from other guests. Both events will be livestreamed and recorded for later viewing.

"We are elated to be able to have our 2021 commencement in person, thanks to the hard work and the diligence of countless members of the UT Southwestern community to ensure that our campus is a safe environment," said Dr. Andrew Zinn, Dean of the Graduate School and an alumnus of both UTSW's Graduate and Medical Schools. "It is heartwarming to be able to also invite our 2019-2020 graduates, whose commencement was postponed, to participate in this ceremony."

The 126 members of the Graduate School's Class of 2020 have been invited to have their names listed in the 2021 program. Many will participate in the May event along with the 23 graduates from this year's smaller COVID-19 year class.

In 2020, for the first time in its history, the Medical School held a virtual commencement for its graduates rather than gathering in person during the COVID-19 pandemic. The Graduate School postponed its commencement entirely.

The rollout of several COVID-19 vaccines and a drop in hospitalizations for the virus in North Texas allowed for the return to in-person commencements, said Dr. W. P. Andrew Lee, Executive Vice President for Academic Affairs, Provost, and Dean of the Medical School.

"This year's graduating Medical School Class has endured a great many challenges due to the pandemic, including being pulled off clerkships, having a completely virtual residency interview season, and having to celebrate Match Day virtually," said Dr. Angela Mihalic, Dean of Medical Students, Associate Dean of Student Affairs, and Professor of Pediatrics. "We are delighted that we will be able to honor this momentous occasion on the campus and in the presence of their loved ones who have sacrificed so much to support them in accomplishing their dream of becoming a physician."

This year's group of Medical School gradu-

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UTSW real-world data shows benefit of early vaccination on health care workforce

Vaccinating front-line employees at UT Southwestern led to a marked reduction in new COVID-19 infections, isolations, and quarantines.

From Staff Reports

Vaccinating health care workers resulted in an immediate and notable reduction of positive COVID-19 cases among employees, reducing the number of required isolations and quarantines by more than 90 percent, according to UT Southwestern data published in the *New England Journal of Medicine*. Health care workers were among the first groups to be eligible for vaccination.

"In light of this real-world experience clearly demonstrating the effectiveness of immunization, further understanding of the reticence of some individuals to take advantage of vaccination bears even greater importance," said first author Dr. William Daniel, Vice President and Chief Quality Officer.

During the first 31 days of vaccinations becoming available, UTSW provided a first dose to 59 percent of roughly 23,000 employees, while 30 percent were able to be fully vaccinated in that time frame. Among the findings:

- 1.5 percent became infected.
- Infection rates were highest – 2.6 percent – among nonvaccinated employees.
- Infection rates were lowest – 0.05 percent – among those fully vaccinated.

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Appendicitis scare inspires Ho Din Award winner to surgical career as way to help people in need

Dr. Natasha Houshmand

By Carol Marie Cropper

A childhood health scare set in motion Dr. Natasha Houshmand's career path to becoming a physician. At age 7, with intense abdominal pain, she was taken to an emergency room. A doctor quickly put her and her frightened parents at ease with a diagnosis of appendicitis and a plan to correct it – surgery.

That experience of compassionate, effective patient care left an indelible mark that inspired her to enter medical school and then become a surgeon herself.

Dr. Houshmand's dedication and skill in patient care have led to her selection as winner of the Ho Din Award, UT Southwestern Medical School's most prestigious honor, given each year by Southwestern Medical Foundation to recognize a doctor with attributes inherent in great physicians. It was established in 1943 and comes with a medal, certificate, and $10,000 scholarship.

"Natasha is a born leader who inspires others with her commitment to excellence and absolute dedication to serve," said Dr. Angela Mihalic, Dean of Medical Students, Associate Dean of Student Affairs, and Professor of Pediatrics. "I have no doubt that she will remain a role model throughout her career, will positively impact countless patients, and will make UT Southwestern very proud to have played a role in her education."

In the years following her recovery from appendicitis, Dr. Houshmand's interest in medicine grew. As a 15-year-old high school senior (she skipped grades 6 and 7 in school), she persuaded a Dallas surgeon – the father of a schoolmate at her private school – to let her tag along one Saturday while he visited patients during rounds.

That trip turned into regular Saturday obser-

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New CAR T-cell therapy extends remission in heavily relapsed multiple myeloma patients

By Patrick McGee

A new type of CAR T-cell therapy more than triples the expected length of remission for multiple myeloma patients who have relapsed several times, according to an international clinical trial with UT Southwestern as the lead enrolling site.

Results of the trial, published recently in the *New England Journal of Medicine*, were significantly better than those seen with other therapies available to heavily relapsed and treatment-resistant myeloma patients who had already received the three main classes of treatment. Nearly three-quarters of the patients had at least a partial response to the therapy. About a third achieved a complete remission.

Median time without the disease worsening was 8.8 months with this new treatment, but Dr. Larry Anderson, Associate Professor of Internal Medicine and co-first author of the article, pointed out that patients who received the trial's maximum dose of engineered T-cells experienced longer remissions, bringing the average to more than 12 months. Previously, similar patients treated with currently available therapies following multiple relapses had an average of three to four months of remission.

"We have patients that are over two

Dr. Larry Anderson

years out from their single infusion of CAR T-cells and still in remission despite having no other treatment options when they were enrolled in this trial," said Dr. Anderson, a member of the Harold C. Simmons Comprehensive Cancer Center who cares exclusively for patients with plasma cell disorders, mostly myeloma patients. "The results mark a true breakthrough with unprecedented depth and duration of remissions from what we hope will be the first cellular therapy

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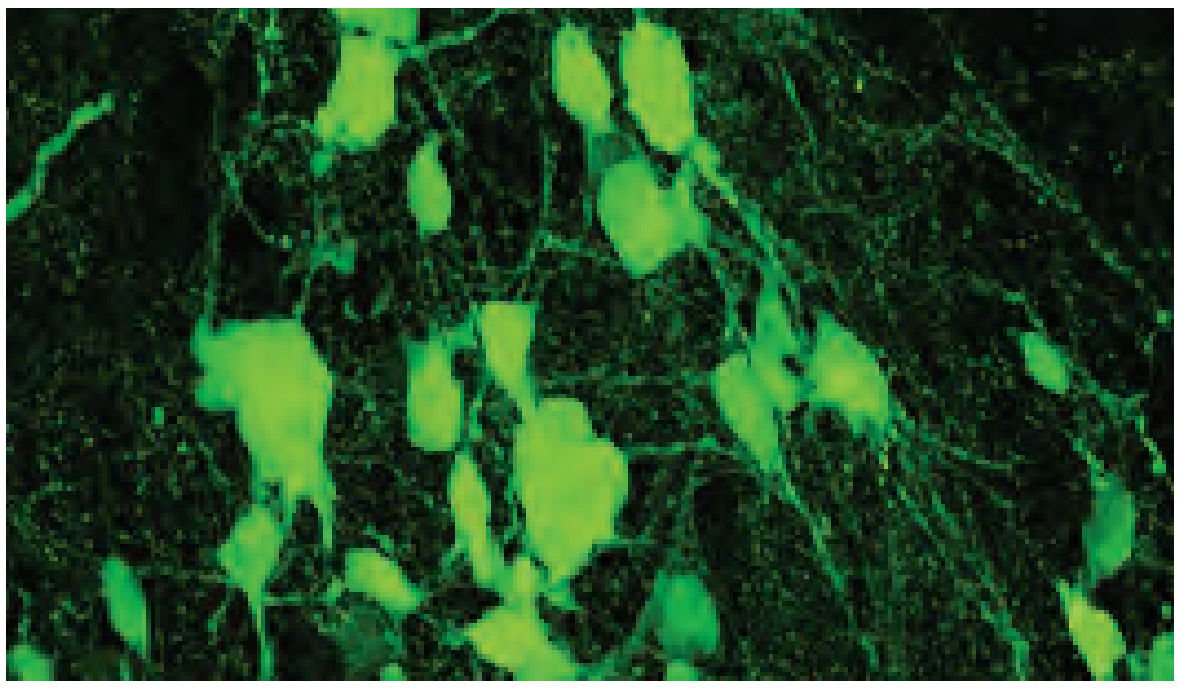
Reprogramming cells offers hope for spinal cord healing

Scar-forming cells that overproduce a protein made new neurons, improving recovery in mice



This image shows new spinal neurons converted from glia.

By Christen Brownlee

Researchers at UT Southwestern and Indiana University have reprogrammed scar-forming cells in mouse spinal cords to create new nerve cells, spurring recovery after spinal cord injury. The findings, published in *Cell Stem Cell*, could offer hope for the hundreds of thousands of people worldwide who suffer a spinal cord injury each year.

Cells in some body tissues proliferate after injury, replacing dead or damaged cells as part of healing. However, explained study leader Dr. Chun-Li Zhang, Professor of Molecular Biology, the spinal cord typically does not generate new neurons after injury – a key roadblock to recovery. Because the spinal cord acts as a signal relay between the brain and the rest of the body, its inability to self-repair permanently halts communication between these two areas, leading to paralysis, loss of sensation, and sometimes life-threatening consequences such as an inability to control breathing or heart rate.

Dr. Zhang said the brain has some limited capacity to produce new nerve cells, relying on progenitor cells to turn on distinct regenerative pathways. Using this knowledge as inspiration, he and his colleagues looked for cells that might have similar potential for regeneration in the spinal cord.

Working with a mouse model of spinal cord injury, the researchers investigated a marker normally found in immature neurons. The scientists found this marker present in the spinal cord after injury and tracked down the cells that produce it: non-neuronal NG2 glia cells.

NG2 glia serve as progenitors for cells called oligodendrocytes, which produce the insulating fat layer that surrounds neurons. They are also known to form glial scars following injury. Dr. Zhang's team showed that when the spinal cord was injured, these glia temporarily adopted molecular and morphological markers of immature neurons.

Dr. Chun-Li Zhang

To determine what caused NG2 glia to change, the researchers focused on SOX2, a stem cell protein induced by injury. They genetically manipulated these cells to inactivate the gene that makes this protein. In mice with the altered cells, researchers saw fewer immature neurons in the days following injury, suggesting that SOX2 plays a key role in helping NG2 glia make these cells.

Dr. Zhang and his colleagues then genetically manipulated NG2 glia to overproduce SOX2. In the weeks after spinal cord injury, mice with this manipulation produced tens of thousands of new mature neurons. Further investigation showed that these neurons integrated into the injured area, making the new connections with existing neurons that are necessary to relay signals between the brain and body.

Even more promising, said Dr. Zhang, is that this genetic engineering led to functional improvements after spinal cord injury. Animals engineered to overproduce SOX2 in their NG2 glia performed markedly better on motor skills weeks after spinal cord injury compared with those that made normal SOX2 amounts. Not only did these animals have new neurons that appeared to take over for those damaged during injury, Dr. Zhang explained, but they also had far less scar tissue at the injury site that could hinder recovery.

Eventually, Dr. Zhang said, researchers may be able to discover safe and effective ways to overproduce SOX2 in human spinal cord injury patients, helping repair their injuries with new neurons while reducing scar tissue formation.

"The field of spinal cord injury has extensively researched trying to heal the damage with stem cells that produce new neurons, but what we're proposing here is that we may not need to transplant cells from the outside," said Dr. Zhang, an alumnus of the UT Southwestern Graduate School of Biomedical Sciences. "By encouraging NG2 glia to make more SOX2, the body can make its own new neurons, rebuilding from within."

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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.**

Study reveals structure of nicotinic acetylcholine receptor

Identification of three shapes of a cell-surface protein could pave the way for new disease treatments

By Christen Brownlee

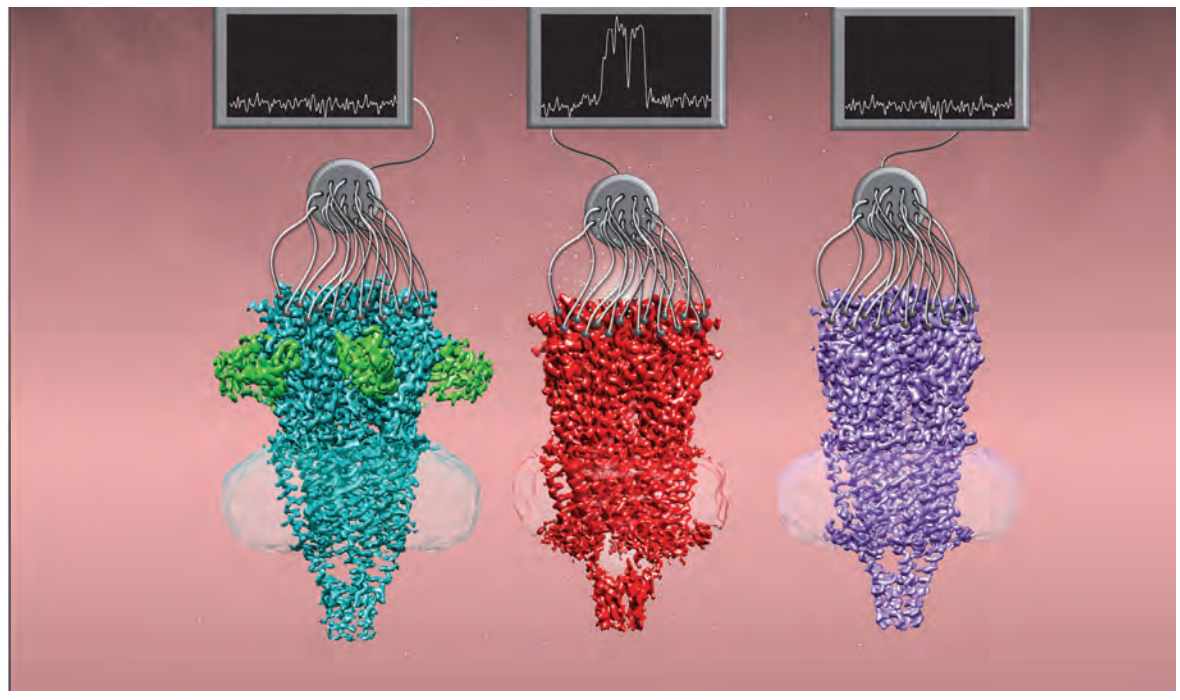
UT Southwestern researchers have identified the structure of a key member of a family of proteins called nicotinic acetylcholine receptors in three different shapes it takes while performing its job. The work, published in *Cell*, could eventually lead to new pharmaceutical treatments for a large range of diseases or infections, including schizophrenia, lung cancer, and even COVID-19.

Nicotinic acetylcholine receptors are members of a broader superfamily of proteins called Cys-loop receptors that function as ion channels on cell surfaces and are found in the membranes of many cell types. When the right molecule settles on these receptors, it acts as a key and opens the gated channels, letting ions flood from the outside to the inside of cells to trigger other cellular processes. Nicotinic acetylcholine receptors respond to acetylcholine, a molecule that nerve cells use to communicate with each other. However, they also respond to other molecules found outside the body, such as nicotine, the essential nutrient choline, and a toxin found on the skin of poison dart frogs called epibatidine.

These receptors, which have been identified in nerve, lung, and immune cells, are connected to conditions such as mental illness, neurodegenerative diseases, lung cancers, and even the destructive immune reactions characteristic of COVID-19 and other infections.

Dr. Ryan Hibbs

Researchers had previously identified the structures of some members of the Cys-loop superfamily in a significant step toward creating drugs that fit onto these ion channels to block or enhance their function. However, said study leaders Dr. Colleen M. Noviello, a Senior Research Scientist, and Dr. Ryan Hibbs, Associate Professor of Neuroscience and Biophysics, the shape, or conformation, of these channels is not fixed. Cys-loop receptors cycle through three major states during their gating cycle that correspond to when they're closed and waiting to respond to a ligand, or activating molecule (resting state); when they've responded to the ligand and opened for ion flow (open state); or when they are still holding the ligand but have closed again (desensitized state).



UTSW scientists have characterized three different conformations of α7, a key cell-surface protein. Credit: Leah Baxter

After trying for years to characterize the structure of the nicotinic acetylcholine receptor α7, success finally came following UT Southwestern's acquisition of cryogenic electron microscopy equipment that allows scientists to take photos at atomic level resolution. With these new tools, the researchers imaged α7 in its different conformations. Because α7's structure is dynamic, allowing it to shift and wiggle, the researchers added different ligands to stabilize it so the cryo-EM images wouldn't be blurry from motion.

The team said that these newly identified structures for α7 could eventually be used as a template for pharmaceutical companies to develop new medicines that target this and related nicotinic acetylcholine receptors. They plan to continue studying α7 in various cell types and how it interacts with other molecules and proteins.

"The more we know about this important receptor found on so many diverse cell types, the closer we'll get to understanding how it functions in physiology and disease," said Dr. Hibbs, a member of the Peter O'Donnell Jr. Brain Institute.

■

Dr. Hibbs is an Effie Marie Cain Scholar in Medical 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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Delivering exceptional patient care during a pandemic

Health System Celebration of Excellence event highlights importance of teamwork

By Carol Marie Cropper

While UT Southwestern's health care teams and staff bravely faced challenges from a pandemic this past year, they also came up with innovative ways to improve patient care.

Health system faculty and employees submitted more than 100 proposals for this year's Health System Celebration of Excellence poster competition – everything from a way to cut medication costs to a strategy to reduce the number of babies transferred to the Neonatal Intensive Care Unit for low blood sugar. These were among the eight projects honored at the March 26 event, held virtually this year due to COVID-19. A finalist and a winner were chosen in each of four categories – quality, service, people, and financial stewardship – from posters that described an idea for improvement. In other awards, four employees were recognized for efforts to improve patient safety.

"We have a lot to celebrate," Dr. William Daniel, Vice President and Chief Quality Officer, told the more than 1,150 people listening in during the third annual Celebration of Excellence, noting the UTSW staff's accomplishments during these trying times. "In fact, our ability to achieve these kinds of results in the midst of a pandemic – no matter how exhausting – may be our finest hour," added Dr. Daniel, a UTSW Medical School alumnus.

Achieving clinical excellence is not about buildings and facilities, added Dr. Daniel K. Podolsky, UT Southwestern President – "It is asking every day, 'In what way can we make our care better, safer, more patient-centered?'"

The theme for this year's event was teamwork, with an address from keynote speaker Dr. Eduardo Salas, Chair of Rice University's Department of Psychological Sciences.

Dr. Salas spent 15 years as a research psychologist and headed training technology development at the U.S. Naval Air Systems Command (NAVAIR-Orlando) in Florida before joining academia. He co-authored the book, *Teams That Work: The Seven Drivers of Team Effectiveness*, and received the 2016 Lifetime Achievement Award for Contributions to Psychology from the American Psychological Association.

"We now know that teamwork in health care really does matter – that teamwork leads to saving lives, improvements in patient safety, and improvements in quality of care," Dr. Salas told the audience. An analysis of research showed health care systems that use team training reduced medical errors 18 percent and improved patient mortality rates 6 percent, he said.

Keynote speaker Dr. Eduardo Salas of Rice University (left) spoke about how effective teamwork can positively impact health care outcomes during his talk and later at a panel discussion.

To have good teamwork, an organization needs capable employees who have a shared understanding and a willingness to cooperate and coordinate, Dr. Salas said. Communication and good coaching from leaders are also important, he said, but the critical element is having the tools in place to support the effort, he added.

Academia is "terrible" when it comes to recruiting the type of employees who are more interested in working as part of a team than going their own way as lone wolves, Dr. Salas said. And health care systems have a history of keeping toxic employees if they happen to bring in a lot of revenue, he added.

"Don't hire and don't tolerate toxic people," Dr. Salas advised. Health care systems are now more willing to remove revenue generators who are toxic, he said.

During a panel discussion following Dr. Salas' talk, Dr. John Warner, Executive Vice President for Health System Affairs, said some employees might feel they have less freedom to speak up than others.

One way to deal with this, Dr. Salas said, would be to have the doctor in charge kick off rounds by telling subordinates, "I like to be challenged." Or a department could put up posters that say, "I'm not perfect," he suggested.

Dr. Salas complimented UT Southwestern for addressing the issue, saying it is one of the few institutions with the courage to do so.

Employees here have shared goals – a key to success, he said. "You as a culture, as an organization, care about what you do," Dr. Salas said.

Dr. Warner said UT Southwestern's commitment to teamwork is what brought him here, and it is "teamwork that has kept me here."

He listed some of the institution's recent accomplishments: more than 2,000 COVID-19 outpatients were treated through March 15, in addition to almost as many inpatients. By the end of March, employees had administered more than 225,000 COVID-19 vaccine doses.

Meanwhile, UT Southwestern ranked eighth among the nation's academic medical centers in the Vizient Quality and Accountability Rankings for patient mortality rates in 2020 and in the top 97th percentile for patient satisfaction by Press Ganey Associates, a company that performs patient surveys.

UT Southwestern completed the third tower of William P. Clements Jr. University Hospital on time in the middle of a pandemic and is now constructing new facilities across the street to add needed space for cancer patient care and brain research, he said. Future plans call for extending UT Southwestern's reach by building facilities at seven to nine locations throughout North Texas. "We want to be the preferred broad-scale specialty provider in North Texas," Dr. Warner said.

UT Southwestern Health System's CELEBRATION of EXCELLENCE

Excellence. Innovation. Teamwork. Compassion.

A video featuring the parents of quadruplets born at UTSW last summer provided an example of how effective teamwork can positively impact patients.

Faced with a couple expecting four babies, doctors came up with a plan, said Dr. Becky Ennis, Associate Professor of Pediatrics and a UTSW Medical School alumna. When the big day arrived, there were three health care providers ready to focus on each new life, she said.

"I have beautiful, healthy baby boys, and I don't know if that would have been possible if it weren't for UT Southwestern," their mom, Katie Sturm, said in the video.

■

Dr. Daniel holds the William T. Solomon Professorship in Clinical Quality Improvement at UT Southwestern Medical Center.

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. Warner holds the Jim and Norma Smith Distinguished Chair for Interventional Cardiology and the Nancy and Jeremy Halbreich, Susan and Theodore Strauss Professorship in Cardiology.

NEWS

MAKERS

Halm appointed to Kumar Distinguished Professorship

Dr. Ethan Halm was drawn to internal medicine by the intellectual challenge of diagnosing and treating a broad range of conditions. He ultimately chose to become a general internist because the specialty focuses on "all of you," he said.

"There is a lot of satisfaction in being able to manage a large number of clinical conditions, develop long-term relationships with patients, and help them live healthier lives by managing their existing medical conditions, as well as counseling them on ways to prevent future problems," said Dr. Halm, Chief of the William T. and Gay F. Solomon Division of General Internal Medicine and Professor of Internal Medicine and Population and Data Sciences.

In recognition of his efforts, Dr. Halm has been appointed the inaugural holder of the Raminder Kumar, M.D. Distinguished Professorship in General Internal Medicine. The endowment was recently established by the family of Dr. Kumar in celebration of her birthday and as a tribute to honor her previous service as a UT Southwestern faculty member for almost 20 years.

"I am very honored and humbled," Dr. Halm said. "Dr. Kumar made long-standing contributions to

Dr. Ethan Halm

UT Southwestern as the founding Chief of General Internal Medicine at the Dallas Veterans Affairs Medical Center, where she recruited 11 faculty members, including several who are now academic leaders at UTSW and beyond."

Dr. Vinay Kumar, also a former UTSW faculty member and now a Pathology Professor at the University of Chicago's Biologic Sciences Division and Pritzker Medical School as well as Dr. Raminder Kumar's husband, said his family established deep academic and personal relationships with UT Southwestern.

"Our affections and respect for UTSW did not abate after we left Dallas. So, when it came time for our family to give something back, we decided to establish this distinguished professorship," Dr. Vinay Kumar said. "We are delighted that Dr. Halm will be the inaugural holder. Although my wife was trained as a hematologist, she chose to work as a general internist for the very same reasons that Dr Halm did. So it is a wonderful match."

The endowment will help support new research and educational activities in General Internal Medicine at UTSW and the VA Medical Center, he added.

A general internist, Dr. Halm provides preventive care and manages adult patients with multiple chronic conditions. His research focuses on improving cancer screening and early detection among underserved patients in Dallas County. His team also specializes in using electronic health record data to predict and reduce the risk of hospital readmissions as well as undiagnosed diabetes or prediabetes, among other adverse events. "All of these efforts have a strong focus on reducing the large disparities in health that have most recently been laid bare by the COVID-19 pandemic," he said.

Dr. Halm received his medical degree from Yale School of Medicine, an M.P.H. from Harvard University, and an MBA from the University of Tennessee. Following residency at the University of California, San Francisco, he completed a general internal medicine and health services research fellowship at Massachusetts General Hospital. He was recruited to UTSW as General Internal Medicine Division Chief in 2008.

Dr. Halm said he is especially gratified that some of his team's most effective interventions to reduce hospital readmissions and improve colon cancer screening that started as research grants have been sustained as part of health system practice.

"So much health care, including how we screen for and manage cancer and chronic diseases, has been severely disrupted by COVID-19," he said, "so future work will need to figure out better ways to deliver care using a variety of virtual modalities like telehealth, mailings, and online health education."

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Dr. Halm also holds the Walter Family Distinguished Chair in Internal Medicine in Honor of Albert D. Roberts, M.D.

Williamson named to ASAHP Board

Dr. Jon Williamson, Dean of the UT Southwestern School of Health Professions, was recently elected to the Board of Directors for the Association of Schools Advancing Health Professions (ASAHP), the national organization for schools of allied health.

ASAHP's primary mission is to advance health through professional collaboration. It also focuses on improving the quality and quantity of the health professions workforce. Serving three-year terms, board members are tasked

Dr. Jon Williamson

with overseeing the activities and affairs of the association.

"It is an honor to be recognized in this way by peers from across the nation," said Dr. Williamson. "The ASAHP is well-positioned as a national organization to help address the needs of all allied health professions."

As an ASAHP member for more than a decade, Dr. Williamson has served the organization by helping to facilitate increased research activity in the health professions. He is on the editorial board for the association's *Journal of Allied Health* and was elected as an ASAHP Fellow in 2018.

■

Dr. Williamson holds the Arnold N. and Carol S. Ablon Professorship in Biomedical Science.

New Assistant Dean to lead diversity, inclusion efforts in Graduate School

By Nyshicka Jordan

Dr. Arnaldo Díaz Vázquez joined UT Southwestern earlier this year as the inaugural Assistant Dean for Diversity and Inclusion in the Graduate School of Biomedical Sciences, part of broader efforts to expand racial and ethnic diversity among students, trainees, and faculty across the institution's three schools.

In this role, Dr. Díaz Vázquez is tasked with strengthening the school's focus on recruitment, retention, and mentorship, partnering with Associate Dean Dr. Nancy Street, a UTSW Graduate School alumna who has spearheaded existing diversity and inclusion efforts. Dr. Díaz Vázquez joined the executive leadership of the Graduate School's diversity initiatives, including the Provost's Initiative for Diverse Emerging Scholars Program (PROVIDES), launched last year to mentor postdoctoral fellows from underrepresented minority (URM) groups and support their advancement to faculty positions. Dr. Díaz Vázquez also is working to fill a gap in the Graduate School's diversity pipeline programs – the lack of a postbaccalaureate fellowship program that would enable students who missed out on research experience in college to gain such experience in preparation for graduate school.

"While the Graduate School student population is very diverse overall, we recognized that certain populations continue to be underrepresented, and we wanted an Assistant Dean to be able to extend our current recruitment efforts to these populations," said Dr. Andrew Zinn, Dean and alumnus of the Graduate School. "Additionally, we realized that just having student diversity is not enough; we needed an additional Dean to enhance our efforts to foster an inclusive environment for basic science trainees and faculty at UT Southwestern."

Dr. Díaz Vázquez, who came to UT Southwestern from the University of Pennsylvania where he held a comparable role, said community outreach and mentoring are key to recruiting more students and postdoctoral fellows from underrepresented populations. While UTSW has seen significant growth in URM graduate students over the past two decades, leaders strive to do better.

"If we invest in our community and in mentoring, I think we can make a huge difference," Dr. Díaz Vázquez said. "The talent is there, but it's about creating opportunities and awareness as well as providing resources to help students and trainees pursue the careers they want."

Dr. Díaz Vázquez said he intends to lean on his many relationships with historically Black colleges and universities and Hispanic-serving institutions to attract recruits. Other long-term recruitment strategies might include developing outreach initiatives for students in grades K-12 and providing graduate students and fellows a platform to share their educational experiences with the community.

A native of Puerto Rico, Dr. Díaz Vázquez earned his Ph.D. in biochemistry at Texas A&M University and completed his postdoctoral training at the University of Pennsylvania. Initially interested in becoming a physician, he discovered research as a college junior. Following postdoctoral training, he shifted his focus to mentoring because that was often a missing piece in his own development.

Dr. Arnaldo Díaz Vázquez

"The way we think about mentoring and outreach has to adjust moving forward. While we will eventually attend conferences in person again, we also need to utilize virtual visits for those who might not have the means to go to a conference and to reach out to schools we have not engaged with before," he said.

Creating diverse learning environments to help students and trainees find the professional paths that suit them is the overall goal, Dr. Díaz Vázquez said.

"There is more that we can do to promote a diverse and inclusive environment for basic science research at UT Southwestern," Dr. Zinn said. "Advocacy by graduate students and postdoctoral fellows in the wake of the racial injustices that came to the fore during the pandemic prompted us to redouble our efforts. Adding a new Assistant Dean for Diversity and Inclusion was one of the key recommendations by graduate students and postdocs."

The appointment of Dr. Díaz Vázquez reflects UT Southwestern's commitment to diversity and inclusion. Late last year, Dr. Quinn Capers IV, a nationally recognized leader on diversity and inclusion in academic medicine, joined UT Southwestern as Associate Dean for Faculty Diversity.

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Dr. Capers holds the Rody P. Cox, M.D. Professorship in Internal Medicine.

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

More online: Read the full story on *Center Times Plus* at **utsouthwestern.edu/ctplus**.

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Dr. Helen Hobbs

Dr. Lora Hooper

ates includes 27 graduating with distinction, an NCAA All-American swimmer, an oboe player in the New Texas Symphony Orchestra, a Japanese ramen restaurant chef, and an oilfield engineer. "There is also a pediatric cancer survivor, a student who overcame homelessness and lived in foster care, a student who gave birth to two children without taking a break from Medical School, as well as immigrants from Ethiopia, Mexico, Cuba, South Korea, France, and Jamaica," added Dr. Mihalic, a UTSW Medical School alumna herself.

Dr. Daniel K. Podolsky, President of UT Southwestern, will confer degrees on the Medical School graduates, followed by presentation of the candidates by Dr. Lee. Delivering the keynote address will be Dr. Helen Hobbs, Director of the Eugene McDermott Center for Human Growth and Development, Professor of Internal Medicine and Molecular Genetics, and a Howard Hughes Medical Institute (HHMI) Investigator. Dr. Hobbs' research focuses on the genetic basis of cholesterol metabolism.

Dr. Hobbs won international recognition for her discovery that individuals with mutations in the *PCSK9* gene have low cholesterol and are protected against heart disease. That discovery led to the development of a drug to lower treatment-resistant high cholesterol and prevent heart disease.

Many of her discoveries grew out of a large longitudinal study with thousands of ethnically diverse participants that she co-founded, called the Dallas Heart Study.

Dr. Hobbs has been honored with the Breakthrough Prize in Life Sciences, the Institut de France Grand Prix, the Passano Award, and the Harrington Prize for Innovation in Medicine, among others. She is a member of both the National Academy of Sciences and National Academy of Medicine.

At the Graduate School, students, family, and faculty are looking forward to celebrating graduates of both this year and last, including students who completed dual Ph.D. and M.D. degrees. The combined 2019-2020 and 2020-2021 graduate list includes students from across the U.S. and at least eight foreign countries. Among them are a member of the U.S. Army Reserve, an Indian dance choreographer, a student who has already received several patents for his research, and a former NCAA Division 1 varsity baseball player.

Last year's graduates are pursuing diverse science-related careers, including traditional postdoctoral training for academic research jobs as well as employment in the biotechnology and pharmaceutical sectors, intellectual property law, clinical research, and biotechnology investment.

Dr. Lora Hooper, Chair of Immunology, Professor of Immunology and Microbiology, and in the Center for the Genetics of Host Defense, will speak at the Graduate School commencement. Her research focuses on the microbiome living inside the mammalian gut and its interactions with the immune system. She has studied how the intestinal immune system defends against the microbes that inhabit it. Her discoveries have helped explain how a host coexists with the trillions of beneficial bacteria in its intestines.

Dr. Hooper's findings show that the microbiome not only affects whether pathogenic microbes in the gut cause infection, but also can determine whether the host is more susceptible to disorders such as diabetes, heart disease, and obesity.

Dr. Hooper is a member of the National Academy of Sciences and an HHMI Investigator. She received the Burroughs Wellcome Career Award in Biomedical Sciences and the Genzyme Award for Thesis Research in Glycobiology.

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Dr. Hobbs holds the Philip O'Bryan Montgomery, Jr., M.D. Distinguished Chair in Developmental Biology, the Eugene McDermott Distinguished Chair for the Study of Human Growth and Development, and the 1995 Dallas Heart Ball Chair in Cardiology Research.

Dr. Hooper holds the Jonathan W. Uhr, M.D. Distinguished Chair in Immunology and is a Nancy Cain and Jeffrey A. Marcus Scholar in Medical Research, in Honor of Dr. Bill S. Vowell

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.

See the endowed title held by Dr. Zinn above.

Therapy Continued from page 1

option to become available for myeloma patients. Even though we don't yet know if some of these patients may be cured, and many relapse within one to two years, it can at least buy many patients time until other treatment options become available. Most patients also have good quality of life with relatively low risk of severe CAR T-cell-related side effects."

Multiple myeloma, the second most common blood cancer, is a cancer of plasma cells, a white blood cell important in the immune system. The disease's attack on bone marrow puts patients at risk of life-threatening infections. It is diagnosed in more than 32,000 people a year, and African Americans are twice as likely as the general population to be diagnosed with this disease.

Three main treatments are available: drugs called proteasome inhibitors, drugs to modulate the immune system, and antibody treatments. Among more than a dozen new therapies for myeloma approved by the Food and Drug Administration over the past decade, most offer only a few months of remission for patients with multiple relapses. Until now, most treatments induced responses in only a third of patients, and complete remissions were rare.

The phase 2 trial involved 128 patients, ages 18 and older, who previously had been given regimens from the three main classes of treatment. The clinical trial included nine sites in the U.S., one in Canada, and 10 sites in five European countries. Several patients traveled from as far away as Michigan and Minnesota to UT Southwestern's Dallas campus to be part of the trial.

Study participants had their T-cells engineered to target a molecule called B-cell maturation antigen, or BCMA, which is only found in plasma cells and myeloma cells. This new T-cell therapy for myeloma patients is called idecabtagene vicleucel, or ide-cel. It is also known as bb2121.

The infusions of the engineered cells started a two-week hospitalization period during which doctors watched for possible side effects such as anemia; neutropenia, a drop in a type of white blood cells; and thrombocytopenia, a drop in blood platelets. Although low blood counts were common, they were manageable, and other severe side effects were uncommon.

> "The results mark a true breakthrough with unprecedented depth and duration of remissions from what we hope will be the first cellular therapy option to become available for myeloma patients."
> – Dr. Larry Anderson

"One of the nice things we saw in this study was that the rates of severe CAR T-cell-related toxicities – called neurotoxicity and cytokine release syndrome – were very low in multiple myeloma compared to what we have seen with lymphoma CAR T-cell infusions," Dr. Anderson said. "The majority of people had some side effects, but most were low level and manageable, and I would say this therapy is often much better tolerated than a stem cell transplant, which most of these patients had already gone through."

Pioneered in the late 1980s, CAR T-cell therapy is a promising and still emerging treatment for blood cancers that involves harvesting a patient's own T-cells by withdrawing blood, reengineering the T-cells in a lab, and then growing millions of them to put back into the patient by infusion.

Currently, CAR T-cell therapy is only approved for lymphoma and leukemia. Several different CAR T-cell treatments for myeloma are in clinical trials, but this CAR T-cell treatment is the first to complete and publish data from an FDA registration trial. Based on these results, the pharmaceutical companies Bristol Myers Squibb and bluebird bio are seeking FDA approval of ide-cel as a standard therapy for relapsed myeloma.

The trial was funded by bluebird bio and Celgene, a Bristol Myers Squibb company. Dr. Anderson is a consultant who serves on an advisory board for Celgene and has other consulting activities disclosed in the manuscript.

STUDENT AWARDS

Dr. Priscilla Tanamal:

Class of 2021 Leadership Award

Dr. Priscilla Tanamal's interest in medicine and science was clear from an early age. As a kindergartner, she was fascinated with the human body and quickly leaned toward a medical career. When she shadowed physicians during a college break, her aspirations of becoming a doctor crystallized.

What the Leadership Award means: "I was very excited to take on the role of Class co-President in the beginning of the first year of medical school, but it was a daunting task. Being in leadership, it's not very obvious whether you're doing a good job because it always feels like you could be doing more. What this award means to me is that I fulfilled the duties of my job well and was able to make an impact during my time at this school, and I am so honored."

Mentor comment: "Whether it be serving on the LCME Student Committee for our medical school accreditation or our Six-Year Strategic Planning process, your thoughtful ideas, rationed approach, and partnership to help shape UT Southwestern Medical School into the best it can be is greatly appreciated. You have represented the student body so well on the UT System Student Advisory Committee, making an impact on how to approach issues related to the pandemic. You have also been an incredible role model to the other class leaders in how to address problems, develop trust, and come up with creative solutions. This has been an extraordinary time, and you have met the challenge with extraordinary leadership." – Dr. Angela Mihalic, Dean of Medical Students and Associate Dean for Student Affairs

Background and family: "I was born and raised in El Paso, Texas. My parents are both from Bandung, Indonesia, and came to the United States to get their master's degrees and ended up in El Paso, where my dad found a job."

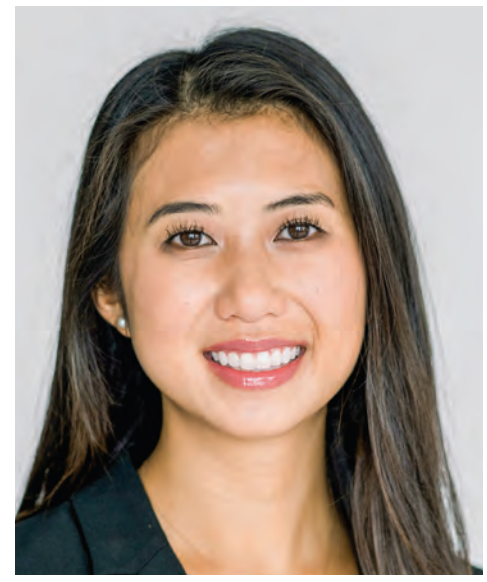
What led to your career path: "There are no physicians in my family, but growing up surrounded by a nurturing home and having parents working so hard for my future, I was always striving to do my best. The human body was intriguing to me since a young age, and one summer in college, I realized I wanted to practice medicine because I loved my time shadowing physicians, especially surgeons in the operating room. I came to medical school excited to see what other opportunities I would have for my career path. During my surgery rotation, my love for the field was confirmed and led me to choose general surgery."

College: "I earned a Bachelor of Science with High Honors in Advanced Nutritional Sciences at UT Austin. During college, I worked in the Dell Pediatric Research Institute Finnell Lab and the Freshman Research Institute Vertebrate Interactome Mapping Lab. I also was a member of Kappa Delta Sorority and UT Club Tennis."

UTSW activities: "Besides serving as Class co-President, I also was active with the UT System Student Advisory Council, Gold Humanism Honor Society, Student Leadership Committee, and as a PRE+OP Orientation Committee member, Colleges peer mentor, Human Structures teaching assistant, and COVID-19 student volunteer."

Surprising fact: "My first language is Indonesian."

Future plans: "I'm excited to go to residency in general surgery at Louisiana State University School of Medicine and can see myself pursuing a fellowship, but I'm not sure yet exactly what I want to specialize in. So far, I loved my experiences in vascular, burns, and plastic surgery."



Dr. Priscilla Tanamal

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

Dr. Thanos Rossopoulos:

Iatros Award

The journey to becoming a doctor took an unusual route for Dr. Thanos Rossopoulos, who had worked as an oilfield drilling engineer in India and the Middle East after earning his undergraduate degree in mechanical engineering. The close friendships he made with co-workers stationed offshore for months along with volunteer work at a food pantry pulled him toward a new career path of service – and the medical field.

What this award means: "It means a lot when my actions have been recognized by my classmates, and I am honored and blessed that others consider me to exemplify the important traits of a physician. Also the word 'Iatros' means 'doctor' in Greek, and I am very proud to be Greek."

Class of 2021 student comments: "This is a diligent student, compassionate clinician, humble life learner, dedicated serviceman, true friend, persistent community builder, honoring family man, and all-around exemplary human being." "Thanos is the kind of man who sees a need, gets himself personally involved in the community, dreams up solutions, and is not afraid to act on them to see them realized." "He values his family and meaningful relationships rather than a career and money and other forms of success. That said, he hasn't shunned diligence and excellence in his medical/clinical education." "I know few people as hardworking and dedicated as this student. On top of all of these things this student is a humble man. He serves because he genuinely cares and wants to make a difference in the community."

Background and family: "I am from Southern California. My father is Greek, and my mother is Cantonese American. Their work ethics inspire me. I have a younger sister who will be studying occupational therapy next year."

What led to your career path: "I was most attracted to medicine because of my desire to have a career helping others in which the interpersonal relationship between provider and patient is at the heart – something that was absent from my short career as an engineer. My most cherished experiences as an oil engineer were the intimate connections I made with co-workers during my monthlong shifts offshore, and after volunteering in a food pantry, I sought to develop a career in service. My love of science and service intersected perfectly with medicine."

Dr. Thanos Rossopoulos

UTSW activities: "I founded an expanded student-led program at Union Gospel Mission (UGM) to help individuals struggling with homelessness quit smoking, serving over 300 clients from 2018 through 2019. I also co-founded the Patient Navigator Program for Individuals Experiencing Homelessness, which pairs students with UGM clients to help them navigate the health care system. In addition, I co-led a medical mission trip to the Dominican Republic as a first-year student and collaborated on a project to implement health care education sessions and primary care needs assessments for undergraduate students of Paul Quinn College."

Surprising fact: "I spent one and a half years in India, Bangladesh, and the Middle East after graduating college, primarily working and living on oil rigs in the desert or the ocean."

Future plans: "I am headed after graduation to a combined Psychiatry-Family Medicine Residency at UC San Diego. I want to work clinically with underserved populations in preventive primary and mental health care, focusing on patients with severe mental illness and/or addiction. I also want to improve the field of integrated/collaborative health care."

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. The Iatros Award carries a cash prize provided by the Alumni Association.

Dr. Logan Mills:

William F. Ross, M.D., Scholarship Award in Family Medicine and the Lorraine Sulkin-Schein Medical Student Award in Geriatric Medicine

Inspired by his late grandmother, Dr. Logan Mills felt led to pursue a career dedicated to elderly and underserved populations. His commitment to family and community left an indelible impact, one that he hopes to honor as a future physician in community-based care.

What the Ross Award means: "Throughout my medical school training, I have admired the dedication of the Family Medicine faculty to teaching medical students and advocating for their patients. To be selected and recognized by these amazing mentors and faculty members as a recipient of one of the William F. Ross awards is a high honor because I hope to carry the same level of dedication and advocacy into my future practice as these mentors."

Mentor comment: "Logan demonstrated an amazing passion and commitment for primary care. This passion has been on display since he entered medical school and is a model for future students interested in family medicine." – Dr. Zaiba Jetpuri, Associate Professor of Family and Community Medicine

What the Sulkin-Schein Award means: "One of my inspirations to enter medicine and care for older adults was my grandmother. She instilled in me the value of caring for family and community. She unfortunately passed away during my first year of medical school, but I will never forget her dedication to her family and her impact on my life. During my medical training, I have sought out opportunities to care for older adults and have encountered many amazing mentors in this process. The Lorraine Sulkin-Schein Award is very meaningful to me because I strive to provide compassionate care for older adults in the same way I have observed my mentors care for their patients."

Dr. Logan Mills

Mentor comment: "Logan has been committed to older adults and their care throughout his training at UT Southwestern. He is a gifted physician who shows great respect and understanding of older adults with complex medical issues." – Dr. Vivyenne Roche, Geriatrics Fellowship Program Director and Professor of Internal Medicine

What led to your career path: "Growing up in rural East Texas instilled in me a strong sense of responsibility and community. During my medical training, I noticed that my mentors within family medicine shared these characteristics and saw their dedication to their patients. I was inspired to pursue a career in family medicine during my family medicine rotation with Dr. Shivum Agarwal in Jacksboro, Texas. His servant nature, dedication to teaching, and compassion for patients led me to consider no other career path than one involving family medicine."

UTSW activities: "I served as President of the Geriatrics Interest Group, Medical Student Manager of the student-run free clinic, President of the Family Medicine Interest Group, and representative of the Free Clinic Committee."

Surprising fact: "One of my hobbies is baking, but during my medical school training I was diagnosed with Type 1 diabetes. I have not let this prevent me from enjoying my hobby."

Future plans: "After graduation I am headed to a family medicine residency at John Peter Smith Hospital and plan to complete the Advanced Rural Medicine and Surgery Track."

About the awards: Named after the former Chair of Family and Community Medicine, the Ross Award includes a $1,000 scholarship from the Dallas Chapter of the Texas Academy of Family Physicians Foundation. The Sulkin-Schein Award recognizes a student committed to the care of older adults. Mrs. Schein, who died in 2007, was a longtime supporter of UTSW who bequeathed funds to promote geriatrics.

Dr. Amber Allen:

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

Dr. Amber Allen

Barriers and challenges never intimidated Dr. Amber Allen. The daughter of an ambitious single mom in West Texas who put herself through occupational therapy school, Dr. Allen had the perfect role model growing up. Her exposure to the many barriers faced by underserved communities led her to pursue a career as a physician, with a passion for family medicine in particular.

What this award means: "I'm honored to be recognized by the faculty that helped develop my love for family medicine. My roots were planted in this Department and I'm grateful for their support as I grow through my career!"

Mentor comment: "Amber is a very responsible, self-motivated, mature, and compassionate learner. She has always demonstrated a high level of enthusiasm and commitment to family medicine. She earned her M.P.H. during medical school and has received a Bronze Presidential Service Award." – Dr. Zaiba Jetpuri, Associate Professor of Family and Community Medicine

Background and family: "I grew up in Lubbock, Texas. I was raised by a young single mother in occupational therapy school who read anatomy textbooks to me. I'd like to think that is where my interest in medicine began. I am the second doctor of the family, following behind my cousin who is a doctor of physical therapy. Outside of medicine, I love dancing, Texas football, and my two miniature schnauzers."

What led to your career path: "Through college and medical school, I was exposed to the many barriers that underserved communities face. This strengthened my interest in helping patients overcome these barriers, specifically through primary care. I chose family medicine because this field supported my passions of patient-centered care, zealous advocacy, and community service in all stages of a patient's life. As an African American woman from West Texas, I did not know many people with a graduate degree who looked like me."

UTSW activities: "Post-clerkship, I served as Family Medicine Interest Group (FMIG) Vice President, FMIG Coordinator for the Texas Academy of Family Physicians (TAFP), a Colleges peer mentor, and a Social Determinants of Health Curriculum Reform Committee member. While attending medical school, I also graduated with a Master of Public Health from UTHSC Houston."

Surprising fact: "Before medical school, I was a dance teacher who taught children and adults many genres – from ballet to ballroom dancing."

Future plans: "I want to be a full-spectrum family physician who supports my patients no matter what age or stage of life. I would love to work with the underserved and use my M.P.H. to understand and integrate myself into my patients' communities through service, advocacy, and research."

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.

Dr. Sara Hassan Youssef:

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

Dr. Sara Hassan Youssef

Medicine runs in the family for Dr. Sara Hassan Youssef, whose father completed his residency here at UT Southwestern and inspired her interest in the field. Dr. Youssef's diverse cultural background played a role in her ability to connect with patients and eventually home in on the field of family medicine.

What this award means: "This award is meaningful to me as it emphasizes the importance of primary care in not only managing medical conditions in the community but also in preventing complex diseases from developing in high-risk patients."

Mentor comment: "Sara has been very committed to community service and this has led to a passion in her serving the underserved. She volunteered with several community organizations and became an advocate for those with minimal resources. Physicians who have worked with her commented on her work ethic and compassion for patients." – Dr. Zaiba Jetpuri, Associate Professor of Family and Community Medicine.

Background and family: "I was born in New York, but moved with my parents to Dallas at the age of 5 for my father's residency in physical medicine and rehabilitation right here at UTSW! My mother is from Guatemala and my father is from Egypt, and I feel so fortunate to have such a unique cultural background as it has allowed me the ability to connect with many people. I recently married my loving husband, who has been a huge part of my support system throughout medical school and who is finishing up his intern year in family medicine."

What led to your career path: "Witnessing the joy that my father gets from his career as a physician initially intrigued me to pursue a career in medicine myself. Then, as a graduate student in business school, I was able to learn about the managerial side of health care as well as the shortage of primary care physicians in our country, which helped shape my commitment to family medicine."

UTSW activities: "I have held leadership positions with the Pediatric Interest Group and the Dermatology Interest Group. I have volunteered at the Agape Clinic, a medical student-run free clinic, since my first year of medical school. I helped mentor pre-med students through the Pre-Med Mentorship Program as well as the Minority Association of Pre-Medical Students. I am a student member of the Family Medicine Interest Group, the Islamic Medical Association, and the Latino Medical Student Association."

Future plans: "As of right now, I see myself serving my community as a general primary care physician."

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.

Dr. Emily Magallanes:

TAFP Dallas Chapter Outstanding Graduate Award

Dr. Emily Magallanes

Working hard and giving back are two philosophies that have guided Dr. Emily Magallanes throughout her life. As a new physician, wife, and mother of two young boys, the pace it seems will only get more hectic now. But Dr. Magallanes enjoys the challenge and looks forward to a career in family medicine where she can help people of all ages and develop long-term patient relationships.

What this award means: "It's always nice to be recognized, but this award is especially meaningful because it validates the philosophy I have lived by for the past four years – it's more important to take good care of your patients than to make yourself look good on rounds."

Mentor comment: "Emily was very strong during her clerkship and actively sought feedback to improve. She consistently would get glowing comments from patients and showed an ability to be empathetic, aware of a patient's social context and physical and emotional needs. She is a hard worker, team player, dependable, honest, and earnest. Her commitment to nutrition and primary care are impressive." – Dr. Zaiba Jetpuri, Associate Professor of Family and Community Medicine

Background and family: "I grew up in Kennesaw, Georgia, raised by my two wonderful parents. My parents taught us to work hard. I can't remember a single Saturday that I wasn't scrubbing toilets, pulling weeds, doing laundry, or mudding sheetrock. At Brigham Young University, I met my husband through my job teaching Spanish to missionaries. He substituted in my class one summer. We were married the next year, right before medical school, and now have two beautiful boys who are ages 2 and 6 months."

What led to your career path: "Throughout my childhood, I was the kid who wanted to watch PBS specials and Netflix documentaries about natural disasters and public health crises. Something about them really lit my fire and gave me the desire to make a difference in the world. As a teen, I was present for the births of my two youngest brothers. My mom's midwife, Teri, was so inspirational in the way she took care of my mom and educated our whole family about pregnancy and childbirth. In the summers, Teri would travel with her family to do medical missions, which I thought was just amazing. For the longest time, I wanted to be just like her. Somehow, despite all of these early influences, it still took me a long time to realize that medicine was the right path for me."

UTSW activities: "One of my most meaningful experiences has been the opportunity to evaluate a new medical student elective, Culinary Medicine. I believe physicians are not getting enough education about nutrition and lifestyle habits that are the root cause of many diseases contributing to morbidity and mortality in our country. We just recently published some of our earliest findings and are in the process of evaluating recently collected data."

Surprising fact: "During high school I danced with the Little General Cloggers, a group from my hometown that performed old-style clogging routines. Every summer we danced at the Grand Ole Opry in Nashville, Tennessee."

Future plans: "I plan to pursue training in full-scope family medicine, including surgical obstetrics and lifestyle medicine."

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

Dr. Carolyn Shanks:

Texas College of Emergency Physicians Award

Dr. Carolyn Shanks

At her first job working on a horse farm in Iowa, Dr. Carolyn Shanks developed a strong work ethic. This drive carried her forward in school as well, as she excelled in math and science, leading her to college and eventually medical school. The importance of the work and the fast pace drew her to the specialty of emergency medicine.

What this award means: "This award is meaningful to me because when I work a shift in the Emergency Department, I am genuinely excited to be there and to engage with and learn from each patient. It's an honor that the attendings and residents with whom I have worked also notice and appreciate my effort."

Mentor comment: "Carolyn excelled on her emergency medicine rotations, impressing all by her diagnostic acumen, procedural skills, and warm bedside manner." – Dr. Christine Kulstad, Associate Professor of Emergency Medicine

Background and family: "I was born and raised in Bettendorf, Iowa. Both of my parents grew up on farms in Iowa, and I got my first job on a horse farm. I do think this first job instilled a work ethic that continues on through my work in medical school and will continue into residency. Math and science were my favorite subjects, and I even skipped a grade in those two subjects, as well as competed on my school's math bee team. I attended Vanderbilt University for undergrad, where I became involved in medical research that propelled my interest in medicine."

What led to your career path: "I explored many different fields, but realized that when I was in the Emergency Department, time flew by and I would leave feeling more invigorated by the importance of the work. I loved the challenge of the undifferentiated patient, but also loved the connection of emergency medicine to the community. At Vanderbilt, one of my majors was medicine, health, and society. I spent four years studying topics such as social determinants of health, racial and ethnic health disparities, health care policy, and how health is portrayed in the media. When I worked in the Emergency Department, I saw all of those topics come to life. It confirmed the importance of providing care to patients who do not otherwise have access to medical care and continues to inspire me to improve health care both in the hospital and out in the community."

UTSW activities: "I served as a Reflections Workshop Leader, seniors community Pen Pal Program volunteer, Meals on Wheels volunteer, and kept active with research in multiple publications."

Surprising fact: "Before starting medical school, I moved to France and worked as an English tutor. It was an experience that has helped me to connect with people from different cultures and certainly taught me how to explain complex subjects despite language and cultural barriers – which is certainly useful in an emergency department."

Future plans: "After my emergency medicine residency, I hope to complete a fellowship. I am interested in medical education, ultrasound, and health policy. After fellowship, I plan to work in the community for at least a couple of years. Eventually, I do hope to return to an academic institution to work."

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.

Dr. Bradley Upchurch:

Society for Academic Emergency Medicine Award

Dr. Bradley Upchurch

As if graduating from medical school wasn't hard enough, Dr. Bradley Upchurch overcame a few more challenges this past year. He married his wife in a small ceremony due to the pandemic and also dealt with contracting COVID-19 himself within a day of getting a new dog. But, given he decided to focus on emergency medicine as a specialty, it seems obstacles are no match for Dr. Upchurch.

What this award means: "To receive this award reaffirms the superior mentorship I have received within the Emergency Medicine department as well as the extensive support from friends and family that have allowed me to enter the hospital daily with renewed passion and resolve to work harder than the day before and approach each patient with compassion."

Mentor comment: "Brad has been involved in our Department since his preclinical years, consistently exhibiting intelligence, hard work, and determination. I expect him to be a success in the field of emergency medicine." – Dr. Christine Kulstad, Associate Professor of Emergency Medicine

Background and family: "Growing up in East Texas was filled with many weekends of team sports, hunting, hiking, golf, and long summer days with friends and family. I also had the opportunity to travel to Ecuador, Nigeria, Romania, and Malawi for humanitarian and medical mission trips with my family. The most consistent and important theme of my upbringing and background is my involvement and dedication to my local church and Christian community that has supported me every step of the way. During the beginning of the pandemic, I was also able to marry my wife, Jaclyn, in a small ceremony with family. "

What led to your career path: "I grew up surrounded by emergency medicine since my dad and family friends are EM physicians. Though I knew very early in middle school and high school that I wanted to pursue a career in medicine, I sought out basic research positions in college to determine if I would pursue my M.D. or Ph.D. Quickly, I determined medicine to be my future and was blessed to have the chance to train at my father's alma mater – UT Southwestern (Dr. Stan Upchurch, '92). During medical school, I found the Emergency Department to be the place that I most enjoyed in the hospital due to the team emphasis, large breadth of pathology, diversity of patients, and need for timely interventions and decision-making."

UTSW activities: "I have been involved in starting a new medical student elective on wilderness, sports, aerospace, and military medicine for pre-clerkship students. I also have spent much of my time on EM research, focusing on new ultrasound methods in cardiac arrests as well as putting new resources together for future EM-bound medical students."

Surprising fact: "I completed a half-marathon, hiked the Boulder Skyline Traverse, and scored my first 'hole-in-one,' all within 96 hours in three different states."

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

Dr. Nikhil Madhusudhan:

Eliot Goldings Award in Rheumatology

Dr. Nikhil Madhusudhan

Drawn to both research and patient care, Dr. Nikhil Madhusudhan is pursuing both through UT Southwestern's Physician Scientist Training Program, which allows him to earn a Ph.D. in addition to a medical degree. His dream job is to become a laboratory investigator and medical oncologist at an academic medical institution such as UT Southwestern.

What this award means: "I enrolled in the rheumatology rotation at the last minute, so I was uncertain if I would enjoy it. But much to my delight, I ended up having a great time. I constantly found myself musing over the elusive pathophysiology of rheumatologic disease and how this impacts the diagnosis and treatment of patients. It felt great to be recognized for my genuine interest and enthusiasm during the rheumatology rotation."

Mentor comment: "Nikhil is an M.D./Ph.D. student who distinguished himself for the interest he put in the rheumatology rotation. It was clear that he was reading about his patients and that he's intellectually curious. His bedside manners were excellent, and even difficult patients felt comfortable around him. He's an excellent student." – Dr. Guillermo Andres Quiceno, Associate Professor of Internal Medicine

Background and family: "I was born in India, but my family moved to Northern Virginia when I was 2 years old. I graduated from high school in 2007 and completed my undergraduate degree at Boston University in 2011. I spent two additional years in Boston as a lab technician at the Broad Institute, studying cancer cell metabolism prior to enrolling in the M.D./Ph.D. program at UT Southwestern in 2013. My parents are both software engineers. My sister is a resident in the combined pediatrics and anesthesiology residency program at Johns Hopkins. My wife is currently a third-year Ob/Gyn resident at UT Southwestern."

What led to your career path: "I worked in a research lab at the VA Hospital in Washington, D.C., during the summer before my senior year of high school. There, I studied how lipid metabolism is altered in rat models of alcoholism. This experience got me hooked on biomedical research and set me on the path to becoming a physician-scientist."

Future plans: "I will be completing my internal medicine residency and oncology fellowship at UT Southwestern in the Physician Scientist Training Program (PSTP). The PSTP offers three years of protected research time after clinical training, which I will use to develop my scientific focus. After this, I will launch an independent career as a laboratory investigator and medical oncologist at an academic medical institution. I hope to make important discoveries that advance medicine and science."

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.

Dr. Naveen Kishore Balakrishnan and Dr. Calvin Geng:

Dr. Richard Mays Smith Award

Dr. Naveen Kishore Balakrishnan

As the son of Indian immigrants, Dr. Naveen Kishore Balakrishnan always felt drawn to diverse patient populations. During his medical education, he sought out experiences involving community health research that included working with the homeless or those with psychiatric issues. Ultimately, his goal is to work in internal medicine and assist underserved populations.

What this award means: "I hope to be at the frontiers of internal medicine care and serve underserved populations. To receive an award from my role models who have previously given this award to students I've looked up to is quite possibly the second best affirmation of my efforts that I could receive right now (after making my parents proud, of course!)."

Mentor comment: "Naveen is a well-rounded student with a strong foundation of clinical skills and an earnest communication style that makes patients feel comfortable – allowing him to deliver evidence-based, personalized care. Inducted into the Gold Humanism Honor Society, Naveen is invested in addressing social barriers to care and strives to work with disadvantaged communities. Naveen has a bright future ahead of him, and we are grateful for the opportunity to continue to watch him grow in the next three years as a resident at UTSW!" – Dr. Ahmad Anshasi, Assistant Professor of Internal Medicine

Background and family: "I was born in Croydon, the United Kingdom, to two Indian immigrant parents. I have a younger sister, and we all moved to the United States when I was 7. I've lived in Rhode Island, Texas, and England."

What led to your career path: "As the son of a physician and due to personal medical experiences, I found myself interested in medicine. Meeting people from different walks of life, learning to recognize my privilege, and learning to process my own identities and experiences as an immigrant really helped me develop a passion for serving underserved populations. I spent medical school obtaining experiences that might help me become a leader in bringing equity and justice to our communities, and I believe I can do that in internal medicine."

UTSW activities: "I helped create a hepatitis C screening program with linkage-to-care at the local homeless men's shelter. I also helped grow the student advocacy group (now Student Patient Advocates for the Rights of our Communities, or SPARC) and learned about community-based participatory research, for which I'll graduate with a distinction in community health. I also served as a Gold Humanism Honor Society co-Chair for the Humanism elective, which is open to all UTSW professions schools."

Surprising fact: "I used to play competitive chess nationally and was ranked in the top 100 for my age. I went on to represent my undergrad class at the pan-collegiate tournament, and I wish I had more time to dedicate to chess."

Future plans: "I hope to serve underserved populations at an academic center in an inpatient care setting. I hope to teach and to continue community-based participatory research."

Dr. Calvin Geng

As a child of Chinese immigrants, Dr. Calvin Geng appreciates the educational opportunities available in the U.S. He dove full force into academics, graduating with a degree in biology through a combined program between UT Dallas and UT Southwestern that afforded provisional acceptance to UT Southwestern Medical School.

What this award means: "I feel extremely grateful to have mentors and classmates who led by example and demonstrated the power of empathy, compassion, and intellectual curiosity. To be selected for this award from a class full of equally deserving colleagues is humbling and serves as motivation to continue to do the best I can for my patients."

Mentor comment: "Calvin's intellect, curiosity, and persistence have helped him excel academically and in research at UT Southwestern and UT Dallas. However, Calvin truly stands out for his warm nature, effervescent enthusiasm for learning, and his gift for forming human connections. I have no doubt that Calvin will combine his considerable skills at the bedside, interest in research, and passion for education in a career in academic medicine." – Dr. Stephanie Brinker, Assistant Professor of Internal Medicine

Background and family: "I was born in Jinan, China, on Dec. 25, 1995. When I was 3, I immigrated to Lubbock, Texas, where my dad studied electrical engineering at Texas Tech University. We moved to Austin, Texas, when I was 5. Undoubtedly the best part of medical school was meeting my partner and best friend, Anna Jane, whom I coupled matched with this year."

What led to your career path: "As a child of first-generation Chinese immigrants, I have seen how personal sacrifice can lead to the betterment of others. My parents gave up so much when they immigrated to America to give me the chance for opportunities they never had. In high school, I made the decision to pursue a career in medicine after I realized the NBA was not in the stars. All joking aside, this decision was driven largely by seeing the difficulties my parents faced in navigating health care. As a soon-to-be resident physician, I am honored and excited to have the opportunity to give to my patients as my parents have given to me."

UTSW activities: "I have enjoyed being one of the Social Chairs for my medical school class. In this role, I was able to meet many lifelong friends. I was also actively involved in a variety of research, ranging from the bench to clinical in the fields of burn physiology, head and neck cancers, and esophageal disorders. I continued to be involved in intramural sports, where I participated as both a player and a referee."

Future plans: "Anna Jane and I matched at the University of Virginia for our psychiatry and internal medicine residency training. I am currently interested in a career in gastroenterology, but will keep an open mind heading into my intern year. Ultimately, I want to practice in academics where I can strike a healthy balance of clinical duties, medical education, and 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.

Dr. Anika Morgado and Dr. Syed Kazim Rizvi:

Dr. Richard Mays Smith Award

Dr. Anika Morgado

Experiences with medical professionals who demonstrated compassion inspired Dr. Anika Morgado to follow suit. Gratitude for the opportunities she received in the U.S. as the child of Venezuelan immigrants led to her desire to become a physician committed to helping underserved Latinx communities.

What this award means: "When I think back to what led me to pursue medicine in the first place, at the forefront are experiences with medical professionals who emanated a spirit of compassion and empathy. I'll always remember shadowing the pediatrician who warmly reassured worried parents and the surgeon who had a tremendous bedside manner. These experiences consistently motivated me to focus on providing empathic and humanistic care to all patients. Consequently, I am both humbled and honored to receive this award."

Mentor comment: "Anika's clinical acumen exceeds her level of training – repeatedly drawing favorable comparisons to first-year residents. Her ability to distill complex patient presentations in a structured, concise manner is a testament to her competence and maturity. Anika's professionalism, critical thinking skills, and empathy will allow her to thrive during residency. Anika has the makings of a future chief resident and will be an outstanding physician." – Dr. Ahmad Anshasi, Assistant Professor of Internal Medicine

Background and family: "My family is originally from Caracas, Venezuela, and moved to the United States when I was about a year old. They left behind their family, friends, and economic stability with the hopes of providing better opportunities for their children."

What led to your career path: "I grew up in a Spanish-speaking household, which meant that from a young age I was impacted by two unique cultures. It also meant that I was able to witness what life as an immigrant was like by watching my parents experience it firsthand. These experiences sparked my desire to use my ethnicity to help others experiencing difficulties stemming from cultural barriers. In medicine, I found that I could easily apply this passion by striving to incorporate cultural competency and accommodate a patient's diverse background when providing medical care for them. I have loved using my background to help care for the underserved Latinx community, and I hope to continue making this a priority in my career."

UTSW activities: "While here, I enjoyed volunteering and translating at the student-run free clinics as well as participating in leadership for United to Serve. "

Surprising fact: "I love the outdoors, but I'm deathly afraid of several bug species. Usually, this doesn't deter me from hiking or camping, but it does provide free entertainment for my company."

Future plans: "I plan on pursuing my residency in internal medicine and have a special interest in longitudinal care and preventive medicine. My current plans include going into primary care or a fellowship in rheumatology."

Dr. Syed Kazim Rizvi

Born in Pakistan, Dr. Syed Kazim Rizvi moved to America with his family in 2002 and witnessed firsthand how inequities can affect one's health. His curiosity about the human body and ambition led him to medicine, with a particular interest in empowering patients through thoughtful, patient-focused care.

What this award means: "It is validating to know that your hard work is appreciated and valuable. It gives you additional motivation to continue to build your vision. I am honored to be chosen for this award."

Mentor comment: "Everything about Syed is praiseworthy – his journey to medicine, his grateful spirit, his respectful advocacy, his infectious passion. He epitomizes the student who pushes you to be a better teacher and an even better physician. Syed, an inducted member of the Gold Humanism Honor Society, prioritizes assisting patients with social determinants of health on both a community and individual level. With an interest and growing expertise in information technology, Syed has many skills that will make him an asset to our residency program here at UT Southwestern." – Dr. Reeni Abraham, Associate Professor of Internal Medicine

Background and family: "I was born in Karachi, Pakistan. I moved to Houston, Texas, in 2002 with my family and went to college at UT Austin."

What led to your career path: "Coming from a humble background, I saw firsthand how inequities can dictate your health. Due to the resilience of my parents and their tireless nature, I was able to empower myself through education to be where I am today. My curious nature and fascination with the human body inevitably led me to medicine. I hope to use my newfound opportunity as an internal medicine physician to fight the inequities that plague our patients and to empower them through thoughtful, patient-centric care, research into socioeconomic determinants of health, and advocacy for health policies and systems that uplift our most vulnerable."

UTSW activities: "I served as co-President of Student Patient Advocates for the Rights of Our Communities (SPARC), Manager of the Agape Clinic, and Committee Chair of the Gold Humanism Honor Society."

Surprising fact: "I love cars! I think working on cars is very similar to the work of a physician, and in another life, I would have been a mechanic!"

Future plans: "I am fortunate to have matched at UTSW in internal medicine. I hope to continue to pursue patient advocacy in all realms – including research, health policies, 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.

Dr. Kyle Saysana and Dr. Reshma Narain:

Hemphill-Gojer Award in Internal Medicine

Dr. Kyle Saysana

Dr. Kyle Saysana is in a unique class as a physician in that he speaks five languages and is learning a sixth. Through an international exchange program, he spent an additional year of his medical school training learning about diverse care models at hospitals in three countries. His exceptional dedication to education led to his selection as a recipient of the Hemphill-Gojer Award.

What this award means: "If there's anything my still-short time in this field has taught me, it's that life can be incredibly fleeting and to care fiercely for one another as friends, family, and colleagues while we're still here, especially in the context of this past year. That will remain my greatest lesson from medical school moving forward, and that is why this award is meaningful to me."

Mentor comment: "An ardent advocate of marginalized populations and the child of immigrants, Kyle intimately understands the need to earn his patients' trust and uses these experiences to create a more inclusive curriculum and widen others' perspectives. Kyle truly embraces diversity and continual growth! He is poised for an incredibly successful academic career and will be a cherished colleague and leader in medicine." – Dr. Reeni Abraham, Associate Professor of Internal Medicine

Background and family: "My father is an aerospace engineer and my mother is a homemaker. I have a sister who's a pharmacist in Houston. My family is of Chinese/Laotian heritage and emigrated from Laos as refugees, later ending up in the United States, where I was born."

What led to your career path: "Growing up, I've always had an organic interest in math and science, but it was reading about and watching the stories of the HIV/AIDS epidemic as a teenager that really moved me to consider medicine as a career. When I was diagnosed with an autoimmune condition in high school, later facing the challenges it presented in college, it truly brought home my passion for this field."

UTSW activities: "Through the International Medical Exchange Program here at UT Southwestern, I was able to spend an additional year of medical school in hospitals abroad, spending six months in France and three months each in Morocco and Argentina, rotating in the fields of critical care, cardiology, and infectious diseases, learning and working in French and Spanish, where I was able to see care and medical education delivered in three very different models from our own here in the U.S."

Surprising fact: "With the exception of a few shows, I've watched every episode of television in the last five or six years exclusively in either French, Spanish, or both languages."

Future plans: "I'll be heading to Harvard and Massachusetts General Hospital for my internal medicine residency prior to pursuing subspecialty training in either cardiology/advanced heart failure or pulmonary/critical care medicine."

Dr. Reshma Narain

Dr. Reshma Narain had an impressive role model growing up: Her maternal grandmother was an internist who headed a large community hospital in Beijing, China. Following in her footsteps, Dr. Narain hopes to provide health care to underserved populations while also working as a clinician-educator.

What this award means: "As I reflect back on my time as a medical student, I realize that I have been truly fortunate to train under such amazing Internal Medicine faculty and residents during my clinical years. I can't help but feel both incredibly honored and humbled to receive this award from the physicians I so admire."

Mentor comment: "Reshma is a true and passionate patient advocate. She has spent her time in medical school particularly dedicated to the health of women and adolescents through research and community outreach efforts. She hopes to use her career in medicine to empower patients through healthy lifestyle interventions. Her ability to form authentic connections with patients will make this possible." – Dr. Stephanie Brinker, Assistant Professor of Internal Medicine

Background and family: "I'm a child of immigrants and grew up in a multicultural (Chinese and Indian) household. My parents are software engineers. We're definitely a small family – I am an only child. My maternal grandmother was an internist who headed a large community hospital in Beijing during the Cultural Revolution. It makes me proud to be following in her footsteps as a future internal medicine doc!"

What led to your career path: "During college, I worked extensively with the urban underserved populations of Los Angeles, whether through volunteering at health fairs or community outreach projects. I saw firsthand how a lack of access to primary care culminated in devastating complications of manageable chronic diseases like diabetes. As an undergrad, I often felt frustrated about my inability to provide the health care that these vulnerable populations deserved. My desire to do right by underserved communities was one of the major reasons why I decided to pursue medicine."

UTSW activities: "I served as co-Director for the Humanism in Medicine elective, Course Director for the Women's Health Enrichment elective, and as a Colleges peer mentor."

Surprising fact: "I am a really huge nerd at heart. I love reading comics, playing Dungeons and Dragons with my friends, and trying out new video games!"

Future plans: "After residency, I hope to combine my passions for working with underserved populations, addressing the social and structural determinants of health, and teaching by pursuing a career in general internal medicine as a clinician-educator."

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 son-in-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.

Dr. Katelynn "Katie" Smith:

Dr. Richard Mays Smith Award

Dr. Katelynn "Katie" Smith

Dr. Katelynn "Katie" Smith had always wanted to be an artist – until a close family friend became terminally ill, shifting her focus. She then turned to science, and later medicine, for her career path. She aspires to work in academic medicine, balancing medical education, research, and clinical care.

What this award means: "I am so honored and touched to be receiving this award. It makes me feel like my hard work was really appreciated and that I was able to make a difference."

Mentor comment: "Katie is a bright and talented student who has a highly developed emotional intelligence and a gift for connecting with emotionally vulnerable patients. Always calm in the center of a storm, Katie is attracted to acute settings where she can work in collaborative environments and draw upon her strong foundation in physiology. Her creativity clearly shines when creating educational material, resulting in an engaging and polished presentation." – Dr. Reeni Abraham, Associate Professor of Internal Medicine

Background and family: "I am the oldest of three kids. I have lived all around the country and even in Canada! However, I consider myself an Indiana native, as this is where I spent most of my time. I am the first physician in my family."

What led to your career path: "My mom is a science teacher and my dad is an engineer, so I suppose science is in my genes. But I was a bit of a rebel and always wanted to be an artist growing up. However, when a close family friend became ill with a terminal diagnosis, my viewpoint shifted. I began to see the art in medicine and knew that it was the career for me. I loved taking care of the whole patient and having the opportunity to have deep personal connections and longitudinal relationships."

UTSW activities: "The majority of my 'spare' time is spent with United to Serve, which organizes the annual Carnaval de Salud health fair. I am also in Alpha Omega Alpha Honor Medical Society and the Gold Humanism Honor Society. Through AOA, I provide free tutoring. Through GHHS, I am one of the Ethics Chairs who helped expand the clerkship ethics curriculum and organize monthly ethics lectures for students. In addition, I have been very active in research with multiple peer-reviewed publications and will be graduating with a distinction in research."

Surprising fact: "I love art and all things creative. I always have an easel set up in my apartment and have done some large commissions for local businesses in Indiana. In addition, I have had some of my short stories and poems published."

Future plans: "I have matched into internal medicine. I plan to continue my career in academics to balance medical education, research, and clinical care. I have some budding interests in critical care, palliative care, and geriatrics; however, I am keeping my options open for now. I never know what I will fall in love with."

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 compassion for patients.

Dr. Lauren Shaffer:

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

Dr. Lauren Shaffer

Medicine runs in Dr. Lauren Shaffer's family. Both her parents are physicians, while her three brothers are pursuing careers in science. She found her niche with internal medicine, which balances the scientific and humanistic aspects of health care.

What this award means: "I am honored to receive this award in honor of Dr. Salomon, who demonstrated immense dedication to the field of medicine while simultaneously battling an untreatable cancer. This award inspires the type of physician I hope to be in the future: one with an unwavering commitment to patients, ongoing medical education, and research pursuits."

Mentor comment: "Lauren has a quiet confidence and competence that engenders trust with all who work with her. She has sought experiences to help her expand her understanding of medicine and challenge her biases, as shown through her study of medical anthropology at the University of Pennsylvania. Having personally witnessed her gifts at the bedside, I can attest that Lauren will be an exceptional physician." – Dr. Reeni Abraham, Associate Professor of Internal Medicine

Background and family: "I was born and raised in San Antonio, Texas, with my parents and three brothers. Both of my parents are physicians: My mother is a pulmonary critical care specialist and my father is a gastroenterologist. All three of my brothers are also pursuing careers in science."

What led to your career path: "After majoring in anthropology in college, I was very interested in a medical career that would be intellectually stimulating but would also foster human connection. During my clinical rotations, I found that internal medicine provided the ideal balance between the scientific and humanistic aspects of patient care. While I am excited by the investigative work involved in diagnosing and managing a patient's illness, I truly love the opportunity to listen and advocate for patients."

UTSW activities: "I was Manager of The Monday Clinic and have been an active participant in United to Serve's annual Carnaval de Salud health fair. I served as an orientation leader for incoming medical students and as a mentor for high school students interested in the sciences. I have also been involved in research on pulmonary diseases."

Surprising fact: "I grew up playing the piano since the age of 5. It has provided me with a wonderful stress outlet, as well as given me a close community of fellow piano players."

Future plans: "I am thrilled to be starting my internal medicine residency at the Hospital of the University of Pennsylvania this summer. While I have an interest in pulmonary and critical care medicine, I am excited to explore the vast array of clinical opportunities before deciding my future career."

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.

Dr. Sonal Gagrani:

American Academy of Neurology Medical Student Prize for Excellence in Neurology

Dr. Sonal Gagrani

Dr. Sonal Gagrani's fascination with the brain started with a neuroscience course in high school. After earning a neuroscience degree, she felt the pull of that field again during her medical education. Now, Dr. Gagrani is headed to a neurology residency this summer, with particular interests in neuromuscular and neuroimmunological diseases.

What this award means: "I am grateful to be recognized for my contribution to neurology as a medical student. I have loved patient-centered clinical care in the field, sharing my passion and knowledge with peers as a mentor and delving into research and quality improvement work. This award reinforces my belief that the brain was the thing for me!"

Mentor comment: "She goes above and beyond for her patients. She has excellent bedside manners and great team skills. But the most striking event was when she spoke up as an advocate for a patient, which led to a change in the medical management plan and a drastically better outcome than would have been otherwise." – Dr. Ghazala Perven, Assistant Professor of Neurology

Background and family: "I was born in India, and my family immigrated to the United States when I was about 3 years old. I grew up in the Northeast for most of my life and moved to Texas for medical school."

What led to your career path: "My first neuroscience course was during a summer program in high school, where I fell in love with the idea of studying the essence of who we all are. There is so much we don't know about the brain and rapidly advancing knowledge in the field. It became my college major, and although I started medical school with an open mind, I chose the brain to study again. Empathy and compassion are traits that I have always considered my strengths, and these are traits that I felt would help me serve patients well in a medical profession."

UTSW activities: "I was involved in the Neurology Student Interest Group, served as Show Chair for the Multicultural Week Committee, and Open School Chapter Lead and Coach for the Institute for Healthcare Improvement, and am graduating with distinction in quality improvement and patient safety."

Surprising fact: "I speak intermediate-level Mandarin Chinese and have spent several summers in China during college for leadership and service programs. I still have five years left on my visa, so I'm hoping to visit again in the next few years!"

Future plans: "I will be starting a neurology residency program this July. My particular interests are in neuromuscular and neuroimmunological disease. I hope to continue integrating quality improvement and patient safety projects in my career, as I have during medical school."

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

Dr. Anthony Dao:

MT "Pepper" Jenkins Outstanding Medical Student Award in Anesthesiology and Pain Management

Dr. Anthony Dao

Considering he can solve a Rubik's Cube blindfolded, there probably isn't much Dr. Anthony Dao cannot do. He has been a go-getter from the start, excelling academically and pursuing leadership roles in student and community organizations while also devoting time to research. He wants to pursue a fellowship in cardiothoracic or critical care, eventually practicing at an academic institution.

What this award means: "This award is a reflection of all the hardships and imperfections I have worked on during medical school, and I am incredibly honored to be recognized for this. I am very appreciative to all the welcoming faculty and residents who have challenged me to grow into the best possible version of myself."

Mentor comment: "Anthony is a natural leader with a servant's heart. He stood out early in his medical career through his leadership in the Anesthesiology Student Interest Group, among others, and has participated in multiple research projects. Beyond all of this, Anthony embodies a true spirit of service. He has volunteered countless hours to many organizations across UT Southwestern and was awarded the President's Volunteer Service Gold Award." – Dr. Amy Woods, Associate Professor of Anesthesiology and Pain Management

Background and family: "I was born in Delaware and raised in Houston. My parents and sister have always been supportive, and I am very grateful for all the love and encouragement they have provided on this journey."

What led to your career path: "My first experience with anesthesiology was shadowing during high school, although it was not until I did my anesthesiology rotations that I was able to appreciate what I loved about the field. I enjoyed the mix of translating clinical knowledge into actionable treatments, seeing patients get better within seconds, and caring for patients during some of the most critical times of their illnesses, such as during surgery or in the ICU."

UTSW activities: "I served as an officer of the Anesthesiology Student Interest Group and loved sharing my experience in anesthesiology. I also was a Manager at The Monday Clinic and a Director of the HepBFree Project."

Surprising fact: "A lot of people already know that I can solve a Rubik's Cube, but not many know that I can do it blindfolded."

Future plans: "I am interested in pursuing a fellowship in cardiothoracic or critical care, or both. I hope to practice at an academic institution where I can work in quality improvement and teach medical students and residents."

About the award: The award recognizes students seeking careers in anesthesiology who excelled at UTSW Medical School, take an empathetic approach to patient care, and exhibit the characteristics of leadership, scholarship, and thirst for knowledge exemplified by the late Dr. M.T. "Pepper" Jenkins, who established and served as Chairman of the Department of Anesthesiology and Pain Management from 1948 to 1981.

Dr. Stacy Kasitinon:

Award for Excellence in Dermatology

Dr. Stacy Kasitinon

A grandmother's diagnosis of late-stage pancreatic cancer and lack of treatment options inspired Dr. Stacy Kasitinon to work toward helping others overcome cancer. With a combined M.D./Ph.D., she hopes to use her expertise to discover new treatments and prevention strategies, focusing in particular on melanoma.

What this award means: "I have been interested in dermatology since I began studying melanoma during my Ph.D. This award is meaningful because it recognizes all of the hard work and passion that I have put toward my career in dermatology and motivates me to make an impact in the field."

Mentor comment: "Stacy exemplifies excellence in dermatology. From her work in graduate school on melanoma in Dr. Sean Morrison's laboratory to her outstanding academic performance and commitment to volunteerism, Stacy has already made a big impact on dermatology. We are so proud of her and are excited to see how her career unfolds." – Dr. Heidi Jacobe, Professor of Dermatology

Background and family: "My parents are first-generation immigrants from Taiwan, and I grew up in the DFW area. I have a sister who is eight years older than me who has always been my greatest role model. I met my husband, who is now a sports medicine physician, during my first year of medical school."

What led to your career path: "When I was in elementary school, my grandmother was diagnosed with late-stage pancreatic cancer and was left without treatment options. She inspired me to pursue a combined M.D./Ph.D. to help discover new treatments for cancer patients. I shifted my focus to dermatology during my Ph.D. training when I studied the role of ion channels and transporters as therapeutic targets in melanoma. Then, from a clinical standpoint, I fell in love with dermatology after volunteering at the Agape Clinic and seeing how much of an impact dermatologists can have on a patient's quality of life."

UTSW activities: "I was a PRE+OP Counselor, a Colleges peer mentor, a United to Serve Booth Chair, a regular Agape Clinic volunteer, a Medical Student Training Program Grand Rounds Chair, and Alpha Omega Alpha Honor Medical Society Research Committee Chair."

Surprising fact: "In my spare time, I am an avid baker who specializes in making macarons. In fact, I own my own home bakery named after my dog, Meeko!"

Future plans: "I hope to continue my career as a physician-scientist at an academic institution. I am particularly interested in studying the drivers and risk factors associated with skin cancers that occur on sun-protected sites and in patients of color in hopes of developing more tailored prevention and treatment strategies for these patients."

About the award: The award is given to a UT Southwestern graduating medical student who has advanced dermatological patient care, research, or teaching in a special way, or who shows promise for leadership in these areas. The recipient receives a certificate and $1,000.

Dr. Amy Xia:

Roland C. Reynolds Pathology Award

Dr. Amy Xia

One of Dr. Amy Xia's fondest memories is of making ice cream using liquid nitrogen from the lab where her parents worked at Caltech. Surrounded by exposure to science, it seemed inevitable she would follow a similar career path and ended up drawn to medicine. Her chosen field is pediatrics, with a residency starting soon at the University of Washington.

What this award means: "I am so honored to have been selected for this award celebrating the legacy of the late Dr. Reynolds. Knowing that this award represents service and care for the community, I feel humbled to be recognized for my passions and involvements during medical school!"

Mentor comment: "It is an honor to recognize Amy with this year's Reynolds Award. Dr. Reynolds led a life of service to others, both professionally and in his personal life, and Amy exemplifies these traits. Her long-standing educational background in community-based health and the social determinants of health are a tribute to her. Of note is her work as Hepatitis C Program Director in establishing a community health program at Calvert Place for hepatitis screening and organizing mental health screenings at Center of Hope." – Dr. Kathleen Wilson, Professor of Pathology and in the Eugene McDermott Center for Human Growth and Development

Background and family: "I am thankful for my family, friends, and my significant other for their continued support during my medical education."

What led to your career path: "I grew up surrounded by science – both my parents studied at Caltech during my childhood. One of my birthday parties growing up involved making ice cream using liquid nitrogen from their lab! I was a very curious child and loved stories. As I grew older, I realized that I could learn about how the stories of science and human physiology take shape in individuals. This pushed me toward a career in medicine."

UTSW activities: "At UT Southwestern, I was heavily involved in the student-run free clinic at Union Gospel Mission and co-developed a hepatitis C screening program for individuals experiencing homelessness. The Albert Schweitzer Fellowship and UTSW's Community Action Research Track (CART) provided me the foundation to implement community-based participatory research and initiatives. I helped expand our clinical nutrition education through implementing an elective, 'Building a Food Foundation.'"

Surprising fact: "During our third year of medical school, my friend was walking his dog Biscuit and found a small black dog without a collar or chip. I adopted that dog and named him Raoul. Now we go on many adventures together!"

Future plans: "I will be starting my pediatrics residency at Seattle Children's/University of Washington this summer and hope to work at a medical center to combine medical education, advocacy, and a community-centered approach into my academic career."

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.

Dr. Amy Kuprasertkul:

John D. McConnell Award for Excellence in Urology

Dr. Amy Kuprasertkul

Women's issues have always been close to Dr. Amy Kuprasertkul's heart, whether through work or community service. She enjoys the combination of medicine and research, so much so that she aspires to become a compassionate urologist and surgeon with a special interest in female pelvic medicine and reconstructive surgery.

What this award means: "I've been able to grow so much as a researcher, and I am so grateful to Dr. Philippe Zimmern, Professor of Urology, and his research team for showing me the ropes. This award is meaningful to me because it recognizes three years of hard work in research, but it also feels special because the UTSW Urology Department will always be my first urology family."

Mentor comment: "Amy demonstrated excellent clinical skills and a natural talent for interacting with patients. She was instrumental in several clinical research projects in the Department and co-authored a paper highlighting some of the challenges faced by women and underrepresented minorities applying for positions in urology. This work, no doubt, will have implications for urology programs as we collectively strive to improve the diversity of our workforce." – Dr. Gary Lemack, Professor of Urology and Neurology

Background and family: "My parents were born and raised in Thailand but moved here for computer science job opportunities. Thus, I was born and raised in Texas, but my family still practices many customs of Thai culture."

What led to your career path: "I had exposure to women's health as an undergrad, so I found projects that I was passionate about by reading Dr. Zimmern's research on female pelvic medicine and reconstructive surgery. I'm excited to further my training as a physician-scientist, collaborating and bringing ideas to basic science labs."

UTSW activities: "I was active with V-Day at UTSW, a global activist movement to end violence against women, and with Advancement Via Individual Determination (AVID), a program to help underachieving students prepare for college."

Surprising fact: "I rode an ostrich in Thailand once!"

Future plans: "I will be starting my urology residency next year at Washington University in St. Louis. I'm excited to take care of urological patients and start my surgical training. Additionally, I'll be getting involved in research with a female pelvic medicine and reconstructive surgery specialist at Washington University."

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 CEO Emeritus of Wake Forest Healthcare Ventures in North Carolina, which develops and commercializes health care products and services.

Dr. Joshua Pierce:

Vernie A. Stembridge Scholarship Award in Pathology

Dr. Joshua Pierce

Science has always fascinated Dr. Joshua Pierce, particularly the cellular and molecular basis of human physiology. His undergraduate interests led to a Ph.D. in molecular biology and, finally, a medical degree. As a pathologist, he looks forward to conducting clinical and translational research.

What this award means: "I have been extremely well supported by members of the Pathology Department during my Ph.D. and M.D. studies, and their further support through this award is very moving."

Mentor comment: "Josh has worked with me on multiple services and, in each case, he is engaged in learning and acting as a team member. His background in basic science stands out and brings a different perspective to questions posed while we are working on cases. He has also been active in promoting the field of pathology among the medical students through his leadership in the Pathology Interest Group." – Dr. Bret Evers, Assistant Professor of Pathology and Ophthalmology

Background and family: "I am from Lubbock, Texas, and am an only child. Both of my parents were employed by Texas Tech University. I have been happily married for 10 years."

What led to your career path: "I have always been interested in the cellular and molecular basis of human physiology, which led me to an undergraduate degree in that subject and a Ph.D. in molecular biology. Continuing my career by studying the medical pathophysiology of disease is the natural progression of these interests."

UTSW activities: "During my Ph.D. training I was involved with the STARS (Science Teacher Access to Resources at Southwestern) program and other high school and college mentoring opportunities."

Surprising fact: "I love to exercise through indoor rock climbing."

Future plans: "I matched to a pathology residency at UCLA. I look forward to becoming a pathologist and performing clinical/translational research."

About the award: The award was established by friends and colleagues of Dr. Stembridge, a former Chair of Pathology who died in 2000. The $1,500 award is given to the most outstanding medical student whose performance in the sophomore pathology course was exemplary and who is interested in a pathology career.

Dr. Kristin Bristow:
Karen Kowalske Outstanding PM&R Undergraduate Award

Dr. Kristin Bristow

A family member born with a rare genetic condition inspired Dr. Kristin Bristow's career trajectory. The younger cousin could never walk, talk, or feed herself, yet her ability to accomplish the unimaginable planted a seed. Dr. Bristow knew then that she wanted to be a doctor working with patients like her cousin, helping them through the specialty of physical medicine and rehabilitation, or PM&R.

What this award means: "This award means so much to me because working with the PM&R Department over the last four years has really shaped me into the person I am today. They have fueled my desire to become a physiatrist and have helped me along that pursuit."

Mentor comment: "Kristin is everything you want someone going into PM&R to be – optimistic, compassionate, dedicated to her patients, smart, and an effective leader. She always shows initiative to learn and is always attentive to helping those around her, including her fellow students. She is going to be an excellent physiatrist!" – Dr. Kelly Scott, Professor of Physical Medicine and Rehabilitation

Background and family: "I am originally from Stephenville, Texas. I went to Abilene Christian University for undergrad before starting medical school at UT Southwestern. My husband, Sterling, and I have been married for almost four years. We have a 6-month-old son and a 5-year-old golden retriever."

What led to your career path: "My younger cousin was born with a rare genetic condition. Watching her defy the odds and accomplish things no one thought she would ever be able to achieve was incredibly inspiring. I knew I wanted to become a doctor to work with patients like my cousin, and when I learned about physical medicine and rehabilitation, it was evident that it was the field for me."

UTSW activities: "I was President of the Physical Medicine and Rehabilitation Student Interest Group, President and founder of Walk with a Future Doc at UTSW, a member of the Preventive and Lifestyle Medicine Student Interest Group, a volunteer with the Helping Augment Neonatal Development Group, and concussion booth coordinator for United to Serve's Carnaval de Salud."

Surprising fact: "I love learning about all things space and missions on the International Space Station."

Future plans: "I don't know what my career will look like after finishing my PM&R residency. Right now, I'm interested in pursuing pediatric rehabilitation or sports medicine."

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

Dr. Harini Suresh: North Texas Society of Psychiatric Physicians Award for Outstanding Medical Student in Psychiatry

Dr. Harini Suresh

Dr. Harini Suresh could have been a classical musician but chose medicine instead. In college, she majored in oboe performance, with a minor in chemistry that ultimately won over as she pursued medical school. As a first-generation Indian American, she has had one foot in each culture and learned to appreciate diversity – attributes that will serve her well in the field of psychiatry.

What this award means: "Even before deciding on psychiatry, I tried to approach patients with humility and empathy, seeking to understand where they come from and what makes them who they are. Psychiatry lends itself to this kind of exploration and understanding of patients on a very human level. I feel honored and humbled to be recognized for my efforts and hope to continue carrying them forward to best help my patients."

Mentor comment: "Harini is an excellent student, interested both in clinical care and research. Receiving this award speaks to the work she has done and our belief in her potential to contribute to the field of psychiatry." – Dr. Lia Thomas, Associate Professor of Psychiatry

Background and family: "My parents were born in India and immigrated to the U.S. in the 1990s. I was born in Pennsylvania, and my family moved to Dallas soon after. My brother became the first doctor in the family – he's currently an ENT resident at Harvard. My parents both got their master's degrees in Dallas and work in tech."

What led to your career path: "I was incredibly steeped in the arts – music and dance – growing up. I've always loved the balance of creativity with science. The dichotomy has taught me intangible things aren't necessarily less real/significant and that most things in life aren't black and white – both important principles in the field of psychiatry. My own cultural background drives me to seek to understand others' cultures and work to destigmatize and promote mental health in all communities."

UTSW activities: "I received an Albert Schweitzer Fellowship, which allowed me to carry out a yearlong service project planning and executing a health literacy program for female veterans. I also was active with the Psychiatry Diversity & Inclusion Education Committee and served as a PRE+OP Orientation Committee member, peer mentor, HPREP mentor, and volunteer at the Agape Clinic."

Surprising fact: "I started running long distances in college as a way to deal with stress: I got hooked on the endorphins and ended up running the Nashville marathon my senior year! I've also tried bungee jumping, parasailing, surfing, skiing, snowboarding, and mountain biking."

Future plans: "I plan to train in child and adolescent psychiatry to treat patients ages 16 to 25. I also want to improve the accessibility and quality of psychiatric care on college campuses – an especially vulnerable place for students as they navigate being away from home for the first time."

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

Dr. Taylore King:
Southwestern Gynecologic Assembly Award

Dr. Taylore King

Before medical school, Dr. Taylore King volunteered for a urogynecologist in South Africa. Her experience revealed racial inequities in medicine and substandard care for women abroad, ultimately leading to her desire to become a physician focused on improving women's health and global health issues.

What this award means: "I developed a deep respect and admiration for the faculty I had the opportunity to work with. To be chosen for this award by some of those same faculty members – who have an incredible dedication to the field of Ob/Gyn and to the underserved women of Dallas – is an immense honor."

Mentor comment: "This award is given to a student who demonstrates scholarship, leadership, and a deep interest in women's health care, and Taylore more than exceeds all of these qualities. Her commitment to the field of obstetrics and gynecology is unwavering, and she is an excellent role model to her peers." – Dr. Alicia Kiszka, Assistant Professor of Obstetrics and Gynecology

Background and family: "I am originally from Orange County, California, and I have three younger siblings that I am incredibly close to."

What led to your career path: "Following my early graduation from Johns Hopkins, I volunteered with a urogynecologist in Cape Town, South Africa. That experience was my first exposure to racial inequalities in medicine and a substandard level of care for women abroad. Volunteering in South Africa was eye-opening and set my career path on a direction toward global health and women's health. I was accepted to the M.D. with Distinction in Global Health track during my first year of medical school, which gave me the opportunity to pursue research in Thailand, Peru, and Guatemala. Several of my projects focused on women's health, specifically among those in underserved communities, which further inspired me to pursue a career in Ob/Gyn. As an Ob/Gyn, I will have the opportunity to provide equitable care for women often in the most vulnerable time in their lives."

UTSW activities: "I am a member of the Gold Humanism Honor Society; a medical student representative of the American College of Obstetricians and Gynecologists for District XI in Texas; co-founder and President of Guatemala Healing Hands Foundation; author and editor of *Home and Abroad*, UT Southwestern's global health magazine; and former President of the UTSW Global Health Interest Group."

Surprising fact: "People would be surprised to know that I have been both skydiving and bungee jumping!"

Future plans: "I am headed to a residency in obstetrics and gynecology at Emory University School of Medicine. I hope to be a generalist Ob/Gyn and spend my career working at a safety net hospital caring for the underserved in the United States and pursuing global health in Central or South America."

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

Dr. Laura Kenyon:
Annelle M. Ahmed, M.D. Women's Health Care Award

Dr. Laura Kenyon

While on a mission trip in El Paso, Texas, Dr. Laura Kenyon met a woman whose sister was fighting stage 4 breast cancer. Given that Dr. Kenyon's own mother and grandmother had breast cancer in their 40s, the experience left an indelible impression and inspired her to pursue obstetrics and gynecology. In this field, she hopes to continue researching, innovating, and expanding educational resources to improve the overall quality of life for women.

What this award means: "There is no greater accomplishment than being recognized for making the lives of women better. It means everything to me to make a difference for women, like physicians have for the women in my family."

Mentor comment: "Laura is compassionate, thorough, and strives to provide quality care. Her passion for women's health care far exceeds the hospital setting, as Laura has also completed several research projects to aid in teaching future Ob/Gyn students and residents." – Dr. Alicia Kiszka, Assistant Professor of Obstetrics and Gynecology

Background and family: "I used to volunteer at Children's Medical Center in high school and remember being in awe of the UTSW medical students. My first niece was adopted from foster care, and one of the babies our family fostered was born at Parkland Memorial Hospital. I know this experience will give me perspective delivering babies at Parkland next year. It gives me reassurance to know there are families who will love and accept them like my sister did for my niece, Jayla."

What led to your career path: "One of my earliest memories is as a 6-year-old watching my grandmother attach her silicone breast; it was a constant reminder of what she bravely overcame. My mother similarly suffered from breast cancer, and I witnessed her battle. Her surgeon's compassion completely altered my outlook on health care and inspired me to believe in the power of medicine and of the doctor-patient relationship. Ob/Gyn is the field that will allow me to have an everyday impact on a diverse range of women as well as advocate for women on a greater scale."

UTSW activities: "I presented a uterine manipulator educational video at the American Association of Gynecologic Laparoscopists conference and published it in *Williams Gynecology*. I also had a first author paper in *Urology* on program directors' perception of pregnancy in urology residency. I am graduating with a distinction in research after completing a clinical trial involving postoperative pain following minimally invasive gynecologic surgery."

Surprising fact: "I know American Sign Language and love to talk to people about the deaf community/culture! My fiancé, Conner, a UTSW biomedical engineering Ph.D. student, and I are both engineers by training, and we are planning on building a computer together this year."

Future plans: "After completing my Ob/Gyn residency at UT Southwestern, I hope to complete a fellowship in a gynecologic surgical specialty. I recently became engaged, and we have a wedding date set for Sept. 3!"

About the award: The award is given in honor of Dr. Ahmed, a UT Southwestern Department of Obstetrics and Gynecology faculty member who died of breast cancer at age 39. Given to a student who demonstrates exemplary women's health care, this student must also epitomize the clinician that Dr. Ahmed was – caring, intelligent, and involved in her community.

Dr. Edward Daniel:

Vanatta, Hesser, Schmalstieg Excellence in Tutoring Award

Dr. Edward Daniel

Tutoring students over the past eight years here at UT Southwestern – as both a medical student and a graduate student – made Dr. Edward Daniel realize his passion for teaching. He has helped hundreds of students absorb the tough scientific material of Cell Biology and Pharmacology courses, and his dedication even led to one of his students following in his footsteps as a tutor.

What this award means: "I originally started tutoring because I wanted to help preclinical students learn material that is often confusing. Then I realized that tutoring helped me discover a passion for teaching and medical education. I have worked countless hours to prepare and teach the materials, and I have tutored hundreds of students over the last eight years. I am extremely proud of what I have done as a tutor, and I am truly honored that the school has recognized my work by giving me this award."

Mentor comment: "Edward's work as a tutor with Student Academic Support Services spans both his M.D. and Ph.D. years. He was especially valuable during the rollout of a new curriculum for the Medical School in 2015 as a wonderful bridge between 'old' and 'new' for two different classes. Edward's deep knowledge, teaching skills, humor, and heartfelt concern for fellow students will be dearly missed." – Carol Wortham, Manager, Student Academic Support Services

Background and family: "I was born and raised in DFW. One of my two brothers is an interventional cardiologist in Houston. We are first-generation doctors in our family. I met my wife, Christina, in medical school, and we married in 2018. She is a UTSW rheumatology fellow who will be completing her training this year. We have a 5-month-old son, William."

What led to your career path: "I remember receiving a little science kit for Christmas when I was 6 years old, and I thought it was the coolest thing. But I didn't discover a passion for research until I worked in a lab here at UT Southwestern before starting college. As an undergrad, I discovered the growing field of stem cell, developmental, and regenerative biology and realized that I wanted to pursue a career where I can bring regenerative therapies to the clinic. This led me to apply for the M.D./Ph.D. dual-degree program and eventual matriculation to the Medical Scientist Training Program here."

UTSW activities: "In addition to my work as a tutor, I have been heavily involved with wellness initiatives on campus. I have organized, promoted, and participated in 'Acknowledging our Humanity,' an event aimed at spreading mental health awareness on campus. I also work as a peer advocate, providing confidential support to other students struggling with mental health or personal issues."

Surprising fact: "I have over 120 rubber ducks."

Future plans: "I am pursuing an internal medicine residency at Barnes-Jewish Hospital in St. Louis. I plan on staying in academia to help teach the next generation of doctors. Additionally, I fully plan to continue research."

About the award: The award includes a certificate and $500, and honors graduating seniors who have made a significant contribution to tutoring fellow students.

Dr. Christian Carr:

U.S. Public Health Service Excellence in Public Health Award

Dr. Christian Carr

Growing up in a rural area of Utah, Dr. Christian Carr witnessed firsthand the effects of living in a medically underserved area. Now he wishes to give back to the community and improve the lives of those in need, aspiring to work in complex medical dermatology and pursue health system research.

What this award means: "Much of the reason I went into public health and medicine was based on growing up in a medically underserved area. There are significant difficulties that people in these areas face every day. I want to be able to improve the lives of underserved populations through enhancing health care delivery. This award is recognition that my efforts matter, and that the health of all people is important."

Mentor comment: "Christian was primarily responsible for the success of our research to analyze the effectiveness of teledermatology at Parkland Memorial Hospital's Urgent Care Clinic. Our analysis demonstrates that the patients seen through teledermatology had improved access to care and were less likely to need in-person visits. The majority of patients seen in this clinic do not have insurance and would not be able to get dermatologic care anywhere else." – Dr. Arturo Dominguez, Associate Professor of Dermatology and Internal Medicine

Background and family: "I grew up in a rural town in Utah as the youngest of nine siblings. My father is a colonel in the U.S. Army and my mother teaches early childhood development at Snow College."

What led to your career path: "While growing up, I consistently saw my parents and grandparents forgo important medical care due to significant competing interests and reduced access to care. These difficulties engendered in me the desire to pursue a career in medicine and public health researching health systems and epidemiology."

UTSW activities: "I served as Database Manager for the HepBFree Program, a student-led program that provides free hepatitis B and C screenings for the local community."

Surprising fact: "I lived in Southern Italy for two years and speak fluent Italian. I love to cook all types of food, but especially Italian."

Future plans: "I plan to complete a dermatology residency at UT Southwestern, then work in complex medical dermatology and continue my research in health systems."

About the award: Administered by the U.S. Public Health Service Physician Professional Advisory Committee, the Excellence in Public Health Award recognizes medical students who have positively impacted public health in their communities.

Dr. Vi Hung Pham:

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

Dr. Vi Hung Pham

Had Dr. Vi Hung Pham's younger brother not been born prematurely, the thought of becoming a doctor might not have entered his mind. But that experience impacted Dr. Pham, as he saw his sibling compassionately cared for as a newborn. Later, the experience of volunteering at a pediatrician's office convinced him of his calling.

What this award means: "I am so honored to receive this award. I deeply admire the individuals of our Pediatrics Department, and to be selected for this award by the very people I view as role models is significant in itself. As a recipient of this award, I hope that I can play a part in honoring Dr. Wey's memory by practicing humanistic, empathetic, and evidence-based patient care."

Mentor comment: "Vi earns the trust of the patients in his care through his level of investment in finding out what matters the most to his patients, and of course through his ability to deliver compassionate, holistic care. He emblemizes everything this award stands for." – Dr. Soumya Adhikari, Associate Professor of Pediatrics

Background and family: "I was born in Connecticut but grew up in Keller, Texas. My parents are both Vietnamese immigrants. I am engaged to my significant other of nine years, Quynh Tran, who is starting medical school at the Texas College of Osteopathic Medicine."

What led to your career path: "A career in pediatrics has always been my dream. My brother was born premature and had an extended stay in the NICU and, growing up, I was often in and out of the pediatrician's office due to catching many different bugs. My mom always talked about how reassuring the pediatricians were during my brother's NICU stay, and I saw firsthand how my own pediatrician made my family feel at ease. My passion for pediatrics grew as I volunteered at a pediatrician's office in college and as I went through my pediatrics rotations."

UTSW activities: "At UT Southwestern, I have been involved in leadership, serving as a free-clinic Manager for the Agape Clinic and as President of both Healthy Living and the Southwestern Alliance Against Food Insecurity. I have also worked on research projects within the Pediatrics Department, studying eosinophilic esophagitis."

Surprising fact: "I'm a huge Nintendo nerd. In fact, I have caught all 898 existing Pokémon in the mainline video game series since the release of Pokémon Crystal on the Game Boy in the year 2000. I'm also a sneaker enthusiast/sneakerhead, with my favorite sneakers being the Jordan 1 and 4."

Future plans: "I am thrilled to be pursuing a residency in pediatrics. My passions lie in preventive medicine and advocacy, and I'm currently considering a career in primary care."

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.

Dr. Layla Zahra Samandi: Pediatric Society of Greater Dallas Award for Excellence in Pediatric Medicine

Dr. Layla Zahra Samandi

Dr. Layla Zahra Samandi has always had a soft heart for children. In high school, she taught swimming lessons and tutored elementary school students. Then in college, her volunteer work at a children's hospital solidified her career path. She hopes to pursue a career as a pediatrician in academic medicine and medical education.

What this award means: "I am so humbled and grateful to have received this award. This award represents the values that I always hope to embody in my practice as a pediatrician. I have immense respect for the Pediatrics faculty here at UT Southwestern, who have served as role models for me, and to be selected by them for this award is especially meaningful."

Mentor comment: "Beyond Layla's clinical skills, she is compassionate, humble, self-motivated, and thoughtful. She made such strong impressions on our faculty throughout the year, and I can't wait to see what she does with the next stage of her training in Boston." – Dr. Soumya Adhikari, Associate Professor of Pediatrics

Background and family: "My parents are originally from Iran. My father is a retired engineer, and my mother is a homemaker. I was born in Australia and lived there until I was 7 years old, when my family moved to the United States. In college, I met my fiancé, Kevin Alloway, and our wedding is in May 2021. He will be joining me in Boston and attending architecture school."

What led to your career path: "I always loved working with children, even when I was still one myself! In high school, I taught swimming lessons and tutored elementary school students, and in college, I volunteered at the local children's hospital. I knew coming to medical school that I was interested in pediatrics, and my third-year clerkship solidified it."

UTSW activities: "In medical school, I have been involved in student government, serving as the test committee representative as well as on multiple curriculum feedback committees. I was also the volunteer coordinator for the Pediatrics Interest Group, coordinating student volunteer efforts at the Ronald McDonald House and Readers 2 Leaders, and tutored for USMLE Step 1. I also conducted research on atopic disease, studying food allergies and eosinophilic esophagitis."

Surprising fact: "I love trivia. I passed the initial round of casting for 'Jeopardy!' and I was invited to audition for the show in New York City, but I was studying abroad at the time in Sydney and couldn't go!"

Future plans: "I will be starting my pediatrics residency at Boston Children's Hospital/Boston Medical Center in the Boston combined residency program. I hope to pursue a career in academic medicine and medical education, and to subspecialize, likely in allergy/immunology."

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.

AOA Honor Medical Society welcomes 49 new members

Forty-nine new members were inducted recently into the UT Southwestern Medical School chapter of the Alpha Omega Alpha Honor Medical Society. Although COVID-19 prohibited the annual in-person banquet, a virtual event was held on March 18 celebrating the inductees and honoring their accomplishments.

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.

Alpha Omega Alpha inducted five faculty or alumni members in 2021:

Dr. Leslie Cler, Chief Medical Officer of Methodist Dallas Medical Center and a 2006 alumnus of UT Southwestern Medical School
Dr. Steven Ellis Hill, Professor of Anesthesiology and Pain Management and Cardiovascular and Thoracic Surgery
Dr. Kehinde Odedosu, Assistant Professor of Internal Medicine
Dr. J. Kathlene Trello-Rishel, Professor of Psychiatry
Dr. Rachel Wooldridge, Associate Professor of Surgery

Five residents or fellows were inducted into AOA:

Dr. Donovan Patrick Berens, Dr. Matthew Hibbs, Dr. Geoffrey Flynn McCrossan, Dr. Elisa Mabel Pichlinski, and Dr. Joshua Walther

Alpha Omega Alpha Class of 2021 inductees are (asterisk denotes Junior AOA recognition):

Jennifer Nicole Bachand*
Bryan Bishop
Samantha Black
Christian Layne Carr
Edward Daniel
Pallavi Dev
Dang-Huy Do
Aseel Ali Dweik
Micah Gamble
Daniel Gelvez
Nicholas Antony George-Jones
Jaskeerat Gulati
Cooper Watson Hale
Natasha Houshmand*
Connor Hughes
Stacy Kasitinon*
Kate Krause
Jeffrey N. Li*
Stephen Li
Allyson Rong-Hua Liu
Jennifer Liu
Kendra Louise Maple*
Anika Morgado
William Christopher Ou*
Katherine Panettiere Kennedy
Vi Hung Pham*
Aishwarya Ramamurthi*
Easton Ryan
Layla Zahra Samandi*
Lauren Shaffer*
Katelynn Smith
Jacob Stevens
Betty Tong
Gray Umbach*
Bradley Upchurch
Brian Wahlig*
Justin Fuhan Wong
Amy Xia
Jane L. Zhu*

UT Southwestern Graduate School of Biomedical Sciences Candidates for Degrees

DOCTOR OF PHILOSOPHY

Biological Chemistry

Aloysus Kome Lawong

Biomedical Engineering

Alicia Rachel England
Yesenia Amanda Gonzalez
Devin Sean O'Kelly
Minzhe Zhang

Cancer Biology

Matthew Aaron Esparza
Demetra Patricia Kelenis
I-Hui Wu
Ning Zhang

Cell and Molecular Biology

Sanchari Datta
Zane Gibbs
Soo Young Kim
Andrew David Mathis
Carlo Giovanni Quintanilla
George Russel Wendt

Clinical Psychology

Joshua Eric Becker
Audrey Lorraine Cecil
Nicholas Edmund Curcio
Savanna Sablich Duley
Daniel Kuroda Elledge
Lora Jane Israelsen
Hayden Mensah Mbroh
Catherine Elizabeth Munro
Aysha Gabrielle Najjab
Sarita Patel
Jeffrey Michael Schaffert
Emily Elaine Smith
Kristin Linette Wolfe

Genetics, Development, and Disease

Cemre Celen
Jordan Harrison Driskill
Zhaoning Wang
Qian Yang

Immunology

Ricardo A. Irizarry-Caro
Minghao Li
Seoyun Yum

Integrative Molecular and Biomedical Sciences

Evan McAllister Stevens

Molecular Biophysics

Jordan Matthew Baumhardt
Nathan Chandler Egge
Anant Vishwanath Gharpure
Tae H. Kim
Anna Kunyoung Lee
Allyson Rice
Sai Rashmi Voleti
Wenmin Xing
Jing Zhang

Molecular Microbiology

Michael Edward Abrams
Peter Michael Burnham
Kyle Nichols Goodman
Elizabeth Rose Hughes
Aman Kumar

Neuroscience

Brianne Marie Dentel
Elyza Hope Kelly
Matthew Mendoza
Mengni Wang
Wen Mai Wong

Organic Chemistry

Jackson Andrew Gartman
Junyu Gong
Mohammed Sharique

MASTER OF SCIENCE

Biomedical Engineering

Joel Liou

Cell and Molecular Biology

Woong Hee Cho

Immunology

Byounggyu Yoo

Molecular Biophysics

Charis Elyse Springhower

Molecular Microbiology

Virginia Ann Ray

Neuroscience

Jacob Lee McClendon

MASTER OF SCIENCE IN CLINICAL SCIENCE

Clinical Sciences

Jessica D. Abramowitz
James Patrick MacNamara

Ho Din Award Continued from page 1

vations. The next fall, in 2013, she entered the University of Texas at Dallas as a biology major at age 16, and her trips increased to Tuesdays and Thursdays. Soon she began accompanying Dr. Matthew Pompeo to the surgical suite to watch whenever she could.

She vividly remembers her first surgical observation. Dr. Pompeo, a general surgeon affiliated with Texas Health Dallas, specializes in wound care for diabetic patients, Dr. Houshmand said – which means he does a lot of amputations.

"It was a below-the-knee amputation," she recalled, and she was standing right next to the patient. "My reaction was probably shock at first, but it quickly turned into fascination. I just thought, 'Wow. He saw a problem and he solved it.'"

"I could see myself doing something that direct and concrete – being able to see a problem and, as a surgeon does, take care of that problem. Dr. Pompeo did seem a little impressed that I didn't pass out."

Dr. Houshmand graduated magna cum laude from UTD in 2017 and was accepted to the Medical School, where her experiences with Dr. Pompeo gave her a head start in anatomy class and when treating clinic patients with diabetes. "I knew how devastating it could be on the other end," she said.

After graduation, Dr. Houshmand will begin a general surgery residency at Johns Hopkins Hospital in Baltimore. Later, she hopes to complete a surgical critical care fellowship.

Such surgeons often work in emergency rooms, tending to patients who need immediate attention for gunshot wounds, traffic accidents, falls – or acute appendicitis, she said. Because of the intellectual challenge from the wide range of injuries treated and the need to act quickly, this type of surgery appeals to her. "Trauma surgeons have to be ready for anything that comes through the door," she said.

Dr. Houshmand said one day she would like to work at a large academic medical center like UT Southwestern, treating patients, teaching, and conducting research.

During her time at UTSW, Dr. Houshmand served as a Vice President for the UT Southwestern Chapter of the American Medical Women's Association. She completed additional work in order to earn a distinction in quality improvement and patient safety along with her medical degree.

"Southwestern Medical Foundation Trustees take great pride in awarding the Ho Din Award to a student who inspires us with both demonstrated medical wisdom and a passion for the betterment of humanity," said Kathleen M. Gibson, President and CEO of Southwestern Medical Foundation. "Natasha Houshmand is a wonderful embodiment of this combination of intellectual and personal skill, which will no doubt change the trajectory of the many lives she will touch for the better."

Besides the Ho Din Award, Dr. Houshmand also received the Hudson-Penn Award, given by the Department of Surgery to a senior medical student whose performance in surgery and attitude toward the care of surgical patients represent the highest standards of the Medical School. The prize, established in 1979, was named for the Lee Hudson and Robert Penn families.

"Natasha Houshmand has all the qualities that we seek to foster in future surgeons: proclivity for technical work, the restless intellect of a scholar, passion for the field, and empathy for patients," said Dr. Herbert Zeh, Chair of Surgery.

The two awards are humbling for Dr. Houshmand. "Receiving this recognition for doing the work that I love doing and I have enjoyed doing … I feel very lucky and very, very humbled to be in this position," she said.

■

Dr. Zeh holds the Hall and Mary Lucile Shannon Distinguished University Chair in Surgery.

Postdoctoral biologist receives Brown-Goldstein Award

By Christen Brownlee

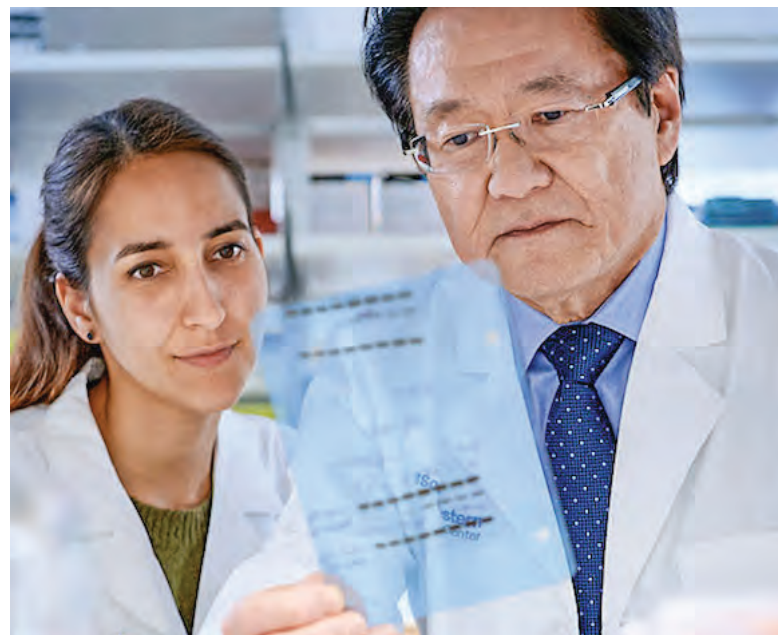
Many of us lean heavily on the rhythms of daily life: waking, working, eating, and sleeping at roughly the same times every 24 hours. This pattern of biological processes – known as circadian rhythms – can have a substantial impact on the health of humans and other species.

For the past five years, postdoctoral researcher Dr. Filipa Rijo-Ferreira has been immersed in this intriguing line of investigation, focusing on the circadian clocks of the human parasites *Trypanosoma brucei* and *Plasmodium*. For her efforts, she has received the Brown-Goldstein Award for Excellence in Postdoctoral Research, the highest honor bestowed by the UT Southwestern Graduate School of Biomedical Sciences. The award honors the contributions of Nobel Laureates Drs. Michael Brown and UTSW Medical School alumnus Joseph Goldstein to training future scientists.

Dr. Rijo-Ferreira began working in the laboratory of world-renowned circadian rhythm researcher Dr. Joseph Takahashi as a doctoral student – not at UT Southwestern, but through a unique graduate program in biology at the University of Porto in Portugal. The program provides students with a stipend to study at a laboratory anywhere in the world.

Before that, she had worked as a technician in a laboratory that studies how *T. brucei*, the sleeping sickness parasite, infects its victims – including the role of its circadian rhythms. She reached out to Dr. Takahashi, Chair and Professor of Neuroscience at UT Southwestern, whose three-decadeslong career has focused on circadian rhythms in mammals.

"It's not just about aligning interests," Dr. Rijo-Ferreira said. "Joe is a very curious person who's willing to explore other directions of research, but he's also extremely generous, providing mentorship and the space for me to explore my own interests. I really hit the bull's-eye when I joined his lab."



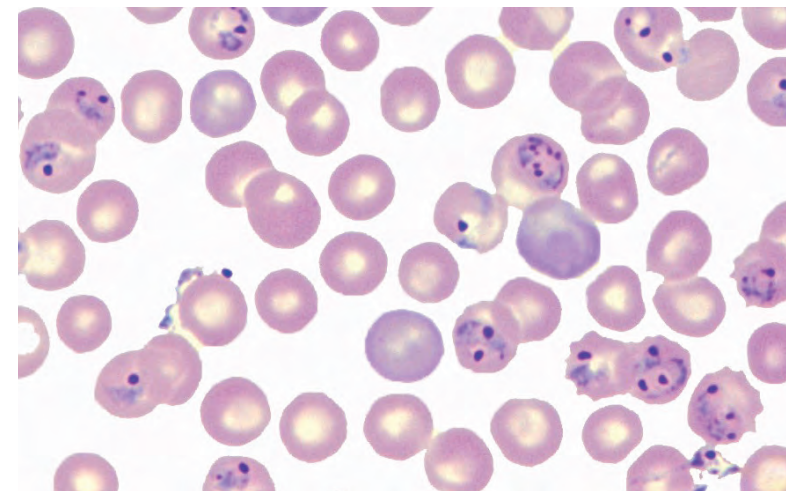
Dr. Filipa Rijo-Ferreira, who works in the lab of Dr. Joseph Takahashi, has received the Brown-Goldstein Award for Excellence in Postdoctoral Research for her investigations of the circadian clocks of two human parasites.

Working with Dr. Takahashi and her University of Porto mentor Dr. Luisa Figueiredo, Dr. Rijo-Ferreira showed that *T. brucei*'s metabolism is controlled by circadian rhythms. The researchers learned that sleeping sickness is a circadian disorder, with the parasite's clock impacting the host's circadian rhythm.

After Dr. Rijo-Ferreira finished her doctoral program in 2016, she stayed in Dr. Takahashi's lab as a postdoctoral fellow, turning her attention to a different fatal parasite: *Plasmodium*, a group of single-celled eukaryotes that cause malaria. One of malaria's key symptoms is rhythmic fevers that typically come and go in variants of 24 hours, such as every day or every two days. Drs. Rijo-Ferreira and Takahashi suspected that the parasite had its own rhythmicity, just like *T. brucei*.

The researchers confirmed this hypothesis using mice with altered circadian rhythms. Some mouse lines bred to study circadian rhythms have cycles that are longer or shorter than 24 hours. When the researchers infected animals with a 26-hour cycle with *Plasmodium*, they saw that the parasites' own patterns of gene activity did not adjust right away – although they seemed to be taking cues from the host, *Plasmodium* had their own independent rhythm. They then infected mice with no circadian rhythms and found about 60 percent of *Plasmodium*'s genes continued to cycle every 24 hours, suggesting that these parasites have an inherent clock that functions independently of the host's patterns.

Understanding parasites' clocks could lead to more effective treatments for humans, Dr. Rijo-Ferreira said. In fact, her research with Dr. Takahashi showed that *T. brucei* can be effectively killed in culture with 2.5 times less suramin – a medication frequently used to treat sleeping sickness – when delivered at a certain time of day. Because treatment for sleeping sickness can be extremely toxic, being able to deliver less medicine with the same efficacy could save more lives.



Dr. Rijo-Ferreira investigates *Plasmodium* parasites, shown here (in purple and blue) within red blood cells.

Dr. Rijo-Ferreira noted that although all life on Earth appears to have circadian cycles, these cycles can differ significantly – for example, bacteria circadian clocks use different molecular mechanisms than human ones. Capitalizing on this effect could lead to drugs that effectively target parasites while sparing treatment side effects.

"There are so many questions that remain in this area: the molecular mechanisms behind other parasites' circadian clocks, the vectors' circadian clocks, and how each of them interacts with humans' circadian clocks," Dr. Rijo-Ferreira said. "These mysteries will continue to fuel my career far into the future."

The Brown-Goldstein Award includes a monetary prize as well as the opportunity to present a University Lecture. Dr. Rijo-Ferreira's virtual seminar, "Circadian Rhythms in Parasitic Diseases: An Underlying Clock of Malaria Parasites," was held on Thursday, April 29.

In addition, award finalists Dr. Jessalyn Ubellacker and UTSW Graduate School alumnus Dr. Bryan Gibson, postdoctoral scholars in the Children's Medical Center Research Institute at UT Southwestern and the Department of Biophysics, respectively, received Dean's Discretionary Awards for their outstanding research.

■

Dr. Brown, a Regental Professor, is Director of the Erik Jonsson Center for Research in Molecular Genetics and Human Disease, as well as a Professor of Molecular Genetics and Internal Medicine. He 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, is Chair of Molecular Genetics and a Professor of Molecular Genetics and Internal Medicine. He holds the Julie and Louis A. Beecherl, Jr. Distinguished Chair in Biomedical Research and the Paul J. Thomas Chair in Medicine.

Dr. Takahashi holds the Loyd B. Sands Distinguished Chair in Neuroscience.

Two UT Southwestern faculty members appointed Professors Emeritus

Dr. Arthur Sagalowsky: Performed 8,000-plus surgeries as urologist

By Lori Sundeen Soderbergh

In 1978, Dr. Arthur Sagalowsky completed his residency at Indiana University Medical Center and joined the urology team at UT Southwestern. He chose to focus on urologic oncology – cancer of the genitourinary tract – even though many developments in modern cancer care, such as techniques of molecular biology and immunotherapy, were far in the future.

Forty-two years later, Dr. Sagalowsky has retired and, effective earlier this year, was appointed Professor Emeritus of Urology. Along the way, he kept a handwritten logbook of more than 8,000 surgeries, many of them complex procedures.

"Few physicians, if any, will match the sheer scope of work done by Arthur Sagalowsky on this campus, the breadth of the disease spectrum, the academic impact, and the illustrious, long years of service to the community, Department of Urology, institution, and urology as a specialty," said Dr. Claus Roehrborn, Chair of Urology. "He is the last bridge to the early days of the fledgling UT Southwestern division from the 1970s to the modern Department of Urology as it is today."

Dr. Arthur Sagalowsky

Dr. Sagalowsky served as Chief of Urologic Oncology from 1994 to 2011, and he joined the Southwest Oncology Group Urologic Cancer Outreach Program, which opened the way for campus participation in multicenter National Cancer Institute (NCI)-supported clinical trials in genitourinary cancer.

Dr. Sagalowsky made contributions at both ends of the spectrum of kidney cancer. He was one of the early proponents of kidney-sparing partial nephrectomy (carving the tumor out of the kidney) for the great majority of patients with localized kidney cancers. He also created a team approach involving cardiac surgery and cardiac anesthesia for safe removal of locally advanced kidney cancers that have a tumor clot growing out the renal vein and even up into the heart.

His contributions for bladder cancer patients include advancement of clinical trials for instillation of medications into the bladder for patients with noninvading cancers, and preoperative chemotherapy for patients with muscle-invading cancers. He was one of the first urologists to create internal continent urinary diversion "neobladders," using part of the intestine for selected patients who require bladder removal.

Throughout his career, Dr. Sagalowsky has been heavily involved in all levels of education for medical students, residents, fellows, and colleagues. He was Master of Cary College from 2011 until his recent retirement and has trained 150 residents in urology.

These days, Dr. Sagalowsky enjoys spending more time with his wife, two children, and four grandchildren. This surgeon's hands will also keep busy with other delicate tasks. "I'm fascinated by classical music and fly fishing. I love music and started piano lessons at age 6. Now I hope to play piano, read, and fly fish more often."

■

Dr. Roehrborn holds the E. E. Fogelson and Greer Garson Fogelson Distinguished Chair in Urology and the S.T. Harris Family Chair in Medical Science, in Honor of John D. McConnell, M.D.

More online: Read the full story on *Center Times Plus* at **utsouthwestern.edu/ctplus**.

Dr. H. Dwight Cavanagh: First ophthalmologist at UTSW to hold esteemed title

By Carol Marie Cropper

Dr. H. Dwight Cavanagh, who retired late last year after working almost three decades at UT Southwestern, has been named the Department of Ophthalmology's first Professor Emeritus.

Dr. Cavanagh came to UT Southwestern in 1991 as a Professor of Ophthalmology and Vice Chair of the Department. He later held the Dr. W. Maxwell Thomas Chair in Ophthalmology and was Medical Director and Associate Dean for Clinical Affairs at what was then Zale Lipshy University Hospital from 1997 through 2005.

He remains a Medical Director at UTSW's Transplant Services Center, a tissue bank that processes and stores corneas and other tissues for transplantation.

Dr. H. Dwight Cavanagh

Dr. Cavanagh said he will also continue to mentor early career faculty in the Ophthalmology Department.

Dr. James McCulley, Chair of Ophthalmology, recruited Dr. Cavanagh, whom he had studied with when they were both fellows at the Massachusetts Eye and Ear Infirmary of Harvard Medical School in the 1970s. At the time, Dr. Cavanagh was a Professor of Ophthalmology at Georgetown University in Washington, D.C.

"We are extremely grateful for the many years of outstanding patient care, laboratory research, administrative service, and teaching that Dwight contributed to the Department," said Dr. McCulley.

Specializing in corneal and external diseases of the eye, Dr. Cavanagh combined research with patient care. He received his medical degree from Johns Hopkins School of Medicine in 1965, then studied under Nobel Prize-winning Professor Dr. George Wald at Harvard University, earning a Ph.D. in biology in 1972.

During his career, Dr. Cavanagh published more than 400 peer-reviewed papers and served as editor-in-chief of both *Eye & Contact Lens: Science and Clinical Practice* and *Cornea*.

In 2009, he received the prestigious Castroviejo Medal, one of the world's top ophthalmology prizes. Ten years later, he received the R. Townley Paton Award, the Eye Bank Association of America's highest honor for corneal physicians. He also was honored by Southwestern Medical Foundation that year with creation of a corneal disease and transplantation lectureship in his name.

The Atlanta native said he was inspired to go into science after the 1957 launch of Sputnik, the Soviet Union's first satellite, while he was in high school.

Dr. Cavanagh entered the Massachusetts Institute of Technology, initially thinking he would be a physicist, but soon gravitated to biology and medicine instead. "I really liked the idea of going to medical school and being a scientist-clinician," he said.

Arriving at UT Southwestern, with its depth of excellence, felt like coming home, he said.

"Through the years, I had the privilege of being around some really outstanding clinicians at Harvard, Hopkins, and here," he said.

Working at UT Southwestern "was a lot of fun," he said recently. "We did a lot of good in the world and we trained a lot of really good people around the world."

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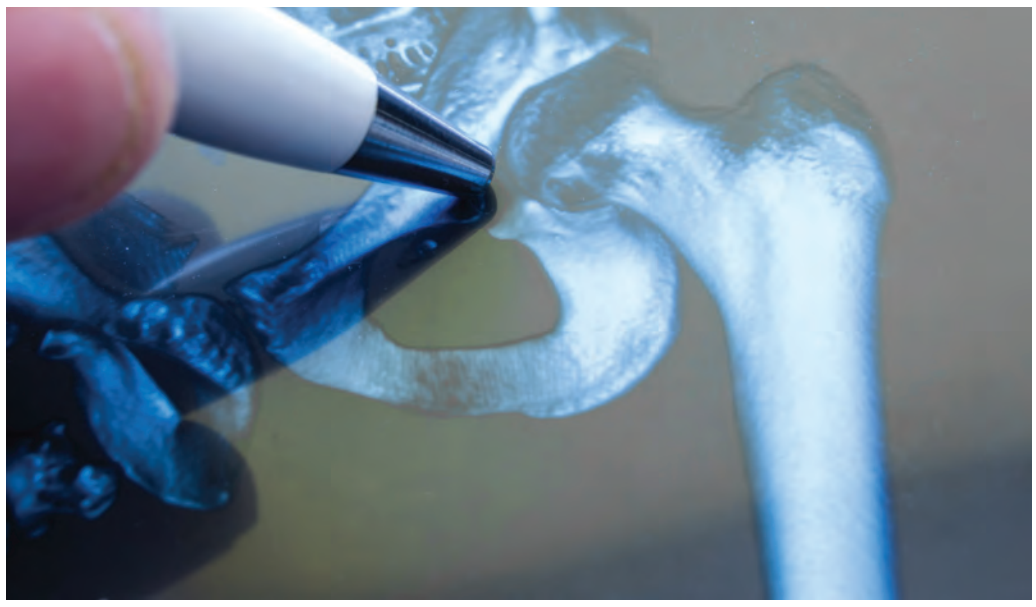
Dr. McCulley holds The David Bruton, Jr. Chair in Ophthalmology.

RESTORE Program provides special care for seniors with fractures



By Patrick Wascovich

UT Southwestern is providing new hope for older adults who suffer fractures and the complications that can result from those injuries with the new Returning Seniors to Orthopedic Excellence (RESTORE) Program.

Led by Dr. Megan Sorich, who had fellowship training in orthopedic geriatric trauma, RESTORE is the only program in North Texas focusing on the musculoskeletal health of older people and consolidates clinical efforts across UTSW departments including Geriatric Medicine, Internal Medicine, Emergency Medicine, Anesthesiology and Pain Management, Clinical Nutrition, and Physical Therapy. RESTORE launched on Feb. 1, shortly after the opening of the third tower at William P. Clements Jr. University Hospital, and provides coordinated care to improve outcomes and reduce hospital stays for UTSW patients – from initial onboarding through recovery and follow-up care.

> "The Program's goal is to provide the best comprehensive collaborative co-managed care of the older adult with an orthopedic injury. We have teamed up to help standardize patient care, expedite patients to the OR and, ultimately, improve outcomes"
> - Dr. Megan Sorich

"The Program's goal is to provide the best comprehensive collaborative co-managed care of the older adult with an orthopedic injury. We have teamed up to help standardize patient care, expedite patients to the OR and, ultimately, improve outcomes," said Dr. Sorich, an Assistant Professor of Orthopaedic Surgery who specializes in geriatric trauma as well as elbow and shoulder procedures.

The costly toll of hip fractures

The medical needs of geriatric patients are growing. The U.S. Census Bureau projects that by 2030, 71 million Americans will be older than 65, accounting for 20 percent of the population.

Hip fractures are the most costly of fall-related breaks in older adults, common events associated with significant morbidity and mortality. More than 300,000 people are hospitalized for hip fractures annually in the U.S., and those older than 65 years of age represent 86 percent of these cases. Most geriatric hip fracture patients are hospitalized and undergo surgery. Several studies have shown hospitalization costs to be the largest expenses associated with hip fracture care, averaging 44 to 57 percent of costs.

Leading medical institutions have worked to identify opportunities to improve the quality of care while decreasing costs through collaborative co-managed models like RESTORE.

In general, these new treatment models standardize the approach to geriatric patients through five principles: surgical fracture management; prioritized operative intervention; medical co-management with geriatricians; patient-centered standards and evidence-based guidelines to increase workflow efficiencies and reduce medication errors; and proactive discharge planning with a focus on rehabilitation.

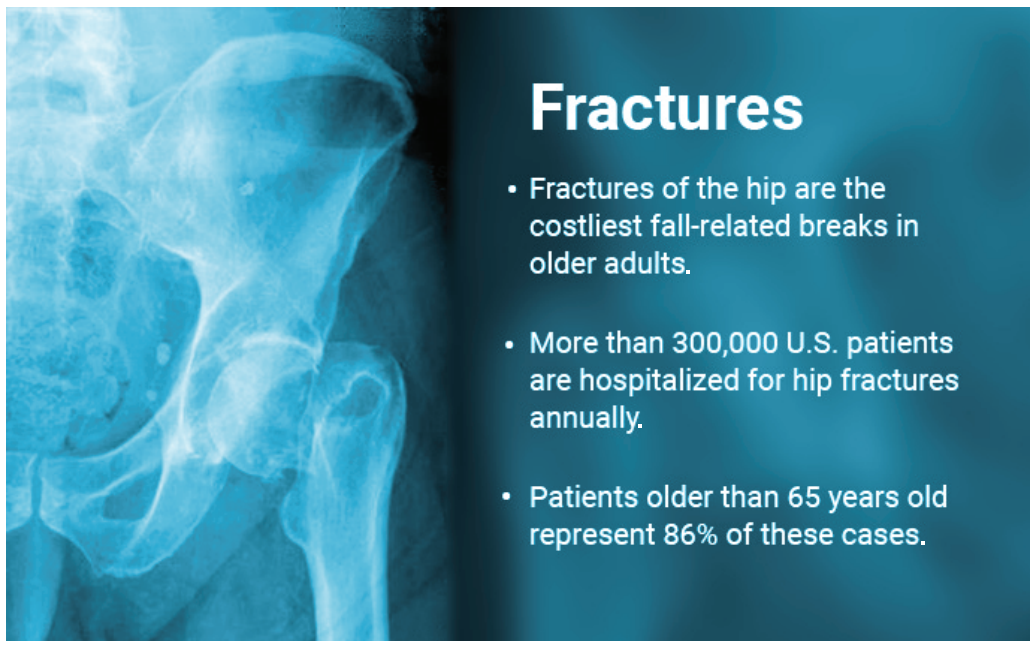
Specialized care for specialized patients

Many older fracture patients have multiple medical comorbidities such as cardiac or pulmonary disease, dementia, diabetes, and renal impairment that often are not adequately assessed in the traditional care model. Postoperative issues such as osteoporosis challenges and concerns, the inability or unwillingness of patients to take on long-term physical therapy, and the lack of focus on scheduling and follow-up care can be highly debilitating while hampering recovery. In many cases, one incident leads to other medical challenges that result in loss of functional independence and higher postoperative mortality rates.

The RESTORE Program addresses these issues by identifying needs and coordinating care. Elderly patients who arrive at the emergency room at Clements University Hospital receive expedited care, including consultation from both geriatric and orthopedic teams. A pain management program that focuses on non-narcotic medicine may be used to reduce delirium, a common side effect from fragility fracture treatments in older people. After treatment, nutritionists provide dietary guidance, and follow-up visits are scheduled to help prevent future falls.

Dr. Megan Sorich

"Generally, hospital systems and individual orthopedic surgeons have not been specifically focused on improving care of our aging population," Dr. Sorich said. "Previously at UT Southwestern, if a patient had a hip fracture they normally arrived and were processed through Clements' ED and then got transported to Zale Lipshy Pavilion. With RESTORE, we will have operating room space at Clements University Hospital and trained geriatric/orthopedic physicians and nurses to help care for these patients."



Decades of health, days of need

The RESTORE Program will effectively provide centralized orthopedic services to patients such as William "Bill" Lawson, 96, and his wife, Jane, 95, who required identical surgical procedures after falling within a week of one another last year.

The Lawsons, New York state natives, have routinely been patients of Drs. Tara Duval and UTSW Medical School alumna Jessica Voit, both UTSW Assistant Professors of Internal Medicine, since moving to Texas a couple of years ago.

In the autumn of 2020, Mrs. Lawson fell at her assisted living facility and needed surgical help. Within four days, Mr. Lawson also was admitted to Zale Lipshy Pavilion–William P. Clements Jr. University Hospital following a tumble of his own.

"They both sustained right displaced femoral neck fractures," said Dr. Megan Sorich, Assistant Professor of Orthopaedic Surgery. "Jane came in on a Monday night and had surgery Tuesday. That same week, Bill came in on Friday and had his surgery on Saturday."

Dr. Sorich performed both cemented hip hemiarthroplasties, procedures in which half of the hip joint is replaced. Overall, cemented fixation has shown a better long-term survivorship in older patients. The couple has since been going through physical therapy, although Mr. Lawson had a setback with a subsequent fall.

"Our whole family is so grateful for the work and compassion that Dr. Sorich and her team have always delivered and shown to our parents," said son Bill Lawson of Garland.

Bill and Jane Lawson (sitting in center) celebrate with family at a grandson's wedding in 2018. The couple had identical surgical hip procedures after falling within a week of one another last year.

Vaccination Continued from page 1

"Our ability to quickly vaccinate a majority of our workforce in the midst of what became the largest surge to date in the region made a critical difference in ensuring we were able to continue providing top-flight care while health systems were strained," said Dr. John Warner, Executive Vice President for Health System Affairs.

Researchers even saw advantages among partially vaccinated individuals and, beginning in mid-January one month after vaccination of staff initially began, the actual number of positive tests among all UT Southwestern employees was consistently lower than the number projected. UT Southwestern is now approaching 80 percent immunization among its workforce.

"Real-world experience with SARS-CoV-2 vaccination at UT Southwestern demonstrated marked reduction in the incidence of infections among our employees, preserving the workforce when it was most needed," said Dr. Daniel K. Podolsky, President of UT Southwestern and an author of the article.

UT Southwestern has provided educational outreach to community groups and businesses, developed extensive online resources including Q&As and blogs, and is preparing to launch a multilingual public service announcement campaign to help educate diverse communities about vaccination and address issues of hesitancy.

"It is important to reach out across multiple platforms to effectively address people's questions so that we can continue to make progress on vaccine hesitancy," said Dr. Marc Nivet, Executive Vice President for Institutional Advancement.

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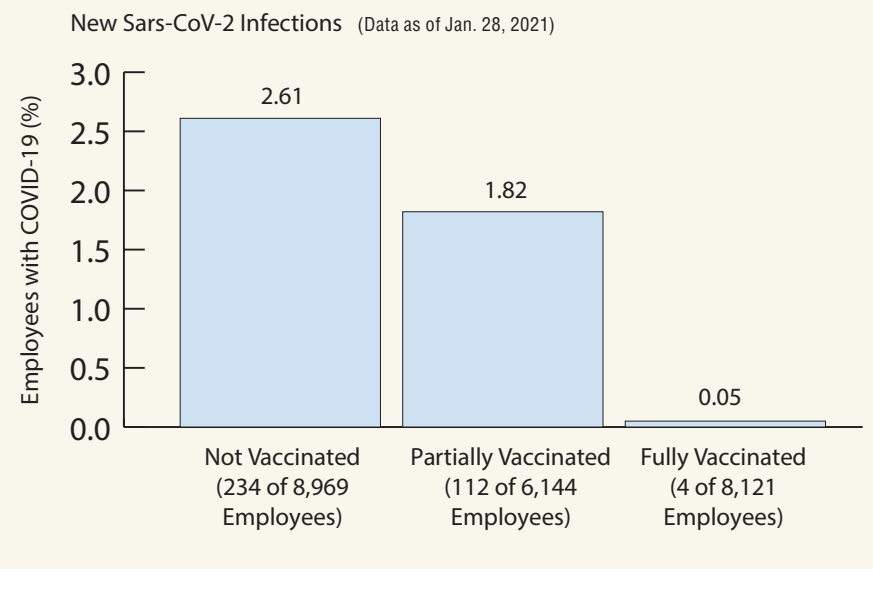
Dr. Daniel holds the William T. Solomon Professorship in Clinical Quality Improvement at UT Southwestern Medical Center.

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. Warner holds the Jim and Norma Smith Distinguished Chair for Interventional Cardiology, and the Nancy and Jeremy Halbreich, Susan and Theodore Strauss Professorship in Cardiology.



Two UT Southwestern faculty members inducted into Shine Academy

By Patrick Wascovich

In recognition of outstanding teaching, UT System's Kenneth I. Shine, M.D., Academy of Health Science Education recently inducted two UT Southwestern educators as new members.

Dr. Nora Gimpel, Associate Professor of Family and Community Medicine, and Dr. Kevin Klein, Professor of Anesthesiology and Pain Management, and Otolaryngology – Head and Neck Surgery, joined 28 current and former UTSW faculty members named to the Academy, which recognizes exceptional health science teaching.

Established in 2005, the Academy is named after Kenneth I. Shine, former UT System Executive Vice Chancellor of Health Affairs. More than 150 UT System educators have been inducted into the Academy. Nominations for membership may come from the President, Dean, Vice Dean, or Faculty Senate at any of the six health institutions in the UT System.

Dr. Nora Gimpel

Dr. Kevin Klein

Nora Gimpel, M.D.

A member of UT Southwestern Academy of Teachers (SWAT) since 2014, Dr. Gimpel serves as Vice Chair of Community Health in the Department of Family and Community Medicine.

She has mentored numerous pre- and post-doctoral students in community-based participatory research (CBPR) principles, training them to create innovative research models and culturally appropriate approaches of care for the underserved. Dr. Gimpel has published several academic articles and delivered scores of international, national, and regional presentations on CBPR and topics related to community medicine.

"My goal as an educator is to inspire learners to think about medicine as the art of compassionate care and social interaction," she said. "I teach the scientific and social aspects of medicine and I intend to create environments where the learners are inspired to think critically."

In addition to her departmental roles, Dr. Gimpel leads UT Southwestern Medical School's community health scholarly activity and distinction tracks and directs the Community Medicine Fellowship Program. She also serves on the boards of the Society of Student-Run Free Clinics and the North Texas Alliance to Reduce Teen Pregnancy.

Dr. Gimpel earned her medical degree at the University of Buenos Aires School of Medicine in Argentina and completed her residency in family medicine at the Center of Medical Studies and Clinical Research in Buenos Aires.

Kevin Klein, M.D.

Dr. Klein graduated from UT Southwestern Medical School in 1981, then completed a three-year residency in internal medicine and a two-year residency in anesthesiology here.

His career at UT Southwestern spans four decades, during which he has served as a leader of the anesthesiology faculty and as a practicing anesthesiologist. Dr. Klein, known as UTSW's expert in difficult airway management, is also a Fellow of the American Society of Anesthesiologists.

In 2019, Dr. Klein served as the 136th President of the Dallas County Medical Society. At UTSW, Dr. Klein has served on numerous institutional committees, task forces, and initiatives. He helped establish the UTSW Heart Transplant Program at the former St. Paul University Hospital and served as Medical Director of Anesthesiology when Zale Lipshy was preparing to open.

"When I meet with my students for the first time, I do my best to make them feel welcome in the clinical environment," Dr. Klein said. "I want everyone – students, patients, and staff – to feel that the care given to each patient is better because a medical student is there. And I want them to have fun."

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Dr. Gimpel holds the Dr. John L. and Louise Roan Professorship in Family Medicine.

More online: Read the full story on *Center Times Plus* at **utsouthwestern.edu/ctplus**.

CLASS NOTES

IN MEMORIAM

Medical School

Robert P. May, M.D. ('62)
Boyd K. West, M.D. ('61)
John M. Richardson, M.D. ('61)
Charles E. Van Cleave Jr., M.D. ('53)

Housestaff

Donald P. Brotherman, M.D.

MEDICAL SCHOOL

Class of 1990: Dick C. Kuo, M.D., FACEP, FAAEM, Chair of Emergency Medicine at Baylor College of Medicine in Houston, is currently a member of the Society for Academic Emergency Medicine's Faculty Development Committee and an oral board examiner for the American Board of Emergency Medicine. His research interests include cardiovascular disorders, such as ACS, heart failure and stroke, clinical effectiveness and testing in the emergency department, and competency in education.

Class of 1999: Monique A. Spillman, M.D., has been elected Chair of the American Medical Association Council on Ethical and Judicial Affairs for 2020-2021. As Chair for this national organization, she will guide the committee on its mission to shape ethical guidance on contemporary medical issues for the AMA.

For the latest updates on alumni events and news, visit engage.utsouthwestern.edu/alumni and follow @utswalumni on Facebook.

Please send your Class Notes contributions or address changes to the Office of Development and Alumni Relations, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9009, email alumni@utsouthwestern.edu, or call 214-648-4539.

From loss to legacy

UTSW cancer researcher's tragic death inspires family to establish Chair in her honor

By Andrew Marton

On Aug. 1, 2020, Arindam Roy's life tragically changed forever. His wife, Sarmistha Sen, a cancer researcher in UT Southwestern's Department of Radiation Oncology, left for her customary early morning jog. She never returned.

Police found her body later that morning. The 43-year-old had been attacked and killed on a trail not far from the Plano home she shared with her husband and two sons.

The next morning, hours after his family's lives were shattered, Mr. Roy began the healing process.

His wife's story was covered by the local media and people were starting to reach out, asking what they could do to help. Working to make sure something positive came out of this unspeakable tragedy, Mr. Roy set up an online fundraising campaign for charities devoted to issues that Ms. Sen deeply cared about, including cancer awareness, cancer research, and healthy living.

What began as a humble remembrance to honor his wife of 16 years led to an overwhelming response from colleagues, family, friends, and the general public. In total, 683 people contributed to the effort that raised $50,000 – far more than the family ever anticipated.

"This fundraising effort may have been an important first step for all of us to recover from such a terrible tragedy," Mr. Roy said. "It became a truly beautiful community response."

He was so moved that he matched the total with funds from his own savings. He donated the gifts to UT Southwestern to create the Sarmistha Sen Chair in Radiation Oncology. UT Southwestern also contributed institutional funds to the new endowment.

"This gift holds special significance for our UT Southwestern family," said Dr. Daniel K. Podolsky, President of UT Southwestern. "Sarmistha Sen devoted her life's work to clinical research that advanced our understanding of cancer. Because of the generosity of so many, that work will continue here and be forever associated with her legacy."

The endowment will be invested by UT Southwestern, and only part of the interest earnings will be spent each year, enabling the fund to grow over time. Distributions will support the endowed chair holder's clinical research activities in radiation oncology.

A passion for cancer research

Mr. Roy, who is Vice President of Product Management with the E.F. Johnson Co. in Irving, confessed he had a hard time understanding the complexities of his wife's work.

"But I never underestimated her passion for cancer research and her devotion to her colleagues and UT Southwestern as a whole," he said.

A native of Sindri, India, Ms. Sen was an avid gardener and trained singer of Indian classical music. A graduate of UT Dallas and the University of Alabama at Birmingham, she was a pharmacist and researcher who studied molecular biology. Her family inspired her commitment to cancer research and treatment.

"Her own mother was a breast cancer survivor, so her work hit very close to home for her," Mr. Roy said.

Dr. Hak Choy hired Ms. Sen to direct clinical research in UT Southwestern's Department of Radiation Oncology.

"From the start, I found her to be one of the kindest, most caring, and thoughtful people you'd ever meet in our field," said Dr. Choy, the Department's Chairman and a Professor of Radiation Oncology.

Arindam Roy and his late wife, Sarmistha Sen, are pictured here with their children during a family vacation. Ms. Sen, a cancer researcher for the Department of Radiation Oncology, was killed last year near her home in Plano.

Ms. Sen, respected and beloved, had a devotion to the Department where she worked for almost four years that often extended beyond the workday.

As a clinician, what impressed Dr. Choy most was Ms. Sen's ability to collect and analyze all manner of clinical trial data from patients.

"She brought such care and compassion to her work," Dr. Choy said. "From the moment she arrived, the amount of clinical research we were able to do grew considerably."

When asked about the impact that the Sen Chair will have on the Department, Dr. Choy was heartfelt in his response: "We are very grateful to Ms. Sen's family," he said. "While grieving the loss of a loved one, they wanted to support clinical research in memory of Ms. Sen."

Such generosity will also help UT Southwestern grow its research capabilities.

"Establishing an endowed chair helps us recruit and retain even more leading clinical research faculty," said Dr. Choy. "It adds prestige and makes the position even more meaningful."

Dr. Choy returns to reflecting on the gift's greater meaning to Ms. Sen's family and friends as well as her colleagues who continue the work she was so committed to at UT Southwestern.

"This endowment makes Ms. Sen's name and her institutional legacy eternal. For that alone, I hope she is looking down on us and smiling."

■

Dr. Choy holds The Nancy B. and Jake L. Hamon Distinguished Chair in Therapeutic Oncology Research.

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.