

# CENTER TIMES

FEBRUARY/MARCH 2023

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CAMPUS EDITION

## Epidemiologist Omer selected as founding Dean of O'Donnell School of Public Health

From Staff Reports

Internationally recognized epidemiologist Saad B. Omer, M.B.B.S., M.P.H., Ph.D., who currently directs the Yale Institute for Global Health, will join UT Southwestern this spring as the inaugural Dean of the Peter O'Donnell Jr. School of Public Health.

UT Southwestern's O'Donnell School of Public Health, which will admit its inaugural class in 2023, was launched with a transformative \$100 million gift from the O'Donnell Foundation, the largest gift to a school of public health at a public university



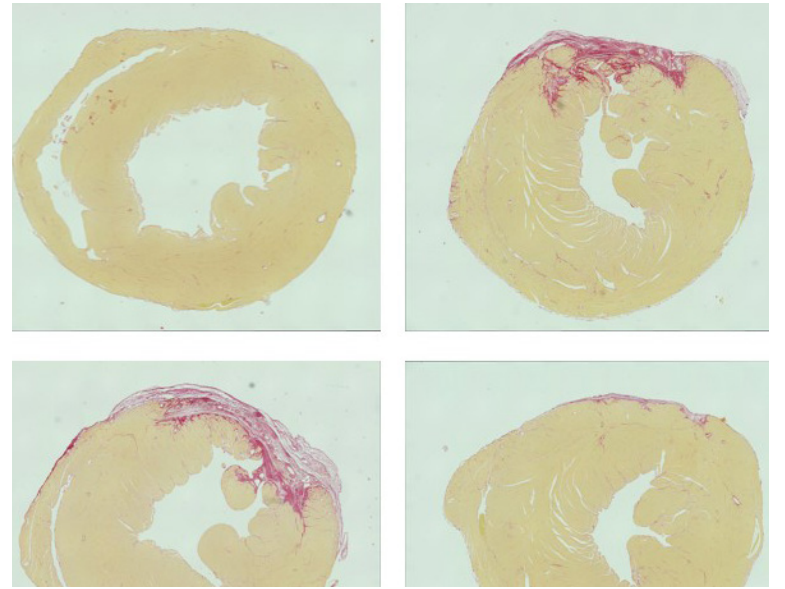
Saad B. Omer, M.B.B.S., M.P.H., Ph.D., FIDSA

in the U.S. and matching the third-largest gift supporting any school of public health.

"Dr. Omer's accomplishments as a public health scholar and advocate have positively impacted communities across the world and provide an outstanding foundation for him to serve as the inaugural Dean of the Peter O'Donnell Jr. School of Public Health," said President Daniel K. Podolsky, M.D. "Dr. Omer will ensure that we fully achieve our vision for the Peter O'Donnell Jr. School of Public Health to ultimately improve the health of communities near and far by

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## Gene editing halts damage in mice after heart attacks



The figure shows cross-sections of mouse hearts with areas of damage in red. Treatment with virus-expressing CRISPR components reduces cardiac damage following ischemic injury.

By Christen Brownlee

Editing a gene that prompts a cascade of damage after a heart attack appears to reverse this inevitable course in mice, leaving their hearts remarkably unharmed. These findings of UT Southwestern researchers, published in *Science*, could lead to a new strategy for protecting patients from the consequences of heart disease.

"Usually, depriving the heart of oxygen for an extended period, as often happens in a heart attack, will damage it substantially. But those animals whose heart muscles were subjected to gene editing after

induced heart attacks seem to be essentially normal in the weeks and months afterward," said Eric Olson, Ph.D., Director of the Hamon Center for Regenerative Science and Medicine and Chair of Molecular Biology at UTSW, who co-led the study with Rhonda Bassel-Duby, Ph.D., Professor of Molecular Biology.

Since its discovery a decade ago, the CRISPR-Cas9 gene editing system has been used by scientists to correct genetic mutations responsible for disease, including work by the Olson lab on Duchenne muscular dystrophy. However, Dr. Bassel-Duby explained, these diseases caused by mutations

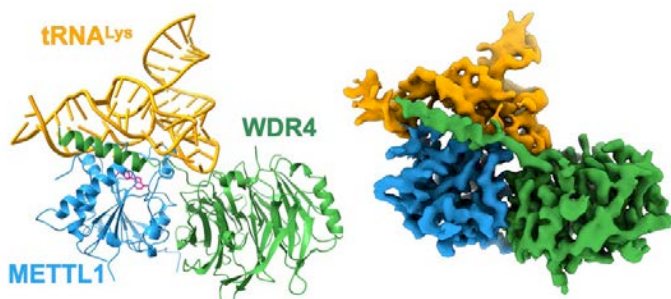
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## Match Day 2023: It's a wrap



A total of 219 UT Southwestern Medical School students celebrated at 11 a.m. CDT on Friday, March 17, opening envelopes to reveal their residency matches. More than 40 matched to the top 20 academic medical centers in the U.S., and 100-plus matched to programs in Texas, including 56 who will remain at UTSW. See pages 4-5 for additional coverage, including photos and the Match Day specialty list.

## Research reveals rare view of enzyme involved in common cancers



Two illustrations above show a tRNA (yellow) interacting with two proteins – METTL1 (blue) and WDR4 (green) – that form an enzyme complex.

By Deborah Wormser

UT Southwestern scientists have used cutting-edge technologies to obtain rare in-action views of a human enzyme involved in several common tumors, including those of the lung and liver.

"Using X-ray crystallography and cryo-electron microscopy (cryo-EM), we revealed at near-atomic resolution several 3D views indicating how a protein called METTL1 binds to its partner protein, WDR4, to form the METTL1/WDR4 enzyme complex that's important for keeping protein levels balanced within cells," said the *Nature* study's corresponding author

Please see ENZYME on page 7

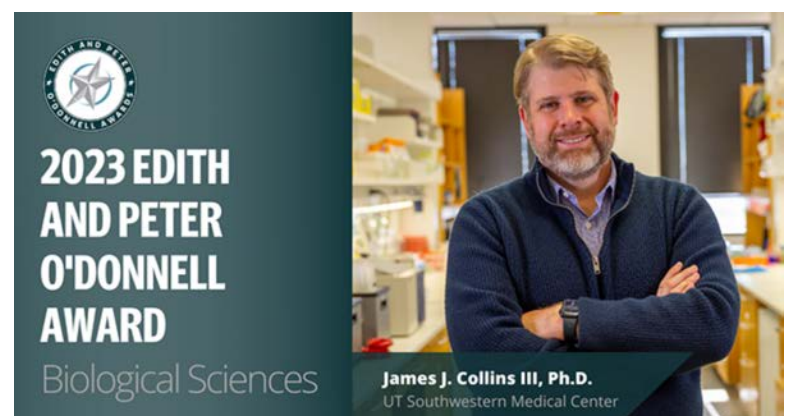
## Collins wins Edith and Peter O'Donnell Award for parasitic disease work

From Staff Reports

James Collins III, Ph.D., Associate Professor of Pharmacology, will receive the 2023 Edith and Peter O'Donnell Award in Biological Sciences from the Texas Academy of Medicine, Engineering, Science and Technology (TAMEST) for broadening understanding of schistosomiasis, a disease caused by parasitic worms that infect hundreds of millions of the world's poorest and most vulnerable people, including children.

TAMEST presents the annual awards to recognize the achievements of early-career Texas investigators in the fields of science, medicine, engineering, and technology innovation. Dr. Collins is the 16th UT Southwestern scientist to receive an O'Donnell Award since TAMEST initiated the honors in 2006.

Schistosomes are parasitic worms



that live in certain types of freshwater snails and enter an individual when skin encounters contaminated freshwater through wading, swimming, bathing, or drinking. The disease affects almost 240 million annually and is second only to malaria as the most devastating parasitic disease,

according to the Centers for Disease Control and Prevention.

The disease becomes progressively worse over time as the female parasitic worms lay millions of eggs inside the host, which cause debilitating inflammatory responses and scarring as more and more eggs get trapped in

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### HONORING THE REV. MARTIN LUTHER KING JR., PH.D.

A story of courage plus student recognition highlight annual MLK Commemorative Celebration.

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### RESEARCH JUMP-START

Grants from The Cary Council further the work of three early-career investigators in pediatrics, radiation oncology, and public health.

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### RECOGNIZED FOR LEADERSHIP

UTSW Police Chief Marcus Lewis is named the UT System's Police Chief of the Year.

Page 8

# UTSW ranked top health care institution globally for published research

By Christen Brownlee

For the third year in a row, UT Southwestern is ranked as the top health care institution globally by *Nature Index* for publishing high-quality research in all subjects and in the life sciences.

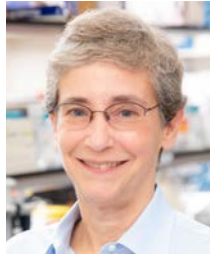
"We are incredibly proud of the outstanding work by our scientists and clinical researchers that is reflected in these *Nature Index* 2022 rankings," said Joan Conaway, Ph.D., Vice Provost and Dean of Basic Research at UTSW. "Our discoveries impact multiple fields in basic science and are making a real difference in developing diagnostic and therapeutic applications for patients at our institution and beyond."

The *Nature Index* compiles affiliation information from research articles published in

82 premier science journals, providing perspective on high-quality scientific discoveries around the globe.

UTSW also ranked second globally among health care institutions in chemistry; among the top 10 in biochemistry and cell biology, earth and environmental, and physical sciences; and among the top 25 in neurosciences.

"UTSW's ranking is a testament to the consistent strength and impact of our research community. Our scientists are currently leading about 5,800 research projects with nearly \$610 million in support from the National



Joan Conaway, Ph.D.



Institutes of Health, the state of Texas, foundations, individuals, and corporations," said W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs, Provost, and Dean of UT Southwestern Medical School.

Dr. Conaway holds the Cecil H. Green Distinguished Chair in Cellular and Molecular Biology.

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

**More online:** Read the full story in the newsroom at [utsouthwestern.edu/newsroom](https://utsouthwestern.edu/newsroom).

## Physician-scientist Sadek receives NIH Outstanding Investigator Award

*Funding over seven years will support development of an ambitious heart regeneration research program*

By Christen Brownlee

Physician-scientist Hesham Sadek, M.D., Ph.D., has received the prestigious National Institutes of Health (NIH) Outstanding Investigator Award to support his ongoing research into mechanisms behind heart regeneration that could lead to treatments for heart failure.

"There are currently no therapies that can reverse heart failure or induce heart regeneration in humans," said Dr. Sadek, Professor of Internal Medicine, Biophysics, and Molecular Biology who serves as the Associate Director of the Hamon Center for Regenerative Science and Medicine at UTSW. "This award will accelerate the development of therapeutics that can reactivate the cardiomyocyte cell cycle and induce heart regeneration in humans."

The award promotes productivity and innovation by scientists whose outstanding record of research demonstrates their ability to make

major contributions to heart research. It provides investigators like Dr. Sadek increased freedom to conduct research that breaks new ground and allow them to take greater risks and pursue research that requires a longer time frame.

"I am honored by this recognition of our contributions and NIH's confidence in our ability to develop a highly ambitious cardiac regeneration research program," Dr. Sadek said.

The competitive grant, which totals \$7.46 million, will provide \$650,000 in direct funds annually for seven years. Dr. Sadek said the funds will be used to identify molecular mechanisms through which cardiac work and oxygenation regulate the heart's ability to regenerate.

About 6.2 million adults in the U.S. suffer from heart failure, a disorder caused by viruses, toxins, high blood pressure, or heart attacks in which the heart struggles to pump enough blood to meet the body's demands. Current treatments for



Hesham Sadek, M.D., Ph.D.

heart failure, including ACE inhibitors and beta blockers, center on trying to stop a vicious cycle of heart muscle loss as strain further damages

remaining muscle, causing more heart cells to die.

In 2011, Dr. Sadek, longtime collaborator Eric Olson, Ph.D., Professor and Chair of Molecular Biology at UTSW, and their colleagues showed that mouse hearts damaged in the first few days of life can regenerate, spurred by the division of cardiomyocytes, the cells responsible for a heart's contractile force. However, this capacity is lost by seven days of age, an abrupt turning point in which division of these cells slows dramatically and the cells enlarge.

Since then, Dr. Sadek and colleagues have identified several key molecular pathways that mediate the loss of this regenerative capacity, including those triggered by increased cardiac load and oxygenation shortly after birth. By manipulating these pathways, the Sadek lab has been able to reactivate heart regeneration, even in adults. They also have shown that mechanical heart pumps called left ventricular assist devices (LVADs),

commonly used to treat heart failure, can reactivate the cardiomyocyte cell cycle in the adult human heart.

"As a basic scientist and practicing cardiologist, Dr. Sadek has brought a unique perspective to our understanding of the molecular basis of cardiac disease," Dr. Olson said. "His discoveries of regenerative mechanisms that are active in the newborn heart and silenced in adulthood have provided new strategies for repair of the injured heart."

Dr. Sadek holds the J. Fred Schoellkopf, Jr. Chair in Cardiology.

Dr. Olson holds the Pogue Distinguished Chair in Research on Cardiac Birth Defects, The Robert A. Welch Distinguished Chair in Science, and the Annie and Willie Nelson Professorship in Stem Cell Research.

## Using artificial intelligence to personalize lung cancer treatment

By Deborah Wormser

UT Southwestern research combining artificial intelligence with traditional pathology analysis holds potential for quickly creating a personalized attack plan for cancer patients when speed is essential: as non-small cell lung cancers spread. This approach identified lung cancers that are most likely to respond to one common treatment versus those that might benefit from a different approach.

"We found that combining digitized clinical pathology slides with AI algorithms holds the potential to improve precision treatment of cancer patients," said Yang Xie, Ph.D., a Professor in the Peter O'Donnell Jr. School of Public Health and Lyda Hill Department of Bioinformatics. Dr. Xie, also Associate Dean of Data Sciences, is a corresponding author on the *Journal of Clinical Investigation* study along with Guanghua "Andy" Xiao, Ph.D., a Professor of Bioinformatics and in the O'Donnell School of Public Health.

The investigation used pathology slides of metastatic non-small cell lung cancers from 272 patients with the epidermal growth factor receptor (EGFR) gene mutation who were enrolled in two studies conducted by the Lung Cancer Mutation Consortium (LCMC), an association of more than 20 U.S. cancer centers working to match patients with targeted drugs and clinical trials for cancers of the chest area.

Dr. Xie explained that tyrosine kinase inhibitors (TKIs) – the main class of drugs targeting the EGFR pathway – are effective for many



John Minna, M.D., and Yang Xie, Ph.D.



Guanghua "Andy" Xiao, Ph.D.

patients with tumors that contain EGFR mutations. However, some tumors – even those containing EGFR-sensitizing mutations – are unresponsive to TKIs. The goal of the study was to find a way to determine tumor characteristics that would predict responsiveness or lack thereof.

"By studying interactions between tumor cells and cells in the microenvironment that surrounds tumors, we found an important marker that could predict which metastatic

cancers would show resistance to TKIs," she said. "Tumor cells that interacted the most with nearby stromal cells were the more resistant. We think that indicates those cancers might benefit from a multipronged approach targeting multiple cell signaling pathways."

Importantly, this approach could easily be used by pathology departments across the country, added John Minna, M.D., Director of the Hamon Center for Therapeutic Oncology Research and a Professor of Internal Medicine and Pharmacology. Drs. Xie, Xiao, and Minna are all members of the Harold C. Simmons Comprehensive Cancer Center.

"This shows the importance of multi-institutional collaborations such as LCMC to make such advances," Dr. Minna said.

The work builds on a deep learning-based

computational algorithm previously developed by Shidan Wang, Ph.D., Assistant Professor in the O'Donnell School of Public Health and lead author of the study. The algorithm, called Histology-based Digital Staining, can identify and classify multiple cell types in routine pathology images, Dr. Xie said.

The study received support from National Institutes of Health/National Cancer Institute Cancer Center Support Grants (R35GM136375, U01AI156189, R01GM140012, R01GM141519, R01DE030656, U01CA249245, P50CA70907, P30CA142543, P30CA008748, P01CA129243), and the Cancer Prevention and Research Institute of Texas (RP190107 and RP180805).

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

Dr. Xiao holds the Mary Dees McDermott Hicks Chair in Medical Science.

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

**More online:** Read the full story on *Center Times Plus* at [utsouthwestern.edu/ctplus](https://utsouthwestern.edu/ctplus).

### CENTERTIMES

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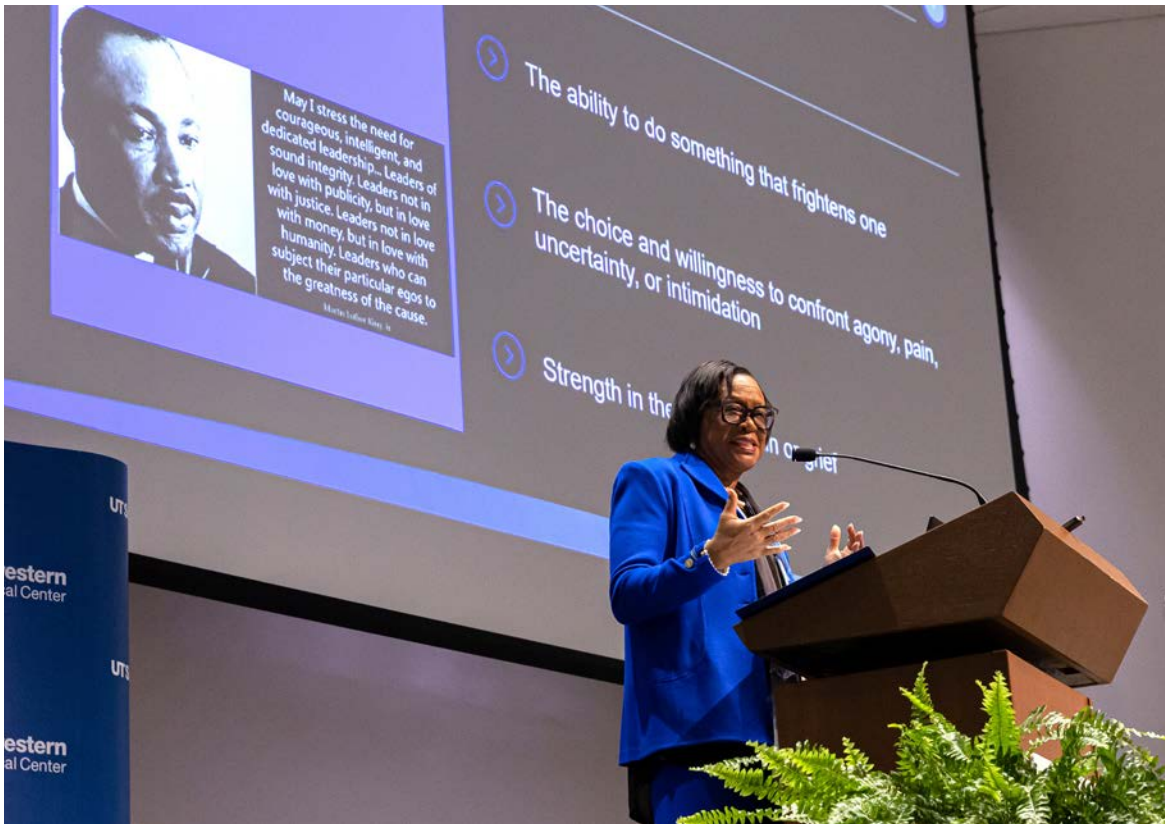
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# Dallas Mavericks CEO calls for courage and character to continue the Rev. Martin Luther King Jr.'s work



Keynote speaker Cynthia "Cynt" Marshall, CEO of the Dallas Mavericks, challenged the audience to be courageous in responding to obstacles they may face.

By Carol Marie Cropper

In a rousing presentation peppered with music and crowd participation, Cynthia "Cynt" Marshall, CEO of the Dallas Mavericks, challenged those gathered for UT Southwestern's annual Commemorative Celebration in honor of the Rev. Martin Luther King Jr., Ph.D., to follow Dr. King's example in responding to this era's tumultuous events.

"I think we have to have the courage – to have the character – to not get sucked up into some of the things that have been going on," Ms. Marshall said. "We've been chosen to make a difference – to be the difference that Dr. King preached about."

Dr. King focused on serving others during his life, said Shawna Nesbitt, M.D., M.S., Vice President and Chief Diversity, Equity, and Inclusion Officer, as she introduced Ms. Marshall as speaker at the Jan. 11 event in the Tom and Lula Gooch Auditorium on South Campus. The event, hosted by the Office of the President and the Office of Diversity, Equity, and Inclusion, drew an estimated 450 attendees.

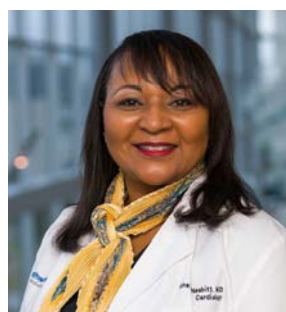
UTSW President Daniel K. Podolsky, M.D., and others at the institution have already shown courage, Ms. Marshall said – in opening the University's newest regional medical center in the Redbird neighborhood south of downtown Dallas and for committing to work toward diversity and equity among students, faculty, and staff.

## Facing the challenges of an era

Ms. Marshall told the audience she was born in the late 1950s in Birmingham, Alabama. In the decade after her birth – a time marred by police dogs attacking Black demonstrators and four young Black girls killed in a 1963 church bombing in her native city – she and her family relocated to San Francisco.

"My mother decided she did not want her kids growing up in the Jim Crow segregated South," said Ms. Marshall. "She had the courage to move ... the courage to believe there was something better."

Ms. Marshall wound up living in a San Francisco housing project and watching as her father shot and injured



Shawna Nesbitt, M.D., M.S.

an armed intruder who pointed a gun at him and her. Following this incident, she had to be escorted to school by a police officer because of ongoing threats to her family stemming from the shooting's repercussions. Despite all this, she became captain of her school's cheerleading squad, a standout student, and the recipient of five scholarship offers, later graduating from the University of California, Berkeley.

Since then, Ms. Marshall has authored a book titled *You've Been Chosen: Thriving Through the Unexpected*; founded Marshalling Resources Consulting; and was named one of the 15 most inspiring female leaders in the world by *Forbes* and one of *Adweek's* 30 Most Powerful Women in Sports. Before becoming the Mavericks' CEO in 2018, she worked for 36 years at AT&T, rising to the role of Senior Vice President, Human Resources and Chief Diversity Officer.

After the event, a reception with refreshments was held on Dr. Donald Seldin Plaza, where Ms. Marshall signed copies of her book.

Ityala Hutchinson, a Monitoring Analyst in the Human Research Protection Program, was among numerous attendees who said she was touched by the talk. "It was honestly so amazing to hear our speaker. It was really motivating and encouraging," she said.

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.

# Three UTSW students receive MLK community service scholarships



UT Southwestern students honored with scholarships at the University's annual Martin Luther King Jr. Commemorative Celebration include (from left) Siddhakshi Solanki, Martyna Kosno, and Heba Zakaria.

By Carol Marie Cropper

A Ph.D. student and two UT Southwestern Medical School students, who all made time to serve the community while also pursuing demanding academic coursework, were recognized with scholarships during this year's Martin Luther King Jr. Commemorative Celebration.

Martyna Kosno, an international student and a Fulbright Scholar in the UT Southwestern Graduate School of Biomedical Sciences, won the \$5,000 Martin Luther King Jr. Scholarship for Community Service. Finalists Siddhakshi Solanki and Heba Zakaria received \$500 scholarships each.

## Scholarship Winner

### Martyna Kosno

Senior graduate student

Ms. Kosno first came to UT Southwestern in 2014 as a pharmacy student from her home country of Poland after learning about a research trainee program called BioLab for those wishing to gain biomedical research experience in the U.S. Ms. Kosno liked the experience so much that she returned to UTSW in 2016 as a graduate student working toward a Ph.D. in biological chemistry. After she earns her doctorate, Ms. Kosno hopes to return to Poland to work as a medical science liaison, helping bridge the gap of communication between doctors and scientists.

While here, Ms. Kosno has been active in volunteer activities focused on improving education, increasing women's participation in scientific fields, and enhancing support for international students.

She joined the Alliance for Women Scientists at UTSW, becoming President of Outreach. In that role, she helped organize career-oriented seminars for students at the Irma Lerma Rangel Young Women's Leadership School in Dallas as well as at other girls schools. She established an online exchange program between the Rangel school in Dallas and one in her hometown of Opoczno, Poland.

## Finalist

### Siddhakshi Solanki

Second-year medical student

Ms. Solanki, who is interested in pediatrics and family medicine, built on "Books for Babies" with an initiative through the Neonatology Student Interest Group that encourages parents whose children were born at Parkland Memorial Hospital to read to their babies in the Neonatal Intensive Care Unit. In the program, medical students are trained to identify newborns who are isolated and work alongside families to encourage reading as a bonding activity from infancy.

In addition, she worked with underrepresented students at area high schools through the Project Education, Leadership, and Mentoring fellowship. Mentors helped the students develop a 30-minute health education presentation on microbiology to show kindergartners.

Another of Ms. Solanki's goals is to help sexual and gender minorities feel represented in medicine. She is an officer of PRIDE-UTSW and works to empower groups traditionally left out of health conversations. As the Community Outreach Coordinator at a new startup, spotLIGHT, she conducts research and creates health workshops to make it easier for LGBTQIA+ adolescents to obtain health information in an ungendered, inclusive manner.

## Finalist

### Heba Zakaria

Second-year medical student

Ms. Zakaria, who grew up in Mansfield, Texas, has worked as a coordinator with the American Muslim Women Physicians Association (AMWPA), planning informational workshops for Muslim women considering medical school. She recently started an AMWPA Chapter at UT Southwestern.

Ms. Zakaria has also advised incoming medical students as a member of Southwestern Student Advising. During the summer of 2022, she helped plan a weekend of fun activities for new students.

"As a first-generation college student and future doctor, I know how difficult it was to navigate educational opportunities and find valuable, honest advice," she said. "Martin Luther King Jr. said, 'Everybody can be great, because everybody can serve.' Whether it's through mentorship or volunteering at a free clinic, I want to continue emulating his legacy by volunteering my time to help others."

**More online:** Read the full story on *Center Times Plus* at [utsouthwestern.edu/ctplus](https://utsouthwestern.edu/ctplus).

MATCH DAY | 2023

# Defining the future for UTSW's Class of 2023

## Match Day reveals residency placements for 219 aspiring soon-to-graduate physicians

By Sharon Reynolds

On Friday, March 17, soon-to-be UT Southwestern Medical School graduates came one step closer to their dreams of becoming part of the next generation of physicians. Students gathered in anticipation in the Bryan Williams, M.D. Student Center gymnasium – surrounded by friends, family, faculty, and staff – to learn where the next stage of their medical training would take place. The mood was festive, and at 11 a.m., students simultaneously ripped open their envelopes to reveal their matches into 28 different specialties at hospitals across the nation.

“Match Day is one of the most significant milestones in the life of a medical student,” said Angela Mihalic, M.D., Dean of Medical Students and Associate Dean for Student Affairs. “Today represents a culmination of many years of hope, hard work, sacrifice, and self-discovery for these students. As educators, we have watched the remarkable transformation that has happened over the past four years. We wish them luck in the next phase of their medical education, where a world of opportunities awaits.”

Celebrating the momentous event with the Class of 2023 were Daniel K. Podolsky, M.D., UT Southwestern President; W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs, Provost, and Dean of the Medical School; Charles Ginsburg, M.D., Vice Provost and Senior Associate Dean for Education; and other academic leaders and mentors. Long-standing UT Southwestern traditions included a countdown clock and drumroll that made for an exciting day for all.

**For 2023, the top six residency specialties selected by UT Southwestern students were:**

Internal Medicine

Pediatrics

Anesthesiology

Obstetrics/Gynecology

Surgery and Emergency Medicine (tie)

This year’s graduating students embraced the opportunity to learn and grow during the pandemic, when the world became their classroom. They faced great challenges but demonstrated leadership and service in helping each other, UT Southwestern, and the nation.

“The Class of 2023 started medical training before the pandemic, then navigated medical school and witnessed medicine evolve as they were being trained to be doctors,” said Melanie S. Sulistio, M.D., Associate Dean for Student Affairs and Associate Professor of Internal Medicine. “Not only will they be historically remembered as physicians who underwent the rigors of medical school during COVID-19, I suspect they will also be some of the most socially aware and agile physicians that have graduated, having witnessed all the adaptations of medicine. They will also undoubtedly bring more innovation to our field. It’s been a true privilege to walk this journey with them.”

Dr. Mihalic said she admired the remarkable flexibility, adaptability, and resilience the students displayed through all the challenges secondary to the pandemic, including the move to a virtual curriculum in the second year; reshuffling of their clerkship schedule to minimize the impact on their clinical training; and new complexities in the residency application process. “I am so proud of their spirit of cooperation, teamwork, and commitment to acquiring the strong fund of knowledge and clinical skills needed to face the new challenges in medicine,” she said. “In addition, this Class played key roles in leading efforts to promote social justice, address racism in medicine, and promote improvements in the curriculum for expanded teaching of social determinants of health.”

Norberto Rodriguez-Baez, M.D., Professor of Pediatrics and Associate Dean of Student Affairs for the Office of Student Diversity and Inclusion, said he believes the students’ medical school training has prepared them to become strong leaders to serve a diverse world. “I’m very proud to see our students represent what they have learned about their social responsibility in addressing health care disparities. I know that they will work hard and become excellent, empathetic physicians. They will not be an echo; they will be the voice that changes the narrative, especially for those who feel they do not have one,” Dr. Rodriguez-Baez said.

Each year, fourth-year medical students across the country participate in the National Resident Matching Program (NRMP) to determine where they will start their medical careers. The NRMP oversees a highly structured interview process that uses an algorithm to match the preferences of students with those of residency programs. Placements are announced on Match Day, a coordinated event held on medical school campuses across the nation. Last year, 42,549 active applicants participated in the Main Residency Match, according to the NRMP.

This special day represents the ultimate achievement for students and marks a bittersweet ending to medical school. Of the 219 students who matched in the Class of 2023, 56 will complete residencies at UTSW, 105 will train in Texas, while the rest disperse to top institutions across the country. After four years of friendship, camaraderie, and collaboration, students will go their separate ways, but their bond as UTSW alumni will last a lifetime.

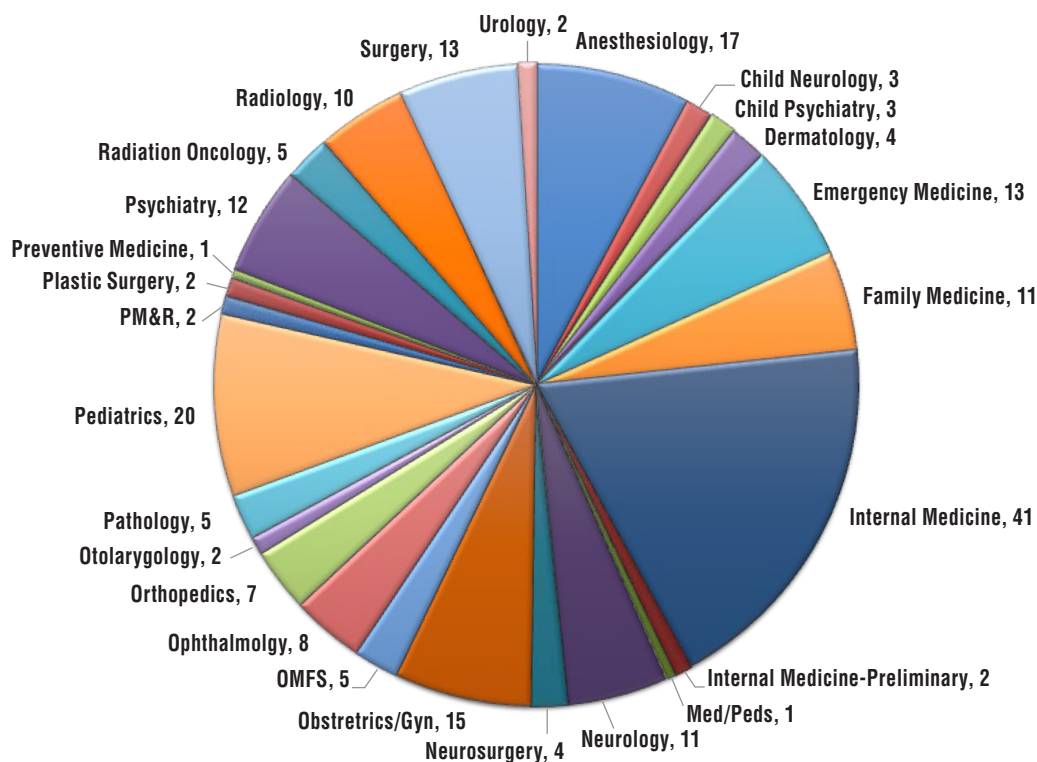
Dr. Ginsburg holds the Marilyn R. Corrigan Distinguished Chair in Pediatric Research.

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.

**More online:** For more Match Day coverage, including videos, photos, and the full student spotlights, go to *Center Times Plus* at [utsouthwestern.edu/ctplus](https://utsouthwestern.edu/ctplus).

## UTSW Match Results: Class of 2023



### Match Day 2023:

#### Anticipation turns to jubilation for soon-to-graduate students

Nearly 220 students participated in UT Southwestern’s live Match Day celebration March 17 on campus. In their own words, read the joyous responses of a handful of graduating students to news of where they will begin their residencies. The individuals highlighted are examples of the diverse and extremely talented group of students in the 2023 graduating class. Read more about their stories on *Center Times Plus*.

Trey Cinclair



**Specialty:** Plastic and Reconstructive Surgery

**Match:** UT Southwestern

**Reaction:** The atmosphere on Match Day was so exhilarating, and it was wonderful to be around family and friends again. I’m feeling incredibly lucky and honored to continue to serve our community with the amazing Department of Plastic Surgery at UTSW.

Mahmoud Elguindy



**Specialty:** Neurosurgery

**Match:** University of California, San Francisco

**Reaction:** I’m incredibly excited and grateful to match at the top neurosurgery program – UCSF! This is a monumental moment for me, my family, and the amazing mentors who’ve supported me.

Ofelia Negrete Vasquez



**Specialty:** General Surgery

**Match:** UT Southwestern

**Reaction:** I am thrilled to have the opportunity to continue my training here at UTSW. This place has become home for me over the past few years. I can’t think of a better environment in which to continue learning and growing!

Whitney Stuard



**Specialty:** Ophthalmology

**Match:** Johns Hopkins Wilmer Eye Institute

**Reaction:** Match Day was wonderful, being surrounded by family, friends, and mentors. Seeing everyone’s excitement was something I will always remember and the start of a new journey for all of us!

Angel Valencia



**Specialty:** Orthopedic Surgery

**Match:** UT Southwestern

**Reaction:** I am very grateful to have matched at UTSW! The training program is excellent and I know I will be surrounded by a great group of attending and resident physicians who will push me to be better every day.

Hiren Patel

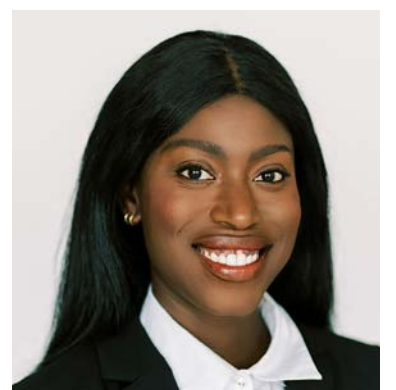


**Specialty:** Internal Medicine-Pediatrics

**Match:** University of Illinois College of Medicine

**Reaction:** Match day was even more exciting than I imagined! All of our hard work has paid off and I am ecstatic to do the next chapter of my training in Chicago! It’ll truly be a day I’ll never forget.

Fatou Sahor

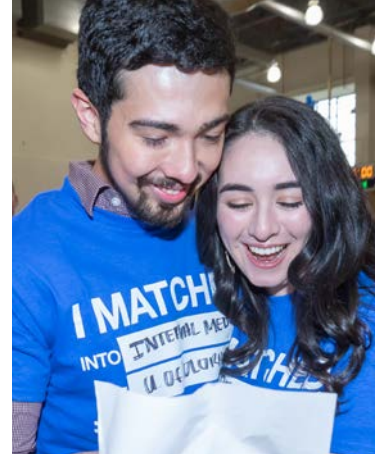


**Specialty:** Obstetrics and Gynecology

**Match:** UT Medical School, Houston

**Reaction:** I’m excited for the future and so happy I got to celebrate with my family, friends, and faculty. I hope to make an impact on population health, especially on the issue of Black maternal mortality.

MATCH DAY | 2023



HERE, GROUPED BY SPECIALTY, ARE THE MATCHES ACHIEVED BY MEMBERS OF THE UT SOUTHWESTERN MEDICAL SCHOOL CLASS OF 2023

**ANESTHESIOLOGY**

**M'Kay Cauble**, Baylor Scott & White Med Ctr, Texas, **Jeffrey Chapman**, UC San Diego Med Ctr (Transitional year, Intermountain Med Ctr, Utah), **Brandon Everett**, UT Southwestern, **Haley Holderness**, UT Med School, Houston, **Weijiao Huang**, NYP Hosp-Columbia U Med Ctr, N.Y., **Russell Jenkins**, Mass Gen Hosp, **Kaitlin Jones**, UT Southwestern, **Mark Landy**, U Colorado SOM, Denver, **Tyler Nelson**, UT Southwestern, **Caitlin O'Connor**, UT Southwestern, **Jonathan Palmer**, U Louisville SOM-Ky., **Ethan Raber**, Baylor Scott & White Med Ctr, Texas, **Amani Ramiz**, Cleveland Clinic Fdn, Ohio, **Swathi Rayasam**, UT Southwestern, **Avni Shah**, Hosp of the U of PA, **David Shu**, NYP Hosp-Columbia U Med Ctr, N.Y., **Diksha Verma**, UT Southwestern

**CHILD NEUROLOGY**

**Destiny Bailey**, UT Med School, Houston, **Victor Daescu**, UT Southwestern, **Stacie Evans**, UT Southwestern

**DERMATOLOGY**

**Henry Chen**, UT Southwestern (Transitional year, UT Austin Dell Med School), **Madeleine O'Brian**, U Kansas SOM (Transitional year, Wellstar Kennestone Reg Med Ctr, Ga.), **Hunter Pyle**, UT Southwestern (Preliminary-Internal Medicine, UT Southwestern), **Rasika Reddy**, U Southern California (Preliminary-Internal Medicine, Baylor U Med Ctr, Dallas)

**EMERGENCY MEDICINE**

**Hailee Browne**, UT Southwestern, **Antonio Figueroa**, ISMMS Mount Sinai Hospital, N.Y., **Christopher Joseph**, UT Southwestern, **Rachel Kim**, UT Southwestern, **Clark Measom**, UT Southwestern, **Sydney Mulqueen**, Beth Israel Deaconess Med Ctr, Mass., **Lindsey Nguyen**, Ohio State U Med Ctr, **Deborah Oyedapo**, Brown U/Rhode Island Hosp, **Parker Ragle**, Johns Hopkins Hosp, Md., **Rogelio Herberto Schouten-Hernandez**, UTHSC, San Antonio, **Robert Trevino**, Montefiore Med Ctr/Einstein, N.Y., **Jacob Wood**, UMass Chan Med School, Mass., **Avery Young**, Northwestern McGaw/NMH/Va.-Ill.

**FAMILY MEDICINE**

**Sasha Ajaz**, Memorial Hermann Hosp, Texas, **Maryam Ali**, UT Southwestern, **Jeremy Aymard**, John Peter Smith Hosp, Texas, **Antonio Garcia**, Stanford Health Care, Calif., **Ashley Herrera**, St Joseph Hospital SCL Health, Colo., **Aishwarya Iyer**, U Wash Affil Hosps, **Daniela Kopado**, UTHSC, San Antonio, **Joseph Liddle**, John Peter Smith Hosp, Texas, **Keonnie Parrilla**, UC San Francisco, Calif., **Kyle Swartz**, Baylor COM, Houston, **Kristie Tu**, Memorial Hermann Hosp, Texas

**INTERNAL MEDICINE**

**Pooja Achanta**, Beth Israel Deaconess



Med Ctr, Mass., **Syed Ajaz**, Methodist Hospital, Houston, **Mir Ali**, Barnes-Jewish Hosp, Mo., **Annapoorani Asokan**, U Southern California, **Saheba Bhatnagar**, Kaiser Permanente, San Francisco, **Lucy Cai**, Scripps Clinic/Green Hospital, Calif., **Sophia Canga**, UT Southwestern, **Alyssa Chen**, ISMMS Mount Sinai Hospital, N.Y., **Christine Chen**, Mayo Clinic School of Grad Med Educ, Minn., **Ashleigh Chuah**, Emory U SOM, Ga., **Ishwar Chuckaree**, Emory U SOM, Ga., **Ashley Ciosek**, Vanderbilt U Med Ctr, Tenn., **Jordan Franklin**, Duke U Med Ctr, N.C., **Daniel Galvan**, U Colorado SOM, Denver, **Galen Gao**, U Washington Affil Hosps, **Nathan Garza**, U Colorado SOM, Denver, **Amrit Gonugunta**, UT Med School, Houston, **Madhuri Gottam**, Duke U Med Ctr, N.C., **Madison Granger**, U Alabama Med Ctr, Birmingham, **David Hutto**, Johns Hopkins Hosp, Md., **Krishna Kapoor**, CHRISTUS Health, Texas, **Ali Khurram**, Methodist Health System Dallas, **Vineeth Kommididi**, UT Southwestern, **Shreya Kondle**, Presbyterian Hosp, Dallas, **Jason Lin**, UT Med School, Houston, **Jessica Lowe**, Methodist Hospital, Houston, **Pratyusha Manthena**, UT Southwestern, **Khadyoth Nanneboyina**, Methodist Health System, Dallas, **Anthony Nguyen**, U Colorado SOM, Denver, **Shyon Parsa**, Stanford Health Care, Calif., **Prem Patel**, Ohio State U Med Ctr, **Josh Peedikayil**, Baylor COM, Houston, **Tri Pham**, Barnes-Jewish Hosp, Mo., **Eli Reynolds**, NYU Grossman SOM, N.Y., **Aidan Strother**, UT Med School, Houston, **Abhinav Thummala**, UCLA Med Ctr, **Michael Trinh**, Mass Gen Hosp, **Angela Wang**, U Wash Affil Hosps, **Ava Wilson**, Hosp of the U of Pa., **Shunshun Yan**, Baylor COM, Houston

**INTERNAL MEDICINE – PRELIMINARY**

**Charlotte Greif**, UTHSC-San Antonio

**INTERNAL MEDICINE/PEDIATRICS**

**Hiren Patel**, U Illinois COM, Chicago

**NEUROLOGICAL SURGERY**

**Ammar Adenwalla**, UT Southwestern, **Sai Susheel Chilakapati**, Baylor COM, Houston, **Mahmoud Elguindy**, UC San Francisco, **Eric Montgomery**, U Colorado SOM, Denver

**NEUROLOGY**

**Claire Abijay**, Stanford Health Care, Calif. (Preliminary-Internal Medicine, Santa Clara Valley Med Ctr, Calif.), **Carson Barnard**, U Kansas SOM, Kansas City, **Alexa Ciarolla**, UCLA Med Ctr (Preliminary-Internal Medicine, Olive View-UCLA Med Ctr), **Scott Crawford**, U Florida COM-Shands Hosp, **Malvika Govil**, NYU Grossman SOM, N.Y. (Preliminary-Internal Medicine, NYU Grossman SOM, N.Y.), **Priyanka Gurru**, UT Austin Dell Med School, **Brianne Lucy**, Rush U Med Ctr, Ill., **Tabarak Mian**, UT Southwestern, **Isabel Miller**, UT Austin Dell Med School, **Chandrasekar Sundararajan**, UT Southwestern

**OBSTETRICS AND GYNECOLOGY**

**Nidhi Desai**, U Oklahoma COM, **Alfarooq El-Eishy**, UT Med Branch-Galveston, **William Garner**, UT Southwestern, **Autumn Greenfield**, UTHSC-San Antonio, **Courtney Johnson**, Ohio State U Med Ctr, **Eugenia Kakadiaris**, UT Southwestern, **Ashlyn Lafferty**, UT Southwestern, **Courtney Newman**, Methodist Hospital, Houston, **Hannah Ramsaywak**, Jersey Shore U Med Ctr, N.J., **Meghana Reddy**, LSU SOM, New Orleans, **Fatou Sahor**, UT Med School, Houston, **Monica Saripella**, HCA Medical City Healthcare, Texas, **Arlen Suarez Ares**, UT Med Branch-Galveston, **Lisa Thiele**, UT Southwestern, **Rachel Williams**, UT Southwestern

**OPHTHALMOLOGY**

**Vladyslav Bondar**, UT Southwestern, **Andrew Davis**, Texas Tech U Affil-Lubbock, **Thomas Emmett**, U Wisc Hosp and Clinics (Preliminary-Internal Medicine, U Wisc Hosp and Clinics), **Bhagyashri Pandey**, UT Southwestern, **Henry Patrick**, UT Southwestern, **Aaron Shi**, UT Houston, **Casey Strauss**, UT Southwestern, **Whitney Stuard**, Wilmer-Johns Hopkins, **Brenda Zhou**, UT Southwestern

**ORAL AND MAXILLOFACIAL SURGERY**

**Yousef Hammad**, UT Southwestern, **Joshua Klein**, UT Southwestern, **Timothy Neal**, UT Southwestern, **Patricia Sarcos-Alvarez**, UT Southwestern, **Scott Sullivan**, UT Southwestern

**ORTHOPEDIC SURGERY**

**Johnson Andre**, UT Southwestern, **Claire Bonnyman**, UC San Diego Med Ctr, **Yida Liu**, UT Southwestern, **Mauricio Valdez**, UTHSC-San Antonio, **Angel Valencia**, UT Southwestern, **Andrew Winsauer**, Vanderbilt U Med Ctr, Tenn., **Esteban Zapata Nunez**, John Peter Smith Hosp, Texas

**OTOLARYNGOLOGY**

**Hayley Baker**, Case Western/U Hosps Cleveland Med Ctr, Ohio, **William Kemper**, Baylor COM, Houston

**PATHOLOGY**

**Albert Budhipramono**, UT Southwestern, **Jordan Driskill**, NYP Hosp-Weill Cornell Med Ctr, N.Y., **Aloysius Lawong**, UT Southwestern, **Joshua Mehr**, UT Southwestern, **Noah Sorrelle**, UT Southwestern

**PEDIATRICS**

**Jawaher Azam**, Phoenix Children's Hosp, Ariz., **Lauren Black**, St Louis Children's Hosp, Mo., **Jennifer Cardona**, UT Southwestern, **Priya Chelliah**, UC Irvine Med Ctr, Calif., **Vinay Kalvacherla**, U of Utah Health, **Sarah Koshy**, Phoenix Children's Hosp, Ariz., **Tiffany Le**, UT Southwestern, **Allison Liu**, Children's Hospital, Boston, **Jim Liu**, UT Southwestern, **Amisha Mehta**, UCLA Med Ctr, **Rohit Nair**, Children's Hospital, Los Angeles, **Santiago Olaechea**, U Colorado SOM, Denver, **Jarod Pamatmat**, U Oklahoma COM, **Aparna Panatpur**, Baylor COM, Houston, **Mackenzie Parker**, U Colorado SOM, Denver, **Naga Amulya Pratapa**, Northwestern McGaw/Lurie Childrens, Ill., **Prachi Shah**, U Arkansas COM, Little Rock, **Thien Huong Tran**, Children's Hospital, Los Angeles, **Amanda Trevino**, U Colorado SOM, Denver, **Heather Xiao**, Emory U SOM, Ga.

**PHYSICAL MEDICINE AND REHABILITATION**

**Sarah Abraham**, NYU Grossman SOM, N.Y. (Transitional Year, Nassau U Med Ctr, N.Y.), **Ravinderjit Singh**, Baylor COM, Houston (Preliminary-Internal Medicine, Baylor COM, Houston)

**PLASTIC SURGERY**

**Trey Cinclair**, UT Southwestern, **I-Chun Lin**, UT Southwestern

**PREVENTIVE MEDICINE/TRANSITIONAL YEAR**

**Brooklynne Palmer**, Loma Linda U, Calif.

**PSYCHIATRY**

**Nida Ahmed**, John Peter Smith Hosp, Texas, **Casey Cai**, Vanderbilt U Med Ctr, Tenn., **Lauren Ford**, UT Southwestern, **Samya Isa**, Baylor COM, Houston, **Fawwad Khan**, U Illinois COM, Chicago, **Janett Ordenez**, ISMMS Mount Sinai Hosp, N.Y., **Andrew Pliszka**, UTHSC-San Antonio, **Maria Reynolds**, Cambridge Health Alliance, Mass., **Blair Riepen**, BayCare Health System, Fla., **Melissa Singasing**, Texas Tech U Affil, El Paso, **Olaide Sode**, Cambridge Health Alliance, Mass., **Triet Vincent Tran**, West Virginia U SOM, **Dat Truong**, U of Missouri-KC/CBM, **Jennifer Wang**, U Wash Affil Hosps

**PEDIATRICS/PSYCHIATRY/CHILD AND ADOLESCENT PSYCHIATRY**

**Alberto Bremauntz Enriquez**, UT Southwestern

**RADIATION ONCOLOGY**

**Eric Hsu**, Stanford Health Care, Calif. (Transitional Year, John Peter Smith

Hosp, Texas), **Cira Mollings Puentes**, UT MD Anderson Cancer Ctr (Preliminary-Internal Medicine, UT Med School, Houston), **Akshat Patel**, Mass Gen Hosp (Transitional Year, Memorial Sloan-Kettering, N.Y.), **Revathi Ravella**, Memorial Sloan-Kettering, N.Y. (Transitional Year, Memorial Sloan-Kettering, N.Y.), **Lucian Zhao**, UT Southwestern (Preliminary-Internal Medicine, Presbyterian Hosp, Dallas)

**RADIOLOGY**

**Joshua Amaya**, UT Southwestern (Transitional Year, Baylor Scott & White All Saints Med Ctr, Texas), **Cody Eldridge**, UT Southwestern (Preliminary-Internal Medicine, Presbyterian Hosp, Dallas), **Priya Garigipati**, UC San Francisco (Transitional Year, Santa Clara Valley Med Ctr, Calif.), **Christopher Johns**, Ohio State U Med Ctr (Transitional Year, Brookwood Baptist Health, Ala.), **Timot Kellermayer**, UT Med School, Houston (Transitional Year, HCA Houston Healthcare/U Houston), **Haaris Khan**, UT Southwestern (Preliminary-Internal Medicine, Presbyterian Hosp, Dallas), **Brian Lue**, Barnes-Jewish Hosp, Mo. (Preliminary-Internal Medicine, Presbyterian Hosp, Dallas), **Nicholas Marshall**, UT Med School, Houston (Transitional Year, John Peter Smith Hosp, Texas), **Bayan Mogharrabi**, UT Southwestern (Transitional Year, John Peter Smith Hosp, Texas)

**SURGERY**

**Sarah Cao**, ISMMS Mount Sinai Hospital, N.Y., **Andrew Chung**, Mass Gen Hosp, **James Hazen**, Creighton University, Neb., **Aaron Hong**, LSU SOM, New Orleans, **Yash Kadakia**, Hosp of the U of Pa., **Stephany Kim**, Med U of S.C., **Joshua Kurian**, Rutgers-Community Med Ctr, N.J., **Ofelia Negrete Vasquez**, UT Southwestern, **Tanushri Pothini**, Baylor U Med Ctr, Dallas, **Brayden Seal**, U Illinois COM, Chicago, **Devin Shah**, Virginia Commonwealth U Hlth Sys, **Tamara Voor**, Memorial Healthcare System, Fla., **Benjamin Wang**, Stanford Health Care, Calif.

**UROLOGY**

**Blake Ferguson**, Baylor Scott & White Med Ctr, Texas, **Samuel Kusin**, NY Presbyterian Hosp/Cornell Med Ctr

*\*This list does not include matches for 2023 students who asked for no publicity, students pursuing alternative careers, or students who are taking a year off before starting their residency training.*

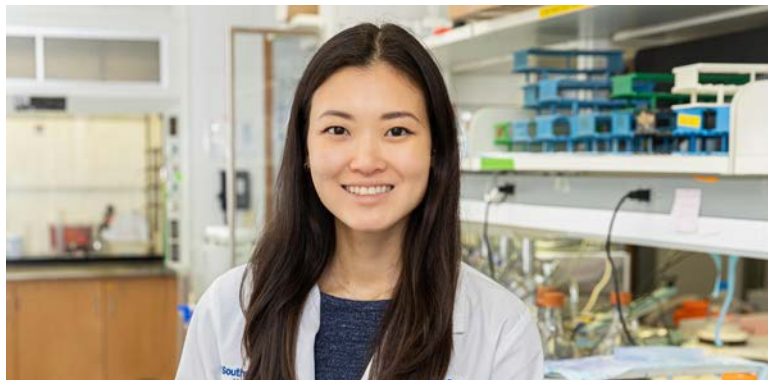
# MSTP student receives Kirkpatrick Award for COVID-19 research

By Deborah Wormser

Perot Family Scholars Medical Scientist Training Program student Gina Park has won the 2022 William F. and Grace H. Kirkpatrick Award for her grant application related to the discovery of a capping mechanism that SARS-CoV-2, the virus that causes COVID-19, uses to disguise its genetic material.

The award is given annually to a UT Southwestern Graduate School of Biomedical Sciences student who submits the most scientifically meritorious National Institutes of Health fellowship or equivalent grant application during the prior academic year as judged by the Graduate School Awards Committee. The grant for Ms. Park's research provides \$30,000 to the lab of Vincent Tagliabracci, Ph.D., Associate Professor of Molecular Biology, to kick-start the proposed research.

"I'm incredibly honored to have been selected for this prize. I'd also like to acknowledge my mentor, Vinnie Tagliabracci, who has been so supportive throughout my time as a graduate student," said Ms. Park, an M.D./Ph.D. candidate in the University's Perot Family Scholars Medical Scientist Training Program and a member of the Tagliabracci lab.



Gina Park, a Perot Family Scholar, received the Kirkpatrick Award for her work related to COVID-19 research.



Ms. Park works with Vincent Tagliabracci, Ph.D., studying an RNA cap that Nidoviruses use to disguise their genetic material and reproduce.

Her project is called "Investigating the RNA-Capping Mechanism of SARS-CoV-2 and Other Nidoviruses." Nidovirus is a type of RNA virus that includes the coronavirus family.

Ms. Park was co-lead author of a recent *Nature* study that revealed a long-elusive mechanism that coronaviruses, including the one that causes COVID-19, use to evade detection by the cells they infect. The virus creates a cap on one end of its RNA that mimics that of the cell.

"The RNA cap disguises the viral genome and allows the virus to hijack host cell machinery to produce its own viral proteins. Thus, it is crucial for the life cycle of the virus. My Kirkpatrick project builds upon this discovery to investigate whether this RNA-capping mechanism is conserved among a broad range of Nidoviruses. This could be relevant in identifying a target for antivirals against not only SARS-CoV-2, but also other coronaviruses that cause human diseases," she said.

Dr. Tagliabracci, a Howard Hughes Medical Institute Investigator and member of the Harold C. Simmons Comprehensive Cancer Center, is known for encouraging trainees to follow science into unexplored territory. The journey that resulted in the *Nature* study began in 2020 near the

start of the pandemic, and the breakthrough experiments occurred about a year later. Ms. Park, who had noticed a possible similarity in the chemistry of the unconventional capping mechanism and that of a well-known reaction called AMPylation, suggested experiments to compare the two.

It took several months to complete the research, with Ms. Park reporting success in the summer of 2021, he said. Rather than celebrate, she and co-lead author Adam Osinski, Ph.D., then a graduate student, worked to replicate the findings.

"So, she went back and repeated the experiment, and thankfully, the results were reproducible," Dr. Tagliabracci said. The lab held off on celebrating until the finding was accepted for publication in *Nature*.

"She had the courage to do the experiment – and good for her. I'm glad she did it," he said, adding, "I encourage my trainees to take chances. If you have a good idea, just try it."

Dr. Tagliabracci is a Michael L. Rosenberg Scholar in Medical Research.

## Pediatrics Professor Rodriguez-Baez named Associate Dean

By Carol Marie Cropper

Professor of Pediatrics Norberto Rodriguez-Baez, M.D., a physician with a long record of helping minority medical students and college students interested in pursuing the field, has been named the new Associate Dean of Student Affairs for the Office of Student Diversity and Inclusion. In this role, he will work to recruit, retain, and support underrepresented minority (URM) medical students.

Dr. Rodriguez-Baez had served in the Office of Student Diversity and Inclusion as Assistant Dean under Shawna Nesbitt, M.D., M.S., who was recently selected the inaugural Vice President and Chief Diversity, Equity, and Inclusion Officer. Since 2003, Dr. Rodriguez-Baez has served as an adviser for minority medical students and college students considering a career in medicine.

He came to UT Southwestern in 2001 after receiving his medical degree and completing a pediatrics residency at the University of Puerto Rico School of Medicine and a fellowship in



Norberto Rodriguez-Baez, M.D.

pediatric gastroenterology, hepatology, and nutrition at Stanford University School of Medicine/Lucile Packard Children's Hospital.

At UTSW, Dr. Rodriguez-Baez specializes in the care of pediatric patients with gastrointestinal and liver diseases. For 18 years, he was Director of the Pediatric Gastroenterology Fellowship Program and pediatric gastroenterology resident and medical student education. He is involved in research related to acute liver failure, hepatitis B, hepatitis C, and other liver diseases.

Dr. Rodriguez-Baez, who is a native of Puerto Rico and a first-generation college student, said one of his goals is to honor those who helped him along the way by "paying it forward."

"This is such a great honor," he said of his new appointment that took effect Dec. 5. "It is wonderful to have the opportunity to increase the diversity and pipeline of students and help and guide them on their journey."

Another priority, he said, will be to expand current programs and develop new outreach strategies to diversify UTSW's future physician

workforce. Dr. Rodriguez-Baez helped recruit the current class of medical students, which – with 56% female and 31% URM students – is the most diverse medical class to date.

Other goals include enhancing recruitment and retention efforts and helping the institution's medical students be more successful as they work toward completing their degrees and becoming excellent physicians.

Dr. Rodriguez-Baez said he would also like to educate students about the importance of increasing health equity and improving health care for the community UT Southwestern serves.

He is the current Secretary-Treasurer of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition Training Committee. In 2022, he received that organization's Master Educator Award, which recognizes individuals who have made a significant and sustained contribution to the gastroenterology field through education scholarship on a national or international basis.

## Dean Continued from page 1

advancing the science of public health and preparing a well-trained workforce of public health professionals."

After formation of the new school was approved by the UT System Board of Regents in 2021, the Texas Legislature committed \$10 million in startup funds. The following year, the O'Donnell Foundation, established by the late visionary philanthropist Peter O'Donnell Jr., and his late wife, Edith, provided the transformational \$100 million gift to accelerate the momentum of the newly established school.

"I look forward to joining the collaborative atmosphere at UT Southwestern and bringing together the robust computational, scientific, and clinical expertise to apply to the important challenges faced in public health today," said Dr. Omer, who was elected to the National Academy of Medicine in 2022. "The sturdy foundation for the school created by the O'Donnell Foundation's generous investment, the strong support of the state, and the eagerness of the UT Southwestern community for our mission offers an exciting environment to recruit the best and brightest faculty and students as we generate fresh avenues for research to

support the welfare of diverse communities here and throughout the world."

Dr. Omer, M.B.B.S., M.P.H., Ph.D., FIDSA, will hold the Lyda Hill Deanship of the School of Public Health at UT Southwestern. He begins his duties on June 1.

"On a personal level, Dr. Omer encompasses the vitality and compassion that are fundamental to advancing the well-being of communities and meeting the need for an expanded expert public health workforce that will broaden our capacity to respond to current and future public health challenges," said W. P. Andrew Lee, M.D., Executive Vice President for Academic Affairs, Provost, and Dean, UT Southwestern Medical School.

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.

## About Saad B. Omer, M.B.B.S., M.P.H., Ph.D., FIDSA

Dr. Omer has conducted studies in the United States, Guatemala, Kenya, Uganda, Ethiopia, India, Pakistan, Bangladesh, South Africa, and Australia. His research involves:

- Epidemiology of respiratory viruses including influenza, RSV, and – more recently – SARS-CoV-2 (COVID-19)
- Clinical trials to estimate efficacy of maternal and/or infant influenza, pertussis, polio, measles, and pneumococcal vaccines
- Trials to evaluate drug regimens to reduce mother-to-child transmission of HIV
- Interventions to increase immunization coverage and acceptance
- Public health preparedness strategies to effectively respond to large emerging and reemerging infectious disease outbreaks.

A prolific and impactful researcher, he has published more than 430 peer-reviewed papers that have been cumulatively cited more than 150,000 times. Dr. Omer's published work, which includes articles in the *New England Journal of Medicine*, *JAMA*, *Lancet*, *Cell*, *Science*, and *Nature*, is consistently cited for policy recommendations and has informed legislative policy and clinical practice in many countries.

He has served on numerous advisory panels,

including the U.S. National Vaccine Advisory Committee, Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria-Vaccine Innovation Working Group, several high-level World Health Organization advisory committees, multiple National Academy of Medicine expert panels, the boards of the Sabin Vaccine Institute and Gavi, The Vaccine Alliance, and as an academic affiliate of the Office of Evaluation Sciences – formerly known as the White House Social and Behavioral Sciences Team.

In 2009, Dr. Omer received the Maurice Hilleman Award from the National Foundation for Infectious Diseases for his work on the impact of maternal influenza immunization on respiratory illness in infants younger than 6 months old for whom there is no vaccine.

He currently serves as inaugural Director of the Yale Institute for Global Health, Associate Dean for Global Health Research with the Yale School of Medicine, the Harvey and Kate Cushing Professor of Medicine in Infectious Diseases, Professor of Epidemiology of Microbial Diseases with the Yale School of Public Health, and an Adjunct Professor with the Yale School of Nursing.

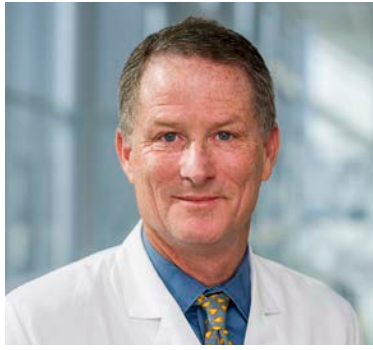
# De Lemos tapped as new Chief of Cardiology Division

By Carol Marie Cropper

James de Lemos, M.D., Professor of Internal Medicine, recently was selected as Chief of the Division of Cardiology. On March 1, he became the fourth leader of this prominent Division since 1977.

Dr. de Lemos' appointment comes after an extensive national search. A leading clinical investigator, he focuses on early detection, risk assessment, and management of cardiovascular disease, with a particular interest in the role of cardiovascular biomarkers.

He currently serves as Principal Investigator for the Dallas Heart Study, a multiethnic population-based investigation of more than 6,000 adults, having played a major leadership role in this study for more than 20 years. He has mentored more than 30 postdoctoral research trainees and authored or



James de Lemos, M.D.

co-authored more than 400 original research articles. He was elected to the American Society for Clinical Investigation in 2014 and the Association of American Physicians in 2017.

"I'm humbled and deeply honored to have the opportunity to lead such a fabulous group of people that I've

known for many years and have great admiration and respect for, and to build on the tremendous legacy of outgoing Chief Joseph Hill, M.D., Ph.D.," Dr. de Lemos said.

His priority as Chief, he said, will be to build on UT Southwestern's talents and strengths. "We're really set up to be superb in every dimension – including clinical care, education, and research," Dr. de Lemos said, pointing out that *U.S. News & World Report* ranks UTSW's Cardiology and Heart Surgery No. 14 among U.S. hospitals.

In particular, Dr. de Lemos said he will recruit additional talented investigators – both in basic and clinical science – especially in the areas of health equity and pragmatic trials that can capitalize on UT Southwestern's strengths, with its diverse patient populations at William P. Clements Jr. University Hospital, Parkland Health,

and the Dallas VA Medical Center. He also plans to enhance programs that capitalize on emerging technologies and data approaches, including those that integrate research into the clinical workflow. "We aim to have a Division that is at the cutting edge of all aspects of cardiovascular medicine."

Education will also be a focus, he said, "to reaffirm that this is the premier place to learn how to be a cardiologist."

Dr. de Lemos received his medical degree from Harvard Medical School and completed internal medicine residency training at UT Southwestern, where he served as Chief Resident. He then finished a cardiology fellowship at Harvard before returning to UT Southwestern as an Assistant Professor in 2000. He was promoted to Associate Professor in 2005, then to Professor in 2011. In 2018, the

UT System Board of Regents named him a Distinguished Teaching Professor.

A former Director of UT Southwestern's Cardiovascular Fellowship Program, Dr. de Lemos has received numerous teaching and mentorship awards, including the 2015 Women in Cardiology Mentoring Award from the American Heart Association (AHA), the 2020 Distinguished Mentor Award from the American College of Cardiology, and the 2021 Award of Meritorious Achievement from the AHA.

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

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

# Cioffi joins UTSW as Chief of General Obstetrics and Gynecology

By Jan Jarvis

Joseph Cioffi, M.D., who has worked for decades in academic medicine and clinical private practice, has been named the new Chief of the Division of General Obstetrics and Gynecology.

Dr. Cioffi said it is an honor to work at UT Southwestern, which has a storied history for not only the development of specialties within the Department of Obstetrics and Gynecology but also for providing cutting-edge, high-quality, patient-centered access to quality care. He joined UTSW on March 1.

"The opportunities that lie ahead



Joseph Cioffi, M.D.

for the General Division to continue, expand, and to elevate these standards are limitless," he said. "UT Southwestern's diverse, talented team of general-

ists will continue to elevate this legacy of health care equity and outstanding patient-centered care."

Since 2011, Dr. Cioffi had served as an Obstetrics and Gynecology faculty member at NYU Langone-Long Island School of Medicine, recently serving as Director of the Hospitalist Division and the Hospitalist Fellowship Program. From 2003 to 2011, Dr. Cioffi served as a Clinical Assistant Professor of Obstetrics and Gynecology, Chief of Gynecologic Services, Director of Gynecologic and Robotic Surgery, and Director of Labor and Delivery Inpatient Clinical

Services at Robert Wood Johnson University Hospital in New Brunswick, New Jersey.

"Dr. Cioffi has a passion for teaching, performance improvement, and increasing patient safety while advancing health care outcomes," said Catherine Spong, M.D., UTSW Chair of Obstetrics and Gynecology.

In addition to his work in academic medicine, Dr. Cioffi has 16 years of clinical private practice experience for both groups and as a solo practitioner.

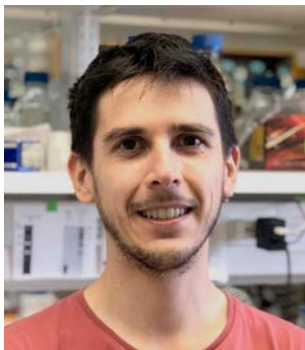
Since 1988, Dr. Cioffi has been board-certified by the American Board of Obstetrics and Gynecology. He serves on committees for the

American College of Obstetricians and Gynecologists, the American Society for Colposcopy and Cervical Pathology, and the Society of Gynecologic Surgeons.

Dr. Spong holds the Paul C. MacDonald Distinguished Chair in Obstetrics and Gynecology.

**More online:** Read the full story on *Center Times Plus* at [utsouthwestern.edu/ctplus](https://utsouthwestern.edu/ctplus).

## Enzyme Continued from page 1



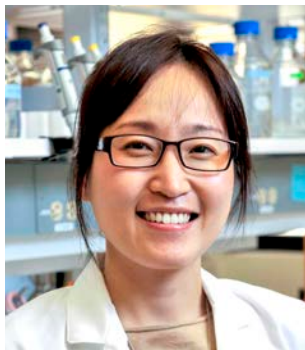
Victor Ruiz-Arroyo, Ph.D.

Yunsun Nam, Ph.D., Associate Professor of Biochemistry, Biophysics, and a member of the Harold C. Simmons Comprehensive Cancer Center. "Importantly, we've elucidated the molecular mechanisms underlying how the protein METTL1 (methyltransferase-like 1) adds a chemical modification – methylation – to tRNAs (transfer RNAs)."

Dr. Nam explained that tRNAs are central to the process by which genetic information is "translated" to synthesize various proteins that are the workhorses of a cell. Chemical changes that add small molecules such as methyl groups to tRNAs govern how fast and how much protein to synthesize, she said. A certain rate of protein translation is necessary to maintain health while cancer cells prefer high levels of protein and unlimited growth.

Although it's been known that METTL1/WDR4 is involved in adding modifications to tRNAs, the lack of a 3D model has hindered a deeper understanding of the enzyme complex. The study determined the site where the two proteins bind to form the complex and showed how they find the exact atomic location to attach a methyl group on the correct tRNAs.

"This work builds on our previous research that focused on abnormal modifications on messenger RNAs and how they contribute to cancer," she said. "This new project shows how tRNA modifications need to be exquisitely



Yunsun Nam, Ph.D.

### Key findings of the study include:

- The revelation at a near-atomic resolution 3D view of how METTL1 works – how it binds its partner protein, WDR4, to recognize substrate tRNAs and coordinate the binding of non-protein factors required for protein activity
- Determination of the dynamic nature of tRNA modification, including which atomic movements function as a switch to activate the methylation reaction that modifies the tRNA
- The discovery of a regulatory handle on METTL1 that can be used by upstream protein factors to control METTL1 activity

controlled for normal cellular function and how abnormally low or high rates of modification lead to disease.

"Transfer RNAs are basic constituents of the central dogma of life through their role in protein synthesis. Chemical modifications, including methylation, control tRNA function by altering its stability, half-life, and/or specificity. For example, a modified tRNA can decode the genetic information differently or increase in amount to produce certain proteins more efficiently," Dr. Nam added. "Cancers sometimes hijack the modification system to steer tRNAs toward uncontrolled growth. Our work provides new avenues to target unwanted methylation of tRNAs for cancers that are addicted to uncontrolled protein synthesis to fuel tumor growth."

Knowing how METTL1 works at the atomic level opens up opportunities to target it specifically and effectively, she said.

The work was led by UTSW postdoctoral researcher Victor Ruiz-Arroyo, Ph.D., and other researchers in the Nam lab. The team also received valuable help from the Cryo-Electron Microscopy Facility (CEMF) and Structural Biology Lab (SBL) groups at UTSW, Dr. Nam added.

This work was supported by the National Institutes of Health (R01GM122960 and R01CA258589), the Cancer Prevention and Research Institute of Texas (RP190259), and The Welch Foundation (I-2115-20220331).

Dr. Nam is a Southwestern Medical Foundation Scholar in Biomedical Research.

**More online:** Read the full story on *Center Times Plus* at [utsouthwestern.edu/ctplus](https://utsouthwestern.edu/ctplus).

## Gene editing Continued from page 1

affect relatively small groups of people, whereas nongenetic diseases affect far larger numbers. For example, cardiovascular disease is the leading cause of death globally, killing about 19 million people every year.

Researchers recently discovered that much of the damage from a heart attack – an event characterized by blockage of blood vessels that feed the heart, depriving it of oxygen – is caused by overactivation of a gene called *CaMKIIδ*. This gene plays a variety of roles in heart cell signaling and function. The overactivation occurs when the heart is stressed, prompted by oxidation of two methionine amino acids that form part of the *CaMKIIδ* protein.

Drs. Olson and Bassel-Duby and their colleagues reasoned that if these methionines could be converted to a different amino acid instead, oxidation wouldn't occur, sparing the heart from *CaMKIIδ* overactivation and subsequent damage after a heart attack.

To test this idea, Simon Lebek, M.D., a postdoctoral fellow, and other members of the team used CRISPR-Cas9 to edit *CaMKIIδ* in human heart cells growing in a petri dish. Tests showed that when unedited heart cells were placed into a low-oxygen chamber, they developed numerous markers of damage and subsequently died. However, the edited cells were protected from damage and survived.

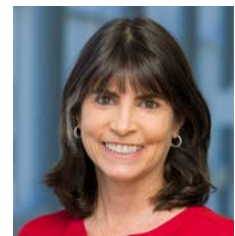
The researchers then tried a similar experiment in live mice, inducing a heart attack in these animals by restricting blood flow to their heart's main pumping chamber for 45 minutes and then delivering *CaMKIIδ* gene editing components directly to some animals' hearts. Both mice that received gene editing and those that did not had severely compromised heart function in the first 24 hours after their heart attacks. But while the mice without the gene editing continued to worsen over time, those that received gene editing steadily improved over the next few weeks, ultimately achieving cardiac function that was nearly indistinguishable from before their heart attacks.

Further research showed that the gene editing appeared to be isolated to the heart – there was no evidence of edited *CaMKIIδ* in other organs, including the liver, brain, or muscles. No negative side effects were apparent almost a year out from treatment, Drs. Olson and Bassel-Duby said.

Although this treatment will need substantial safety and efficacy studies before it can be used in humans, the researchers suggest that gene editing could offer a promising solution



Eric Olson, Ph.D.



Rhonda Bassel-Duby, Ph.D.



Simon Lebek, M.D.

for treating patients in the aftermath of a heart attack and could have potential for a range of other nongenetic diseases.

"Rather than targeting a genetic mutation, we essentially modified a normal gene to make sure it wouldn't become harmfully overactive. It's a new way of using CRISPR-Cas9 gene editing," Dr. Bassel-Duby said.

This study was funded by grants from the National Institutes of Health (R01HL130253, R01HL157281, and P50HD087351); Leducq Foundation Transatlantic Networks of Excellence; The Robert A. Welch Foundation (1-0025); the German Research Foundation (LE 5009/1-1); the German Cardiac Society; and the Cancer Prevention and Research Institute of Texas (RP210099).

Dr. Olson holds the Pogue Distinguished Chair in Research on Cardiac Birth Defects, The Robert A. Welch Distinguished Chair in Science, and the Annie and Willie Nelson Professorship in Stem Cell Research.

**More online:** Read the full story on *Center Times Plus* at [utsouthwestern.edu/ctplus](https://utsouthwestern.edu/ctplus).

# The Cary Council's Early-Stage Research Grants accelerate work of investigators

By Sharon Reynolds

The promising work of three early-career UT Southwestern investigators in pediatrics, radiation oncology, and public health recently received a jump-start through grant funding from The Cary Council.

The Cary Council, founded in 2015, aims to increase awareness of causes in academic medicine, research, and medical education. This group of emerging young community leaders raises funds through philanthropic efforts, including its signature event, An Evening with DocStars, and awards grants to UTSW researchers early in their careers. To date, The Cary Council Early-Stage Research Grants have been awarded to 15 investigators and led to \$9.4 million in additional research funding.

At the Council's last DocStars event on Nov. 3, Proshad Efuné, M.D., Robin Higashi, Ph.D., and Dominic Moon, M.D., were named grant recipients. Learn more about these investigators and their research below.

## Proshad Efuné, M.D., Assistant Professor of Anesthesiology and Pain Management and Pediatrics

After earning her medical degree at UTSW, Dr. Efuné completed a residency in pediatrics at Children's Hospital of Philadelphia, followed by a residency in anesthesiology at UTSW. She then completed fellowships in pediatric critical care medicine and pediatric anesthesiology at UTSW.

Her work seeks to predict which children will be at risk for severe breathing complications following tonsil-removal surgery to better monitor those children in the hospital, while giving children who are not at risk the opportu-



From left: Dominic Moon, M.D., Robin Higashi, Ph.D., and Proshad Efuné, M.D., were awarded Early-Stage Research Grants at The Cary Council's annual fundraising event, An Evening with DocStars.

nity to recover at home.

"The first 24 hours after a tonsillectomy are crucial to a child's recovery, and The Cary Council Early-Stage Research Grant will allow me to predict post-surgery complications and challenges more accurately," said Dr. Efuné.

## Robin Higashi, Ph.D., Assistant Professor in the Peter O'Donnell Jr. School of Public Health

Dr. Higashi earned an undergraduate degree in psychology at Stanford University, a master's degree in anthropology at University of California, Berkeley, and a doctorate in



medical anthropology at the University of California, San Francisco.

Dr. Higashi is working to improve delivery of telehealth care to cancer patients among underserved populations in the southern Dallas area served by UT Southwestern at RedBird. Her work will uncover the unique challenges of those

patients that can hinder their access to care and develop strategies to address those challenges.

"Expanding digital health literacy and telehealth services in underserved communities is an important part of enhancing access to cancer care throughout North Texas," said Dr. Higashi. "Telehealth is a valuable service and, when coupled with treatment and medication for cancer, can be lifesaving."

## Dominic Moon, M.D., Assistant Professor of Radiation Oncology

Dr. Moon earned his medical degree at University of Michigan Medical School, where he spent a year conducting translational research at the National Institutes of Health through the prestigious Medical Research Scholars Program. He then completed his residency in radiation oncology at the University of North Carolina Hospitals.

His research aims to tailor head and neck cancer treatments to each specific patient. He is developing a blood test to help physicians predict how an individual's cancer will respond to different treatment options.

"Specialized cancer regimens have saved thousands of lives that would have been lost to cancer, and the funding for this research will further our understanding of specific pathways activated in different head and neck cancers," said Dr. Moon. "With this grant, my team and collaborators are one step closer to developing a blood test that can ultimately personalize cancer therapy to improve its effectiveness."

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# Lewis named UT System's Police Chief of the Year

By Camille Bowers

In recognition of outstanding work and leadership, UT Southwestern Police Chief Marcus Lewis has been named the UT System Police Chief of the Year. The awardee is personally selected by Michael J. Heidingsfield, UT System Director of Police.

"To be recognized at this stage in my career means a lot," Chief Lewis said of the honor. "It's complimentary to see my efforts recognized."

The award, created in 2011, is given annually to one of 13 UT System police chiefs for leadership and accomplishments at the chief's respective institution.

Since joining UTSW 25 years ago as a Police Officer, Chief Lewis' ascent to his current role leading the Police Department has been a natural progression. He was appointed Interim Chief in 2016 and named permanent Chief the following year. Throughout his career here, Chief Lewis has approached the important job of safe-



Chief Marcus Lewis

guarding his UTSW work family with fierce loyalty and commitment.

"I think about protecting UTSW the way I would want to protect my family and making it the type of environment that I would want my family to feel safe in," he said. "That's really what drives me every day – a kind of guardianship."

UTSW Police Capt. Billy Talkington agreed: "He's fully vested in the



Chief Lewis (center) with other members of the UT Southwestern Police team (from left): Manager Nechelle Harris, Police Officer Jorge Lizardo, Lt. James Lee Jr., and Public Safety Officer Ilinko Skrget.

community and a firm believer in the mission of UTSW."

Colleagues mentioned "family" repeatedly in their assessment of Chief Lewis. They also said Chief Lewis is an effective Chief because he possesses the qualities of a good leader: deci-

siveness, authenticity, and dedication to empowering others. When he talks to peers and officers, many said, Chief Lewis goes the extra mile to build deep, trusting relationships.

Nechelle Harris, Manager of University Police, said Chief Lewis is

well respected within UTSW as well as throughout the UT System.

"Chief Lewis holds everyone to high standards and leads by example. He's gone up through the ranks, and that's inspiring to see for a lot of our officers," Ms. Harris said. "He doesn't measure the effectiveness and productivity of the Department based on the number of arrests made or citations written – he measures the Department's effectiveness based on the campus community's overall satisfaction with the Police Department."

As proof of that effectiveness, the UTSW community has rated its overall satisfaction with the Police Department at or above 95% for several years now.

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## Collins Continued from page 1

the liver, intestines, or even the brain. After years of infection, the parasite can also damage the liver, intestines, lungs, and bladder as well as cause anemia, malnutrition, and learning difficulties in children.

Dr. Collins was the first to set up the culture conditions to monitor the reproductive cycle of the worms without having to pass it through a host. In doing so, he has transformed society's understanding of schistosomes by discovering and isolating the pheromone or signal used when male worms contact a female. Experts believe understanding and isolating the exchange provides a great new direction for the field and may cause relief to the millions it affects each year in developing nations.

"The only current treatment for schistosomes targets the worms themselves, not the eggs that can survive 30 years in the body, creating a debilitating cycle in patients even with treatment," said nominator David J. Mangelsdorf, Ph.D., Chair of Pharmacology. "Dr. Collins is a bold visionary who has not only identi-

fied new therapeutic avenues against these parasites by focusing instead on the eggs and reproduction, but he has uncovered new paradigms in cell signaling and developmental biology as well. He and his team have laid the groundwork toward something that will eventually break the cycle of egg laying and provide a better outlook for the disease."

The O'Donnell Awards annually recognize rising star Texas researchers who are addressing the essential roles that science and technology play in society and whose work meets the highest standards of exemplary professional performance, creativity, and resourcefulness. The awards are made possible by the O'Donnell Awards Endowment Fund, established in 2005 through the generous support of several individuals and organizations.

The 2023 recipients will be honored at the 2023 Edith and Peter O'Donnell Awards Ceremony on May 24 and will give presentations on their research preceding the award ceremony at the TAMEST 2023 Annual Conference, Forward Texas – Accelerating



James Collins III, Ph.D., was the first to be able to set up the culture conditions to monitor the reproductive cycle of the worms without having to pass it through a host.

Change, in Houston.

"The Edith and Peter O'Donnell Awards aim to identify rising stars in Texas research to support their

careers moving forward and there is no question that this year's recipients are incredible researchers who epitomize the Texas can-do spirit," said

Edith and Peter O'Donnell Awards Selection Committee Chair Ann Beal Salamone, Chairman of the Board at Rochal Industries. "Our elite group of past O'Donnell recipients have a spectacular track record of going on to national academy election and benefiting from the mentorship and awareness these awards bring to the groundbreaking research happening in our state. These recipients fit into the same mold and we can't wait to see where their discoveries lead and hope to welcome them as TAMEST members in the years to come."

Dr. Collins holds the Jane and Bud Smith Distinguished Chair in Medicine and is a Rita C. and William P. Clements, Jr. Scholar in Biomedical Research.

Dr. Mangelsdorf holds the Alfred G. Gilman Distinguished Chair in Pharmacology and the Raymond and Ellen Willie Distinguished Chair in Molecular Neuropharmacology in Honor of Harold B. Crasileck, Ph.D.