MU Medicine

University of Missouri School of Medicine

Summer 2021

THE SKY'S THE LIMIT

NEXTGEN PRECISION HEALTH USHERS IN BOLD NEW ERA

In the past few years, I've spent a lot of time thinking about how the School of Medicine can best expand our research efforts in ways that advance the goals of the University of Missouri System's NextGen Precision Health initiative and also best serve our state.

Like all medical school deans, I aspire for our school to grow NIH-funded research and climb the Blue Ridge Institute rankings. But I've also been thinking about what we can do that the schools at the top of those rankings can't. Unlike many academic health systems, we're located in a college town rather than a large city, and our patient base is predominantly rural. Nothing would please me more than to see our scientists and clinicians work together to create more innovations that benefit our rural population.

I want to emphasize that our significant new investment in research is enhanced by the NextGen Precision Health building going up next door, but we can't take our eye off our other missions of clinical care and education. Clinical growth remains incredibly important. It's the way we're going to sustain our research growth. Similarly, we're not going to have good training and educational programs if we don't have good clinical experiences for our students. It's all interrelated. We are well-positioned to balance those missions because the School of Medicine and MU Health Care now collaborate on a shared strategic plan, with an executive vice chancellor for health affairs, Richard Barohn, MD, who oversees both operations.

We have a shared vision of what an academic health system should be. It's a system where expert care is provided to patients, and there's teaching and training done within that expert care. It's also where innovation, scholarship and research drives continuing benefits to the patients who are cared for in that system. When that happens, we've created a flywheel of innovation and success. The NextGen Precision Health initiative is a key piece of that. It provides us the opportunity to do more of the research and innovation that enables us to fulfill our mission as an academic health system.

Steven Zweig, MD '79
Hugh E. and Sarah D. Stephenson Dean
University of Missouri School of Medicine

We are all extremely excited for the grand opening of the NextGen Precision Health building in October. This facility is a tremendous commitment by the University of Missouri System to make translational health research a priority to benefit the residents of Missouri and beyond. We have identified 15 current scientists, many of whom are School of Medicine faculty, who will move into the facility over the next few months. In addition, new faculty will be joining us from across the country, such as the new radiology and imaging faculty that Department of Radiology Chair Talissa Altes, MD, has been recruiting. Many of them will bring in federally funded research.

However, we should remember this — NextGen is more than a building. The building is certainly the most visible evidence of our pursuit of research excellence. Our goal has always been to have facilities throughout MU and our system campuses in Kansas City, Rolla and St. Louis to be part of NextGen research investigations in many ways. Our leadership is setting up important mechanisms by which all of our scientists who are engaged in precision health research across the spectrum can form successful teams. As we successfully recruit new scientists to join this initiative, I will be letting you know periodically about them and what they bring to NextGen. I am certain you will be impressed with our personnel and the team science they produce.

Richard J. Barohn, MD
Executive Vice Chancellor for Health Affairs
University of Missouri

MU Medicine

MISSION STATEMENT
To save and improve lives through exemplary education, research and patient-centered care.

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ON THE COVER:
The NextGen Precision Health building is slated to open in October. The 265,000-square-foot facility will be home base for a University of Missouri System initiative to deliver more translational medical research that improves the lives of people in the state and beyond.

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Radiologists Talissa Altes, MD, and Joseph Cousins, MD, are excited about the research and clinical possibilities offered by new state-of-the-art imaging equipment.

A BIG IDEA WHOSE TIME HAS COME

For MU School of Medicine, NextGen Precision Health opens door to more translational research.

Soon after Talissa Altes, MD, took over as chair of the Department of Radiology in 2016, she started to hear about a big idea that would eventually become known as NextGen Precision Health.

She was skeptical.

"I didn't expect it to ever happen," Altes said. "I've been in academics long enough to be somewhat jaded about large initiatives like this."

She's not jaded anymore.

The NextGen Precision Health building, a 265,000-square-foot research facility, is set to open in October just east of University Hospital. The building is home base for a University of Missouri System initiative championed by President Mun Choi. It aims to harness the strengths of the university's four campuses and its corporate partners to create health care innovations that have a real impact on the lives of people in Missouri and beyond.

One of the features of the NextGen building is an imaging core that includes a MAGNETOM Terra 7-Tesla MRI scanner. The 7T MRI — acquired through the university's partnership with Siemens Healthineers — allows clinicians and researchers to see inside bodies with more than double the detail of standard 3T MRI scanners. Altes has used that super magnet to attract talented scientists, especially physicists who specialize in neuroimaging. After hiring one researcher in her department the previous four years, she added four in the span of six months.

"I'm the tail wagging the dog, because imaging is just a small piece of this whole initiative, but I've been able to hire a number of highly accomplished researchers who, in truth, we would not have been able to attract without this kind of equipment and the environment of the NextGen," Altes said.

She grew animated when she discussed how her new hires will be force multipliers, bringing novel imaging techniques to share with MU students, trainees, scientists and clinicians. She explained how the new hires would advance their own NIH-funded research into cancer and dementia with the help of the 7T MRI, which reveals the workings of the brain with new clarity.

"Am I too enthusiastic?" Altes said with a laugh. "Sorry, but I love this stuff."

INVESTING IN THE FUTURE

Altes isn't alone in her enthusiasm. As the NextGen building has taken shape in the last two years, so have the School of Medicine's plans to capitalize on the moment. Dean Steven Zweig, MD, called the current investment in research "the most ambitious growth plan in school history."

To invest wisely, School of Medicine leaders created a research strategic plan that meshed with the goals of the NextGen initiative. The initial focus centered on cancer, cardiometabolic and neurologic diseases. The NextGen model has recently been expanded to two new areas — infectious diseases and reproduction/child health.

"We used the building, and the ideas behind the building, as ways of constellating enthusiasm and opportunity," Zweig said. "Then we set up a strategic hiring plan to not only hire top-notch researchers for that space but also hire people who would work with them."

Zweig called the hiring plan RISE-UP — an acronym for Research Investment Strategic Engagement University Partnerships. The school is committed to hiring 30-40 new research-oriented faculty. The hires are being made in clusters to create teams of scientists who complement each other, such as Altes' imaging experts.

Beyond the RISE-UP additions, several new leaders have joined the health system and will play key administrative roles in research.

First and foremost, Choi hired Richard Barohn, MD, as MU's vice chancellor for health affairs and quickly tabbed him as the executive scientific director of NextGen. Before coming to MU in 2020, Barohn spent two decades at the University of Kansas and was a key figure in the school's explosive growth in medical research during that period. He led the team that earned KU a coveted NIH Clinical and Translational Science Award, a renewable five-year, $25 million grant.

Barohn's former KU colleague Russ Waitman, PhD, joined the School of Medicine as associate dean for informatics. Gillian Bartlett-Esquilant, PhD, came to Columbia from McGill University in Canada and took over as associate dean for population health and outcomes research. And Parvesh Kumar,

The 265,000-square-foot NextGen Precision Health building is set to open in October.

MD, came from UNLV to become the new associate dean for clinical and translational research.

"Drs. Waitman, Bartlett-Esquilant and Kumar have joined Dr. Bill Fay, our senior associate dean for research, so that we now have extensive leadership in the School of Medicine research office to cover the full spectrum of research," Barohn said. "Their leadership covers everything from wet laboratory investigations to clinical trials to study outcomes and discovery work. All of our research deans will be involved in NextGen, both in the recruitment process for new talent and in creating the infrastructure in the School of Medicine to make sure all of our researchers can be successful."

FOUND IN TRANSLATION

Additional support to help faculty complete translational research is important because the journey from lab discovery to clinical use can be a slog. There is often a wide gap between when the initial funding for basic science research ends and the potential funding for commercialization begins.

It has its own nickname: The Valley of Death.

"You write a paper. You write another paper. You present it at meetings. Maybe another group tries it," Altes said. "It can take 20 years to get to patients, if it gets there at all."

To accelerate the process, the NextGen building is designed to handle every step of the translational continuum, from laboratories to the Clinical Translational Science Unit to the Good Practice Manufacturing spaces for pilot-scale production of drugs and devices. Equally important, the building will foster the collaboration that's at the heart of the NextGen initiative.

"My clinical radiologists will be sitting in the NextGen imaging facility, reading patient exams and talking to our researchers," Altes said. "You'll have the ability to have what some people call 'collision science,' where people from diverse scientific backgrounds get to know each other and solve difficult problems by combining their different viewpoints.

"And because we're allied with Siemens, we'll have a Siemens scientist on-site. If we develop a better way to image using the 7T MRI, their scientist can take it back to the company for potential inclusion on their next generation of products. In this way, the cycle from innovation to widespread clinical use potentially can be reduced from the typical 20 years to something much shorter."

Once skeptical that the talk of NextGen Precision Health would become action, Altes now can't contain her excitement about the possibilities ahead.

"All the key stakeholders developed a vision for what we at the University of Missouri could do well and what strengths we could build upon to have a big impact in precision health," she said. "We have come up with a vision and executed that vision incredibly well for NextGen. Not many places have something like this."

MU RESEARCH INFRASTRUCTURE

- Four NIH-funded animal resource centers offer access to valuable animal models.
- The nation's most powerful university nuclear research reactor.
- Strategic partnerships with Cerner for IT, Siemens Healthineers for imaging and Thermo Fisher Scientific for electron microscopy.
- Close relationship with campuses in Kansas City, St. Louis and Rolla and a connection to every county of the state through MU Extension.

▲ The NextGen building is designed to encourage collaboration among scientists.

NEXTGEN BUILDING FEATURES

- Collaboration space designed with an open laboratory concept.
- Conference rooms with advanced audio/visual capabilities.
- Multidisciplinary laboratory space.
- Clinical Translational Science Unit for physiological and cognitive testing of human study participants.
- MAGNETOM Terra 7-Tesla (7T) MRI scanner.
- PET/CT, Cryo-EM and high-resolution electron microscopy.
- Good Manufacturing Practice (GMP) spaces for pilot-scale manufacturing.
- Clean rooms for tissue engineering and device fabrication.

TO LEARN MORE about NextGen Precision Health, visit **precisionhealth.missouri.edu**.

Diana Gil Pagés, PhD, is developing a treatment for cancer that alters T cells to make them more likely to attack tumor cells.

A LIFE OF SCIENCE SUITS HER TO A 'T'

Gil Pagés unlocks mysteries of the immune system with cancer research.

Diana Gil Pagés, PhD, has made T cells her life's work. Her study of the tiny soldiers of the immune system shaped the course of her professional life, leading her from Spain to Missouri, where she is developing a treatment that would alert T cells to attack the cancers they've been tricked into ignoring.

But that's only half of the story. Her marriage, friendships and even the name of the just-for-fun rock band that occasionally gets together to jam after a long day in the lab — all of it is bonded by T cells.

Although Gil Pagés couldn't have predicted all those details, it was clear from an early age that science would shape her life. While growing up in Madrid, her favorite TV shows were documentaries featuring Spanish naturalist Félix Rodríguez de la Fuente, French oceanographer Jacques Cousteau and American astronomer Carl Sagan. Her father, whose formal schooling ended at age 13, read biochemistry textbooks for pleasure, and he passed along those books and his appetite for knowledge to his daughter.

"When I was a teenager, I was already thinking about cancer and about making my own little contribution," Gil Pagés said.

As it turned out, her contribution is not so little. In 2019, she was awarded a $3.7 million grant as part of the National Cancer Institute's Moonshot Initiative to explore an immunotherapy that could change lives.

"By the end of my PhD, I was already working on the things that have now allowed me to develop this new therapy," said Gil Pagés, who holds a dual appointment as an associate professor of surgery at the MU School of Medicine and associate professor of bioengineering at the MU College of Agriculture, Food and Natural Resources. "I just didn't know then that I was going to make a therapy out of it."

LOVE AT FIRST SCIENCE

Adam Schrum was pursuing a PhD in immunology at the University of Pennsylvania in 2002 when he read a paper in the scientific journal Cell by a Spanish doctoral student. He was enthralled by her discovery about the actions of a particular T cell receptor — CD3 — and what it might mean for the future of immunotherapy.

"I personally printed out copies of that paper for every person in the lab and placed it on their desks," Schrum said. "I never did that in any other case. I was blown away by this paper."

About six months later, Schrum was interviewing for a position as a postdoctoral fellow in the laboratory of international immunology expert Ed Palmer at the University of Basel in Switzerland. Palmer introduced him to a postdoc who had just arrived from Madrid. Her name was Diana Gil Pagés.

Schrum began gushing about her breakthrough paper. When that had little effect, he brought up a lesser-known paper she had published in the Journal of Biological Chemistry. A surprised Gil Pagés told him that nobody knew about that paper.

"Well," he responded, "I do."

TO LEARN MORE about new discoveries by University of Missouri scientists, visit **medicine.missouri.edu/research**.

Gil Pagés and Schrum soon became a couple. So did another Spanish woman/American man pair of postdocs — Emma Teixeiro Pernas and Mark Daniels. They formed an inseparable four-person team, doing experiments by day, exploring Basel at night and taking train trips to Germany, France and Italy on the weekends.

They even formed a band, CARMA and the T's, named for the CARMA protein Teixeiro Pernas was studying and the T cells they were all trying to understand. Teixeiro Pernas sang, Daniels played drums and Schrum handled the guitar. Gil Pagés had no musical training, but she did her best on the bass. The group, which played rock 'n' roll cover songs, practiced in an empty lab and played live at the institute's holiday party.

They had a blast for the four years of the fellowship, and then it was time for them to start their own labs. Marriage wasn't far off for both couples. Teixeiro Pernas and Daniels went to the University of Missouri. Gil Pagés and Schrum went to the Mayo Clinic in Rochester, Minnesota.

"In Rochester, I had my first ideas about manipulating the T cells to create a therapy," Gil Pagés said. "It was there that I got the first evidence that it may be a possibility."

A FAB IDEA

Our immune system constantly identifies and destroys foreign invaders. Sometimes cancer cells beat the system, fooling the T cells into leaving them alone, which allows the disease to grow and spread. The field of tumor immunology is devoted to helping the T cells recognize the threat and respond.

The most common form of immunotherapy is checkpoint inhibition, in which drugs block a specific protein whose job is to put the brakes on the immune response. With no brakes, the T cells are free to attack the cancer cells.

Gil Pagés developed a different approach to immunotherapy by altering the T cells themselves to make them more alert to danger. She injects antigen-binding fragments — also known as Fab fragments — which attach to the T cells' receptors. The Fab fragments cause the receptors to change shape and signal a strong immune response to previously undetected cancer cells.

In experiments on mice with metastatic melanoma, the treatment causes the tumors to grow far slower than they do in untreated mice. When the Fab fragment therapy is used in conjunction with other treatments, the tumors grow even slower. Gil Pagés said that in principle the Fab fragment treatment also could apply to other cancer types. So far, she hasn't found any side effects.

"You would expect it to cause autoimmune attacks, but we haven't seen them," Gil Pagés said. "We don't fully understand that. It's possible that our tweaking of the T cells is very subtle. We may just help a little bit but not enough to cause autoimmune diseases."

THE BAND GETS BACK TOGETHER

During their 10 years at the Mayo Clinic, Gil Pagés and Schrum stayed in touch with their friends in Missouri. In 2018, they were recruited to MU through a collaboration that included the Department of Surgery; the Department of Molecular Microbiology and Immunology; and the Department of Biomedical, Biological and Chemical Engineering.

"Mizzou offered us a great opportunity, and there was already

▲ **Top:** While postdocs in Switzerland, Mark Daniels, Adam Shrum, Emma Teixeiro Pernas and Diana Gil Pagés became friends and formed a band called CARMA and the Ts. **Above:** The band got back together at MU, where all four scientists will soon move their labs into the NextGen Precision Health building.

the attraction of Mark and Emma," Gil Pagés said. "We haven't regretted it — not once. It's been really good for us here with the students, the postdocs and our friends."

Gil Pagés and Schrum share a lab, and their offices are next door to each other. They get the chance to collaborate professionally — and musically — with Teixeiro Pernas and Daniels again.

"We reunited the band," Texeiro Pernas said. "We get together from time to time, even though we are busy with young families."

For Gil Pagés, the move to Missouri has given her the chance to take the next step in a career spent honing the brilliant discovery she made in graduate school. She is eager to test the Fab fragment treatment on human T cells in a clinical trial.

"I've added some ideas created by the new environment and the collaborators that are around here to explore in more realistic ways how this may work for humans," Gil Pagés said. "For mice, we have a proof of concept that it may work. Now, the question is: Can we translate it into humans?"

DANCING WITH BIG DATA

With informatics expertise, Waitman will help the University of Missouri strut its stuff.

Two crocheted prairie chickens sit on the desk of Russ Waitman, PhD, at the MU School of Medicine. To explain the work he does, Waitman picks up one of the chickens and shakes its tailfeather. He describes the bird's mating ritual, which amounts to an all-male dance contest — called a lek — that is judged by females.

"If you're a male chicken dancing by yourself, the females won't come," Waitman said. "The male chickens have to dance with the group or they won't get any female chickens. It's a similar thing with research now. If you don't figure out how to dance with other people, nobody is going to want to do business with you."

Waitman is the University of Missouri's new dance instructor. He specializes in helping researchers find, understand and share data with a wide network of collaborative partners.

Waitman has several official titles — including associate dean for informatics at the MU School of Medicine, director of health informatics for NextGen Precision Health and scientific director of the Tiger Institute for Health Innovation — but the bottom line is he was hired to make the four-campus UM System a bigger player in clinical medical research. Increased clinical research will mean more opportunities for patients to participate in research studies that could improve or save their lives. It will also mean more federal grant funding for the university and its researchers.

MU Executive Vice Chancellor for Health Affairs Richard Barohn, MD, calls Waitman a "transformational hire." They worked together during a fertile decade for medical research at the University of Kansas.

"I've seen what he can do at a national level by taking the informatics pieces from the electronic health record and making them available to researchers and clinicians so they can take that data and ask some serious questions about how to fix diseases," Barohn said "He's a national guru in this field."

Waitman, a joint hire of the MU and UMKC medical schools, believes in the University of Missouri's potential, in part because of the increased commitment to research that's evidenced by the NextGen Precision Health initiative. He also was intrigued by the university's unique partnership with Cerner, the Kansas City-based health information technology company. He now has a direct working relationship — rather than a client-vendor relationship — with the company that provides the electronic health record for one-quarter of the nation's hospitals.

"I see a big upside here in clinical research," Waitman said. "That, in turn, will feed back to the basic science, because we'll have more of a culture of research in our health care system that will make it more fertile for translational research from bench to bedside. When we open up how we do data and how we organize data, we've got big potential working with engineering, we've got a lot of potential working with Cerner and other medical innovators in industry. If we can show we're a good partner, we have a lot of potential."

"I've seen what he can do at a national level by taking the informatics pieces from the electronic health record and making them available to researchers and clinicians so they can take that data and ask some serious questions about how to fix diseases. He's a national guru in this field."

— **Richard Barohn, MD**, MU executive vice chancellor for health affairs

The subject of better research through partnerships is a recurring theme for Waitman.

He's been the principal investigator of Patient-Centered Outcomes Research Institute awards worth more than $20 million. These established the PCORnet Greater Plains Collaborative (GPC), a regional data-sharing network that has grown to 12 medical centers in nine states and is now based at MU. Researchers at any GPC member site have access to secure health information from all of their partners, with a pool of more than 21 million patients.

"The ability to harness that data to improve health care delivery requires three key steps — first, developing data warehouses with common architectures that allows for linking data across multiple health systems; second, making the warehouse data accessible and usable for clinicians and investigators; and third, building the analytic capabilities to distill information from the data," said Gary Rosenthal, MD, who represented the University of Iowa in the GPC and worked on the project with Waitman. "Russ saw the importance of pursuing this approach and was a master of putting the three pieces together. This area of research is increasingly important. Every major research institute and health system in the country is going to have to build large footprints in data science or they're going to be left behind."

LEARN MORE about biomedical informatics by visiting **medicine.missouri.edu/informatics**.

GETTING TO KNOW RUSS WAITMAN

- Born in Japan and grew up all over the U.S. in a military family.
- Bought his first computer as a teenager with money he saved from a summer job.
- Graduated from Washington University in St. Louis with a degree in electrical engineering and earned his masters and PhD in biomedical engineering at Vanderbilt.
- Served as an officer in the Air Force Medical Services Corps.
- Enjoys playing guitar in a jazz combo.
- Spends most of his free time with his wife, Luisa, who is a pediatric cardiologist, and two young children: "I'm Giganto the dinosaur with my 3-year-old. We have play fights on the bed. That's his thing."

The GPC logo includes a prairie chicken, a nod to Waitman's analogy about group research. When Rosenthal left Iowa to become the chair of internal medicine at Wake Forest, Waitman gave him a parting gift from the Greater Plains Collaborative — a painting of a prairie chicken signed by representatives of the other GPC schools.

"It's sitting in my office, and I get a lot of questions to tell the story about that chicken," Rosenthal said.

Waitman is now teaching a new audience in Missouri how to do the big data dance.

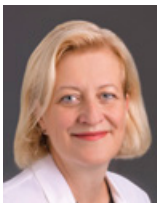
"How do we become a good partner?" Waitman said. "We grow our clinical research program, and in the course of doing that, it helps our people know that it's not impossible to dance, and then on top of that, it's not impossible to learn a new dance and lead it."

FACULTY SPOTLIGHT

NEW APPOINTMENTS

LEE-ANN H. ALLEN, PHD, was named chair of the Department of Molecular Microbiology and Immunology and the George Trimble Endowed Chair for Excellence in Medicine. Allen previously was a professor in the Departments of Microbiology and Immunology and Internal Medicine/Infectious Diseases at the University of Iowa. Additional leadership positions include being president of the Society for Leukocyte Biology and a member of the FASEB board of directors.

STEPHEN BARNES, MD, was appointed chair of the Hugh E. Stephenson Jr., MD, Department of Surgery. Barnes, the chief of the Division of Acute Care Surgery, joined the health system in 2008. He serves as the planning chief for MU Health Care's COVID-19 incident command team.



GILLIAN BARTLETT-ESQUILANT, PHD, was hired as associate dean for population health and outcomes research, co-director of the Umbrella PhD Program and professor in the Department of Family and Community Medicine. Bartlett-Esquilant was the principal investigator or co-investigator on 54 mostly federally funded grants in Canada before coming to MU.

JOSEPH BURRIS, MD, was named the interim chair of the Department of Physical Medicine and Rehabilitation. Burris is also the interim medical director of Rusk Rehabilitation Hospital. He has been director of PM&R's residency program since 2007.

JONATHAN A DYER, MD '98, was appointed chair of the Department of Dermatology. Dyer is a professor of dermatology and the director of pediatric dermatology.

RAYMOND FOSTER, MD '00, was named interim chair of the Department of Obstetrics, Gynecology and Women's Health. Foster, an associate professor and director of the Division of Urogynecology, became a faculty member in 2007 and established a program to help women with incontinence, prolapse and other pelvic floor symptoms.

DAVID HAUSTEIN, MD '05, was named associate dean of the Springfield Clinical Campus. Haustein succeeded interim leader C. Mark Costley, MD. As associate dean, Haustein oversees the clinical curriculum and works with the clerkship directors on the Columbia campus, the clinical curriculum steering committee and the associate clerkship directors at CoxHealth and Mercy to continue the concept of one medical school, two campuses.

PARVESH KUMAR, MD, was named associate dean for clinical and translational research. Kumar plays a central role in increasing participation in clinical research and cancer trials while fostering new campus collaborations and industry partnerships. He also serves as the associate director for clinical research at Ellis Fischel Cancer Center. Kumar previously served as vice dean of research and chair of the Department of Radiation Oncology at the University of Nevada, Las Vegas.

MICHAEL LEFEVRE, MD '79, was appointed as the Jack M. and Winifred S. Colwill Endowed Chair of the Department of Family and Community Medicine. LeFevre has practiced family medicine at MU Health Care since 1984. LeFevre has served as chair of the U.S. Preventative Services Task Force and was elected to the prestigious Institute of Medicine of the National Academies in 2011.

KERRY MCDONALD, PHD, was appointed the Bolm Distinguished Professor and Chair of the Department of Medical Pharmacology and Physiology. He has served the department as vice chair for research since 2015 and interim chair since 2019.

MARK MCINTOSH, PHD, was appointed interim research director for Ellis Fischel Cancer Center. McIntosh recently retired as MU's vice chancellor for research and economic development, and he also served as chair of the Department of Molecular Microbiology and Immunology from 2002-17.

DOUGLAS C MILLER, MD, PHD, was named chair of the Department of Pathology and Anatomical Sciences after serving as interim chair since 2018. Miller is a clinical professor of pathology and has been the director of the department's residency program since 2009. He practices as an eye pathologist and neuropathologist at University Hospital and Women's and Children's Hospital and also serves as an associate medical examiner for Boone and Callaway counties.

RUSS WAITMAN, PHD, was named associate dean for informatics, vice chair for informatics, professor in the Department of Health Management and Informatics at MU and a professor in the Department of Biomedical and Health Informatics at UMKC. Additionally, Waitman is the director of medical informatics for NextGen Precision Health. He was a joint hire of MU and UMKC.

MARK WAKEFIELD, MD '94, was named interim director of Ellis Fischel Cancer Center. Wakefield is an associate professor, chief of the Division of Urology and associate chief medical officer of MU Health Care. He has been a faculty member since 2004.

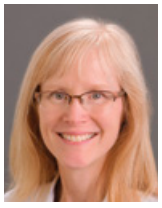
ACCOLADES

JAMES COOK, DVM, PHD, the William & Kathryn Allen Distinguished Chair in Orthopaedic Surgery, was selected as the 2021 recipient of the Orthopaedic Research Society's Marshall R. Urist Award. The award honors a leader in tissue regeneration research with a sustained commitment to innovation, collaboration and mentorship.

DIMA DANDACHI, MD, MPH, assistant professor of clinical medicine, was honored as an MU Presidential Engagement Fellow. As fellows, select faculty members represent the UM System and share their research discoveries and expert knowledge with Missouri citizens in every county and outside Missouri. Faculty members were selected based on their demonstrated excellence and their ability to communicate their research to the public.

DONGSHENG DUAN, PHD, a Margaret Proctor Mulligan Professor in Medical Research, was named a fellow in the American Association for the Advancement of Science (AAAS). Duan was honored for his work developing gene therapies for Duchenne muscular dystrophy.

DAVID GOZAL, MD, the Marie M. and Harry L. Smith Endowed Chair of Child Health, was awarded the American Thoracic Society Assembly on Pediatrics Lifetime Contributions to Pediatric Respiratory Medicine Award. It recognizes individuals who have contributed greatly to the specialty, dedicating a lifetime of work to the advancement of pediatric respiratory medicine.



KRISTIN HAHN-COVER, MD, the Helen Mae Spiese Professor and chair of the Department of Medicine, was named a fellow in the Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) program. ELAM is a part of the Institute for Women's Health and Leadership at Drexel University College of Medicine in Philadelphia. The institute promotes the advancement of women in medicine.

ELIZABETH MALM-BUATSI, MD, an associate professor in the Department of Surgery, won the highest honor in medical education bestowed by the University of Missouri — the Jane Hickman Teaching Award — during the School of Medicine's 2020 Education Day. Malm-Buatsi was named a 2020 Young Urologist of the Year by the American Urological Association for her efforts and commitment to advancing workforce diversity and mentorship.

JONATHAN MITCHEM, MD, an assistant professor in the Department of Surgery, won the Dorsett L. Spurgeon, MD, Distinguished Medical Research Award at MU's 2020 Health Sciences Research Day. The award is presented to a researcher for outstanding accomplishments early in his or her career. Mitchem's research is focused on understanding and enhancing the immune response to cancer.

ABIGAIL ROLBIECKI, PHD, an assistant professor in the Department of Family and Community Medicine, earned the international 2020 Junior Investigator Award from the North American Primary Care Research Group. Rolbiecki studies narrative, storytelling interventions and the ways in which these interventions help people find meaning from their adverse life situations, like serious illness and death.

MATTHEW J SMITH, MD, an associate professor in the Department of Orthopaedic Surgery, was elected as an active member of the American Shoulder and Elbow Surgeons (ASES) society. Smith is the outpatient medical director at the Missouri Orthopaedic Institute and the vice president of the Missouri Shoulder and Elbow Society.

JAMES STEVERMER, MD, MSPH, a professor and vice chair for clinical affairs for the Department of Family and Community Medicine, was appointed to the U.S. Preventive Services Task Force. The 16-member task force is an independent volunteer panel of national experts in prevention and evidence-based medicine that works to improve the health of people nationwide by making evidence-based recommendations about clinical preventive services such as screenings, counseling services and preventive medications.

STEVAN WHITT, MD '94, the senior associate dean for clinical affairs and associate professor in the Department of Medicine, received the Michael L. Slive Distinguished Service Award for his work on the Southeastern Conference's Return to Activity and Medical Guidance Task Force. Whitt helped the SEC set policies for athletic competitions during the COVID-19 pandemic.

Michela Fabricius, a third-year medical student, visits with retired doctor Thomas Cooper, MD '78, on his farm in Fulton.

COUNTRY DOCTOR, CITY STUDENT SHARE A COMMON CONNECTION

Thomas Cooper, MD '78, removed the toothpick from his lips, cupped a hand around his mouth and called out "Haw-HAW" to get the attention of the cattle grazing in the distance on his farm outside of Fulton, Missouri.

He wanted to give his special guest a closer look at the herd.

The guest, Michela Fabricius, is a third-year MU medical student from Los Angeles who was getting her first taste of Missouri farm life. As the livestock ambled in a more-or-less orderly fashion to the feeding pen and chowed down from troughs filled with corn, Fabricius hung on every word as Cooper pointed out the traits of the Angus and Hereford breeds, offered good-natured laments about cattle prices and vowed that this was definitely his last year of farming.

It is a vow, he admitted with a laugh, that he makes every year.

The retired doctor — wearing a ballcap, suspenders and soiled shoes that he's under strict orders to remove before setting foot on the carpet at home — did not seem to have much in common with Fabricius, who was stepping carefully around the pasture in her open-toe sandals.

But they have a connection.

Cooper and his wife, Sharlyn, decided decades ago to donate to Lincoln University, where they met as undergraduates in the 1960s, and to the University of Missouri School of Medicine, where he trained to become a family medicine and emergency medicine doctor. They started giving back to the next generation of students before they had even paid off Cooper's own student loans. Fabricius is the current recipient of the Thomas J. and Sharlyn Cooper Minority Medical Student Scholarship.

"My wife and I had come from humble means, and we had a lot of help along the way," Cooper said. "The idea was that someone had helped us, and we just wanted to help someone. We didn't have much to give, but we would give it religiously."

Fabricius shares the Coopers' generous spirit. As a child, she volunteered in the soup kitchen her mother operated and took to heart one of her mom's favorite sayings: "If you're not living life for others, you're not living life right." By second grade, Fabricius knew she wanted to help others as a doctor.

She applied to the MU School of Medicine partly because her fiancé — now husband — had relatives in Columbia.

"I had never been to Missouri before my interview and just put it on the list initially, but when I interviewed, I fell in love with 'Midwest nice,' " Fabricius said. "It's really a thing. Anita Berry in the admissions office had the brightest smile and was so welcoming and kind, and everyone I met really wanted to get to know me as a person rather than just checking the list of applicant requirements. That was one of the biggest drivers of me coming here. I loved the people at the school."

She got the same warm reception from Cooper, who kept her laughing and learning as he gave her a crash course on the flora and fauna of his 100-acre property from the driver's seat of his utility vehicle.

A vision problem caused Cooper to retire as a physician in 2002, but he stayed involved in medicine and shared his knowledge by teaching Introduction to Patient Care at the MU School of Medicine until 2017, when he decided it wasn't safe to keep driving to Columbia with his declining eyesight.

He has yet to retire from farming. Cooper grew up as the 12th of 12 children on a family farm in Missouri's Bootheel. When he and Sharlyn started raising their own four children, he realized he missed farm life, so he bought some land and enlisted his kids to help him raise cattle so they could make a little spending money. The kids are grown now and Cooper no longer has much help, but he can still sling heavy bags of feed corn, mend fences and manage his herd of 80 cattle.

"You don't have to be able to see to farm and lose money," he joked. "When you circle the sun 75 times, your health diminishes a little bit, but I still want to do things to help."

His scholarship has been a great help to Fabricius, who envisions a career that merges her interests in infectious diseases and health policy.

"Aside from friends and family and those immediate people in my life, it's like there's someone else who believes in me," Fabricius said of Cooper. "There's someone else who was able to see something in my application and see that I'm going to be a great physician and support me in that journey. It's nice to know that someone has your back."

To learn how you can give back and help MU medical students, visit **medicine.missouri.edu/giving**.

INAUGURAL GRADUATE OF SPRINGFIELD CLINICAL CAMPUS PLANS TO RETURN TO SOUTHWEST MISSOURI

Five years ago, the MU School of Medicine opened a second clinical campus in Springfield as part of an initiative to train more physicians for Missouri, where 90% of counties do not have enough doctors. By expanding to Springfield, MU could increase its class sizes from 96 to as many as 128.

But for the initiative to work, the students who spent their final two years of medical school at the Springfield Clinical Campus needed to receive exceptional training and have a great experience. Murphy Mastin, one of nine MU medical students who were the Springfield pioneers, recalled being nervous about the unknown.

"In the back of my mind, I worried if being in Springfield would affect my residency match, but that was not the case at all," said Mastin, who will be completing his dermatology residency at the Mayo Clinic in 2022. "I got hands-on experience being first-assist on surgery cases and working closely in the clinics with physicians. They let me grow and gave me valuable learning opportunities."

Mastin, his wife and daughter are already looking forward to him practicing medicine in Missouri after he completes his residency and then a one-year fellowship in dermatopathology at the University of Virginia. Mastin will be the first dermatologist in more than seven years at Citizen's Memorial Hospital in Bolivar.

"I'm really excited and have already started having talks about establishing my practice," Mastin said. "I always knew I'd return to the Springfield area. I love the community. Missouri is probably where I will practice the rest of my life."

All MU medical students spend their first two years in Columbia for preclerkship training and spend their final two years in either Columbia or Springfield. The Springfield Clinical Campus is a partnership with CoxHealth and Mercy hospitals, where the students receive clinical training.

"Each year, our Springfield campus medical students have the opportunity to learn one-on-one from private practitioners at CoxHealth and Mercy who volunteer their time and talents to train the next generation," said Springfield Clinical Campus associate dean David Haustein, MD. "The breadth and depth of clinical experiences available to students in Springfield is truly remarkable, and our students, like Dr. Mastin, often match into top residency programs across the country."

"I'm really excited and have already started having talks about establishing my practice. I always knew I'd return to the Springfield area. I love the community. Missouri is probably where I will practice the rest of my life."

— **Murphy Mastin**, MU School of Medicine graduate

Mastin was assisted financially by receiving the Springfield Medical Student Scholarship. Mastin aspires to become a professor at the School of Medicine and hopes to have students rotate through his practice so he can do for them what the doctors in Springfield did for him.

"I'm just super thankful for the opportunities I had at Springfield, and it played a huge role in where I ended up and where I will ultimately carry on my career," Mastin said. "The campus is doing important work, and my experience was definitely life-changing. I would encourage any medical student with interest in experiencing community practice to try this experience."

To support Springfield Clinical Campus students, visit **tinyurl.com/springfieldcampus**.

▲ Abdoulie Njai helped establish a Common Read program at the School of Medicine that introduces first-year students to a book that focuses on diversity, equity and inclusion.

LEARN MORE about MU's inclusivity efforts at **medicine.missouri.edu/diversity**.

LIVING THE DREAM

Njai shows that a motivated medical student can be a force for change.

When Abdoulie Njai was a teenager in Wichita, Kansas, he volunteered at a local hospital every Saturday. Njai enjoyed visiting patients, listening to their life stories and hearing their encouragement to keep pursuing his dream to become a doctor. But sometimes he was made to feel like he didn't belong, like when a nurse tossed a mop to him because she assumed he was a janitor and when security guards questioned why he was in the building.

"I remember one of those times it really bothered me," said Njai, who recently finished his third year as a student at the MU School of Medicine. "I went home and asked my dad, 'Why does this keep happening to me?' He sat me down and said: 'You have two options. You can let this make you want to quit, or you can use it as an opportunity to show them that someone like you can be a health care worker.' "

"I see him as a very driven, determined, dedicated student who wants to see change and doesn't just sit back and complain that change needs to happen. He makes it happen."

— **Laine Young Walker, MD**, associate dean of student programs

That experience stuck with Njai, whose parents emigrated from the tiny African nation of Gambia and worked food-service jobs so he might one day wear a white coat. He never took for granted the opportunities available to him in America, nor accepted that people who look like him should have to settle for a lesser version of the American dream.

"I see him as a very driven, determined, dedicated student who wants to see change and doesn't just sit back and complain that change needs to happen," said Laine Young Walker, MD, the associate dean of student programs. "He makes it happen."

In the spring of 2020, Njai met with the deans in the Office of Medical Education and suggested starting a Common Read program for incoming medical students featuring a book that focuses on diversity, equity and

"Learning about implicit bias, diversity, equity and inclusion is just as important as learning about pathophysiology, learning how the heart pumps or learning about pharmacology."

— **Abdoulie Njai**, MU School of Medicine student

inclusion. The deans agreed.

Njai and fellow student Patricia De Castro selected "Seeing Patients: Unconscious Bias in Health Care," by Augustus A. White. One of Njai's mentors, Gregory Della Rocca, MD, PhD, associate professor of orthopaedic surgery, had given him the book the year before. It explains how doctors' biases can affect their care for patients. Njai and De Castro created the facilitator's guide to be used in discussion groups, and in August 2020, the book was required reading for new MU medical students.

"Learning about implicit bias, diversity, equity and inclusion is just as important as learning about pathophysiology, learning how the heart pumps or learning about pharmacology," Njai said.

Njai's activism didn't stop there. When the first COVID-19 vaccines were approved, he took note of the questions, skepticism and misinformation he heard about the vaccines at his barbershop. On the advice of his barber, he and fellow student Michela Fabricius created a vaccine survey to learn the questions members of the Black community had about the vaccine. He delivered the surveys to the barbershop in December.

In February, Njai, Fabricius and another student, Deidre Dillon, visited local Black-owned businesses to discuss the vaccines and pass out fliers promoting an online community forum called "Let's Talk: COVID Vaccines and the Black Community." During the forum, the survey responses were discussed by an expert panel, which included MU School of Medicine faculty Laura Henderson Kelley, MD, and Christelle Ilboudo, MD. Njai served as one of the moderators.

Njai was encouraged by the response to the vaccine outreach. He wants to partner with MU doctors in the future to visit Black-owned businesses to offer blood pressure and blood sugar tests and to answer questions.

"I feel obligated as a Black male in medicine to do what I can to get into the community and show my face," he said. "We know there's a lot of hesitancy and mistrust about the health care system within communities of color. I think the only way to truly address that is to get out there, have frank conversations and be real, like, 'We're here to hear your concerns.' "

▲ Last winter, Abdoulie Njai visited his barbershop and other Black-owned businesses to learn more about community members' concerns about the COVID-19 vaccine.

Njai will further explore his interest in health policy this year. He was accepted into Harvard's Master of Public Health program, and he will complete that degree before returning to MU in 2022 for his final year of medical school. His ultimate goal is to be a surgeon and focus his research and outreach on population health and health policy.

Those who know him now have no doubt he is right where he belongs.

"Abdoulie embodies the American dream," Della Rocca said. "His parents were immigrants and have toiled for him to be as successful as possible, and he has taken full advantage of that. I can't think of a better way for him to thank his parents than for him to be doing exactly what he's doing."

PAWS PROGRAM BUILDS A PIPELINE TO MEDICAL SCHOOL

In her freshman year at the University of Missouri, Mikella Vermaire knew she wanted to become a doctor. What she didn't know was how to reach that goal.

Her undergraduate advisor in the Department of Biology suggested she apply to join a new program called Pathways to Success (PAWS).

"I didn't know anything that was involved with the application cycle or what would be required to get in," said Vermaire, who is entering her first year at the MU School of Medicine. "PAWS structured those three years in a way that made it not easy — because it's never easy to get into med school — but made it more digestible."

PAWS is a partnership between MU's MedOpp Advising Office and the School of Medicine and is led by Associate Dean for Diversity and Inclusion Laura Henderson Kelley, MD. PAWS accepts up to 10 freshman students per year. Its mission is to help underrepresented minority, first-generation or economically disadvantaged students become competitive medical school applicants.

Three of the five students in the first PAWS class were accepted into medical school, and two of them — Vermaire and Micaela Kemerling — are attending the MU School of Medicine.

"They enrolled us in courses that prepared us to take the MCAT, they got us involved in volunteering in the hospital and they had us doing mock interviews," said Vermaire, a native of Champaign, Illinois. "Every piece of the application, they helped us. I had fantastic mentors, like Dr. Henderson Kelley, who read through my entire application before I submitted it. Even when we were done with all the actual activities, they were still around to help."

▲ Mikella Vermaire was part of the first Pathways to Success class, and she is now a first-year student at the School of Medicine.

> "PAWS structured those three years in a way that made it not easy — because it's never easy to get into med school — but made it more digestible."
>
> — **Mikella Vermaire**, medical student

The early success of the program inspired Dean Steven Zweig, MD, to expand its scope in the spring of 2021. Initially, PAWS graduates who met the academic standards were guaranteed an interview with the MU School of Medicine. Now, those students are guaranteed acceptance. It's the same system, with the same standards, as the Bryant Scholars Pre-Admissions Program, which has helped the School of Medicine recruit students from rural areas for decades.

"Learning the lessons from the Rural Track, where we have a preadmissions program that starts in undergraduate college and continues through medical school, we realized this is a great opportunity to do the same thing with a different population of students," Zweig said. "To be able to partner with the University of Missouri on this makes a lot of sense. These are students who have already been here in Columbia, they have a greater likelihood of not only feeling supported here, because this is their environment, but also are more likely to go on to be physicians in our state and provide services for people who might not have had them otherwise."

Vermaire is a great example of a student who belonged in medical school and got there with the help of PAWS.

"Mikella is bright, enthusiastic and passionate about her pursuit of medicine but really needed resources and support to make her dream a reality," Henderson Kelley said. "PAWS was able to provide that for her, and she proved what we knew all along — she will be an incredible addition to the physician workforce."

LEARN MORE about the Pathways to Success program at **medicine.missouri.edu/paws**.

MU ADAPTS MEDICAL EDUCATION TO MEET COVID-19 CHALLENGES

KANE

What happens when a medical school that trains students through small-group learning and hands-on clinical experience is confronted with a pandemic? Kevin Kane, MD, the associate dean for curriculum and evaluation, explains how the MU School of Medicine adapted.

Q: In March 2020, what were the major changes made to educate medical students safely?

A: With our preclerkship curriculum, we transitioned from in-person to all online classes through the rest of the academic year. We used Zoom videoconferencing for small group and lecture content and assigned online videos for anatomy teaching. All of our exams were done online.

With our clerkship curriculum, we followed the American Association of Medical Colleges' guidelines and suspended all direct patient care activities at the end of March. Learning continued through the use of online cases, videos, Zoom lectures and independent study assignments. In May, direct patient care resumed with some limitations based on availability of personal protective equipment. Students also were not allowed to care for patients who had — or were suspected to have — COVID-19, and they were required to complete additional infection control modules. As MU Health Care shifted to doing much more patient care through telehealth, students were involved in telehealth visits and remain so today.

Q: How did you modify those policies for the 2020-21 school year?

A: We reconfigured our physical spaces to align with the campus' Show Me Renewal guidelines for in-person learning. That meant posting room capacity limits and changing seating to adhere to physical distancing guidelines. Plexiglass barriers were installed on lecture room tables, and students were required to wear masks and disinfect their workstations before and after use. Anatomy dissection labs were changed to accommodate fewer students per session and required students to wear PPE.

After vaccinations became available and COVID-19 cases declined in our community, students were allowed to provide routine care to patients with COVID-19, known or suspected, while following required infection control precautions and wearing appropriate PPE. Participation in certain aerosolizing procedures is still restricted. Per AAMC guidelines, M4 away rotations were suspended unless it was for a specialty that wasn't available at MU or for required military rotations.

Q: How was the COVID-19 pandemic incorporated into the curriculum?

A: We added pieces on mRNA vaccine technology and RNA virology as it relates to COVID-19. We expanded our infection control talk to focus more on COVID-19 and required discussion of appropriate hand-washing, mask and eye protection before performing a history and physical exam. Health disparities related to COVID-19 were discussed in lectures. Learning sessions of observational studies, Infectious Epidemiology, and Public Health and Medicine all had large sections dedicated to discussing COVID-19.

Q: What were your biggest takeaways from this experience?

A: Our faculty members and Med Ed team were amazing and collaborated together extremely well while adapting to changes quickly and creatively in order to continue providing the highest quality educational experience possible given the circumstances and challenges created by the pandemic. Our medical students' response to the pandemic and the challenges it created was nothing less than stellar. They demonstrated resilience, professionalism, adaptability and grace. Several stepped up to contribute in ways they could through activities such as gathering research data on COVID-19 and helping with COVID-19 testing and administering vaccines.

We were reminded that frequent and transparent communication between faculty and students is very important. We surveyed our students and faculty about their online learning experience this past academic year. A preliminary review shows that faculty and students seem to prefer certain in-person learning strategies versus online learning, particularly in the small-group setting. Technology works well but has its limitations in our patient-based learning curriculum.

Q: Will there be any changes from last year's protocols in the 2021-22 school year?

A: We're planning for the return of the medical students to in-person learning this year. We will be closely following the AAMC, CDC and our own institution's guidelines for medical student learning to reduce the risk of COVID-19 transmission and maximize the safety of our students, staff, faculty and community. This summer, we surveyed our students and faculty regarding their perceptions about their online learning and teaching experience last year. Based on those results, we will continue integrating technology in our classrooms where appropriate, such as in some Zoom-based lectures, pathology lab help sessions and anatomy dissection videos.

Hung Nguyen brought a photo of his father, Leo Nguyen, who died in December, with him to the School of Medicine on Match Day. Nguyen was thrilled to learn he would stay at MU for psychiatry residency.

A PICTURE-PERFECT MATCH DAY FOR NGUYEN

Hung Nguyen brought a framed photo of his father to the University of Missouri School of Medicine on March 19. It was Match Day, when fourth-year medical students across the nation open envelopes to learn where they've been selected to serve as resident doctors, and Nguyen couldn't stop thinking about his dad, Leo Nguyen, who died in December after a long illness.

"I wanted to go through this process with him, so I would think about him every time I got news about an interview or when I got news that I'm matching," Hguyen said. "Even today, I grabbed his picture and said, 'Let's pick up my envelope.' "

When Nguyen opened his envelope and saw that he would be staying at MU to serve his psychiatry residence, he was thrilled.

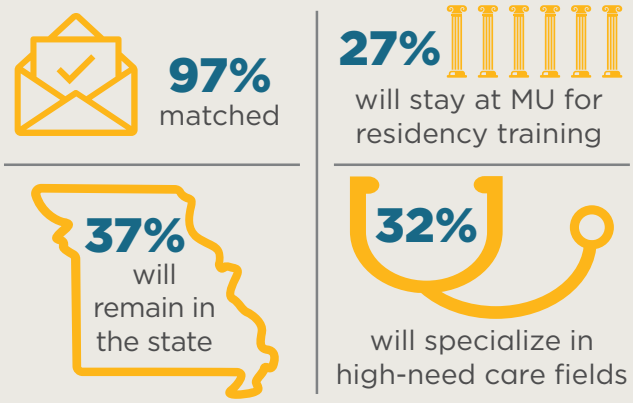
"I felt if I stayed here, I would have really strong mentors who would help me succeed," Nguyen said. "Also, I wanted to stay close to home, in case my mom needed me for anything."

In a normal year, the students would have gathered with family and friends at the School of Medicine for a mass opening of envelopes. Because of COVID-19, that wasn't possible this year, so students celebrated separately. Clutching the photo of his father, Nguyen processed a wide spectrum of emotions as he recalled his journey.

Leo Nguyen brought his family of four from Vietnam to St. Louis when Hung was 4. The Nguyens didn't have much money and didn't speak English.

"We all lived in one room," Nguyen said. "We made a little dresser out of plastic boxes."

Nguyen discovered at an early age that he had a knack for science, and that, coupled with his desire to help others, led him to pursue medicine. He was the first in his extended family to graduate from college. In medical school, Nguyen gravitated to psychiatry because he enjoyed getting to know patients personally as well as helping them medically.



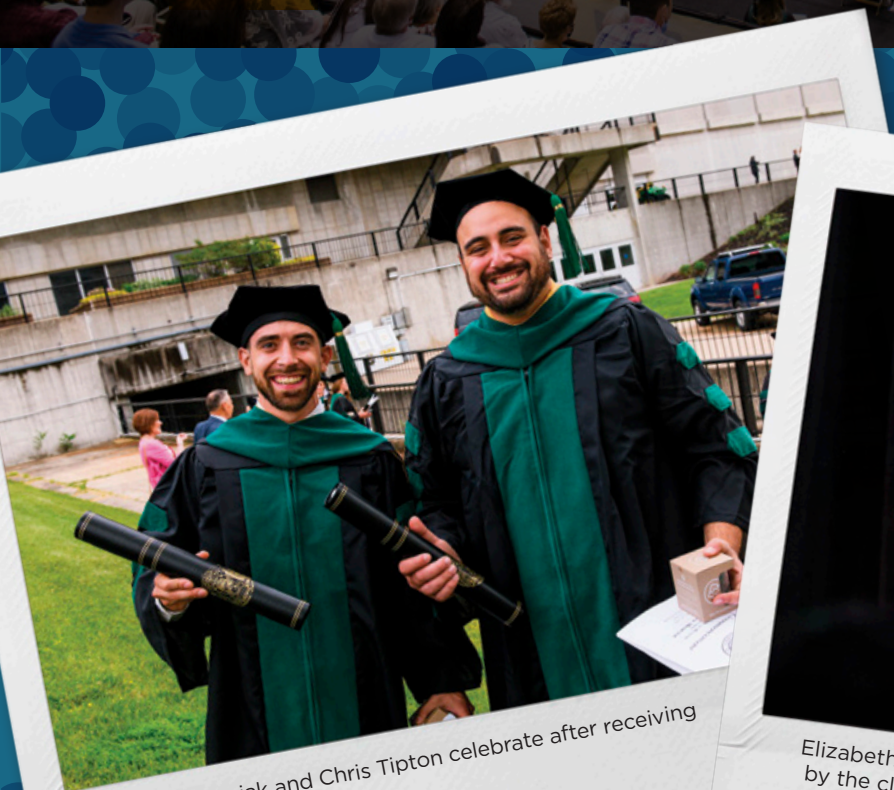
"Higher education wouldn't have been a thought in Vietnam because we couldn't afford it," Nguyen said. "Being able to go to college, being able to finish medical school, that was a big deal to my parents and my extended family. It was unimaginable for us. I'm grateful for this opportunity."

He said Department of Psychiatry faculty Amanda Kingston, MD, and Rasha El Kady, MD, were especially influential in his development. Now, Nguyen will get a chance to work alongside them and continue to learn as a resident doctor.

"One of the most rewarding moments in academia is working with intelligent, enthusiastic medical students like Hung," El Kady said. "I am looking forward to working with Hung in his residency training."

See more photos and video of Match Day 2021 at **medicine.missouri.edu/match-2021**

The 122 members of the MU School of Medicine's Class of 2021 graduated on May 16 at the Hearnes Center.



Ezekiel Kapusciak and Chris Tipton celebrate after receiving their diplomas.

Elizabeth Malm-Buatsi, MD, assistant professor of surgery, was chosen by the class as the commencement speaker. "Go get what fulfills you and drives you," Malm-Buatsi told the graduates. "Do not extinguish that silent trigger to make a positive difference in others' lives."

A group of 128 students took their first steps toward becoming physicians at the White Coat Ceremony on July 30, 2021. The class of 2025 is the most diverse in School of Medicine history, with 20% of the students identifying as underrepresented minorities.

Meet the CLASS OF 2025

128 Students CURRENTLY ENROLLED

Average Math/Science GPA: **3.75**
Average Total GPA: **3.81**
Average MCAT Score: **509**

3,156 TOTAL APPLICATIONS

418 Interviews scheduled

191 Applicants accepted

Students from socioeconomically disadvantaged backgrounds: **26%**

Students from rural areas: **20%**

Students from Missouri: **88%**

42% Students who self-identify as an ethnic minority

20% Students who self-identify as an underrepresented minority

AGE RANGE: 21 – 42

72 56

GEOGRAPHIC REPRESENTATION

MISSOURI - 113
OHIO - 1
TENNESSEE - 1
TEXAS - 3
VIRGINIA - 1
ARIZONA - 1
CALIFORNIA - 2
COLORADO - 1
FLORIDA - 1
GEORGIA - 1
ILLINOIS - 2
INDIANA - 1

Class Notes

THOMAS

'70s

J. REGAN THOMAS, MD '72, was inaugurated as president of the Illinois State Medical Society during its 2021 annual meeting. Thomas is a professor of otolaryngology at Northwestern Feinberg School of Medicine and is board-certified in facial plastic and reconstructive surgery.

'80s

DAVID O. BARBE, MD '80, was inaugurated as the 2020 president of the World Medical Association. Barbe is a past president and board chair of the American Medical Association.

DAVID A. MILLER, MD '89, received the St. Louis Academy of Family Physicians' 2020 Greater St. Louis Community Health Award for his work coordinating multiple COVID-19 testing sites throughout St. Louis for uninsured and underinsured patients.

'00s

LOIS PARKINSON, MD '00, has been in private practice in San Francisco, providing both psychotherapy and psychopharmacology, since 2006. She completed training in eye movement desensitization and reprocessing in 2018.

KEVIN BOYD, MD '05, is completing a pediatric dermatology fellowship at the Mayo Clinic in Rochester, Minnesota.

ALISA HAYES, MD '05, is the residency program director and the vice chair of education and training at the Medical College of Wisconsin.

RACHEL KERFORD LESCHER, MD '05, is a pediatric endocrinologist for the Alaska Native Tribal Health Consortium in Anchorage, Alaska, and a clinical associate professor at the University of Washington. She participated in Vitamin D deficiency research and completed a Leadership and Education in Adolescent Health fellowship with the University of Washington. Lescher also co-leads a transgender health working group and serves on the board for the Alaska Eating Disorders Alliance.

KARI MARTIN, MD '07, was recognized in July 2020 with a national Patient Care Hero award by the American Academy of Dermatology.

In Memoriam

'40s

WALLACE CARPENTER, MD BS MED '49, of Rock Port, Missouri, died on Sept. 1, 2020, at the age of 94. Carpenter was a family physician practicing in northwest Missouri for 56 years. He was a 2002 recipient of the Distinguished Service Award from the MU Medical Alumni Organization.

'50s

MAX HEEB, MD BS MED '51, of Sikeston, Missouri, died on Dec. 30, 2020, at the age of 93. Heeb served in the Navy during World War II. He was a founder and surgeon with The Ferguson Medical Group, practicing for more than 50 years before retiring at the age of 81. He received the 2017 Distinguished Service Award from the MU Medical Alumni Organization and presented the 2006 Overholser Lecture.

DONALD KUENZI, MD BS MED '51, of Kansas City, Missouri, died on March 14, 2021, at the age of 94. Kuenzi served in the Navy during World War II and the Korean War. He was a family practice physician. Kuenzi received the Distinguished Service Award from the MU Medical Alumni Organization in 2016.

GERALD HOXWORTH, MD BS MED '52, RES '74, of Pasadena, California, died on July 8, 2020, at the age of 93. Hoxworth served in the Navy during World War II. He was a general practitioner in Cape Girardeau, Missouri, for 15 years and was the chief radiologist and chief of staff at Audrain Medical Center in Mexico, Missouri.

ARLAN COHN, MD BS MED '54, of San Francisco, died on Jan. 15, 2021, at the age of 90. Cohn served in the Army during World War II. He was an internist in Berkeley, California, for more than 50 years.

THOMAS STRIBLING, MD BS MED '55, of Palm Desert, California, died on Jan. 15, 2021, at the age of 88. Stribling practiced obstetrics and gynecology in Independence, Missouri, for almost 40 years.

HENRY LEE, MD '58, of Leawood, Kansas, and Snowmass Village, Colorado, died on Sept. 3, 2020, at the age of 88. Lee was a radiologist and department chair at Baptist Medical Center.

RICHARD BENJAMIN, MD '59, of Minnetonka, Minnesota, died on Jan. 6, 2021, at the age of 86. Benjamin was a flight surgeon in the Air Force. He practiced family medicine before entering a 28-year career with Prudential Insurance Company, serving as vice president of medical services.

In Memoriam

'60s

JOHN COTTEY, MD '60, of Dallas, died on Nov. 21, 2020, at the age of 86. Cottey was a commissioned medical officer in the Army, achieving the rank of lieutenant colonel and was awarded the Meritorious Service Medal while stationed in Ethiopia. Cottey practiced surgery for 41 years.

RICHARD GUTHRIE, MD '60, of Wichita, Kansas, died on June 1, 2020 at the age of 84. Guthrie was a pediatrician, medical educator, researcher and endocrinologist. Guthrie served as the first chair of the department of pediatrics at the University of Kansas School of Medicine-Wichita.

CHARLES SIGMUND, MD '60, of St. Louis, died on Mar. 29, 2021, at the age of 88. Sigmund was a flight surgeon in the Air Force. He was a physician and surgeon in private practice in St. Louis for nearly 50 years.

DONALD SIPES, MD '60, RES '64, of Green Bay, Wisconsin, died on Oct. 17, 2020, at the age of 85. Sipes was a captain in the Air Force and practiced gynecology and obstetrics.

C. FRANKLIN SMITH, MD '60, of West Plains, Missouri, died on Sept. 20, 2020, at the age of 86. Smith served in the Army Medical Corps. He served a wide rural area around Willow Springs, Missouri, for 47 years as a general practitioner and general surgeon, delivering more than 3,500 babies.

LEO WYRSCH, MD '60, of Springfield, Missouri, died on Sept. 28, 2020, at the age of 85. Wyrsch served in the Air Force as a flight surgeon in Vietnam. Wyrsch was an obstetrician and gynecologist and a member of the MU Medical Alumni Organization board of governors.

WINSTON HARRISON, MD '61, of Marshall, Missouri, died on June 18, 2020, at the age of 83. Harrison was commissioned in the Air Force Reserve as a captain. He practiced for more than 55 years in large and small hospitals over a wide area of central Missouri.

HAROLD CROW, MD '63, of Sun City Center, Florida, died on June 5, 2020, at the age of 87. Crow was an educator and family medicine physician, serving as the director of the family practice residency at the University of Virginia, chair of family medicine at the University of Nevada and founding director of the family practice residency at E.W. Sparrow Hospital in Michigan.

THOMAS DEFEO, MD '64, of Greenwood Village, Colorado, died on Jan. 28, 2021, at the age of 82. Defeo was a pathologist.

DAN KELLY, MD '64, of Topeka, Kansas, died on Sept. 15, 2020, at the age of 81. Kelly served in the Navy at Bethesda Naval Medical Center and on the USS George Washington. He was an instructor and interim director at the School of Submarine Medicine. Kelly worked in private practice in pediatrics for 33 years.

JERRY FOOTE, MD '65, RES '70, RES '71, of Columbia, Missouri, died on Sept. 5, 2020, at the age of 81. Foote served in the Navy as a physician and was a dermatologist for 42 years.

JERRY RAGLAND, MD '65, RES '70, of Coronado, California, died on Mar. 6, 2021, at the age of 81. Ragland served in the Navy, retiring as captain. While at the Balboa Naval Medical Center in San Diego, he developed one of the Navy's first surgical endoscopy laboratories and served as chair of surgery and general surgery residency program director.

JACK WEIGLE, MD '65, of Grandville, Michigan, died on Jan. 7, 2021, at the age of 81. Weigle served in the Army. During his 35-year career in obstetrics and gynecology, he delivered nearly 8,000 babies.

EDWARD BAUM, MD '67, of Charlotte, North Carolina, died on Oct. 3, 2020, at the age of 83. Baum served in the Army Medical Corps, retiring with the rank of lieutenant colonel. He was a pediatric oncologist and one of the founders of the first Ronald McDonald House in Chicago. He was professor emeritus of pediatrics at Northwestern's Feinberg School of Medicine. Baum also led the creation of Camp One Step at a Time in Lake Geneva, Wisconsin, the first camp for children with cancer in the Midwest. He was awarded the Distinguished Service Award by the MU Medical Alumni Organization in 1989.

DAVID EDEN, MD '67, of Driftwood, Texas, died on Sept. 18, 2020, at the age of 79. Eden served in the Army at Tripler Army Medical Center in Honolulu, at Third Surgical Hospital in Vietnam and Walter Reed Army Medical Center in Maryland. He was an anesthesiologist in Austin, Texas, for 19 years.

LARRY MARTI, MD '67, of Rolla, Missouri, died on Aug. 21, 2020, at the age of 82. Marti served in the Army, including a stint as assistant chief of orthopaedic surgery at Walter Reed Army Medical Center in Maryland. Following his military service, Marti practiced in Rolla for 41 years and was recognized in 2012 with the Distinguished Service Award by the MU Medical Alumni Organization.

DAVID EDWARDS, MD '69, of Lawrence, Kansas, died on Oct. 19, 2020, at the age of 77. Edwards served in the Army Medical Corps. He practiced with Emporia Orthopedic Associates for 26 years then formed the Persimmon Forge artist blacksmithing studio.

'70s

TROY MAJOR, MD '70, RES '71, of Springfield, Missouri, died on Nov. 6, 2020, at the age of 76. Major served in the Air Force and was stationed at Kelly Air Force Base in San Antonio during the Vietnam War before his 43-year career in dermatology. Major was inducted into the Missouri Sports Hall of Fame in 2019 in the sporting clays category.

DONALD WEHMEYER, MD '71, of Abilene, Texas, died on Nov. 12, 2020, at the age of 75. He was a general surgeon in the Air Force before spending 38 years as a hand surgeon.

LARRY SCHICK, MD '74, of Rockford, Illinois, died on Feb. 26, 2021, at the age of 75. He practiced anesthesiology for 40 years.

ROBERT SOLTZ, MD '74, of Wichita, Kansas, died on Nov. 27, 2020, at the age of 73. Soltz was a pediatrician for 38 years.

WILLIAM STEINMANN, MD '74, of Tucson, Arizona, died on Feb. 18, 2021, at the age of 75. Steinmann served on the medical faculty at the University of Pennsylvania, Thomas Jefferson Medical College and Tulane University. At MU, Steinmann

was professor of medicine and division director for general internal medicine, leading the research division and developing the fellowship program, and was appointed director of clinical research. He received the Distinguished Service Award from the MU Medical Alumni Organization in 2008.

CHARLES JANOVSKY, MD RES '76, of Portage, Indiana, died on Jan. 7, 2021, at the age of 73. Janovsky practiced family medicine with the Medical Group of Michigan City, Indiana, for more than 30 years.

JIMMIE COY, MD RES '77, of Columbia, Missouri, died on Dec. 27, 2020, at the age of 74. Coy served 25 years in the military, ending his career in the Army Reserve assigned to the Special Operations Command at Fort Bragg, North Carolina. Coy authored numerous journal articles about his research developing lightweight X-ray equipment for military use. He was an associate professor in radiology at MU and retired from Harry S. Truman Veterans Hospital, serving 15 years as the chief of radiology.

DAVID LOHMEYER, MD '77, of Covington, Louisiana, died on Mar. 14, 2021, at the age of 69. Lohmeyer was a pediatrician, serving the communities of Hannibal, St. Louis, Jefferson City, Sikeston and Kirksville in Missouri, as well as Quincy, Illinois.

'80s

BELINDA IRELAND, MD '80, of Pacific, Missouri, died on Feb. 4, 2021, at the age of 66. Her career included a role with the Arctic Investigations Lab of the CDC. As the CEO of The Evidence Doc, she worked with medical societies assisting in writing evidence-based guidelines as well as presenting original papers nationally and internationally.

MICHAEL FRIEDMAN, MD '82, of Columbia, Missouri, died on Oct. 24, 2020, at the age of 65. Friedman practiced anesthesiology in Kansas City then moved to Columbia, where he practiced for 18 years.

MARK HOSLER, MD RES '84, of Cape Girardeau, Missouri, died on July 31, 2020, at the age of 73. Hosler was a pathologist.

CAROL MCMULLIN, MD '85, of Flagstaff, Arizona, died on Mar. 7, 2021, at the age of 62. McMullin specialized in internal medicine and geriatric care.

ROBERT MUDD, MD '86, of St. Louis, died on Feb. 26, 2021, at the age of 61. Mudd was an emergency room physician.

COLLEEN ROSE, MD FELL '86, of Springfield, Missouri, died on Nov. 18, 2020, at the age of 75. Rose served in the United States Public Health Service commissioned corps and was an Army reserve medical officer. She was a neonatologist and founded the nonprofit Books for Babies to improve the health and development of babies and children in intensive care.

ROBERT LITTLE, MD RES '87, of Columbia, Missouri, died on Jan. 28, 2021, at the age of 63. Little was an anesthesiologist.

STEVEN GOETZ, MD '88, of Coralville, Iowa, died on Feb. 16, 2021, at the age of 58. Goetz was a pathologist.

KATHERINE LEAR, MD '89, of Springfield, Missouri, died on Sept. 26, 2020, at the age of 62. Lear was a private practitioner, assisting the LGBTQIA+ community and rape and abuse victims.

'90s

KENDALL WARDEN, MD '92, of Durham, North Carolina, died on Sept. 12, 2020, at the age of 61. Warden was a psychiatrist and the founder and medical director of a nonprofit mental health and substance abuse service in Raleigh-Durham.

MICHAEL BENNETT, MD '96, of Greenfield, Missouri, died on March 6, 2021, at the age of 52. Bennett was a physician, director and owner of the Greenfield Medical Center.

HENRY TAYLOR, MD RES '97, of Ashland, Missouri, died on Aug. 9, 2020, at the age of 81. Taylor practiced medicine at MU Health Care and the Missouri Department of Corrections.

JAMES SPIELER, MD RES '99, of Kapaa, Hawaii, and Columbia, Missouri, died on July 8, 2020, at the age of 52. Spieler was an internal medicine physician, licensed in both Missouri and Hawaii.

'00s

BRADLEY SACHS, MD '04, of Toledo, Ohio, died on Aug. 24, 2020, at the age of 49. Sachs specialized in hematology and oncology.

BRIAN SILVERMAN, MD '06, of Washington, Missouri, died on Aug. 20, 2020, at the age of 47. Silverman completed his residency at Johns Hopkins and received his MBA from the University of Massachusetts. Brian enjoyed being a physician and working as an intensivist in the ICU.

'10s

JONATHAN SCHAFER, MD RES '10, of Chattanooga, Tennessee, died on Aug. 18, 2020, at the age of 59. Schafer earned degrees in law, electrical engineering and medicine, practicing as a patent attorney and specializing in family medicine.

LAUREN WIGGINS, MD RES '13, of Dallas, died on Oct. 14, 2020, at the age of 38. Before attending medical school and becoming an ophthalmologist, Wiggins was a fourth-grade math and science teacher.

BRENT M. PARKER, MD, of Colorado Springs, Colorado, died on Feb. 15, 2021, at the age of 93. Parker retired as a professor emeritus of medicine and served as chief of staff, associate dean for clinical affairs and chief of cardiology during his tenure at the MU School of Medicine. He was a fellow in both the American College of Physicians and the American College of Cardiology.

DONALD SILVER, MD, died on Oct. 19, 2020, at the age of 91. He was the W. Alton Jones Distinguished Professor and Chairman of the Department of Surgery at the MU School of Medicine and surgeon-in-chief of University Hospital. During his 23 years as chair of the department, he was instrumental in expanding the residency program. He was honored by the department with the dedication of the Donald Silver Rare Book Room in the J. Otto Lottes Health Sciences Library.

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