

UK Medicine

Solving Kentucky's Greatest Health Challenges

A portrait of Michael D. Rankin, MD, an older man with grey hair and a goatee, wearing a light blue button-down shirt. He is smiling slightly and looking towards the camera. The background is a soft-focus outdoor setting with greenery.

Alum's vision for a healthier Kentucky

Growing up on a farm in small-town Kentucky, Michael D. Rankin, MD, developed a deep love for the beauty of his state

PAGE 08

The Impact of Research at the UK College of Medicine

PAGE 12

RPLP 10 Years Later: How UK's Rural Medical Training Program is Helping the Commonwealth

PAGE 16

CONTENTS

- 01** Message From the Acting Dean
- 02** Four Years in, UK College of Medicine Makes Impact in Bowling Green Community
- 04** Match Day 2022
- 06** Diversity and Inclusion Ambassadors Collaborate to Engage with Community
- 08** Alum's Vision for a Healthier, Thriving Kentucky Starts at the College of Medicine
- 12** The Impact of Research at the UK College of Medicine
- 16** RPLP 10 Years Later: How UK's Rural Medical Training Program is Helping the Commonwealth
- 18** College of Medicine's Growing Graduate Medical Education Programs Train 'Clinically Strong' Residents and Fellows
- 20** The Alliance Research Initiative: Promoting Collaboration and Mentorship for Groundbreaking Discoveries
- 22** Dr. DeMasi's Impact Will Live on at UK College of Medicine
- 25** Highlights

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ON THE COVER

Alumnus Michael D. Rankin, MD '80, pictured at his farm in Danville, Ky., has committed a generous \$22 million gift to improve health care in the Commonwealth through medical student scholarships and a new health education building.

MESSAGE FROM THE ACTING DEAN

EXPANDING TO MEET THE NEEDS OF THE COMMONWEALTH



Charles "Chipper" Griffith III, MD, MSPH
Acting Dean; Vice Dean for Education

This past year, while serving as acting dean, I have had the great pleasure of witnessing some incredible "**firsts**" here at the College of Medicine.

This spring, the Bowling Green Campus celebrated its **first** Match Day and graduation. The inaugural class has been sent off to care for their communities as doctors, benefiting from the excellent educational experience provided by the campus's kind-hearted, mission-driven faculty and staff. The excitement does not end here as our Northern Kentucky Campus will graduate its **first** class next spring! Meanwhile, our graduate medical education team has established additional residency and fellowship programs, including in Bowling Green, so more trainees are able to advance their medical education in Kentucky.

Many graduate students, postdoctoral fellows, and early-career faculty had their **first** publications, **first** big grants, or joined their **first** big, groundbreaking research project. In part, that is thanks to the growth of the Alliance Research Initiative, which connects them to experienced faculty across departments and colleges. In our biomedical education programs, such as our growing MD/PhD program, more students are publishing papers, developing projects, and preparing for well-rounded careers.

Collaborative efforts also have introduced more mentorship opportunities for underrepresented students, including programs such as the new Markey Science Training in Research, Oncology, Networking and professional Growth (STRONG) program and the African American Research Training Scholars (AARTS) program. Dedicated faculty have stepped up to ensure each department continues promoting inclusivity by serving as diversity and inclusion ambassadors.

As you'll read in our cover story, a generous \$22 million gift from alumnus Michael D. Rankin, MD '80, will allow us to continue our expansion through medical student scholarships and a new health education building in Lexington, which will certainly escalate our impact in the future – and lead to more pivotal "**firsts**" for our learners, faculty, and staff.

I have no doubt that our continued expansion will make a tremendous impact in advancing the delivery of health care in our state, our Commonwealth, and our country. ■



FOUR YEARS IN, UK COLLEGE OF MEDICINE MAKES IMPACT IN BOWLING GREEN COMMUNITY



“There is definitely a physician shortage in rural areas, and I really feel like it’s my calling to help meet that need,” says Mitchell Owens, PharmD, a second-year student at the Bowling Green Campus. Owens was a practicing pharmacist before he decided to go back to school to pursue medicine. He is from Owensboro, Ky., and his wife is from Lafayette, Tenn. The Bowling Green Campus was the perfect midpoint to complete his medical training and fulfill his career aspirations.



Bowling Green, Ky., native Caitlyn Galloway always felt right at home in a small town, but that posed a challenge when she made plans to apply for medical school. She wanted to stay close to home, but in her third year of undergraduate studies at Western Kentucky University, there were no four-year medical schools where she grew up that would allow her to stay near her small, close-knit community.

She soon found out that was about to change.

“My advisor said, ‘well, you know there’s a new medical school campus for UK in Bowling Green,’ and I remember being riveted,” Galloway said.

The missions of training physicians in Kentucky for Kentucky and addressing the physician shortage in the Commonwealth, especially in

underserved regions, required an unconventional solution. As a result, the concept of the UK College of Medicine-Bowling Green Campus was born, and it opened in the fall of 2018 with students like Galloway in mind.

Galloway applied and officially became a member of the inaugural class. Four years later, she has gone through Match Day and received her medical degree during the campus’s first graduation ceremony this spring.

This milestone marks an incredibly important step for the College of Medicine and its first four-year regional campus. With an established presence in Bowling Green, the college is poised to not only address the state’s physician shortage, but also help lead the advancement of health care in western Kentucky and beyond.

An ‘Exciting Opportunity’

The UK College of Medicine was the

Caitlyn Galloway, part of the UK College of Medicine-Bowling Green Campus inaugural class, celebrates with her family as she opens her letter to learn which residency program she will join on Match Day.

ideal medical education institution to address Kentucky's shortage of doctors in rural settings. The college had established a commitment to training rural physicians with its Rural Physician Leadership Program in Morehead, Ky.

With that successful model, leadership wanted to extend UK's reach across the Commonwealth.

"I knew this would be an exciting opportunity to be part of the team creating the first four-year regional medical school in our state, literally from the ground up," Bowling Green Campus Associate Dean Todd Cheever, MD, MS, said.

Dr. Cheever had many reasons why he wanted to be part of the UK College of Medicine's expansion. A Western Kentucky University graduate, he was familiar of the area. As an alumnus and longtime faculty member at the UK College of Medicine Department of Psychiatry, he possessed a passion for medical student education. And as a former student affairs dean, he knew how to ensure holistic student success.

Creating a full-fledged regional campus was a process that took intensive planning and collaboration long before it opened. Dr. Cheever, UK Provost Robert DiPaola, MD, Acting Dean Charles Griffith, MD, MSPH, and many others played instrumental roles in building connections with community partners. Med Center Health and Western Kentucky University (WKU) are the partner institutions that helped move the process forward.

They formed committees to meticulously plan every aspect of the regional campus, including faculty,

students, curriculum, student affairs, admissions, facilities, and more.

"It was certainly a collaborative effort that couldn't have been done without our partners," Dr. Griffith said. "But the result has made all of the work worth it. Our regional site in Bowling Green has the capability to make a huge impact in western Kentucky health care. Four years in, I believe we already have."

A Campus Established in the Community

Thanks to this hard work, current students at the Bowling Green Campus benefit from a modern, state-of-the-art facility. Medical students have access to a full range of student services and activities at WKU and early clinical experiences with Med Center Health.

Students enjoy the same curriculum as the University of Kentucky's medical campus in Lexington through a combination of interactive learning, onsite classes, and virtual experiences. And the campus has recruited top faculty to provide this education, including Mohammed Kazimuddin, MD, a prominent health care leader in Bowling Green who serves the campus as associate dean for graduate medical education and assistant dean for undergraduate medical education.

The Bowling Green Campus also offers combined degree programs, and available residency and fellowship programs have increased since the campus's launch.

With four years completed, Galloway is ready for the next step – residency. On Match Day, she learned she will advance her training at UK. She said going through medical school at a regional campus strengthened her

knowledge of how to provide the best care. "I would recommend this experience to anyone," she said.

The students who follow the inaugural class are benefiting from the milestones that have been completed at the campus.

Now second-year student Mitchell Owens said it's helpful for his class to have three classes of students ahead of them to mentor and offer guidance. His classmate Anna Cox said the intimacy of a small campus allows students to build strong connections with esteemed faculty. Cox said in her anatomy class, students were stunned to see Dr. Kazimuddin right there in the cadaver laboratory with the students. Office staff are just a phone call or text away, and Dr. Cheever knows every student on a first-name basis.

"I feel like our voices are heard," Cox said.

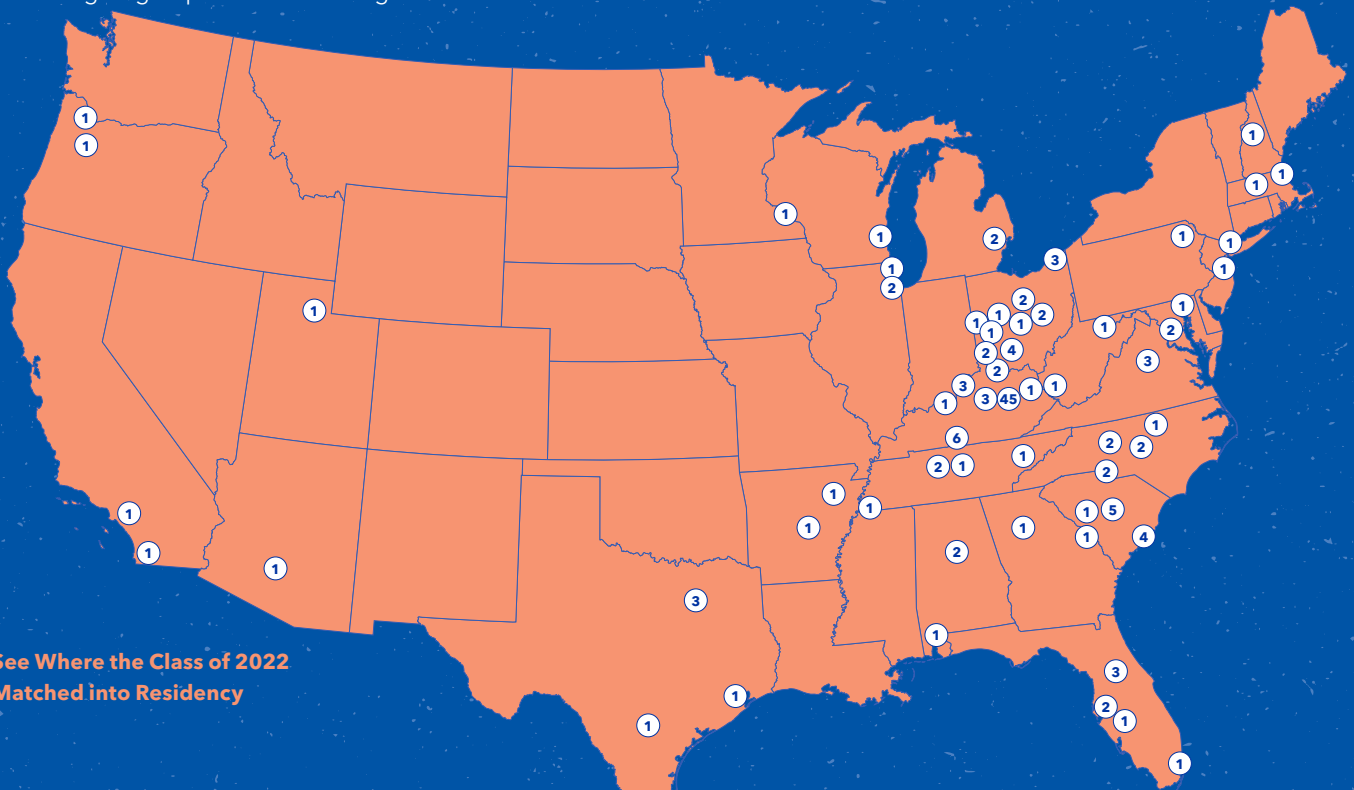
This is what Dr. Cheever dreamt of when he joined the effort to lead the development of a regional campus. With four classes, the Bowling Green Campus is no longer a new site. It is established in the community. And students are carrying on the mission.

Dr. Cheever said his favorite part of being an educator is hearing from graduates when they reach out about accomplishments in their careers. He looks forward to hearing what the inaugural class at the Bowling Green Campus achieves.

"They're going to be part of the College of Medicine family. That never ends," Dr. Cheever said. ■

MATCH DAY 2022

Match Day is always a special event for the UK College of Medicine. This year, the college added to the excitement by celebrating an incredible milestone in its mission of training more physicians in Kentucky, for Kentucky. With students from Lexington, the Rural Physician Leadership Program, and the inaugural class at the Bowling Green Campus, the Class of 2022 was the College of Medicine's largest group of students recognized at this annual event.



See Where the Class of 2022 Matched into Residency







DIVERSITY AND INCLUSION AMBASSADORS COLLABORATE TO ENGAGE WITH COMMUNITY



For assistant professor Jamie Key, DO, promoting equality and inclusion “is in my blood as much as red blood cells.” In fact, part of her reasoning for choosing a specialty in physical medicine and rehabilitation was so she could provide care for individuals who experience biases of ableism and help them navigate the challenges.

“I sat for years feeling and seeing inequalities in our system and knew if our culture was going to change, I needed to do my part,” she said.

Dr. Key is now helping create positive change in her department through the UK College of Medicine Diversity and Inclusion Ambassador program. The college has appointed 22 ambassadors who are charged with developing more equitable practices and leading these efforts in their respective departments and centers.

“It is important that as our team implements strategies and initiatives to promote inclusion, we have the structure to sustain our progress,” said Stephanie White, MD, MS, associate dean for diversity and inclusion. “We want our diversity and inclusion ambassadors to serve as resources for faculty and staff, as well as catalysts for continued change.”

Diversity and inclusion ambassadors meet regularly, providing opportunities to share successes and collaborate on future efforts.

An example of this collaboration is an ambassador-led outreach program with Frederick Douglass High School's (FDHS) biosciences academy, an idea conceptualized by Ima Ebong, MD, MS, assistant professor and ambassador for the neurology department. The effort later expanded to surgery, physical medicine and rehabilitation, and emergency medicine.

Faculty in these departments offered workshops related to their specialties, introduced FDHS students to medical equipment and showed them how it was used, and connected them to residents and medical students who could share their experiences. Faculty who have been instrumental in the event's success include Dr. Key, as well as Kevin O'Connor, MD, assistant professor of neurology; Prakash Pandalai,

MD, assistant professor of surgery; and Katelyn Yackey, MD, assistant professor of pediatric emergency medicine.

Participation in the event continues to grow. Nearly 200 high school students attended the February workshops.

"FDHS is already doing so much to help students experience what a medical career could look like, and we were happy to join them in that endeavor," Dr. Yackey said. "Ultimately, it's about supporting diversity in medicine and providing excellent care to our equally diverse community."

The hope is that eventually, College of Medicine faculty will help local students with college applications and offer letters of recommendation, with the ultimate goal of connecting them to in-state medical schools and residency programs like UK to advance health care in the Commonwealth.

To Dr. Key, the most exciting benefit of community engagement is the potential to build more connections and networking opportunities for the people we are serving. Along with helping with the FDHS event, she is utilizing the connection to build a summer observership program, working to enhance recruitment efforts in her department, and connecting with local food vendors of color to celebrate cultural holidays within her department.

"This is my absolute favorite part of my job," Dr. Key said. ■

Diversity and inclusion ambassadors and faculty from multiple College of Medicine departments led hands-on demonstrations for students at Frederick Douglass High School. These events were intended to expose students to careers in health care.



ALUM'S VISION FOR A HEALTHIER, THRIVING KENTUCKY STARTS AT THE COLLEGE OF MEDICINE



Michael D. Rankin, MD '80, has generously committed \$22 million to advance the mission of the UK College of Medicine and expand the college's top-notch educational opportunities through support of a new health education building and the funding of medical student scholarships.

Growing up on a farm in small-town Kentucky, Michael Rankin developed a deep love for the beauty of his state and its compassionate, hard-working people. In his youth, he made a vow to take care of it. To achieve his goal, he planned to become a doctor, which he credits to having strong science and math teachers in his rural Kentucky high school.

Committing to eight-plus years of medical education was not a financially feasible option for him when he finished high school. Instead, he followed a more popular route among his peers, engineering. But even after earning this undergraduate degree at the University of Kentucky, his desire to become a physician never truly went away. In 1980, following six years working at a communications company, he graduated from the UK College of Medicine, followed by a family medicine residency at UK.

"It was very clear to me that primary care and family medicine was my interest at heart, and it always had been," he said. "Medicine was an opportunity to work more directly with people and to further help my fellow mankind."



Michael D. Rankin, MD, (left) is honored at the UK football team's Homecoming game on Oct. 9, 2021. He stands alongside (left to right) UK Provost Robert DiPaola, MD, (who was College of Medicine dean in this photo) and his lifelong friends Yvonne McDowell, MD, JD, MBA, and Mel Morgan, MD, JD, MBA. Dr. McDowell was Dr. Rankin's study partner during their first year at the UK College of Medicine, and she is currently a member of the Dean's Advisory Council, which Dr. Rankin chairs.

Over 40 years later, Dr. Rankin is giving back to his alma mater with a historic gift of \$22 million. With this donation he aims to help advance the mission of the UK College of Medicine and expand scholarship opportunities for the college's growing number of learners.

Dr. Rankin's gift includes \$10 million that will help fund the construction of a new, more technologically advanced health education building for the UK College of Medicine and three other health care colleges to provide an enhanced medical school experience for future learners. The remaining \$12 million will be an estate gift to support the Michael Rankin Community Scholarship Endowment, supporting prospective medical students from rural Kentucky counties who are facing financial need.

"Dr. Rankin has gone above and beyond to assist the College of Medicine in its mission of improving the health and wellness of the state through transformative medical education, clinical care, and research," UK Provost Robert S. DiPaola said. "We're incredibly grateful for his work with the UK College of Medicine and his generous donations to the college, both financially and through his service. There's no doubt his contributions will make a monumental impact on the future of our college and the health of Kentucky."

A Long, Admirable Medical Career

Having come from a high school graduating class of 40 students, joining a large institution like UK was both exciting and scary for Dr. Rankin. In fact, he had never seen a working science laboratory before coming to UK.

Earning an undergraduate engineering degree furthered Dr. Rankin's skill set and taught him how to manage large, complex projects. He also established strong connections that helped him land his job at a major communications company, which led him to gain valuable professional experience and save money to attend the UK College of Medicine.

Dr. Rankin's first challenge in medical school appeared in his first-semester histology course. He remembers sitting before a microscope, a piece of equipment he had never used. He was unable to follow his instructor and focus on the slides.

"I somewhat panicked," Dr. Rankin recalled. But his instructor was patient and gentle. "She said, 'Mike, if you can graduate at the top of your class in engineering, you can do this with ease!'"

In that moment Dr. Rankin's confidence was restored, and the rest of his years in medical school continued to be just as transformative. He made lifelong friends and matured into the physician he hoped to become.

Dr. Rankin launched his medical career opening a practice in Atlanta in the 1980s, a decade when HIV and AIDS were rampant in the U.S., but not widely understood. To many, the epidemic was viewed as the next plague, practically "a death sentence" for those who faced it. Because of this many of those who were ill were rejected by family, friends, and employers, adding mental and emotional stress to the already devastating toll. There was a need for better care, and Dr. Rankin saw this as a chance to take action.

“These patients were just dying with no hope of any medication, and all we were able to do was palliative care. There was a drastic need for whole-person health care,” he said. “That family medicine philosophy, like what I learned at UK, looked at the entire patient. We became friends with patients. They became like extended family members.”

Dr. Rankin joined forces with local providers to create the AIDS Research Consortium of Atlanta, which offered free, accessible services for HIV and other sexually-transmitted diseases, along with counseling, support services, and education on disease prevention. The consortium also conducted several Phase 2 investigational studies supported by drug companies and the National Institutes of Health.

While managing his Atlanta practice, Dr. Rankin maintained a 600-acre Kentucky farm. Often after a long work week in Atlanta, Dr. Rankin would travel back to Kentucky on the weekends to work on the farm. Then he would catch a 5 a.m. flight back to Atlanta the following Monday to treat more patients.

Those frequent trips to Kentucky were therapeutic and restorative for Dr. Rankin. Working up a sweat on the farm helped him cope with the stress from building his practice and the emotional toll from caring for patients battling such an awful, life-threatening disease.

“The farm became a necessary refuge for weekend getaways to refresh and regroup for the coming week,” Dr. Rankin said. “My time back in Kentucky was invaluable.”

A Commitment to Kentucky Health and Medical Education

Growing up in a farming family, the importance of education and continuous learning was instilled in Dr. Rankin from an early age. His parents also promoted a culture of giving back.

Dr. Rankin now lives in Danville, Ky., and serves as volunteer faculty in the department of family and community medicine at his alma mater. He recently gifted his farmland to UK to support his \$22 million gift to the UK College of Medicine.

Dr. Rankin continues to be one of the college’s biggest supporters because he understands its importance in helping Kentucky thrive. Since he attended, he has seen a wealth of progress, from the innovative technology helping better educate medical students to the focus on research that will lead to more solutions for some of Kentucky’s greatest health challenges such as cancer, cardiovascular disease, substance abuse, neurological disorders, obesity, and diabetes.

One major initiative he champions is UK’s work to address the state’s physician shortage through its campus expansion in Northern Kentucky and Bowling Green, which will bring in 260 additional future physicians to train in Kentucky once both campuses are at full capacity. His gift will allow the College of Medicine to expand the class size in Lexington, continuing the work of providing excellence in medical education and training more physicians for the Commonwealth of Kentucky. Meanwhile, the University is addressing health care inaccessibility in rural, underserved areas by educating students on community medicine through its Rural Physician Leadership Program in Morehead, Ky., a program that continues to grow.

“Those additional students educated in Kentucky will add millions each year to our economy when they practice in our state after graduation,” Dr. Rankin said. “And the health impact is even more significant.”

Dr. Rankin has contributed to the college’s mission as a longtime member of the UK Medical Alumni Association. He is a past president of the UK Medical Alumni Association Board and

— “ —
Those additional students educated in Kentucky will add millions each year to our economy when they practice in our state after graduation

—Michael D. Rankin, MD

— ” —

has served on the scholarship committee and as chair of the Dean’s Advisory Council. He also served on the College of Medicine’s scholarship committee for 18 years, and he has interviewed students with the admissions committee for 15 years and currently serves on the admissions committee.

Perhaps Dr. Rankin’s most personal contribution has been founding a scholarship of his own, the Michael D. Rankin, MD, Community Scholarship, for prospective medical students from rural Kentucky – specifically Appalachia — who maintain good grades and have financial need.

It’s a rather fitting scholarship for him to create because he knows from personal experience how beneficial it is for students passionate about health care to attend medical school, even if they can’t afford it. He wants students to enjoy the same educational



Michael D. Rankin, MD, (right) was honored by the College of Medicine and President Eli Capilouto as he announced his historic \$22 million gift on July 13, 2021.

opportunities he did at UK in hopes they'll utilize that education to serve the Kentuckians around them. Dr. Rankin's passion for making medical school affordable and accessible to students from rural Appalachia is profound, and his support for UK's medical students is unparalleled.

A Lasting Impact

Since establishing his endowed scholarship in 2010, Dr. Rankin has created an opportunity for scholarship support to go on in perpetuity. He has received countless thank you notes and heart-warming stories from students who have been able to follow their dreams because of the financial assistance.

Dr. Rankin says his contributions are his way of paying it forward for the ways the College of Medicine and UK HealthCare benefited him, his family, his friends, and his community over the years. Being so heavily involved in the college's mission has given him a sense of purpose and allows him to continue pursuing his lifelong goal of keeping his community healthy.

"I hope all students will think about the honor and privilege of being selected to be a physician," Dr. Rankin said. "Down the road, hopefully they realize their success was possible due to the UK College of Medicine and help give back to help future generations of students." ■

New Health Education Building: *Where we are now*

The University of Kentucky has taken exciting steps toward progress on its new Health Education Building.

The building will be an innovative collaboration among four UK health care colleges - Medicine, Public Health, Health Sciences, and Nursing - to help advance the health care of the Commonwealth and beyond.

UK has selected JRA Architects and HOK as the architects and designers for the project as well as Turner, a construction services company. These local and national firms will help establish the Health Education Building as a cutting-edge facility with state-of-the-art technology and modern design, enhancing the educational experience for trainees who will serve as next generation of health care leaders in Kentucky.

- **JRA Architects** with offices located in Lexington and Louisville, Ky., is one of the Commonwealth's largest, oldest, and most respected architectural and planning firms. Founded in 1946, the firm has over \$1 billion of completed construction in place. Its responsibility as architects is not to simply create beautiful buildings, but to improve the lives of clients and all others who occupy the spaces.
- **HOK** is a global design, architecture, engineering, and planning firm. Its 1,600 people collaborate across a network of 24 offices on three continents. HOK designs buildings and spaces that respond to the needs of people and the environment. The designers are rooted in technical excellence, driven by imagination, and focused on a solitary goal: to deliver solutions that inspire clients and communities.
- **Turner** is a North America-based, international construction services company and is a leading builder of some of the most ambitious projects in the world. It is a recognized commercial contractor spanning 47 offices, including Lexington and Louisville, Ky. Turner is ranked as the No. 1 general builder in diverse market segments, completing \$12 billion of construction on 1,500 projects each year. Turner prides itself in delivering on promises and creating a positive impact on the lives of clients, employees, trade partners, and communities.

The UK Board of Trustees approved the design phase for construction of the new health education building in May 2021. The historic gift from Dr. Rankin - including \$10 million dedicated to the new building - accelerated progress.

Project leaders at the College of Medicine are thrilled to have distinguished experts in architecture, design, and planning on board to continue the progress of this exciting venture for health education in Kentucky.

Stay updated on the building project:
provost.uky.edu/health-education-building



THE IMPACT OF RESEARCH AT THE UK COLLEGE OF MEDICINE

Above: The inaugural class of African American Research Training Scholars includes (left to right) Bisimwa “Jack” Nzerhumana, Alexa Halliburton, Nolan Abdelsayed, Jordon Burdette, and Urim Geleta.

Top right: Postdoctoral scholar Brittany Rice, PhD, (left) says her mentor Kevin Pearson, PhD, director of inclusive research initiatives, (right) helped her find the right path to follow in her research career.

By senior year of her undergraduate training, Urim Geleta had already played a key role in neuroscience research at UK.

She participated in UK’s inaugural African American Research Training Scholars (AARTS) program. Collaborating with Joe Springer, PhD, professor of neuroscience, she actively participated in a study of biological sex factors and traumatic brain injury, which led her to have her name on a publication before she even started a doctorate in research. She also presented her findings at a neuroscience symposium hosted by the UK Spinal Cord and Brain Injury Research Center (SCoBIRC).

To Geleta, it’s crazy to think she almost didn’t apply to the AARTS program. She said she initially felt unqualified. Looking at all that she has achieved since completing the program, her mentor Dr. Springer is thankful Geleta changed her mind. Her potential shined through her outside-the-box thinking and her inherent ability to analyze results.

“She came up with a possible interpretation that I had not even thought of,” Dr. Springer said. “Right then, you knew that she got it. She understands both technically and methodologically, but she also understands the science in such a way that she’s able to synthesize an answer. That’s something that I’ve only seen when I’m dealing with graduate students.”



“

All these people were heavily invested in me,
They checked on me. They understood the plight
of what it is like to be underrepresented.

—Brittany Rice, PhD

”

Geleta’s success embodies what Dr. Springer and fellow AARTS Program Committee members (Warren Alilain, PhD; Mark Prendergast, PhD; and Zelneva Madison) hoped to accomplish with the initiative. It also demonstrates the impact the College of Medicine strives to make in research education.

The earlier that students are exposed to the possibilities of research, the earlier they can build interest, expand their research expertise, and network with colleagues to collaborate on cutting-edge projects. And the mentorship gained through initiatives such as the AARTS program can establish longstanding connections.

Mentorship is what made all the difference for Brittany Rice, PhD. Before she arrived at the UK College of Medicine, she assumed research was limited to studying animal models. Then she connected with Kevin Pearson, PhD, director of inclusive research initiatives and professor of pharmacology and nutritional sciences, and she was introduced to other





Above: "I just really see how excellent of a mentor Brittany is with peers, women in STEM, and diverse trainees in STEM," Kevin Pearson, PhD, said. "She's a light at the end of the tunnel for so many people."

possibilities that better aligned with her career goals. Dr. Pearson welcomed her into his lab, equipped her with the skillsets necessary to advance in science, and supported her co-curricular activities – all of which ultimately led to her current postdoc position.

"All these people were heavily invested in me," she said. "They checked on me. They understood the plight of what it is like to be underrepresented."

Now, Dr. Rice is a postdoctoral fellow at UK Markey Cancer Center, paving the way for future researchers. She helped write an American Cancer Society grant application for UK's Markey Science Training in Research, Oncology, Networking, and professional Growth (STRONG) Scholar's program in the spring of 2021. Her work helps UK provide career and professional development for college sophomores, juniors, and seniors interested in cancer research who come from historically underserved or underrepresented ethnic and racial backgrounds.

"I just really see how excellent of a mentor Brittany is with peers, women in STEM, and diverse trainees in STEM," Dr. Pearson said. "She's a light at the end of the tunnel for so many people, and we're lucky she's staying on here at UK."

Erin Oakley, PhD, Markey's cancer education coordinator, said opportunities are endless for trainees at the College of Medicine thanks to its focus on expanded mentorship, enhanced training, and the multitude of career options available through research.



Above: Brittany Rice, PhD, (middle) serves as co-program director of UK's Markey Science Training in Research, Oncology, Networking, and professional Growth (STRONG) Scholar's program, an opportunity for her to mentor future researchers.

In 2003, she was an aspiring graduate student with a traditional career goal for someone with her training – to earn a doctorate and run a research laboratory. Now, while still in research – just not quite how she planned – part of her job involves helping enhance the pipeline by working with learners from kindergarten to high school, partnering with local schools to provide tours of UK research facilities and organize hands-on activities in the laboratory. She also supports the training of undergraduates, graduate students, and postdocs by coordinating career development and mentoring opportunities at the cancer center.

"Research is such a learning experience in creative thinking and problem solving," Dr. Oakley said. "I love my job because I get to watch trainees grow and discover skills they didn't even realize they had."

The success of UK's learners is vital for the future of health research in the Commonwealth. Kentuckians face the burden of many diseases including cancer, cardiovascular disease, neurological disorders, and more. As research at UK expands, diversifies, and increases its bandwidth, Kentuckians benefit.

After completing the AARTS program, Geleta has a broader idea of what she can accomplish through a research career. She continues to work with Dr. Springer and feels more confident in her ability to fulfill a longstanding goal – to obtain an MD/PhD.

"I love being challenged here, and Dr. Springer and the team are very supportive in helping me understand the material and asking questions that I should be asking," Geleta said. "By the end you can see your thought process changing, and you understand the way science is done in a different dimension. "The more you get to know it, the more you understand the magic behind it."

Dr. Rice is currently working on the ARISE T32 grant where she is developing measures to evaluate the effectiveness of current and future cancer education and research training programs. This goes along with Dr. Rice's ultimate dream of maximizing diversity, equity, and inclusion in science and medicine.

"Here I am today doing something that I never thought I would be given the platform to do," she said. ■



RPLP 10 YEARS LATER: HOW UK'S RURAL MEDICAL TRAINING PROGRAM IS HELPING THE COMMONWEALTH

Ten years ago, the UK College of Medicine recruited four of its second-year medical students for an educational experiment. With a goal of preparing more physicians to practice in the rural areas of the Commonwealth and beyond, the college asked these students to immerse themselves in small-town Kentucky, learning rural medicine onsite at a rural medical campus in Morehead.

The experiment was not only successful, but also built the foundation for what has evolved into a cutting-edge program helping address the physician shortage in Kentucky.

Those four individuals – Ilva Iriarte, MD; Larissa Kern, MD; Chadwick Knight, MD; and Sarah Tibbs, MD – made up the first graduating class of what is now called the Rural Physician Leadership Program. Since its first year, the program's graduating class tripled in size, and the program continues to graduate 12-14 medical students each spring who are equipped to practice medicine in small communities that need health care.

"The idea behind the original program truly has worked, that if you take students from rural communities and train them to be physicians, they want to go back and practice in those rural communities," Rebecca Todd, MD, assistant dean for RPLP, said.



Students enrolled in the Rural Physician Leadership Program gain clinical experience at St. Claire HealthCare.

Bottom right: The inaugural class of the Rural Physician Leadership Program graduated in 2012 and included Larissa Kern, MD; Chadwick Knight, MD; Ilva Iriarte, MD; and Sarah Tibbs, MD.

want to help more doctors get qualified and come to work in rural areas.”

What might be most distinct about the program, however, is how it fosters connection to a small community.

Ashley Brown, MD, RPLP director of admissions and outreach, is an alumna of RPLP who now works as an emergency physician at St. Claire HealthCare. She said the small-town charm students experience in RPLP will continue as they graduate and practice in community settings.

“When I’m at the grocery store, or out to the gas station, I see my patients. They recognize me. They know my family when they come into clinic,” Dr. Brown said. “That’s the best part about it.”

Dr. Todd shares a similar experience. When she takes her evening jog or a walk downtown with her family, she inevitably runs into one of her students, staff, or fellow faculty members. She recalls in the wintertime when a student was blocked by a downed tree across her road. All that student had to do was call Bodie Stevens, RPLP site administrator, and thanks to his connections with the city, the tree was removed 30 minutes later.

“These are just really unique experiences that you don’t necessarily get to have when you’re at a really big tertiary center,” Dr. Todd said. ■

Dr. Todd has been involved with the program since the beginning and has led it for the last four years, overseeing much of the program’s transformation. Ten years in, the program now has a robust set of alumni. Many come back to mentor current students, and five have been back to teach through St. Claire HealthCare, the program’s clinical partner. Three alumni are teaching in the greater Morehead area, and one is even joining Dr. Todd as a partner in August.

In total, RPLP has had nearly 100 graduates as of May 2022.

Dr. Todd has found that RPLP brings out the best of all medical training, combining old and new components of effective medical education. Like an apprenticeship, RPLP provides students opportunities to work one-on-one with physicians in the area. Students benefit from the small class size, which allows for strong bonds with faculty and more chances to shadow professionals and assist in procedures. At the same time, students are part of the larger UK College of Medicine network, learning from the same high-standard, up-to-date curriculum that other students follow at other campuses in Lexington, Northern Kentucky, and Bowling Green.

Thanks to partnerships with St. Claire HealthCare and Morehead State University, the program offers students additional opportunities for rural clinical experiences and educational advancement.

“The success of the program really hinges on the amazing students and faculty that we have,” Dr. Todd said. “The vast majority of our faculty are volunteer faculty, and they are wonderful. They do this because they love teaching, and they



COLLEGE OF MEDICINE'S GROWING GRADUATE MEDICAL PROGRAMS TRAIN CLINICALLY STRONG RESIDENTS AND FELLOWS

Over the past five years, the UK College of Medicine Office of Graduate Medical Education (GME) has undergone a remarkable transformation. GME has added 21 new residency and fellowship programs, 200 additional fellows and residents, and a new partnership with the Medical Center at Bowling Green to its varied graduate medical education training offerings.

The numbers are impressive on their own. But Katherine McKinney, MD, senior associate dean for graduate medical education, explains that GME expansion has also included “an intentional emphasis on enhancing resident and fellow engagement in health care quality and safety and development of additional training in leadership and teaching.”

Jitesh Patel, MD, professor of surgery, serves as director of the new colorectal fellowship program at UK College of Medicine in Lexington, providing general surgery residency graduates with opportunities for additional specialty-specific training and advanced research opportunities.

Kentucky has one of the highest incidences of and mortality rates for colorectal cancer in the nation, and so, as Dr. Patel points out, the clinical volume and case complexity fellows experience prepare them thoroughly for the challenges of the field.

The program also contributes significantly to patient care at UK HealthCare. “It’s a complement to the general surgery program,” Dr. Patel said. “It improves the experience of the junior resident while freeing up the chief resident for more in-depth inpatient care and allows them to have a richer experience in the outpatient setting.”

Pulmonologist Nisar Kazimuddin, MD, directs the pulmonary disease and critical care fellowship at the UK College of Medicine-Bowling Green Campus. The fellowship initially began in 2019 as a pulmonary disease-focused training program and subsequently expanded to a combined pulmonary and critical care fellowship.

The following spring, COVID-19 emerged, a special challenge for pulmonary specialists. The Medical Center at Bowling Green, serving 10 surrounding counties, saw a sharp increase in patients needing intensive care treatment.

With the pulmonary fellowship in place, the Medical Center was in a strong position to respond. The addition of critical care to the pulmonary program and the increase in fellows, Dr. Kazimuddin explains, benefited both the Medical Center and the program.

“Further this year, we plan to move to a closed ICU, thereby ensuring 24/7 coverage by critical care physicians for every sick patient that comes into

ICU. This allows for fellows, residents, and students to have plenty of time for formal and informal teaching sessions,” she said. “We’re big enough to provide comprehensive care for patients and small enough for rapport, so we can adapt to the needs of fellows.”

The first fellows will graduate in July with experience under pandemic conditions and in-depth learning provided by the program. Dr. Kazimuddin is confident that they will be well-prepared. “Wherever they go, they’ll provide effective care,” she said. “They’re clinically strong.”

The extraordinary growth in GME is not over by any means, according to Dr. McKinney. Several of the new programs have not completely filled all classes of residents and as they fully expand will be adding more learners in the years ahead.

“We’re continuing to look for additional opportunities to partner with hospitals across the state, especially more rural opportunities, and additional subspecialty training in Lexington,” said Dr. McKinney. “More partnerships across Kentucky, more advanced opportunities in Lexington,” with the long-term result of an increase of highly trained physicians, with many who decide to make the Commonwealth their home. ■



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THE ALLIANCE RESEARCH INITIATIVE: PROMOTING COLLABORATION AND MENTORSHIP FOR GROUNDBREAKING DISCOVERIES

Nearly two years ago, with funding from UK HealthCare and the vice president for research, the College of Medicine launched the Alliance Research Initiative. It has a mission, Vice Dean for Research **Rebecca Dutch, PhD**, explained, “to help spur on transdisciplinary research by pairing clinical and basic scientists together to answer new questions in new ways.”



The project began with three groups and now includes 21 teams focusing on the diseases and health conditions that most challenge Kentucky and the nation. The Alliance Research Initiative investment is already paying off. “It’s been very effective,” said Dr. Dutch. “There’s seed money to get things started, and it’s been exciting to watch that progress.”

Mentorship for Early-career Faculty

Eighteen months ago, **Matthew Bush, MD, PhD, MBA**, professor of otolaryngology, joined colleagues to form Translations of Research Interventions in Practice, Populations, and Policy Leadership (TRIPPPLe) to gather scientists from across campus for collaboration in interventional studies. Since then, TRIPPPLe has welcomed eight colleges, 25 departments, and 65 members to its group.



TRIPPLE offers its members monthly meetings and small focus groups for mentorship not only in grant writing, but in the broader challenges of early-career researchers. Bush described TRIPPLE's focus on their early-career faculty. "You have to listen to what they need. What is it like to juggle teaching and research? What is it like to create a research team?"

With a holistic approach to professional development, TRIPPLE has accomplished much to support early-career clinical research faculty. Despite the challenges of carrying through with clinical trials in the middle of a pandemic, over a dozen early-career clinician scientists on the team have National Institutes of Health (NIH) funding now or will be receiving it in a few months.

Yielding Results

An early-career researcher, **Austin Stone, MD, PhD**, assistant professor of orthopaedic surgery, is one of the faculty members of Osteoarthritis Alliance of Kentucky (OAK). Stone credits OAK with his involvement in several pilot grants leading to NIH and other large research grants.



Dr. Stone's focus on arthritis is shared by many researchers across campus, including faculty in the College of Medicine, the College of Health Sciences, and College of Agriculture, Food, and Environment. The interdisciplinary context opened doors for him in research and funding.

With his colleagues, Dr. Stone said, "We leveraged that opportunity for a common purpose that's already yielded results." Without the support of OAK, the seed grants offered by the Alliance, and collaboration of colleagues, he maintains, "I wouldn't have had that opportunity."

Physician-Scientist Collaboration

Since joining the department of physiology at UK, respiratory physiologist **Chris Waters, PhD**, has looked for ways to bring scientists from across disciplines together to work on lung disease. When Alliance Research Initiative funding first became available, Waters and his group formalized their collaboration as Kentucky Research Alliance for Lung Disease (K-RALD).



A unique accomplishment for K-RALD is the lung specimen biobank offering samples of tissues gathered for use in research. For instance, with patient permission, a discarded lung from a transplant can be collected to study pulmonary fibrosis.

"That was a way to get basic scientists in the room with physicians," Dr. Waters said. "It was a unifying resource."

The funding, Dr. Waters explained, "really helped us to develop and grow interactions with people working on lung disease in a broad context. K-RALD gave us the opportunity to bring people together."

What's Ahead

With the support of the College of Medicine, UK HealthCare, and the vice president for research, the Alliance Research Initiative is meeting its goals. Nearly two years in, with a great track record, Dr. Dutch said, "we're just going to keep doing that. Leverage money for growth."

In addition, she explained, the Alliance Research Initiative can continue to encourage the growth of all faculty, junior and senior, through collaboration. "We can challenge people to envision, "What else can I do?" ■



Learn more about the Alliance Research Initiative

medicine.uky.edu/sites/research/alliance-research-initiative



DR. DEMASI'S IMPACT WILL LIVE ON AT UK COLLEGE OF MEDICINE

Left to right: Bhaswanth Dhanireddy, MD; William St. Clair, MD, PhD, professor of radiation medicine; and John DeMasi, MD.

The UK College of Medicine Department of Radiation Medicine honored the memory of former resident John DeMasi, MD, with an endowed lectureship.

A young John DeMasi foreshadowed his career at 5 years old when he chose his first Halloween costume. Wearing green scrubs from a teddy bear and a stethoscope so big it dragged as he walked, he proudly impersonated a doctor.

John would eventually carry on that childhood dream, powering through nine years of medical training to become Dr. DeMasi. His family wasn't surprised. John's father, Jim DeMasi, MD, opened John to a world of caring

for others. And according to one of his mother Ginny DeMasi's friends "if there were two magic markers and two coloring books, and three boys in the room, he would always let them go first." John simply cared about other people, and a job as a doctor was a perfect fit.

John's career path led him to the University of Kentucky College of Medicine Radiation Medicine Residency Program, where he made a profound impact on his mentors and fellow trainees through his compassionate nature, intense focus on work, and innate ability to connect with patients.

“

Any person who goes through medical training can deliver treatment options to a patient. That's not what sets a doctor apart. What makes John unique is that he cared for them as a human being.

—Bhaswanth Dhanireddy, MD

”

He maintained these qualities even through unrelenting challenges, including one that would ultimately cut his life short. He died in February 2020 at the young age of 34. Still, he made an early impact on health care, and he continues to do so even after his death.

It was the evening before his second year of medical school when John looked in the mirror and didn't recognize himself. After suffering a week of shoulder pain, his right eyelid was drooping, and his pupil was constricted.

At age 27, John learned he had vascular Ehlers-Danlos syndrome (vEDS), a connective tissue disorder typically caused by a mutation in the COL3A1 gene. The condition is considered the rarest and most severe type in the EDS family, and currently, there is no cure.

John described the gravity of the moment in his personal statement that he submitted to apply for residency at UK. “I had lost my health in an instant,” he wrote, “and it was never coming back.” In the coming years, John would be thrown into a life of constant medical appointments – as a patient, not as a doctor as he had planned.

Through his radiation medicine residency, John was surrounded by individuals with terminal illness every day while carrying the weight of his own diagnosis. Rather than letting the diagnosis consume him, he used it to build empathy with his patients. This stuck out to Marcus Randall, MD, then chair of radiation medicine, and Mahesh Kudrimoti, MD, residency program director and current acting chair.

“Patients always remembered seeing John. He had very good bedside manner,” Dr. Kudrimoti said. “That's something a lot of physicians develop, but he had innately good manners and that's what helped him connect with people.”

No one saw that more closely than Bhaswanth Dhanireddy, MD, who completed residency training with John. Together, they spent long days – a lot of them beginning before 6 a.m. – caring for patients and studying. Dr. Dhanireddy said John was vital in helping him adjust to cultural changes after attending medical school in India and that he strived to emulate John's patient-centered care. Now as a physician in Kansas City, “there is a

little bit of John” through each of Dr. Dhanireddy's patient interactions.

“Any person who goes through medical training can deliver treatment options to a patient. That's not what sets a doctor apart,” Dr. Dhanireddy said. “What makes John unique is that he cared for them as a human being.”

While caring for cancer patients, John also was determined to improve accessibility to testing, treatment, and care for those facing vEDS. In 2017, he joined forces with his brother, David DeMasi, a businessman, to start a nonprofit called FIGHT vEDS. The group aims to help patients learn more about the rare disease, gain access to affordable genetic testing, and link them to available clinical trials.

Using his background as both a patient and a physician, John educated patients about vEDS, helped them find affordable options for genetic testing, and rallied the community to support research. The research efforts John supported continue today, including an upcoming clinical trial regarding a new way to prevent arterial rupture in vEDS.



“There were many times where John would be in sessions with vascular EDS researchers, talking about the stark reality of the condition and the outcomes. He brought energy to those meetings, asking questions and learning so that he could translate for patients in a way that would create optimism,” David said. “He put himself in the middle of hearing these difficult truths while looking for the silver lining, striving to connect patients with more information and give them hope.”

David continues to run their nonprofit with an ultimate goal of finding a treatment for vEDS.

Knowing John’s ever-present admiration for medical education, Dr. Randall and Dr. Kudrimoti knew the best way to carry on their former resident’s legacy at UK. They collaborated with the College of Medicine philanthropy team to establish an endowed lecture in John’s memory.

The first annual DeMasi Endowed Lectureship was held in November, bringing together John’s family, his former colleagues, and his mentors for a day of learning, connection, and advancement of medicine. As a nod to John’s undergraduate institution, University of North Carolina faculty Larry Marks, MD, FASTRO, delivered the inaugural keynote address.

David was scheduled to make a speech, and it was important to him to be there; however, his baby’s due date was approaching, and he was afraid to travel too far from his home in New York. Instead, he delivered a talk virtually.

As fate would have it, David and his wife, Amanda, delivered a healthy baby boy the night before the lecture. They, fittingly, named their child John.

When John first learned of his condition, he knew his life was about to change. He knew there would be

challenges, and that there was a significant chance it could shorten his life. That never prevented him from following his childhood dream, acting upon his compassionate nature, and making a difference for his patients.

“I didn’t need this illness to make me a quality physician. Already, I possessed intangibles which I believe would make me an ideal residency candidate: authenticity, magnanimity, and resilience,” John wrote in his personal statement. “I will strive to be a resident that patients are comforted by, peers enjoy, and physicians appreciate training.”

It’s safe to say John accomplished his goal. ■

Learn more about the lecture

To learn more about the DeMasi family’s fight for vEDS treatment, visit fightveds.org. To learn more about the DeMasi Endowed Lectureship and how you can contribute, contact Taryn Derrick, director of philanthropy, at taryn.derrick@uky.edu.

HIGHLIGHTS

College of Medicine Wins Esteemed Award

The UK College of Medicine received the 2021 Health Professions Higher Education Excellence in Diversity (HEED) Award from INSIGHT Into Diversity magazine, the oldest and largest diversity-focused publication in higher education. This national honor recognizes U.S. health colleges and universities that demonstrate an outstanding commitment to diversity and inclusion. The UK College of Medicine was featured in the December 2021 issue of the magazine.

The University of Kentucky has been recognized as a Diversity Champion and was also named to the annual Forbes list of Best Employers for Diversity in 2019, 2020, and 2021. The Health Professions HEED Award is a demonstration that the University DEI vision is impacting college-level actions.



Congratulations to the Inaugural Mission, Vision, Pillar, and Enabler Award Recipients

These new awards recognize individuals in the college who have made exceptional contributions that embody the overall mission, vision, and purpose of the college's current strategic plan: College of Medicine Map to Impact through a Transdisciplinary Strategy (COMMITTS).

Mission

Loor Alshawa, MD

Fellow, Internal Medicine

Michele Staton, PhD, MSW

Professor, Behavioral Science

Faculty Associate, Center on Drug and Alcohol Research

Vision

Amy Meadows, MD

Assistant Professor, Pediatrics and Psychiatry

Director, Division of Child and Adolescent Psychiatry

Gabriella Pugh

PhD Candidate, Microbiology, Immunology, and Molecular Genetics

Education

Sandra Batsel-Thomas, MD

Associate Professor, Psychiatry

Director, Psychiatry Residency Program

Brandy Lawson

Accreditation Manager Senior, Office of Medical Education

Research

Thomas Curry, PhD

Professor and Vice Chair, Obstetrics and Gynecology

Director, National Institutes of Health (NIH) Building Interdisciplinary Research Careers in Women's Health (BIRCWH) Program

Director, Center for Clinical and Translational Science (CCTS) and UK Center for Appalachian Research in Environmental Sciences (UK-CARES) Pilot Project Program

Tanya Myers-Morales

Scientist, Microbiology, Immunology, and Molecular Genetics

Clinical Care

Joseph Kim, MD

Professor of Surgery

Chief, Division of Surgical Oncology

Erica LeMaster

Clinical Services Technician, Internal Medicine

Diversity and Inclusion

Ariel Arthur

Program Manager, Center for Health Equity Transformation

Ima Ebong, MD, MS

Assistant Professor, Neurology

Director, Diversity and Inclusion, Neurology

Jennifer Torres Yee, MD

Resident, Internal Medicine

Community Engagement

Bodie Stevens

Administrator, Rural Physician Leadership Program

Hilary Surratt, PhD

Associate Professor, Behavioral Science

Enabler

Angela Dearing, MD, MPH

Associate Professor, Internal Medicine

Assistant Dean for Student Affairs, Well-being and Professionalism

Assistant Dean for Accreditation, Graduate Medical Education

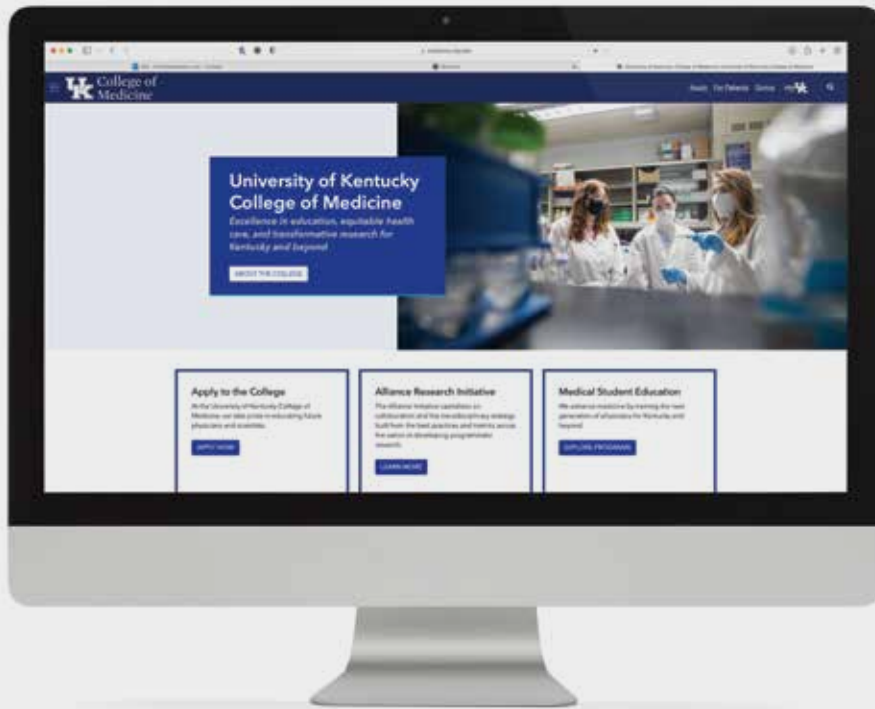
Stephen Welch

Manager, Academic and Research Technology, UK HealthCare and UK College of Medicine

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