THE UNIVERSITY OF ALABAMA AT BIRMINGHAM® | HEERSINK SCHOOL OF MEDICINE | FALL/WINTER 2025

UAB Medicine® Magazine

The Power Principle
Heersink faculty members share insights on the power of innovation, compassion, and discovery to shape the future of medicine

Cover Story

In our cover story, Caroline Harada, M.D., associate dean for Strategic Initiatives, Medical Education, discusses the power of humanism in medicine, page 20.

Briefs

More Stories

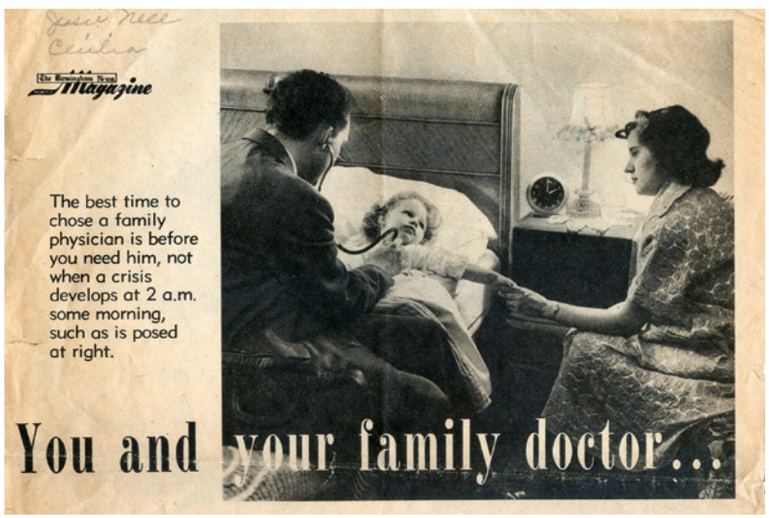
“

I fell in love with immunology from undergrad. This field had every type of 'ology' or science you could imagine—physics, chemistry, pharmacology—and that's what really made me fall in love with immunology and science in general."

FARAH LUBIN, PH.D.
Read more on page 26

ALUMNI

Cecil Prescott Jr., M.D., MAA's oldest living alumni member, pictured in a Birmingham News ad, circa 1953
Read more on page 32.



MESSAGE FROM THE DEAN

At the Heersink School of Medicine, we are fortunate to have state-of-the-art facilities and technology to advance our missions in patient care, biomedical research, and medical education. Yet our greatest resource has always been our people, who share their talent and dedication every day to improve health and well-being in our community and beyond.

This issue's feature story highlights the power of our people through profiles of outstanding members of the Heersink community. Their contributions fuel our progress, transforming ideas into impact and challenges into opportunities.

You will also find a personal essay from Ph.D. trainee Krystal Rivera, who shares the journey that carried her from Puerto Rico to the Heersink School of Medicine as she pursued her passion for discovery in vascular traumatic injury.

In the Alumni section, we honor Cecil Prescott Jr., M.D., who became our oldest living Alumni Association member when he celebrated his 100th birthday on August 8, 2025. You can also learn about the many events and activities hosted by our Medical Alumni Association that bring our graduates together.

Finally, our Giving section spotlights extraordinary philanthropic gifts made to support our people and programs, including a transformational $10 million gift from the Killion family to name the Killion Center for Neurodegeneration and Experimental Therapeutics. This generosity will sustain and expand vital research on Parkinson's, Alzheimer's, Huntington's disease, and amyotrophic lateral sclerosis (ALS).

As you read these stories, I hope you are inspired by the remarkable people who make up the Heersink School of Medicine and the future they work to build for our school and the communities we serve.

ANUPAM AGARWAL, M.D.
Senior Vice President for Medicine and Dean
James C. Lee Jr. Endowed Chair
UAB Marnix E. Heersink School of Medicine

EDUCATION

A Lasting Legacy

New Learning Community honors medical education leader

In fall 2025, the Heersink School of Medicine announced the creation of its 12th Learning Community (LC), named in honor of Latesha Elopre, M.D., MSPH, a beloved physician-scientist and medical education leader who passed away in July 2025.

Heersink students are assigned to a Learning Community when they begin medical school and remain in that group until graduation. The program's goal is to foster supportive relationships among students and between students and faculty mentors while promoting personal wellness and professional development.

Inspired by Elopre's legacy, students suggested naming the new LC after her. "In addition to being an outstanding clinician and researcher, Latesha Elopre was a highly regarded educator who had a passion for engaging and mentoring students," said Craig Hoesley, M.D., senior associate dean for Medical Education. "She possessed every quality we look for in our Learning Community mentors, and I am very pleased our students recommended naming our newest Learning Community after her."

At the time of her passing, Elopre was an associate professor in the UAB Division of Infectious Diseases, Department of Medicine, and assistant dean for Access and Engagement–Resident and Fellow Experience. As a physician-researcher, she studied and promoted HIV prevention in vulnerable populations.

LATESHA ELOPRE, M.D., MSPH

CARE

Hope and Healing

UAB celebrates opening of new Rehabilitation Pavilion

The new UAB Rehabilitation Pavilion opened August 18, 2025. With a focus on specialized neurorehabilitation care for stroke, brain and spinal cord injury, and other conditions, the $156.7 million facility offers 134 patient beds, advanced technology, therapy gyms, and a state-of-the-art seizure monitoring unit.

Designed to promote real-world recovery, the building is filled with natural light and includes indoor and outdoor spaces that support daily living. A rooftop garden helps patients work on mobility, cognition, and range of motion, while an outdoor terrain park and simulated city streetscape allow safe practice on curbs, crosswalks, and ramps. An in-clinic auto simulator prepares patients for car transfers, while recreational spaces such as a putting green and basketball court provide opportunities for patients and families to engage in active recovery.

The Pavilion also features advanced equipment to support patients at all mobility levels. Each room is equipped with overhead lifts, and patients can access robotic arm devices, tilt tables, and virtual reality treadmills that simulate real-world movement. A dedicated multisensory room helps reduce anxiety in patients with brain injuries through calming sounds, music, interactive projections, and LED lighting to create a soothing environment.

RESEARCH

Long COVID Discovery

Lung foam cell formation linked to long-term damage

Millions of Americans who acquired COVID-19 experience persistent respiratory symptoms—including breathlessness, coughing, and chest pain—lasting over three months, known as long COVID.

A study led by researchers at UAB and the University of North Carolina at Chapel Hill revealed a previously underappreciated mechanism by which SARS-CoV-2 infection contributes to long-term lung damage. The study, published in Nature Microbiology, demonstrates that SARS-CoV-2 uniquely induces the formation of foam cells—lipid-laden macrophages with pro-fibrotic and pro-thrombotic properties— in human lung tissue.

Researchers found that SARS-CoV-2 infection significantly increases macrophage numbers and foam cell formation in the lung, unlike other coronaviruses. These foam cells express genes linked to platelet activation, collagen synthesis, and extracellular matrix remodeling, contributing to persistent lung fibrosis and thrombi formation even after viral clearance.

"This study provides evidence that foam cells are a product of SARS-CoV-2 infection and possibly active contributors to the lung damage seen in COVID-19," said J. Victor Garcia-Martinez, Ph.D., professor and chair, Charles H. McCauley Endowed Chair in the UAB Department of Microbiology.

Importantly, the study shows that early treatment with the antiviral EIDD-2801, or molnupiravir, can prevent foam cell formation and reduce fibrosis markers, suggesting a potential therapeutic strategy.

COMMUNITY

A Strong Defense

Guardian Caps donation to help prevent concussions in youth sports

In September 2025, UAB Sports and Exercise Medicine donated 800 Guardian Caps to the Birmingham Youth Sports League to reduce the risk of concussions and traumatic brain injuries. Guardian Caps are soft-shell, padded covers worn over an athlete's existing hard-shell helmet to reduce the force of impact from head collisions.

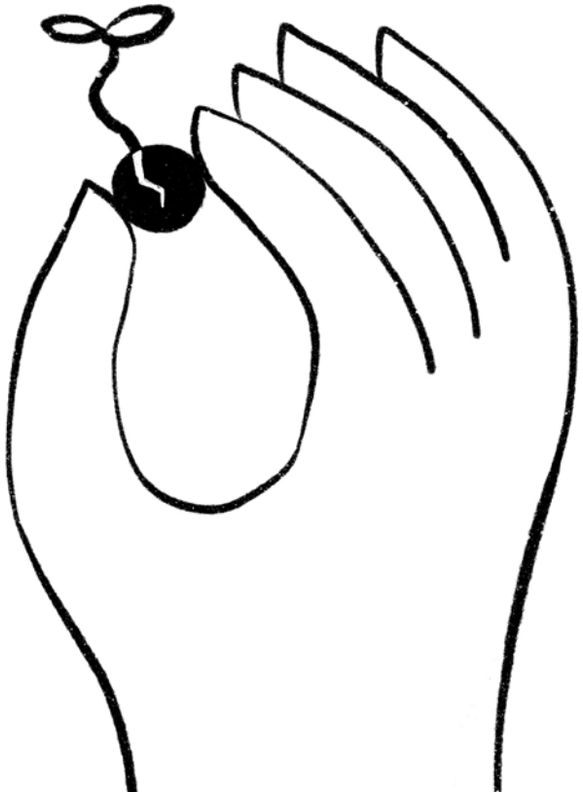
"This initiative reflects our mission to deliver comprehensive orthopedic and sports medicine services while actively promoting education, prevention, and community engagement," said Fred Horton, executive administrator for the UAB Department of Orthopaedic Surgery. "Through a generous gift from the Monday Morning Quarterback Club, we are proud to donate Guardian Caps."

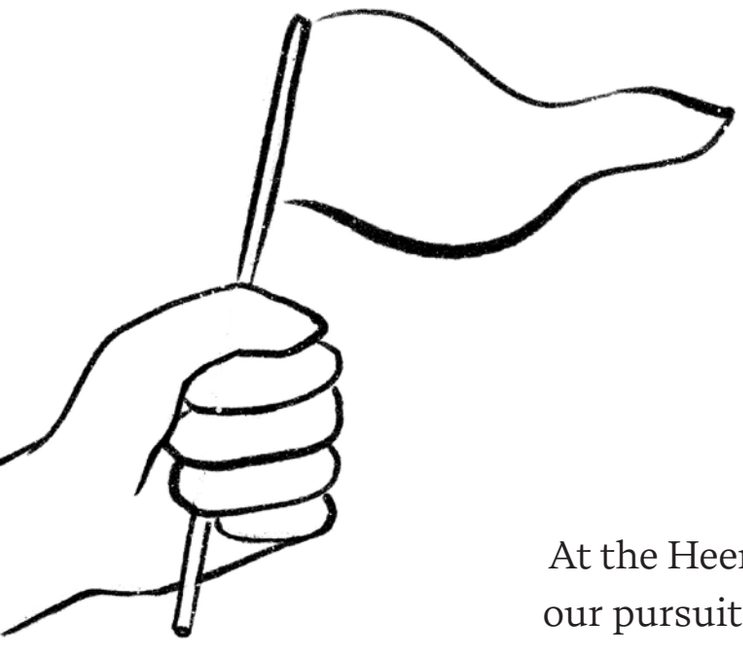
Concussions, a type of traumatic brain injury, occur when a sudden impact shifts the brain internally, damaging cells and disrupting function. Youth athletes, particularly in football, face higher risk. "One of the biggest dangers is ignoring symptoms and letting kids return to play too soon," said John Lax, M.D., assistant professor in the UAB Department of Family and Community Medicine, "When in doubt, hold them out."

UAB Sports and Exercise Medicine remains committed to supporting coaches, parents, and young athletes through prevention, education, and care to keep kids safe and healthy.

the power principle

HEERSINK FACULTY MEMBERS SHARE INSIGHTS ON THE POWER OF INNOVATION, COMPASSION, AND DISCOVERY TO SHAPE THE FUTURE OF MEDICINE





At the Heersink School of Medicine, our pursuit of excellence is fueled by people who bring passion, creativity, and vision to their work. In the following feature, members of our Heersink community share insights from their fields, reflecting on what drives progress in medicine and science. From innovation in medical education and humanism in patient care to breakthroughs in immune memory, kidney disease, cancer survivorship, and more, their perspectives highlight the power of ideas—and the people behind them—to transform health care and medicine.

the power of lifelong care

For many, the story of cancer in recent decades has been one of progress. Survival rates have improved dramatically, new therapies hold incredible promise, and once-deadly diagnoses now come with hope. Yet, as Smita Bhatia, M.D., MPH, , reminds us, survival is only part of the story. The long-term health and quality of life of survivors require just as much attention—and that's where the power of lifelong, risk-based care comes in.

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By the time childhood cancer survivors reach 45 years of age, 95 percent of them have severe or life-threatening complications

SMITA BHATIA, M.D., MPH

Bhatia's journey into the field began, as she describes it, "serendipitously." During her fellowship at the University of Minnesota in the 1990s, she was paired with Les Robison, Ph.D., a pioneer in cancer survivorship research. Their work together introduced her to the troubling reality that lifesaving treatments often carried hidden costs—risks of second (and third) cancers, heart failure, cognitive impairment, and more. "What really sparked my interest was not just observing these complications but trying to understand the mechanisms behind them—why some survivors develop them and others don't—and how we might prevent them," Bhatia recalled.

The stakes are high. Survivors of childhood cancers, for example, face a lifetime of health challenges. Treatments once standard for conditions like Hodgkin lymphoma or leukemia have been linked to devastating long-term consequences. Chest radiation that cured cancer in adolescence has later led to breast cancer in young women. Chemotherapy drugs essential for survival have caused heart failure years down the line. "By the time childhood cancer survivors reach 45 years of age, 95 percent of them have severe or life-threatening complications," Bhatia explained.

These numbers highlight a paradox: while more people than ever before are surviving cancer, they often live with a shortened lifespan—one to two decades less than the general population — because of treatment-related conditions. And yet, supportive care, both medical and social, remains uneven.

Part of the challenge is structural. In pediatric oncology, survivorship clinics exist at many major health centers, guided by carefully developed road maps for monitoring long-term risks. Even so, only about half of survivors consistently receive this specialized follow-up care. In adult oncology, the gap is even wider. Survivorship clinics are scarce, and most patients transition back to community physicians who may not have the training or resources to manage the complex needs of long-term survivors.

Beyond medical monitoring, survivors often struggle with issues that are harder to measure but no less impactful. Anxiety, depression, and social isolation are common. Bhatia recalls one patient who, after years of treatment, was left with cognitive challenges, short stature from hormone deficiencies, and morbid obesity. To cope, she rarely left her apartment, effectively cutting herself off from the world. "Her physical complications were serious, but the isolation compounded everything," Bhatia said. "Her quality of life was deeply diminished."

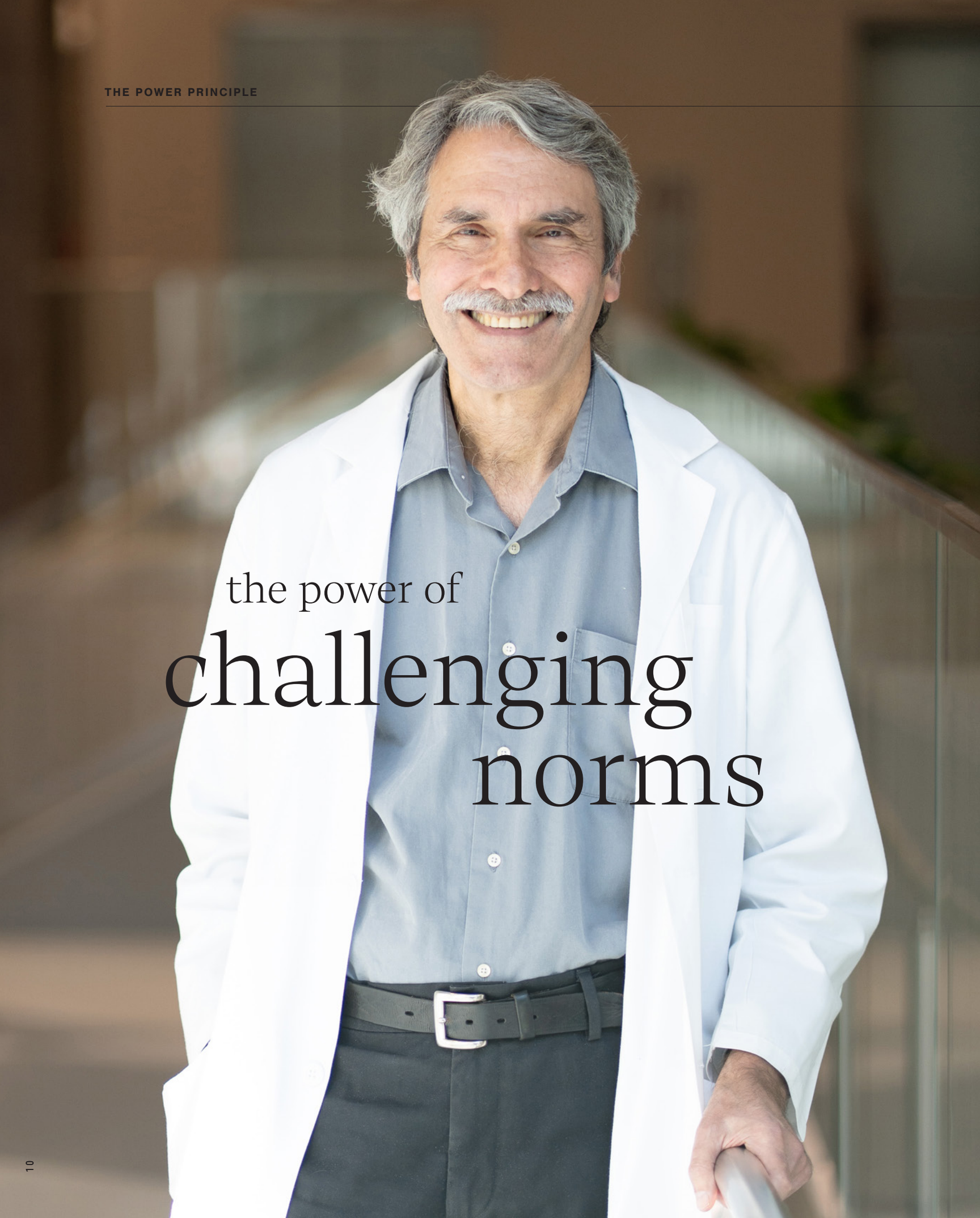
That's why Bhatia says care for these patients must extend beyond medicine. Survivorship programs at UAB, for instance, include support groups where patients can share experiences, learn about financial management, or hear directly from fellow survivors about how they navigate challenges. These groups foster community and resilience, addressing survivors' profound need to connect with people who truly understand their struggles.

The field itself is evolving. Research priorities now include developing interventions to reduce risks from older therapies, exploring genetic predispositions that make some survivors more vulnerable than others, and tracking the long-term effects of newer treatments like immunotherapy and targeted drugs. Early evidence suggests these cutting-edge therapies may carry fewer long-term risks, but, as Bhatia cautioned, "the jury is still out." Only years of careful follow-up will reveal the full picture.

Still, one of the biggest hurdles is practical: survivorship care is time-intensive and not financially profitable under current healthcare models. A single visit can last 45 minutes or more, covering everything from risk reduction to health promotion, alongside necessary screenings. That complexity is vital for patients but difficult to sustain within systems designed for quick, high-volume care.

Despite these challenges, Bhatia remains optimistic. She points to the rewarding moments that come with seeing survivors thrive—going to school, starting careers, building families. For medical students considering their specialty, she says cancer survivorship offers a unique perspective. "They're used to seeing very sick patients in the hospital but in survivorship clinics, they can see what comes after—how these individuals return to the community, and how we can help them live full, meaningful lives."

■ *Jane Longshore*



the power of challenging norms

Early in his career, **Michael Allon, M.D.**, professor in the UAB Division of Nephrology, Department of Medicine, noticed that the prevailing wisdom concerning vascular access did not match his observed experience. Hemodialysis is the process of filtering and removing waste and excess fluids from the body, usually when the patient's kidneys cannot do so because of disease or dysfunction. A needle or catheter is used to draw blood out of the patient's body and into a hemodialysis machine. The blood is then passed through a dialyzer, which separates waste products and excess fluid from the blood. The cleaned blood is returned to the patient's body through another needle or catheter.

As a nephrologist, Allon knew that successful dialysis requires a reliable method to withdraw blood from the patient's circulation ("vascular access"). What Allon questioned was the best type of vascular access for dialysis. "In the 1990s, the National Kidney Foundation guidelines said that the best type of vascular access was a fistula, where the surgeon directly connects an artery to a vein in the arm," Allon explained. "Grafts, where the surgeon takes a piece of plastic tubing and inserts one end into the artery and the other end into the vein, were considered a poor second choice. However, the more I reviewed the standards, the more I questioned those recommendations. What I found in my clinical practice was not consistent with what was recommended."

When those vascular access recommendations were made in the 1990s, Allon observed, only about 25 percent of dialysis patients were using a fistula; most patients had a graft. Also, fistulas were mostly put in an extremely specific population of dialysis patients.

"Those patients were young, they were male, and they did not have a lot of medical conditions. In that specific population, the fistula worked very well. The problems started when we accepted those guidelines and started saying, 'Well, we should put fistulas in everyone, right? Why only 25 percent?' That is where we ran into problems."

Allon and his collaborators soon found that in older patients, women, and patients with more severe vascular disease, a higher proportion of fistulas failed to mature, or expand to a size usable for dialysis.

"

Wherever the research leads you, do not be afraid to pursue that and to publicize that ...

If you are right, it can change how people in the entire specialty perceive and manage that problem, and the patients benefit."

MICHAEL ALLON, M.D.

"When all this was considered, we found that approximately 40 percent of fistulas did not mature. That is where I started trying to understand what the issues were and how we could improve the outcomes," Allon said. "By putting a graft rather than a fistula in specific populations, you end up using the right type of access in each patient."

This "right access in the right patient" practice spearheaded by Allon resulted in fewer procedures to maintain vascular access and fewer dollars spent by the healthcare system. Now, the revised 2019 recommendations are to place the right access in the right patient at the right time for the right reason, a vast change from the earlier "fistula first" guidelines.

Allon's research challenging longstanding assumptions about vascular access in hemodialysis was recognized in 2025 with the Belding H. Scribner Lifetime Achievement Award from the American Society of Nephrology. "Do not be afraid to challenge the prevailing status quo of what physicians believe. Wherever the research leads you, do not be afraid to pursue that and to publicize that," Allon said. "If you are right, it can change how people in the entire specialty perceive and manage that problem, and the patients benefit."

■ *Andy Currie*

the power of innovation

On any given day at UAB Hospital-Highlands, Berdale Colorado, D.O., MPH, might be helping a ballet dancer recover from a foot injury, performing a platelet-rich plasma injection on a tennis player's elbow, or diagnosing a nerve injury. While he scans patients with the ultrasound machine, he walks them through what he sees on the screen and points out any abnormalities. For Colorado, these are not just injuries; they're obstacles keeping people from what they love.

Whether it's a stage, a court, or a long-awaited family trip, his goal is to help patients get back to their physical activities—with less pain and improved function.

Colorado is a national leader in nonoperative musculoskeletal medicine. His work spans sports medicine, electrodiagnostics, regenerative treatments/ortho-biologics, and interventional spine procedures. His roles at UAB include associate professor and vice chair of Education in the Department of Physical Medicine and Rehabilitation (PM&R), assistant dean for Student Experience in the Heersink School of Medicine, chief of Sports and Musculoskeletal Medicine, PM&R Residency Program Director, and now program director for the new Interventional Spine and Musculoskeletal Medicine Fellowship.

When Colorado began using ultrasound with electrodiagnostic testing (EMG) at Washington University in St. Louis over a decade ago, little did he know how valuable the combination would be in the diagnosis of nerve disorders. "Case after case, the ultrasound findings would be crucial to the diagnosis," Colorado said. Soon, his surgical colleagues would routinely request ultrasound with the EMG. Before long, Colorado began presenting nationally and publishing articles on the topic. He was one of the first physicians in the country (and currently one of only two physicians in Alabama) to be board-certified in both neuromuscular ultrasound and electrodiagnostic medicine by the American Board of Electrodiagnostic Medicine.

When Colorado arrived at UAB in 2022, he saw an opportunity to reimagine musculoskeletal medicine training in the PM&R Residency Program. He created a new ultrasound curriculum, introduced a case-based EMG simulation curriculum, and expanded opportunities for sports medicine and spine education. "We're training future leaders in PM&R," he said. "We need to incorporate the newest technology and integrate different teaching strategies."

In 2025, Colorado founded the UAB Interventional Spine and Musculoskeletal Medicine Fellowship, which welcomed its first fellow this year. The program, one of the few of its kind in the country, offers advanced training in electrodiagnostics, ultrasound, spine procedures, and musculo-skeletal medicine. And he's not stopping there. Colorado hopes to help develop multiple fellowships in the PM&R department—a Spinal Cord Injury Medicine Fellowship is already in the works, aiming to launch in 2027.

Colorado's dedication to training and mentoring has been recognized with several recent accolades, including the Accreditation Council for Graduate Medical Education's Courage to Teach Award, the Early Career Academician Award from the Association of Academic Physiatrists, and the Innovators and Influencers Award from the American Academy of Physical Medicine and Rehabilitation.

Colorado's passion for sports medicine and promoting the health of individuals with disabilities led him to the world of adaptive sports, where he's helped rewrite the rules—literally. As chair of the Medical Subcommittee for the USA Wheelchair Football League, Colorado helped create the league's new classification system. This ensures fair competition between people with different functional abilities in adaptive sports.

Colorado's adaptive sports journey started during his residency. While covering a local wheelchair rugby tournament, he recognized one of the athletes as a patient he had taken care of during acute inpatient rehabilitation from a spinal cord injury. "Knowing some of the struggles that the athlete had gone through during his inpatient rehabilitation to now enjoying sports was one of the most impactful experiences of my residency," Colorado said.

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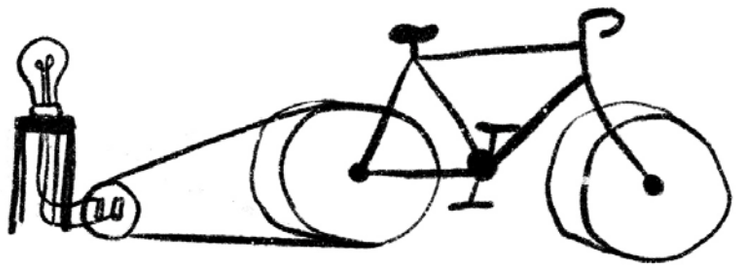
Stay curious and ask questions, develop your passion, and always keep the patient at the center.

BERDALE COLORADO, D.O., MPH



When Colorado established the Performing Arts Medicine Program at UAB, he drew on his firsthand knowledge of the unique physical demands and health challenges that performing artists face. As a former church organist and with children involved in dance and music for years, he understands the need for an individualized treatment plan to return to performance.

“Unfortunately, specialized medical care for performing artists is not readily available across the country,” Colorado said. “This program ensures that dancers, musicians, and other performing artists in the Birmingham area have access to the highest quality specialized care.” The program is now the official medical provider for the Alabama Ballet, Samford University School of the Arts, and UAB Dance/Cheer.

Colorado’s father, grandfather, and great-grandfather were all pastors. While he did not enter the ministry himself, he views medicine as more than just a job—it’s a calling. He strives to provide compassionate care to help patients achieve their goals and improve their quality of life. “Faith and family have been the most important parts of my journey in medicine,” he said. “The love and support of my wife and three kids have allowed me to pursue my passions.”

In a field that’s constantly evolving, Colorado’s approach to innovation is simple: Stay curious and ask questions, develop your passion, and always keep the patient at the center.

■ *Natalie Garcia*

the power of collaboration

It was the mid-1980s when two young vision scientists found themselves on converging paths that would reshape how the world understands age-related macular degeneration (AMD), a disorder of the retina that is a leading cause of vision loss in older adults.

CHRISTINE CURCIO, PH.D

CYNTHIA OWSLEY, PH.D.

“

You can’t know everything; collaboration is the way to solve a scientific problem.”

CYNTHIA OWSLEY, PH.D.

Christine Curcio, Ph.D., had chosen aging as her research focus, and in 1986, she attended the Association for Research in Vision and Ophthalmology annual meeting to hear **Cynthia Owsley, Ph.D.,** speak. “She was talking about vision, aging, and the retina, and no one else was,” Curcio recalled, captivated by Owsley’s seamless blend of public health and behavioral science.

A year later, they had an official meeting of minds. Curcio was completing a postdoctoral fellowship at the University of Washington, where her groundbreaking work on human photoreceptor topography was on its way to becoming a staple in ophthalmology textbooks In town for a conference, Owsley recognized Curcio's rare anatomical expertise and admired her dedication and precision, calling Curcio “a wonderful and brilliant scientist.” Those early exchanges planted the seeds of a collaboration that now spans nearly four decades.

By the mid-1990s, both had turned their focus to AMD. Curcio discovered that rod photoreceptors are especially vulnerable in aging and disease, while Owsley documented delays in rod-mediated dark adaptation under low light. “That’s when things clicked,” Owsley said. “We brought complementary skills to the table—Christine’s structural expertise and my functional approach. It made us a very strong team.”

Curcio joined the UAB Department of Ophthalmology in 1990 at Owsley’s urging, drawn by the Alabama Eye Bank’s access to human tissue. Their first joint publications appeared in 2000, but the defining project arrived in 2009 with ALSTAR (Alabama Study on Early Age-Related Macular Degeneration). The longitudinal study tracked patients’ retinal structure and function over three years. Weekly meetings with clear agendas, meeting notes, and project timelines kept their work moving forward. “We’re both very honest,” Owsley said. “Sometimes that means we disagree, but it always makes for better science.”

> “Multidisciplinary science is the way to go … Go fast alone, go far together.”
>
> CHRISTINE CURCIO, PH.D.

One of their most significant breakthroughs emerged from ALSTAR and its successor, ALSTAR2. The duo demonstrated that delayed rod-mediated dark adaptation (RMDA) is the first functional biomarker of early AMD. By linking RMDA changes to structural alterations in the fovea area of the retina and common genetic risk factors, they established a model for early intervention. “We developed a pathophysiology model that united the fovea’s biology with drusen deposits,” Curcio explained. “Mice and isolated cells do not have a fovea. Our collaboration made this human model possible.”

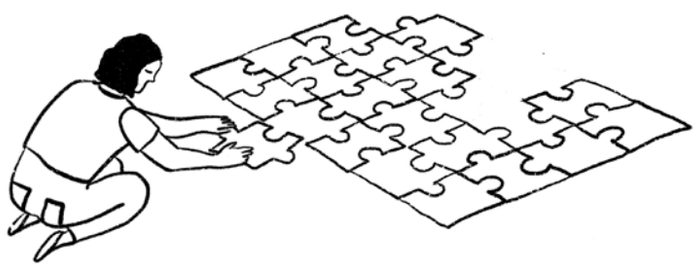
Mentorship has been another hallmark of their partnership. Curcio and Owsley emphasize generosity with ideas and tolerance for independent thinking. “Learn from your staff and fellows,” Curcio advised. Their loyal teams provide institutional continuity that spans career stages.

In 2024, the Association for Research in Vision and Ophthalmology awarded them the Proctor Medal, the highest honor in vision science research. For Owsley, the honor represented the pinnacle of rigorous, impactful science she never expected. Curcio treasured the moment for the opportunity to reach a mixed audience in Salt Lake City. “Getting the word out to people who will act is as important as getting the data,” she said.

To young scientists, they offer a simple but hard-earned lesson: launch collaborations early and build them with structure. “Multidisciplinary science is the way to go,” Curcio said. “Go fast alone, go far together.” Owsley sums up their shared credo: “You can’t know everything; collaboration is the way to solve a scientific problem.”

Reflecting on nearly four decades of joint work, both hope their partnership will be remembered for changing our understanding of the aging-to-AMD transition and for forging a path toward treatments that stop vision loss before it begins.

■ *Grace Bertram*



the power of humanism

The grand rounds session at the Heersink School of Medicine is quiet and charged with attention. **Caroline Harada, M.D.**, professor in the Department of Medical Education, watches as a student unfolds the story of a man from rural Alabama who—afraid of hospitals—grew out his hair to conceal a lump on his head. When his wife discovered it, she took him to the doctor. The diagnosis was grim: stage 4 meningioma (a tumor that grows from the membranes surrounding the brain and spinal cord) with metastases to the spine.

Harada listens intently, guiding students through cases that reveal how social and emotional factors complement textbook knowledge and deeply influence patient care. For Harada, this kind of learning, rooted in humility and connection, isn't just a teaching method, but the foundation of humanism in medicine.

Harada's understanding of that foundation deepened early in her own medical training, when her husband was diagnosed with bipolar disorder. During his first mental health crisis, she recognized the emergency department nurse from her own past shifts as a young physician. A stern woman not prone to small talk, the nurse offered Harada a hug and Harada broke down.

"No amount of knowledge could help me in that moment. What I needed was empathy," Harada recalled. That experience reshaped her career. She shifted from general geriatrics to dementia care, driven by a desire to care not just for patients, but also for caregivers who shoulder the burden quietly and often invisibly.

Later, her path turned to medical education. As associate dean for Strategic Initiatives, Medical Education in the Heersink School of Medicine, Harada founded the Office of Service Learning to bridge classroom knowledge and community needs. Her students teach healthy cooking at a farmers' market in a food desert neighborhood, counsel women on heart health and smoking cessation at a women's shelter, and exercise with clients at a disability services center, reducing the stigma around intellectual disabilities. Harada emphasizes that these community partnerships aren't one-off projects, but ongoing year-round efforts to build trust and collaboration.

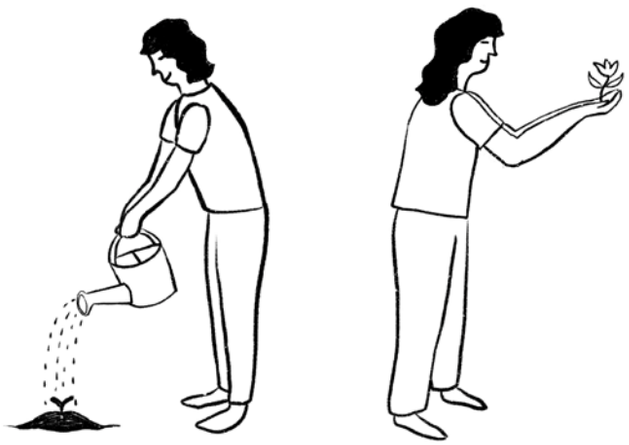
In 2024, medical students Katie McMillan, Hana Habchi, and Karnika Mehrotra approached Harada with a plan: to expand Equal Access Birmingham (EAB), Heersink's student-run free clinic, with a Street Medicine Clinic for unhoused residents at George Ward Park. Harada initially hesitated, aware of the challenges, but the students' persistence won her over. The clinic launched with guidance from Emergency Medicine faculty Erin Shufflebarger, M.D., MSPH, and Christine Shaw, M.D. Each month, unhoused residents gather at the park, not just for medical care but to be seen and heard.

"This work is humanism in action," Harada said. She teaches students to meet people where they are—with dignity and respect—and to understand patients' backgrounds and the many factors that shape their health. The approach is working: The students have earned the trust of many park residents, who are also seeing improvements in their health.

When Harada received the 2024 Arnold P. Gold Foundation Humanism in Medicine Award from the Association of American Medical Colleges, she was surprised. "I thought it was a mistake," she laughed. "So many deserve it." Still, the honor affirms the values she champions: empathy, listening, and humility. For Harada, humanism is the heart of medicine. "Doctors care for people, not patients. Without humanism, there is no care," Harada said. But it also helps the doctors. "It gives meaning to our work and helps prevent burnout during tough times."

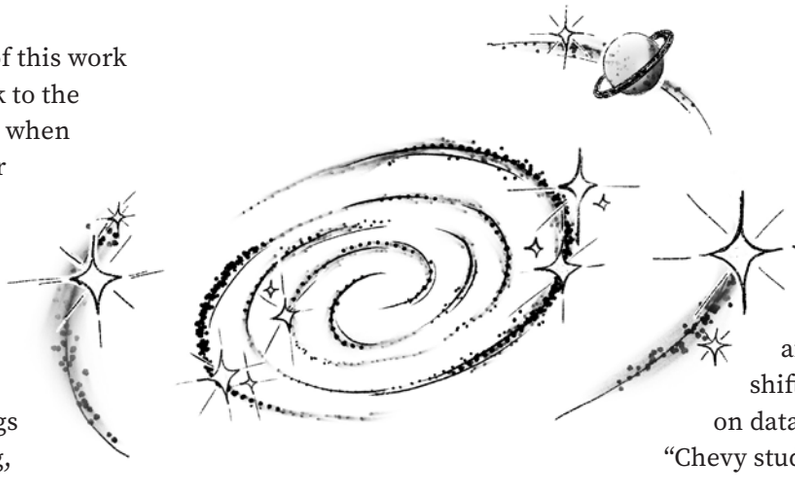
With hope for the future, Harada wants humanism to remain the foundation of medical practice long after her career ends. She encourages her students to remember their "why" when challenges arise—and to listen to what their patients are telling them. At the free clinic, watching students connect with patients, Harada sees the principle in action: Listening isn't just part of care—it is care.

■ *Jatava Burns*



the power of hope

When David Kimberlin, M.D., arrived at UAB in 1994, he joined a legacy decades in the making. Drawn by UAB's expertise in virology, Kimberlin became part of a multi-institutional effort—first called the Collaborative Antiviral Study Group (CASG) and now known as the Congenital and Perinatal Infections Consortium (CPIC)—dedicated to understanding and treating rare viral infections in newborns.



The origins of this work stretch back to the early 1970s, when Kimberlin's mentor at UAB, Richard Whitley, M.D., and Whitley's mentor, Charles Alford, M.D., recognized two key truths. First, antiviral drugs were just emerging, offering opportunities for the treatment of viral infections that few believed possible at the time. Second, pharmaceutical companies were unlikely to focus on rare diseases affecting newborns. Their solution was visionary: bring together medical centers across the country to pool expertise and patients, creating the power to study—and eventually treat—these conditions.

The results have been transformative. Through sustained NIH funding since 1973, the consortium has proven that life-threatening conditions such as neonatal herpes, congenital cytomegalovirus (CMV), and neonatal enteroviral sepsis can be treated effectively. Kimberlin's leadership of the research network added to that impact, showing that oral antiviral therapy following intravenous treatment for neonatal herpes improved long-term neurological outcomes and that longer-term treatment of congenital CMV improved both hearing and neurodevelopment—findings that became standard of care.

For Kimberlin, distinguished professor in the Division of Pediatric Infectious Diseases, Department of Pediatrics, these studies are not just about science; they're about people. Many of the viruses his team studies can cause profound harm: neonatal herpes can kill or leave lasting brain injury, while CMV is the leading cause of non-genetic hearing loss in children. Behind every clinical trial are families navigating fear and uncertainty, and—most importantly—seeking hope.

That hope, Kimberlin says, is at the heart of clinical research. "The intersection of clinical trials and patient care provides the opportunity for hope," he explained. "Not false hope, but the chance for people to consider a potentially groundbreaking option for themselves or their child." Success, in his view, is defined by the opportunity to give people the options and information they need to make their own informed choice.

Research in newborns is complex. Parents must decide on behalf of their child, and the studies themselves must be designed with extraordinary care. Kimberlin admits his approach evolved after becoming a parent himself—shifting from "Cadillac studies" heavy on data collection to more practical "Chevy studies" that still answer essential scientific questions without unnecessary burden on infants or families.

That careful balance of science and compassion has yielded impressive results. In April 2009, the H1N1 "swine flu" pandemic began to unfold. While the world scrambled for answers, UAB's pediatric infectious disease team was already running a study on oseltamivir (Tamiflu) dosing in infants—the only such data available anywhere. Kimberlin received a call from the FDA the Sunday after the first two cases were recognized in California: Could UAB share its findings immediately? By that afternoon, the data were in Washington. Within 48 hours, the FDA, European Medicines Agency, and Japanese regulators had issued life-saving treatment guidelines for babies under 12 months old.

Today, Kimberlin's role has expanded as UAB's associate vice president for Clinical Trials. He touts the development of the Academic Research Organization for Clinical Trials (ARO-CT), an initiative designed to remove administrative barriers so UAB researchers can focus on science and bringing clinical trial opportunities to their patients, as an important step forward in growing UAB's clinical trials enterprise.

The aim of ARO-CT is threefold: streamline processes for faster study start-up, support investigators in enrolling participants, and strengthen opportunities for industry-sponsored research.

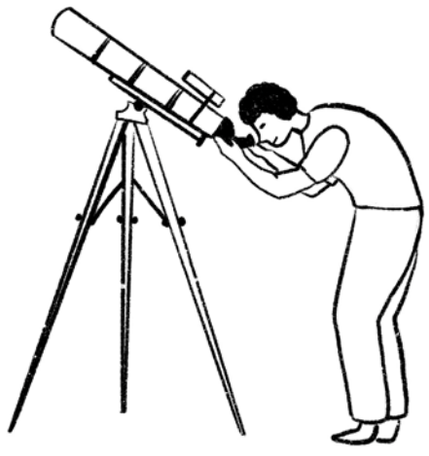
For Kimberlin, the power of hope is not abstract—it is tangible in every trial, every conversation with a family, every incremental step toward a cure or better outcome. "We went into medicine to work with people and give them options to make their lives better," he said. "Clinical trials do that. They give patients, and those who love them, a reason to hope."

■ *Jane Longshore*

“

The intersection of clinical trials and patient care provides the opportunity for hope.”

DAVID KIMBERLIN, M.D.



the power of memory

A single memory can shape the course of a person's entire life. For **Farah Lubin, Ph.D.**, distinguished professor in the UAB Department of Neurobiology, memories didn't just influence her life—they shaped her career, driving her to become a trailblazer in the field of epigenetics and memory research.

Lubin's academic journey began in immunology, where she earned her Ph.D. in molecular genetics and immunology. Fueled by a deep curiosity and passion, she explored the molecular mechanisms behind immune memory, studying T and B memory cells.

"I fell in love with immunology from undergrad," Lubin said. "This field had every type of 'ology' or science you could imagine—physics, chemistry, pharmacology—and that's what really made me fall in love with immunology and science in general."

But as Lubin entered her postdoctoral phase and began applying for fellowships, she found herself drawn to neuroscience. While looking through available fellowships, one molecule stood out to her: NF-κB, a transcription factor that plays a major role in the immune response in B memory cells.

"I started reading about memory formation and came across the work of Eric Kandel," she said, referencing the Nobel Prize-winning neuroscientist often credited with proving the molecular basis of memory. "The literature was placing NF-κB solely in the context of inflammation, while another transcription factor, CREB, was being linked to synaptic plasticity." (Synaptic plasticity refers to the brain's ability to change the strength of connections between synapses in response to activity and experience—a fundamental mechanism underlying learning and memory that allows the brain to adapt and reorganize itself.)

Lubin, whose background was deeply rooted in immunology, saw something others hadn't. "As an immunologist, I knew CREB is just as involved in immune responses as NF-κB. They're both transcription factors—they just regulate different gene networks. So why was one only associated with plasticity and the other with inflammation?"

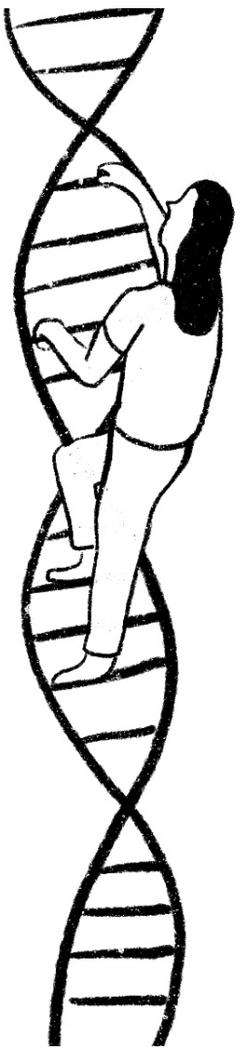
"The dual role of these transcription factors eventually brought me to the neuroscience field and epilepsy research," Lubin said. Studying temporal lobe epilepsy improved her understanding of how the brain learns and retains memories, as epilepsy reveals these processes.

During her second fellowship, Lubin shifted her focus from brain changes in memory formation to life's molecular marks on DNA. This led her into the world of neuroepigenetics—the study of how gene expression changes in brain cells are shaped by experience.

Not long after, Lubin made history by discovering that a form of epigenetic regulation—DNA methylation—can directly influence BDNF, a key molecule for learning and memory, in the adult brain. It was a discovery that challenged longstanding assumptions and reframed how scientists think about gene regulation in non-dividing neurons.

Today, Lubin continues to break ground by laying the foundation for the next generation of scientists. "My work stands for itself," she said. "All I've ever wanted is to do something meaningful—something that can help improve lives." That mission is already inspiring others. "I have high school students emailing me," she added. "They're like, 'I want to talk about epigenetics.'"

Looking ahead, Lubin aims to deepen our understanding of the epigenome, explore non-coding RNAs, and identify new drug targets for memory-related disorders. But her vision goes beyond the lab. She's passionate about how everyday choices—exercise, sleep, diet, stress management—can influence brain function on a molecular level. Our memories are our history … I think people can become better versions of themselves just by remembering who they really are and where they come from."



■ *Joy Marsch*

Healing in Pieces

A Ph.D. candidate reflects on lessons learned about injury, recovery, and growth

KRYSTAL RIVERA

I arrived in Birmingham with a suitcase, a dream, and more self-doubt than I cared to admit. As a Puerto Rican woman in STEM (science, technology, engineering, and mathematics), I came to UAB in 2023 to pursue a Ph.D. in biomedical science. I felt excited, determined, and a little bit afraid. After rotating in a few different laboratories, I chose to work in the UAB Division of Trauma and Acute Care Surgery within the Department of Surgery. Drawing on my undergraduate degree in cardiopulmonary sciences, I realized that studying traumatic injury offered a unique opportunity to bridge my academic background with real-world impact. This path enables me to apply my expertise to directly support patients in crisis and make a meaningful contribution to society.

In this role, I investigate the biological effects of traumatic injury. Specifically, I study how trauma disrupts the vascular system, the network of blood vessels that delivers oxygen and nutrients to our organs. One of the molecules I study is hyaluronic acid, a sugar-like molecule naturally found in our bodies. After traumatic injury, this molecule can send signals to the immune system, either helping the body heal or worsening inflammation. My project seeks to improve our understanding of how hyaluronic acid behaves after trauma. In enhancing our understanding of hyaluronic acid, I hope to uncover new ways to help patients recover and protect the vascular system that keeps us alive.

Traumatic injury is the number one cause of death for Americans under 45. It is sudden, devastating, and often triggers a cascade of vascular damage that contributes to long-term complications or death from severe blood loss. In those critical moments after injury, survival can depend on what happens to the blood vessels of the vascular system. My research project focuses on understanding how trauma damages the vascular endothelium and how we might develop a therapeutic agent to protect it during those early, crucial hours. I came to UAB to understand trauma on a molecular level. What I did not expect was how deeply I would also learn about recovery, resilience, and healing both in the lab and in myself.

THE SCIENCE OF HEALING

Trauma does not end when the bleeding stops. In the lab, I study how the vascular endothelium, defined as the inner lining of our blood vessels, begins to unravel after severe traumatic injury. Hyaluronic acid, normally a quiet protector in the body, helps tissues stay hydrated and strong. But after trauma, it can break down into fragments that make everything worse: more inflammation, more leakage, more damage.

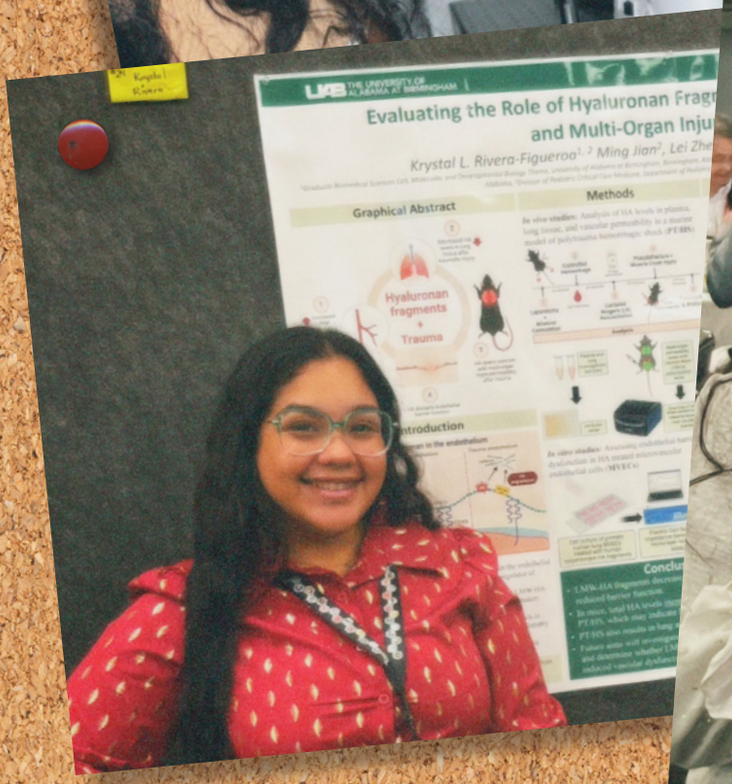
Through plasma samples from trauma patients and experiments with human endothelial cells and mouse models, I try to map what goes wrong at the molecular level and how we might intervene. Can we block the signals that trigger more harm? Can we protect the fragile blood vessels that hold everything together? These are the scientific questions I chase. But in chasing them, I started asking myself other questions, too: What helps a person hold themselves together after life breaks them open? What allows healing to begin?

My mornings start early. I am often in the lab before the city fully wakes up, pipetting quietly while the sun begins to rise over Birmingham's skyline. Some days, I process fresh plasma from trauma patients, including blood donated just hours after a crash, a fall, or a near-fatal rupture. These are not just tubes of blood; they are pieces of a person's fight to survive. Other mornings, I work with our animal models by assisting with surgeries that model trauma and hemorrhagic shock or collecting tissue samples to study how injury changes the body at the molecular level. Between the patient samples, the animal models, and the cells I culture, my mornings move between the sharp urgency of trauma and the delicate precision of research.

In the afternoons, I trade my pipette for the microscope. I spend hours peering into the cellular world, looking for signs of damage or healing that might be invisible to the naked eye. The endothelial cells I work with are delicate and complex, just like the patients they represent. I stain, image,

■ Photo by Rachel Hendrix

With every experiment, I gain clarity. With every failed assay, I gain resilience. And with every conversation with my mentors, I realize that I belong here.



and analyze, searching for patterns in how trauma disrupts the very structure of life. These images, these shifts in cell shape or barrier integrity, are where I begin to understand what the body endures and what it needs to recover.

Not every day is a triumph. Sometimes my cells die. Sometimes my data contradicts what I hoped to find. Some days, I cry at my desk because I miss home or because I feel like I am failing. Then I wipe my face, tie my hair back, and go back in. Because this is more than science. It's my calling. And it's also my own story.

THE PATH TO UAB

It means so much to me to be part of a top-tier research institution that believes in the work I do. At UAB, I'm surrounded by brilliant minds, supported by mentors who challenge and guide me and have given me the tools to pursue questions that matter.

My journey here began long before UAB. I grew up in Puerto Rico, where I saw firsthand the gaps in health care and the limited access to advanced medical research and resources, especially during natural disasters like Hurricane Maria in 2017. Those experiences left a deep mark on me. I wanted to understand how the body breaks down in crisis, and more importantly, how it can be helped. I chose science because I wanted to be part of building solutions, not just for patients here, but for people back home who deserve the same chances at survival and healing. For a Puerto Rican woman in STEM, this kind of support is not just validating, it is life changing. It means I can carry my roots into every discovery I make and, one day, bring those discoveries back to the island that raised me.

LESSONS LEARNED

Studying trauma has made me more human. It has taught me that healing is rarely linear – a lesson that applies to cells, to patients, and to me. When I first moved to Birmingham, I didn't know how lonely it would feel to be far from my island, my family, my language. I didn't know that pursuing something I loved would also mean confronting all the ways I felt I wasn't enough. Not smart enough. Not strong enough. Not ready.

But the more I learn about trauma, the more grace I give myself. I see now that damage doesn't mean the end. The body doesn't just collapse, it responds. It tries. It adapts. It heals in pieces. And I am healing, too.

With every experiment, I gain clarity. With every failed assay, I gain resilience. And with every conversation with my mentors, I realize that I belong here, not despite being a Puerto Rican woman in STEM but because of it. I carry a perspective shaped by community, by struggle, by a culture that knows how to survive hurricanes and rebuild in the sun.

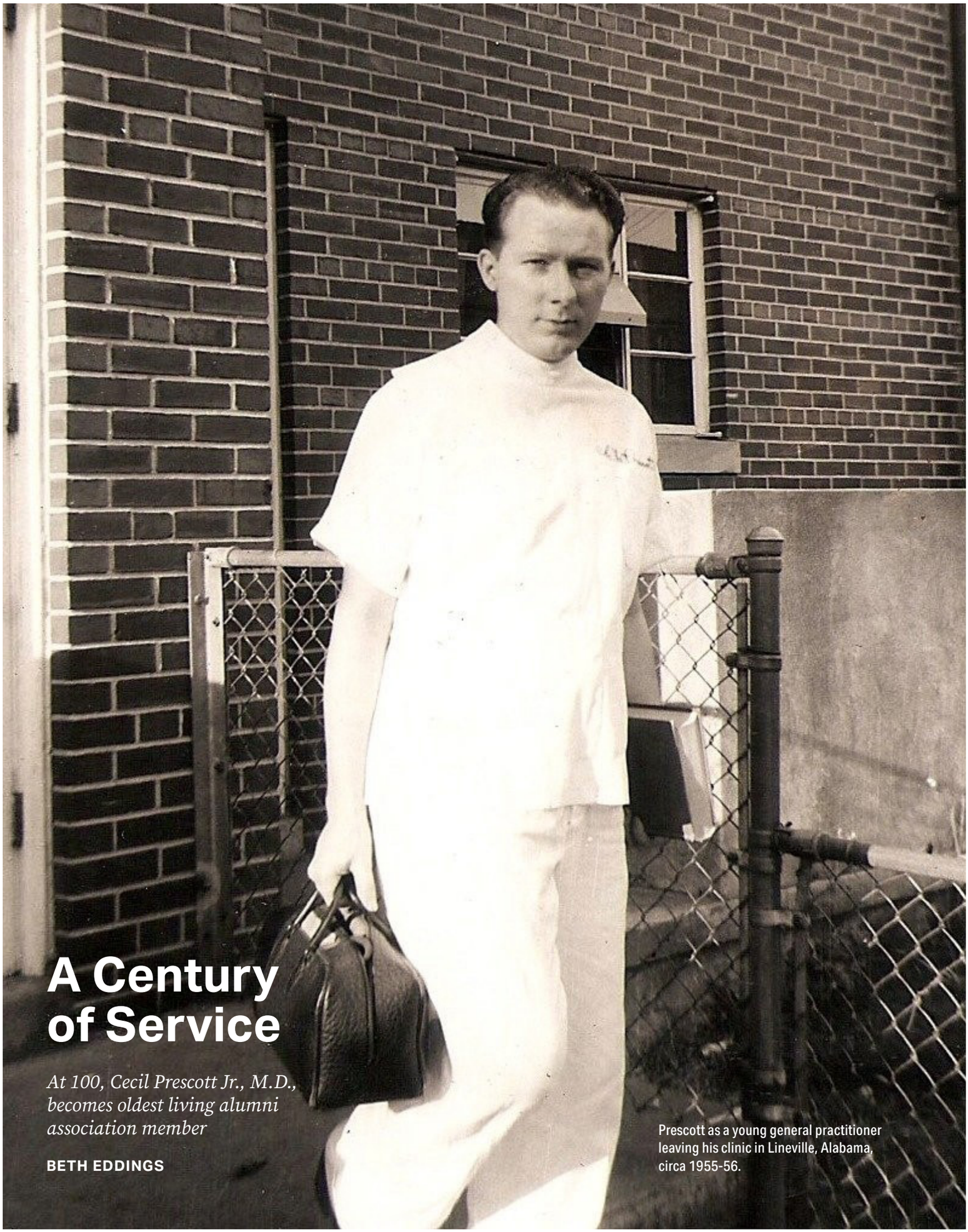
UAB has received me like a warm hug. Southern hospitality, the rhythm of this city, and the church I began attending have given me more than a routine -they have given me a home. In that space, surrounded by kindness and faith, I have found moments of peace that have helped me grow not just as a researcher but as a person.

At UAB, I study how bodies break and how they heal. But more importantly, I am learning how to hold complexity: life and loss, grief and hope, data and emotion. My research lives in the moments between what is and what could be. And so do I.

I do not have all the answers, not in my experiments, not in my life. But I am here. I am learning. I am healing in pieces.

One day, I hope my work will help trauma patients survive the worst moments of their lives. But even now, it has already helped me survive mine.

Krystal Rivera is a rising third-year Ph.D. candidate in the graduate biomedical science program at UAB. She works under the guidance of Jillian Richter, Ph.D., associate professor in the Division of Trauma and Acute Care Surgery, Department of Surgery. With approximately two years remaining in her program, she is on track to complete her doctorate in a total of four years.



A Century of Service

At 100, Cecil Prescott Jr., M.D., becomes oldest living alumni association member

BETH EDDINGS

Prescott as a young general practitioner leaving his clinic in Lineville, Alabama, circa 1955-56.

On August 8, 2025, the Medical Alumni Association (MAA) had the honor of celebrating the 100th birthday of Cecil Prescott Jr., M.D., a milestone that makes him the MAA's oldest living alumni member.

His service in the Navy during World War II aboard the USS Consolation, a hospital ship that cared for victims of the Bataan Death March, would lead him to his career in medicine.

Prescott's daughter, Cyndy Salmon, shared, "One of his superiors in the Navy planted the idea in his head that he might make a good doctor. When he told his girlfriend Nell, my mom, she loved the idea and he used his GI Bill benefits to help with college tuition after the war ended."

In 1946, he married Nell and they would go on to be married for nearly 77 years before she died at the age of 97 in 2023. They have three daughters: Cecilia, Cynthia, and Carolyn.

After graduating from medical school, Prescott began his medical career in Lineville, Alabama, where he co-founded a general practice clinic alongside Otis Cook, M.D. His commitment to serving others was evident from the start.

Prescott celebrated his 100th birthday on August 8.

Prescott in the Navy, 1943. A notable stint from his Navy years was serving on the USS Consolation and participating in bringing back the U.S. prisoners of war from Bataan. One of his superiors in the Navy suggested he might make a good doctor. He used his GI Bill benefits to help with his college tuition after the war ended.

In 1964, he returned to Birmingham with his family to complete a residency in Psychiatry, a field in which he would make a lasting impact for decades to come. The Prescott family later moved to Montgomery, where Prescott continued his dedicated service as a psychiatrist and helped to establish the psychiatric unit at Montgomery's Jackson Hospital. He spent his career offering compassionate care to the community until his retirement.

Outside of medicine, Prescott's lifelong passion is music. He was given his first piano at the age of 7 and he plays the saxophone. He shares his passion for music with his children, who all play instruments themselves. A dance band he played with for many years regularly performs in his retirement home and performed for his 100th birthday celebration.

Prescott received a host of well wishes for his birthday, including one from Anupam Agarwal, M.D., senior vice president for Medicine and dean of the Heersink School of Medicine: "On this incredible milestone, we honor not only your century of life but also your remarkable legacy of service, compassion, and joy."

MEDICAL ALUMNI ASSOCIATION NEWS

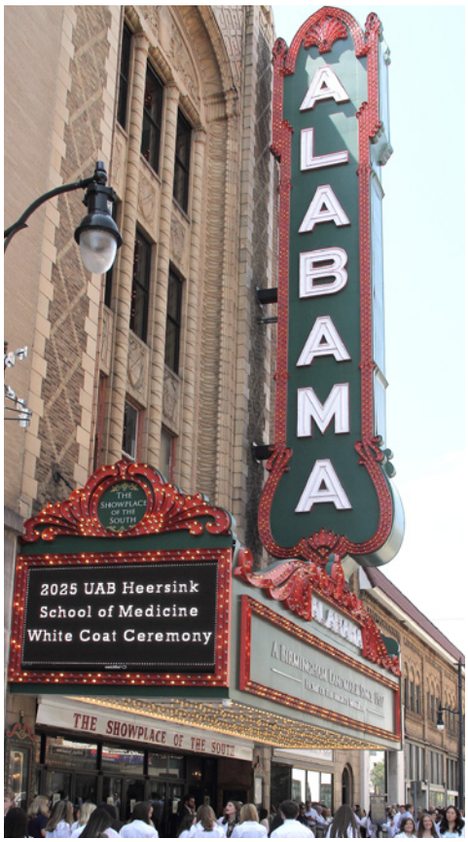
Welcome Event and White Coat Ceremony

Each year, the Medical Alumni Association hosts a special event to welcome the class of incoming medical students. On August 5, the incoming class enjoyed a happy hour at Good People Brewing Company, followed by a Barons baseball game at Regions Field just across the street. Dean Agarwal and faculty from the Heersink School of Medicine were also in attendance to warmly greet the incoming students and help kick off their medical school journey.

On August 16, Birmingham's historic Alabama Theater welcomed the newest—and largest—incoming class of the Heersink School of Medicine, along with their families and friends, to celebrate this milestone in their medical careers. At 196 students in total, the Class of 2029 represents over 50 undergraduate institutions and has completed over 204,000 hours of medically related experiences prior to medical school, impressive facts shared by Caroline Harada, M.D., associate dean for Strategic Initiatives.

"It is a longstanding tradition of the Medical Alumni Association to present each incoming class with their first white coat. These coats are made possible through the generous support of our active alumni, and we are proud to continue this legacy each year," shared Rebecca Byrd, M.D., Medical Alumni Association president. "We hope you are always proud to wear your white coat."

Unlike many medical schools that rely on sponsorship programs, the Medical Alumni Association funds the cost of every coat directly through its operating budget. This tradition ensures that no student bears the burden of purchasing their first white coat—a powerful symbol of both responsibility and the community of alumni who stand behind them.



UPCOMING EVENTS

The More Than a Doctor virtual speaker series highlights alumni who are more than doctors in their communities. Hear from physicians who are navigating private practice, shaping healthcare policy, and everything in between. CME is available.

View past presentations

NOVEMBER 19, 2025, 12 P.M.

More than a doctor ... life as a physician social media influencer

Abby Threet, M.D., '18, discusses using social media to promote her career as a plastic surgeon.

JANUARY 28, 2026, 12 P.M.

More than a doctor ... life as a rural physician

Arnelya Chatman, M.D., '15, and John Wheat, M.D., '76, share their experiences as rural physicians in Alabama.

FEBRUARY 25, 2026, 12 P.M.

More than a doctor ... life as leader in an academic medicine

Mark Dransfield, M.D., chair of the UAB Department of Medicine, shares insights into balancing the needs of administration, faculty, and trainees, all while caring for patients.

Note from the President

Dear Alumni and Friends,

I hope the year has treated each of you well. Even while students were away from campus for summer break, the Medical Alumni Association staff were hard at work preparing for the coming year's programming and events.

Over the summer, we hosted two Summer Series sessions. The first focused on Planned Giving and Establishing Scholarships, with guest presenters from the UAB Advancement Team. The second featured Heersink School of Medicine Huntsville Regional Campus Dean Roger Smalligan, M.D., who shared his experiences taking current MS3 and MS4 students on global health trips.

The last week of July we welcomed the newest class of medical students during their Orientation. Coincidentally, their first day in Volker Hall was also the first day the building's new entrance and atrium were ready for use. The updates to the space are beautiful and offer all building guests the ability to enter from street level.

Our year of programming began anew on October 1, 2025. In today's financial and economic climate, where rising costs are a constant reality, the dues received from our active members are more important than ever. Mindful of our operating budget, this year's programming will be carefully planned to make the most of every resource while still delivering the engaging experiences our alumni have come to expect. We are continuing with virtual CME opportunities, Dine with the Docs, and will return to hosting Specialty Interest Lunch and Learns as a way to engage with our students.

We are proud of the programs, connections, and opportunities we provide for our alumni, students, and the broader medical community—but we can only do this with your support. Your membership dues directly fund events and initiatives that strengthen our network and enrich the lives of current and future alumni. By renewing your membership or joining today, you're not just supporting the MAA—you're investing in the future of medicine at UAB and ensuring that our tradition of excellence continues for generations to come.

Sincerely,

Rebecca R. Byrd

Rebecca Byrd, M.D.
Class of 1995

Share Your Creative Spark

Calling all creative alumni! We're building the Beyond the Stethoscope Showcase to highlight the artistic talents of our physician alumni—from music and writing to painting and more. Whether it's a hidden hobby or a lifelong passion, we'd love to feature what inspires you outside of medicine.
Share your creativity with us!

Watch a video of Anand Iyer, M.D., Pulmonary Critical Care physician and associate chief medical officer at UAB Hospital and class president and reunion chair for the Class of 2011, as he discusses his passion for playing the piano and shares one of his favorite pieces.

UPCOMING EVENT

Medical Alumni Weekend Save the Date

The countdown is on for the reunion celebrations March 6-7, 2026, honoring classes ending in 1 and 6. Be sure to update your contact information so you don't miss important details, which will be shared primarily via email.

Each year, Medical Alumni Weekend offers alumni the chance to come together and participate in a variety of activities, including the Welcome Event, the Reynolds-Finley Historical Lecture, the 50th Reunion Recognition Dinner, the Annual Saturday Awards Luncheon, a Reunion Reception, and individual Class Dinners.

Volker Hall Atrium Opening

School leaders, alumni, donors, students, and supporters gathered at Volker Hall on November 5, 2025, to celebrate the opening of a new atrium as well as renovations throughout the building. Hosted by the Heersink School of Medicine and the University of Alabama Medical Alumni Association, the event highlighted updates that have modernized learning spaces, administrative offices, student study areas, and more. The atrium was made possible by a gift from the Heersink Family Foundation.

Funding the Future

$10 million endowment to support Parkinson's, Alzheimer's, Huntington's and ALS research and education

HANNAH ECHOLS

Sandy Killion, center, with her sons Cooper Killion, and his wife Ashley Killion, left, and David Killion, and his wife Katy, right.

A transformational endowed gift from a Birmingham family will sustain and expand vital research and education focused on Parkinson's, Alzheimer's and Huntington's diseases and amyotrophic lateral sclerosis, or ALS.

The Killion family has given a $10 million gift to UAB to create the Wayne Killion Endowment for the Center for Neurodegeneration and Experimental Therapeutics (CNET) and to rename the center the Killion Center for Neurodegeneration and Experimental Therapeutics at the UAB Marnix E. Heersink School of Medicine.

The gift honors three generations of Killions who suffered from different neurodegenerative diseases.

The center was founded in 2007 to translate ideas from UAB laboratories to novel human therapies for patients living with neurodegenerative diseases. Its leaders say the Killions' gift will have a long-term impact by fueling research and scientific training for years to come in this growing field of medicine.

"This gift will have a permanent impact on neurodegenerative diseases," said David Standaert, M.D., Ph.D., the John N. Whitaker Professor and chair of the UAB Department of Neurology, founding director of the center, and a renowned expert in Parkinson's disease.

"We are endowing all the funds from this gift because we want to maximize the long-term impact. It's going to fuel both research and education by training future generations of scientists, which is very important," Standaert said. "In some ways, training lasts longer than any single research project. One research project hopefully moves us toward progress. But training a scientist will have a 40- or 50-year impact."

Sandy Killion attributes the ability to give this gift to UAB to her in-laws, Christine and Wayne Killion Sr. Her father-in-law was president and an owner of industrial insulation company Shook & Fletcher for many years. The company has expanded to become Shook & Fletcher Services, which has numerous industrial contractor affiliates, including Vulcan Industrial Contractors, Vesta Industrial Contractors, and Shook & Fletcher Supply. Today, the companies are led by Sandy and her sons David and Cooper Killion.

Her father-in-law suffered from Alzheimer's and died in 2013. Her husband, Wayne Killion Jr., M.D., was a respected local physician and later took over the family business from his father as president and CEO. He was diagnosed in 2019 with corticobasal degeneration and passed away in 2022. Before Wayne Jr.'s death, their son Wayne Killion III was diagnosed with ALS and passed away in 2024, cutting short a brilliant legal career.

During both of their lifetimes, the family established separate endowed funds at UAB to support memory disorders and behavioral neurology under David Geldmacher, M.D., and ALS research under Peter King, M.D. The $10 million gift includes these funds.

"My father-in-law was a very generous man and would be very proud of the legacy he was able to create," Killion said. "My hope is that combining the amount will have a bigger impact on researching neurodegenerative diseases. Maybe someday, somehow, they are going to figure out a way to prevent, to cure, and to increase quality of life for patients, because these diseases are horrible."

Killion says genome mapping the family revealed no connection between the three separate diseases. But the neurodegenerative similarity warrants the need for expanded research.

"To have this rare form of dementia and ALS, there has to be a connection somewhere out there," Killion said. "When Dr. [Erik] Roberson and Dr. Standaert explained to us the focus of CNET, it became clear that this effort focusing on research across the spectrum of neurodegenerative diseases was one we would wholeheartedly support."

Finding the connection is why the center was established nearly 20 years ago—and why Standaert was recruited from Harvard University to oversee it.

"We felt that working on these four major areas together would lead to more progress than working on each separately," he said. "We didn't build just a Parkinson's disease research center. We built an integrated neurodegenerative disease center because we thought Parkinson's researchers would benefit from working daily with people working on Alzheimer's, ALS and Huntington's. There is shared biology, shared knowledge, shared approaches, and shared methods. We've seen a lot of things happen that would not have happened if these scientists were working separately."

> *"While my husband was in clinical care, he understood that the research piece was so important ... with what we are facing with these diseases, our family wants to do everything possible to support the immense need for research."*
>
> Sandy Killion

Today, the Killion Center is led by Erik Roberson, M.D., Ph.D., who holds the Rebecca Gale–Heersink Endowed Chair and specializes in Alzheimer's disease and frontotemporal dementia, while Standaert continues to play an active role.

Currently, the center employs 19 principal investigators who are training around 30 doctoral students. The number of scientists has steadily grown, Roberson says, and this gift will help continue that progress and keep the center on the cutting edge of the field.

Work at the center has already led to the development of new therapies for neurodegenerative diseases. In Parkinson's disease, center investigators have discovered how immune signaling contributes to the disease. This work has enabled the development of new anti-inflammatory treatments for Parkinson's that are now being tested in clinical trials at UAB and other sites around the world.

"This kind of research requires a lot of sophisticated equipment—for example, million-dollar microscopes to capture the most high-resolution images of a synapse between two neurons," Roberson said. "Obtaining that equipment is expensive, maintaining it is expensive, and every 10 years or so, you've got to upgrade it because it either wears out or becomes obsolete in terms of technology."

And with the center's growth will come the training of more scientists with the expertise to make impactful discoveries—all making it a richer intellectual environment that attracts additional funding. Killion says that is why she wanted the endowed funds to be unrestricted, allowing the center to allocate funds to its areas of greatest need and opportunity. The endowment will provide a reliable stream of income.

"While my husband was in clinical care, he understood that the research piece was so important," Killion said. "With what we are facing with these diseases, our family wants to do everything possible to support the immense need for research."

To learn more about giving to UAB Neurosciences, contact Director of Development Morgan Quarles at 205-934-9302 or nmrobinson@uabmc.edu.

It's All About the Students

Burleson Foundation gift creates historic endowment for Department of Medical Education

WALT LEWELLYN

Linda Draughn with Burleson scholarship recipients at the 2022 Scholarship Dinner.

After decades of support, the Paul W. Burleson Foundation's transformative partnership with the Heersink School of Medicine reached a new milestone this September with the creation of the Paul and Martha Burleson Endowed Chair in Medical Education. This is the first endowed chair—and one of only a handful of endowed faculty positions—specifically designated for the UAB Department of Medical Education since it became an independent department in 2011.

The Burleson Endowed Chair will support the work of inaugural holder Craig Hoesley, M.D., who has served as department chair and senior associate dean for Medical Education for more than a decade. Hoesley joined the Heersink School of Medicine faculty in 1999 after completing his internship, internal medicine residency, chief residency, and infectious disease fellowship at UAB.

"He is such a valuable asset to the medical school," said Burleson Foundation trustee Linda Draughn. "I think he leads by example and he's very approachable—people can come to him with their problems, even personal problems. The Burleson [scholarship] students through the years have unanimously told me that they knew, admired, and respected him, and he gives all students a role model to learn from. He's been a pleasure to work with, and I hope he'll realize from this donation how much he's appreciated by the school, his students, and this donor."

Draughn has worked closely with Hoesley since 2009, when the Burleson Medical Scholarship—one of the most prestigious and generous scholarships available to Heersink students—was first awarded. The foundation has since distributed more than $6.5 million to deserving recipients, allowing dozens of students to pursue their academic and career goals debt-free.

"We don't have many full tuition and fees scholarships and it's a real difference-maker for our students," Hoesley said. "The amount of debt that students carry now on average is higher, but physician compensation hasn't really kept up with inflation."

The scholarship's namesake, Paul W. Burleson, M.D., was intimately familiar with the financial challenges involved with attaining a medical education. The only child of a railroad conductor and a stay-at-home mother, Burleson had to take on significant debt to earn his medical degree. Even after becoming one of the most active and accomplished primary care physicians in Alabama's history, serving the Birmingham community for 35 years as an internist, Burleson never forgot his struggles as a young physician.

“

By providing these full scholarships, Linda and the Burleson Foundation are really allowing these students to pick a specialty that they’re passionate about, including primary care.”

Craig Hoesley, M.D.

Paul W. Burleson, M.D.

“He was so excited about what the money could do,” recalled Draughn, who helped her stepfather establish his namesake foundation. Burleson’s hope was not only to invest in individual careers, but also to increase the number of talented, homegrown family medicine doctors, internists, and pediatricians serving Alabama communities. In the two decades since Burleson’s death, the state’s need for dedicated primary care physicians has only increased.

“In many respects, the amount of debt you have will directly influence the specialty that you go into, and primary care is one of the lower-compensated specialties,” Hoesley explained. “By providing these full scholarships, Linda and the Burleson Foundation are really allowing these students to pick a specialty that they’re passionate about, including primary care. It’s a real benefit not to have to worry about how much you’re getting paid. It’s an unbelievable gift that they’re giving to students.”

Hoesley reserved special praise for Draughn, who has been the driving force behind the Burleson Foundation since its inception.

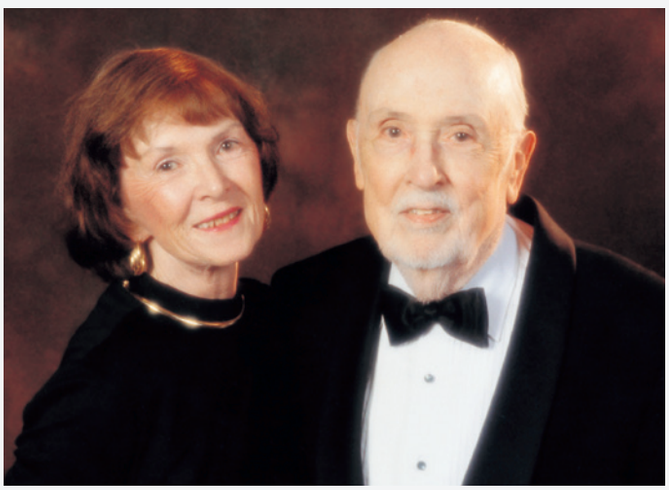
“Of the individuals who have donated resources for scholarships, Linda Draughn has probably been the most hands-on donor we’ve ever had,” Hoesley said. “She vets the students based on criteria that we’ve had for many years, and she has a relationship with them—she keeps in touch with the students. She cares about their academic progress. She wants to make sure they’ve got the financial knowledge they need to succeed as physicians and as adults.”

The Burleson Medical Scholarship has a unique requirement: it’s mandatory for all recipients to take a financial literacy course, ensuring that they’re equipped with basic budgeting skills in addition to their specialized body of medical knowledge. Hoesley intends to apply those same skills to the management of the Burleson Endowed Chair.

“Whatever portion of your salary that an endowment gives you, that’s money that you don’t have to come up with in another way,” Hoesley said. “It makes available funds that will be used for the betterment of your program, which is how we’ll use the Burleson Endowed Chair.”

Although he’s honored and grateful to benefit from the Burleson Endowed Chair, Hoesley emphasized that it will primarily be used to enhance the student experience in the Heersink School of Medicine. It’s a fitting capstone to Paul Burleson’s vision for medical education in Alabama: a perennial investment in both the students who will serve families across the state and the mentors who educate them.

“I think it will allow the Heersink School of Medicine to attract the best educators and give them star power at the top levels, and I think that students benefit from gaining access to exceptional faculty and research opportunities,” Draughn said. “It’s all about the students for the Burleson Foundation, and this chair will help them.”



Paul W. Burleson, M.D., and his wife Martha.

To learn more about giving to medical scholarships, contact Senior Director of Development Erica Hollins at 205-996-6839 or elhollins@uabmc.edu.

Investing in Tomorrow

Barber Companies' gift accelerates innovation and training in vascular surgery

WALT LEWELLYN

A gift from the Barber Companies will serve as a powerful catalyst to advance medical innovation in the UAB Division of Vascular Surgery and Endovascular Therapy, Department of Surgery. The Barber Companies Research Fund for Patient Centered Innovation is a transformative investment in the work of Benjamin Pearce, M.D., associate professor and the William D. Jordan, Jr. Endowed Professor in Vascular Surgery and Endovascular Therapy.

While President and CEO George Barber is a grateful patient of Pearce—"He's saved my life once or twice," Barber shared—the Barber Companies' gift reflects an even deeper commitment to advancing progress. "The Barber Companies have always been synonymous with innovation and moving forward," Pearce said. "In this spirit, we will use this fund to further the education of future vascular surgeons through the only vascular surgery training programs in Alabama."

With the Barber Companies' support, Pearce intends to further surgical education research and explore novel programs—including a coaching program for future academic leaders and an exploration of how artificial intelligence will impact the future of medical training—in the hope that this work will shine a light on the relatively small but dedicated community of vascular surgeons.

"With the diabetes epidemic in our society, peripheral vascular disease is on the rise and more patients will need our services," Pearce said. "The role of a vascular surgeon is to be the expert on diagnosis, medical management, minimally invasive procedures, and traditional surgery on all blood vessels that are not around the heart or in the skull. The main procedures we do involve aneurysms of the aorta, stroke prevention in the carotids, and saving the arms and legs due to blockages."

In addition to his robust research portfolio—including tibial revascularization, open thoracoabdominal reconstruction, iatrogenic injury, and more—Pearce also directs the division's integrated residency and fellowship programs. A former UAB Vascular Surgery fellow himself, Pearce has been recognized for his mentorship and will use the Barber Companies' support to promote the values of compassion and excellence that guide his work.

"I plan to use this gift to work on surgical education both at UAB and nationally to help re-invigorate the idea of caring for each and every person—patients and coworkers—within the next generation of surgeons."

The Barber Vintage Motorsports Museum is more than the Guinness-certified largest collection of motorcycles in the world; it's a shrine to innovation. While the museum celebrates the heroes, trailblazers, and craftsmen who have defined the discipline, it also demonstrates that progress rarely occurs in a straight line.

In motorsports and medical research alike, setbacks are a part of the process. "I wanted to make sure that Dr. Pearce has all the support he needs to keep doing such excellent work," Barber said. "I want him to have the freedom to make mistakes and learn from them."

> *"The Barber Companies have always been synonymous with innovation and moving forward"*
>
> Benjamin Pearce, M.D.

Barber's personal support for the university stretches back decades, highlighted by his pivotal role in establishing the Julius N. Hicks Endowed Chair, the George W. Barber, Jr., Foundation Endowed Professorship, and the George W. Barber, Jr., Foundation Endowed Lectureship in the UAB Department of Otolaryngology.

"I believe in what UAB is doing," Barber said. "I love what it's done for our city."

With the Barber Companies' support, Pearce will be empowered to explore new avenues in vascular surgery while preparing the next generation of leaders in the field. It's a bold goal, but as famed motorcycle designer Daryl Villanueva put it, "The only thing that stands between fact and fiction is time."

To learn more about giving to UAB Surgery, contact Assistant Vice President for Development Megann Bates Cain, 205-934-7408 or meganncain@uabmc.edu

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A gift made through your estate can make a significant impact on the future of medicine.

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UAB MEDICINE | HEERSINK School of Medicine

Bellows, Presses, and Body Parts

Anatomical manikin bridges art, history, and science

COURTESY OF ALABAMA MUSEUM OF THE HEALTH SCIENCES

This ivory manikin from Germany, crafted sometime between 1500 and 1700, depicts organs in a way that physicians of the time would be sure to understand—the lungs as bellows, the heart as an anvil, and the stomach as a wine press were all common anatomical analogies. This is evidenced in a quote from Fabrici D'Acquapendente (1533-1619), pioneering Italian anatomist and surgeon: "The mechanism which nature has devised is strangely like that which artificial means has produced in the machinery of mills." The anatomical doll, along with eight others, is part of the collections of the Alabama Museum of the Health Sciences, a member of UAB Historical Collections in UAB Libraries. View artifacts from the Alabama Museum of the Health Sciences at the Dennis G. Pappas Historical Collections Gallery.

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