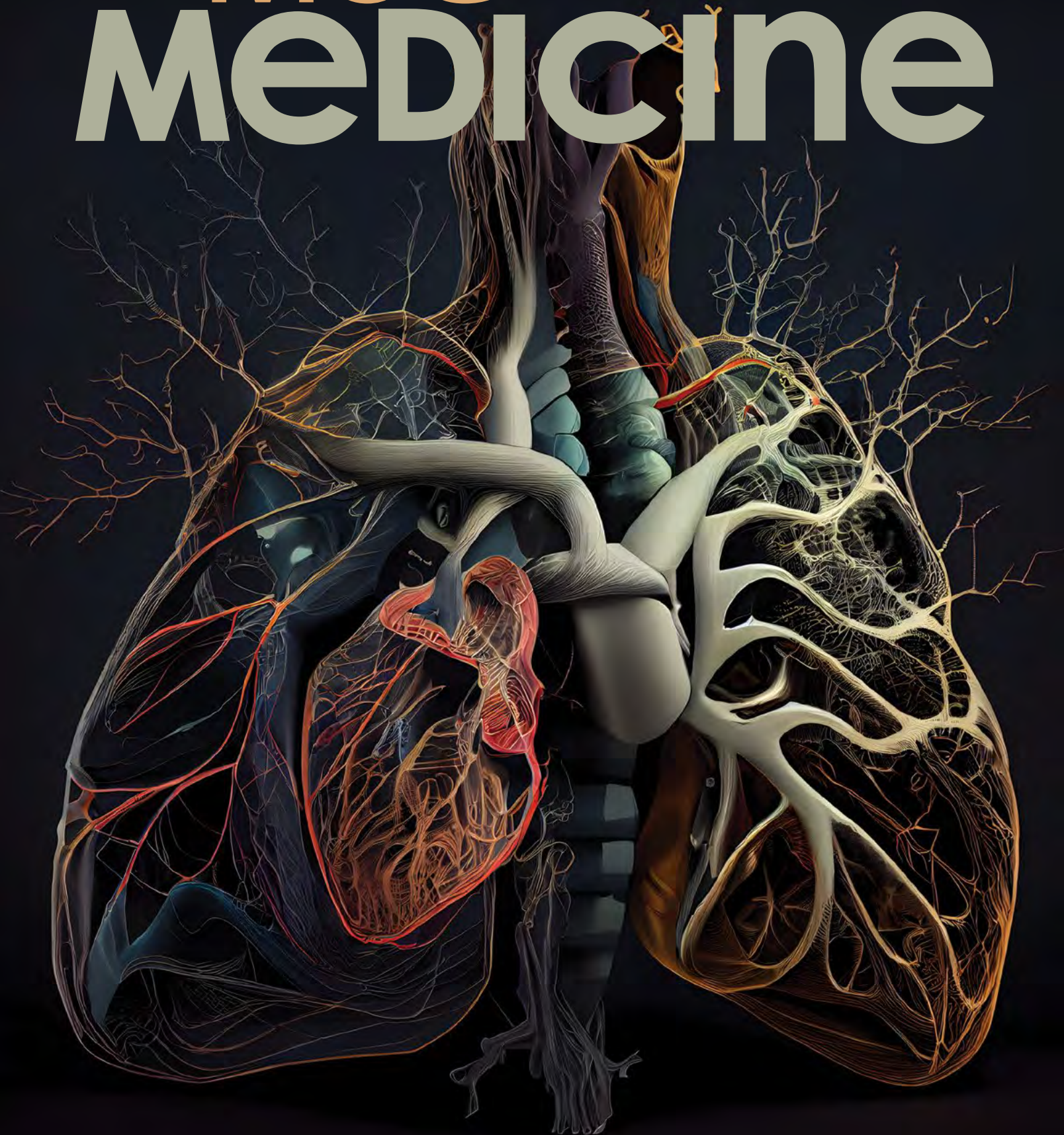


MCG Medicine

FALL | WINTER 23



BUYING TIME

ECMO takes over the work of damaged heart and lungs



Class of **2023**



MCG Medicine

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FROM THE DEAN

In his defining book *Good to Great*, which remains one of my favorite business strategy reads of all time, author Jim Collins talks about the Flywheel Effect. In describing it, he explains that “No matter how dramatic the end result, good-to-great transformations never happen in one fell swoop. In building a great company... there is no single defining action, no grand program, no one killer innovation, no solitary lucky break, no miracle moment. Rather, the process resembles relentlessly pushing a giant, heavy flywheel, turn upon turn, building momentum until a point of breakthrough, and beyond.”

I can't think of a better way to describe the last year at MCG. Turn upon turn, we have been working toward several important milestones – breakthroughs and beyond. It has truly been a time of unprecedented change and growth at the state's only public medical school.

Our first breakthrough came in May, when we received funding approval for what will be our third four-year campus, in Savannah, in partnership with Georgia Southern University. This new campus will allow us to grow our class size, already one of the nation's largest, from 264 to 304 students per class — with the first class set to enroll in July. In the coming months, \$1.7 million in renovations to the GSU's Armstrong Campus — fortuitously located just down the street from St. Joseph's/Candler, a longtime clinical partner — will be complete, making the Augusta University/Medical College of Georgia-Georgia Southern Partnership campus a reality.

We could not have pushed the flywheel alone — not without the funding being included in the FY 2024 budget passed by the Georgia General Assembly and signed by Governor Brian Kemp; the backing from University System of Georgia Chancellor Sonny Perdue, the entire Board of Regents and AU President Brooks Keel; the unwavering assistance of the entire legislature, specifically House Speaker Jon Burns and state Rep. Butch

Parrish; or the great partnership of Georgia Southern University, specifically President Kyle Marrero. I would also be remiss to not acknowledge the longtime support of St. Joseph's/Candler Health System, particularly CEO Paul Hinchey. They have helped educate MCG students in that corner of the state for over a decade and I know their commitment will only grow with this new partnership.

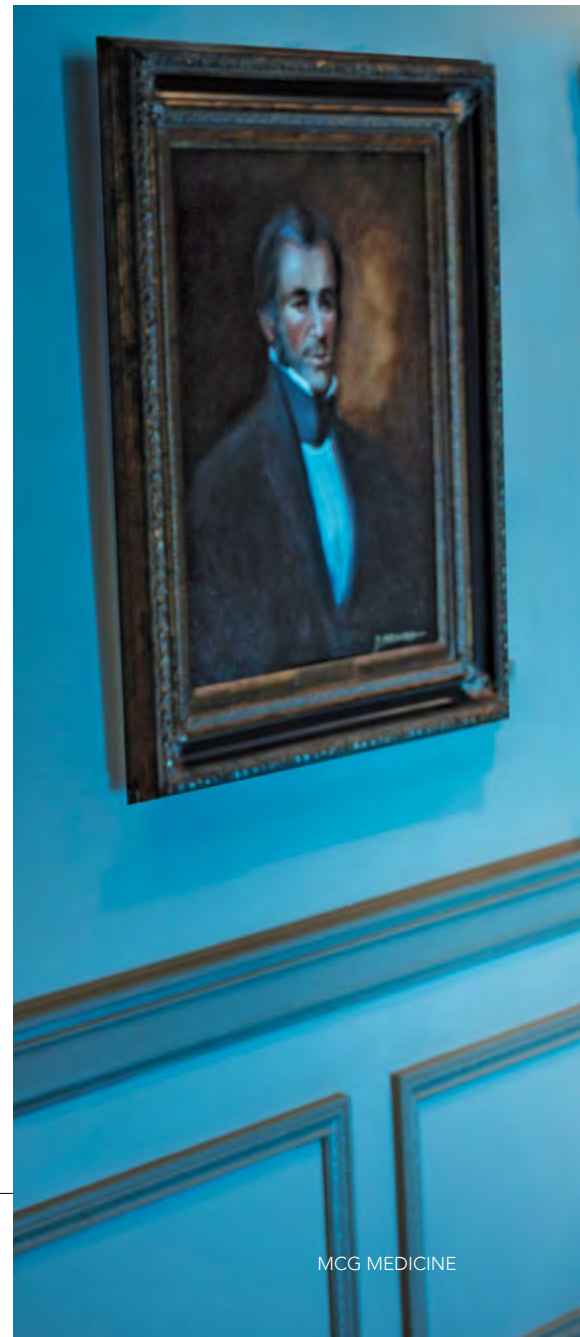
Each of them understands that as the public medical school for a state that consistently ranks near the bottom in the number of active physicians, and in turn, near the top in poor health outcomes, it is our responsibility and commitment to produce more doctors for Georgia. This growth in our class size is an important part of fulfilling that critical mission. The momentum for the growth of your medical school only continued throughout the summer when we received word from our accrediting body, the Liaison Committee on Medical Education, in July that our plans to expand in Savannah met their rigorous standards; and then again in August, when Dr. Elizabeth Gray, who has led the Savannah location of our Southeast Regional Campus since 2020, was appointed founding campus dean. (See page 9).

August brought another breakthrough as well, with the announcement that Wellstar Health System and Augusta University Health System are now a unified system, known locally as Wellstar MCG Health. The public signing on Aug. 30 was truly a historical moment for health care in our state. The new system combines the strengths of Wellstar, a large non-profit health system that provides care for 1 in 6 people in Georgia, the Augusta University Health System, and your nearly 200-year-old medical school.

As Wellstar CEO Candice Saunders rightly said that day, this was the realization of a longtime vision. MCG has had medical students rotating at Wellstar Kennestone for over six years — in fact, 17 of them are currently completing their

clinical training at Wellstar Kennestone in Marietta now, with more set to join them in January. We may have a new name, but it represents generations of excellent patient care, innovation, research and education.

In addition to helping financially stabilize and grow our health system and medical school, Wellstar has committed to investing in facilities and infrastructure in Augusta. They're also going to strengthen collaborations with rural hospitals, provide greater access to clinical innovations



in clinical care and expand digital and telehealth services — something that falls right in line with the mission of our MCG Center for Telehealth, which has long been working to connect the resources of this medical school and its teaching hospital to those who need them, no matter their location.

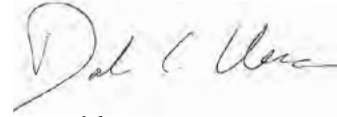
We also hope that, with LCME approval, we can eventually establish a permanent regional clinical campus — much like those we already have in Albany, Rome/Dalton and Savannah/Brunswick — in Atlanta

in partnership with Wellstar. And our new partners have 265 graduate medical education slots across the state — in primary and subspecialty care — that already train MCG graduates. I can imagine that number will only multiply and help keep more Georgia-trained physicians in our state.

I must again extend my thanks to Gov. Kemp, the University System of Georgia Board of Regents and Chancellor Perdue, leadership at both health systems and to all of you for your belief in, and endless support of, your medical school.

While there is still much work to be done, I do believe some of our greatest days, and biggest breakthroughs, are ahead. ☺

All my best,



David C. Hess, MD
*Dean, Medical College of Georgia
Executive Vice President for Medical Affairs
and Integration, Augusta University
Presidential Distinguished Chair*



FROM THE PRESIDENT

As we begin each academic year, I am always invigorated by the continued growth at the Medical College of Georgia. We should always strive to be better, and I am confident that MCG's progress will continue into the 2023-24 academic year. In recent years, numerous resources have been invested in this institution, demonstrating a continued commitment by local, state and federal lawmakers, as well as our alumni, to our number one priority: our students and patients. As we continue to grow, both with new campuses throughout the state and with new academic programs and research, the continued support of resources is paramount.

One of the more noteworthy investments we are looking forward to is our new partnership with Wellstar Health System. As our two organizations worked together over the past year to reach this agreement, the rationale for this partnership has only grown stronger — to enable our health system to thrive in today's challenging health care environment and to extend our mission of improving health for all Georgians through excellence in patient care, education and research.

Our partnership with Wellstar will ensure that academic medicine continues to influence health care in Augusta and the surrounding region, increase the number of physicians, nurses and allied health professionals we are able to train, and make substantial investments in our health care facilities and new technologies to provide care in more convenient settings for patients across Georgia.

We are facing a crisis-level physician shortage throughout the nation, and the lack of health care providers in rural settings is especially acute. We want every Georgian, no matter where they live, to have access to high-quality health care provided by well-trained physicians. To that end, we are extremely grateful for the investment of \$2 million in federal funding as part of the Fiscal Year 2023 funding bill that U.S. Rep. Sanford D. Bishop, Jr. (GA-02) helped secure for the Southwest Campus in Albany.

We share Congressman Bishop's commitment to Southwest Georgia and know how important it is to ensure this area has enough physicians to serve patients in the area. This funding will help to establish a primary care training hub on MCG's Southwest Campus, allowing us to continue training physicians who are dedicated to meeting the health care needs of Georgia and to helping decrease health disparities in some of the state's most underserved areas, both now and into the future.

As we continue to look at new ways to aid physicians in caring for patients in rural areas, telemedicine has become a powerful tool to help physicians and other clinicians reach underserved populations. Earlier this year, U.S. Rep. Earl "Buddy" Carter (GA-01) secured \$1 million in federal funding to support the recently established Medical College of Georgia Center for Telehealth.

We are proud of this next phase of our mission, and we expect this expansion of the MCG Center for Telehealth to help improve health care outcomes throughout the state for many years to come. The center focuses on training future physicians and preparing them to provide telehealth-related patient care. It also will work with health care providers and facilities across the state to connect them to the expertise of the state's only public medical school and its teaching hospitals.

I also want to commend our Augusta University Government Relations team for helping secure \$105 million this budget year for a much-needed upgrade to our electronic health records system. On the surface, this may sound like it impacts only our patients and physicians, but it has a positive impact on our students as well. As we prepare to send our health sciences students out into the workforce, they need to have access to state-of-the-art technology, including working with the most updated technology for health system records.

Everything we do at this institution is based on providing our students with state-of-the-art education and training opportunities in Augusta and beyond. That's what drives this university, and it is shown in the growth we have seen in the number of degrees awarded each year. We are incredibly proud of what the Medical College of Georgia has accomplished.

The future is extremely bright at MCG, and I can't wait to see what is in store for the next decade — because there is great opportunity awaiting us. With the support of those who love MCG, anything is possible. 🍀

Sincerely,



Brooks Keel, PhD

President, Augusta University



INFERTILITY INCREASES RISK

About 17% of women with unexplained infertility also have gene variants known to cause disease, from common conditions like heart disease to rare problems like ALS, Medical College of Georgia researchers report.

Theirs appears to be the first study to identify an increased prevalence of disease-causing genetic variants in females with unexplained infertility, the team, led by Lawrence C. Layman, MD, reports in the *New England Journal of Medicine*.

They hypothesized that genetic disease creates a predisposition to infertility and subsequent medical illness and their findings support that link, they write. Females with infertility, for example, have been noted to have an increased risk of cardiovascular disease.

“The connection to diseases has been known, but what has not been known was if there was a genetic connection. That was the purpose of this study,” says Layman, a reproductive endocrinologist and geneticist who is chief of the MCG Section of Reproductive Endocrinology, Infertility and Genetics.

The investigators note that while clear, common pathways between infertility and conditions like heart disease, still have not been established, “a strong association between infertility and future disease can still assist in early detection, genetic counseling and intervention.” Fertility could be in effect a “biomarker” for future medical illness, they write.

They sequenced the exomes, which contain the protein-coding regions of genes, of 197 females ages 18 to 40 with unexplained infertility, a percentage that comprises about 30% of infertile females, to look for variants in genes that were known or suspected to cause disease.

They found 6.6% of the females they studied had variants in 59 genes termed “medically actionable,” which means they are likely to cause conditions like heart disease and breast cancer but there are interventions, lifestyle and/or medical, that might remove or at least reduce their risk. By comparison about 2.5% of the general population have been found to have variants in these genes.

An additional 10% of the females had gene variants known to cause disease for which little to no action could be taken to ameliorate the problem, like Parkinson’s disease, Layman says. ♡



Lawrence C. Layman, MD

BLOOD PRESSURE INITIATIVE

The American Heart Association has partnered with the Department of Family and Community Medicine at the Medical College of Georgia to address hypertension by implementing a Self-Monitoring Blood Pressure (SMBP) initiative. Research shows that SMBP, coupled with clinical support, can improve blood pressure control.

Janis Coffin, DO, a family medicine physician at MCG and Wellstar MCG Health and one of the project’s leaders hopes “that this work will increase the awareness of high blood pressure, empower patients to manage their blood pressure, and ultimately reduce their risks of stroke and cardiovascular disease.”

In April, the Family and Community Medicine Center began connecting their hypertensive patients who were Medicare beneficiaries to educational materials and validated blood pressure cuffs. Working closely with clinical staff and trained residents, they report readings along with other relevant data (compliance with medication(s), etc.) to allow providers to supply proper care to control their blood pressure. ♡



NEWS & VIEWS

PREMATURE VISION

In the spiraling cycle that can lead to vision loss in premature newborns, Medical College of Georgia scientists have found a new target and drug that together appear to stop the destruction in its tracks.

In babies, the development of the blood vessels of the retina should be complete by birth. But with preterm birth, the still-immature retina can develop a potentially blinding eye disorder known as retinopathy of prematurity.

When premature babies transition from inside the womb, where oxygen levels are relatively low, to significantly higher oxygen levels in the incubator, this creates a sensation that their still-developing retina is getting too much oxygen. That sensation inhibits normal blood vessel development, but the retinal neurons keep growing, which leads instead to relative hypoxia, or too little oxygen to the retina.

In the eyes of premature babies as well as people with diabetes, a cascade can follow that should help by growing more blood vessels to make up the oxygen

deficit. But the well-intended response can prove problematic instead, resulting in what is called pathological retinal neovascularization.

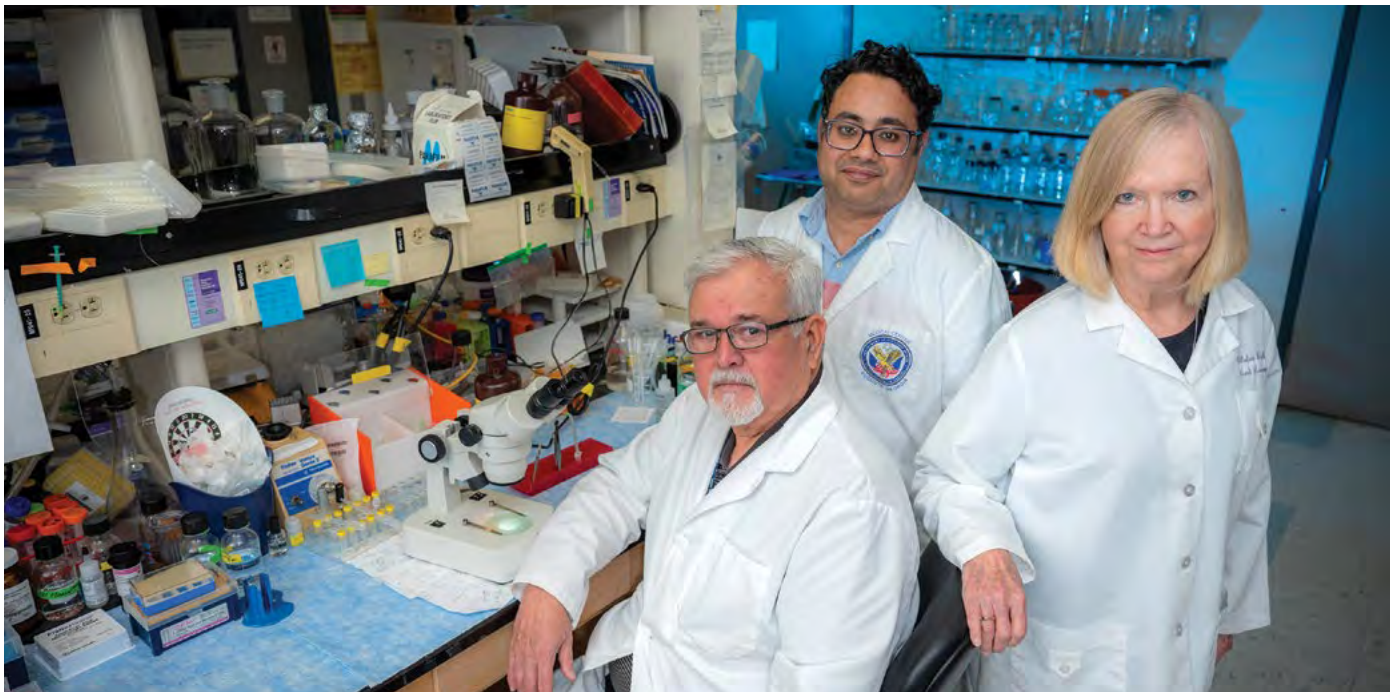
Now MCG scientists have shown in their animal model of retinopathy of prematurity that the small molecule K604, which is being explored in cancer and Alzheimer's, can block the development of leaky, obstructive blood vessels in the retina, tamp down inflammation and enable more normal blood vessel growth, ultimately enabling better vision for the babies, they report in the *Journal of Neuroinflammation*.

K604 blocks ACAT1, or acyl-Coenzyme A: cholesterol acyl transferase 1, an enzyme that converts free cholesterol and long-chain fatty acids to cholesterol esters,

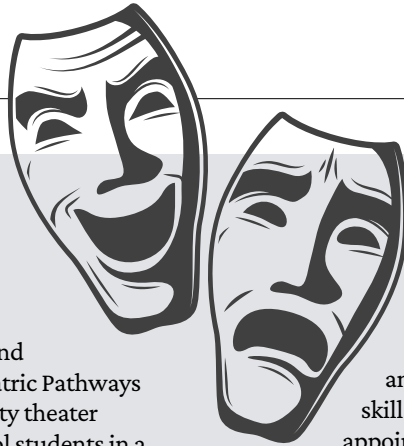
basically smaller pieces of cholesterol that can be more easily eliminated by the liver to keep cholesterol levels from getting too high.

But in premature babies, the hypoxia their retina's may experience can prompt the formation of dysfunctional blood vessels in the eye and may lead to an accumulation of lipids, fats, and these cholesterol esters, says Modesto A. Rojas, MD, a vascular biologist in the MCG Department of Pharmacology and Toxicology.

It was ACAT1's role in enabling these toxic cholesterol esters to pile up in the retina that led the MCG scientists to explore what happens when they block it, says Rojas, a corresponding author on the new study. ♡



Modesto A. Rojas, MD, (seated) Syed A.H. Zaidi, PhD, and Ruth Caldwell, PhD



ACTING IT OUT

To better prepare medical students at the Medical College of Georgia to work with adolescent patients, April Hartman, MD, division chief of General Pediatrics and Adolescent Medicine developed the Pediatric Pathways Program that combines Augusta University theater students and local middle and high school students in a unique collaboration to help address pediatric health concerns.

For two weeks this past summer, Hartman, along with Melanie Kitchens O’Meara, PhD, an associate professor of performance studies in the Augusta University Department of Art worked with area middle and high school students to teach them dramatic acting skills to become pediatric standardized patients for mock appointments with medical students.

“The Augusta University students and middle school students are partnered as a parent and child,” O’Meara said. “We wanted to create a family dynamic so the medical students could practice how they talk to and ask questions to patients this age.”

Whenever a physician walks into a room with a patient and their family, it is important that the doctor is prepared to handle any scenario in a professional and productive manner, Hartman says. “Sometimes there is mom, there’s dad, there’s grandma, there’s a brother and they all have an opinion about what’s happening with that child,” Hartman says. “Sometimes it will feel awkward and uncomfortable. You just have to be OK with that. And this comes with time and practice, which is why we are doing this. It’s a process so that you can practice building a relationship with your patient.”



CENTER FOR TELEHEALTH RECEIVES \$1 MILLION IN FEDERAL FUNDING

U.S. Rep. Buddy Carter helped secure \$1 million in federal funding to help support the Medical College of Georgia Center for Telehealth. The funding will also support Augusta University’s mission to improve health care access and outcomes for all Georgians, particularly those in rural and underserved areas of the state.

The MCG Center for Telehealth aims to reduce health care disparities, strengthen rural care partners and support rural patients by building relationships statewide through digital inclusion and a trained telehealth network. The center also trains future

physicians and prepares them to provide telehealth-related patient care.

“The Medical College of Georgia has shown great commitment to the continued advancement of telehealth in our communities,” says Rep. Carter. “I am both excited and optimistic to see what kind of revolutionary work comes as a product of this great program and how telehealth continues to advance and improve the lives of both patient and provider.”

MCG has focused on telehealth for many years, so this expansion is a natural progression of that foundation, adds David Hess, MD, MCG dean.



U.S. Rep. Buddy Carter

SOUTHWEST CAMPUS RECEIVES \$2 MILLION IN FEDERAL FUNDING



U.S. Rep. Sanford D. Bishop, Jr. (left)

U.S. Rep. Sanford D. Bishop, Jr. has helped secure \$2 million in federal funding for the Medical College of Georgia's Southwest Campus as part of the Fiscal Year 2023 funding bill.

MCG will use the funds to create a primary care workforce training hub that will help provide more physicians and medical professionals to work in and serve rural and underserved communities, particularly in Southwest Georgia.

"The Southwest Campus will become a hub where medical students will be trained to address Georgia's health care challenges and gain valuable experience in the communities in which they are needed to serve," says Bishop. "One of my top priorities in Congress is to make sure our rural and underserved communities have the health care professionals, equipment and facilities they need to ensure residents have all of their medical needs met at or as close to home as possible."

Augusta University leaders said the funding will help MCG fulfill a crucial mission to serve all Georgia residents. ♡

PANOBINOSTAT SHOWS POTENTIAL

A class of drugs used for their ability to stop tumor cells from dividing is now under study for their potential to reduce the pain and damage caused by sickle cell disease, investigators report.

The drugs are called HDAC inhibitors, and the investigators have early evidence one called panobinostat can reactivate after birth the gene that produces fetal hemoglobin, which cannot sickle, says Abdullah Kutlar, MD, director of the Center for Blood Disorders at the Medical College of Georgia and Wellstar MCG Health.

Hemoglobin is the oxygen-carrying component of red blood cells, and with sickle cell disease it's inefficient at this fundamental role. Potentially devastating consequences include frequent pain attacks from blockages particularly in small blood vessels produced by the also oddly shaped, sticky red blood cells. Many patients experience a rapid breakdown, or hemolysis, of their red blood cells. Anemia, damage to major organs and a shortened life expectancy can result.

Histone deacetylases, or HDACs, are enzymes that are among the many ways gene expression gets turned down, a

natural process for some genes, like the gamma-globin gene that makes fetal hemoglobin, as we move from childhood to adulthood.

Fetal hemoglobin enables a developing baby to capture oxygen from mother's blood while the beta-globin gene produces adult hemoglobin that carries oxygen. Within the first few months after birth, most babies have little to no fetal hemoglobin.

Kutlar and Betty Pace, MD, Francis J. Tedesco Distinguished Chair of Pediatric Hematology and Oncology and a sickle cell researcher, are co-principal investigators on a three-year, \$2.3 million grant from the National Heart, Lung and Blood Institute, funding an early stage clinical trial to see if the HDAC inhibitor panobinostat can turn that fetal hemoglobin gene back on in adults to directly address the fundamental problem of inefficient oxygen delivery. ♡



Abdullah Kutlar, MD

LESS INSOMNIA WITH ANTIPSYCHOTIC MEDICATION

Brian Miller, MD



Insomnia affects up to half of people with schizophrenia and is thought to worsen the impact of their disease, including their risk of suicide. A new meta-analysis of the antipsychotics these patients take indicates those who take clozapine have significantly fewer problems with insomnia, investigators report.

Insomnia and suicide risk have been linked in schizophrenia, and clozapine is the only antipsychotic with a Food and Drug Administration indicator for reducing suicide risk, says Brian Miller, MD, psychiatrist and schizophrenia expert at the Medical College of Georgia.

MCG investigators say it's plausible that clozapine's ability to essentially double patients' ability to sleep versus other antipsychotics helps explain the reduced suicide risk. Insomnia has been found to generally worsen schizophrenia symptoms and complications from obesity to depression.

However, clozapine, which has a small risk of big

side effects including inflammation of the heart muscle and an acute, severe drop in immune cells that can leave patients vulnerable to life-threatening infections, is typically only used in patients with treatment-resistant schizophrenia, not as a first-line therapy, says Miller, who has dozens of these patients taking clozapine.

The MCG investigators performed what appears to be the first systematic review of insomnia in patients with schizophrenia that looked at the impact of clozapine versus other antipsychotics. They reviewed information on 1,952



patients enrolled in eight clinical trials that included 922 people treated with clozapine and the remainder with other first-line antipsychotics, like risperidone and olanzapine.

They found each of the other antipsychotics associated with increased odds of having insomnia compared to clozapine; overall a 2.2-fold increased risk. ♡

ELIZABETH GRAY, MD, NAMED FOUNDING DEAN

Elizabeth Gray, MD, associate dean at the Southeast Campus of the Medical College of Georgia, based in Savannah and Brunswick, has been named founding campus dean of the Augusta University/ Medical College of Georgia-Georgia Southern Partnership campus.

The campus, which is slated to open in Savannah in the fall of 2024, will be the third four-year campus of the state's only public medical school. It also will allow MCG, already one of the nation's largest medical schools by class size, to increase its enrollment from 264 students per class to 304, and ultimately produce more physicians for Georgia.

Gray, an internist, has led the Savannah location of the Southeast Regional Clinical

Campus, home to around 80 third- and fourth-year students who live and learn in the area, since 2020.

As campus dean, Gray will be charged with developing a long-term vision and setting goals and priorities for the campus; developing a leadership team; and working with hospital partners, like St. Joseph's/ Candler Health System and others, to develop clinical education opportunities for students, as well as future graduate medical education opportunities.

Gray earned her medical degree and a master's in business administration from Texas Tech University in Lubbock. She completed her internal medicine residency at George Washington University in Washington, DC. ♡



CALMING DIABETIC GASTROPARESIS

Amol Sharma, MD

Magnetic stimulation of a group of nerves key to how our gut and brain communicate may help correct the conversation that goes awry in painful, debilitating diabetic gastroparesis, researchers say.

Patients come to Amol Sharma, MD, because their stomachs constantly hurt, they are always nauseous and they can't or won't eat or drink. Sometimes they can't get out of the hospital because of nausea and vomiting.

"Gastroparesis is suspected in about 2% of the population, which is the about the population of Missouri, but only confirmed in .2% of the population so it's a rare disorder," says Sharma, gastroenterologist at the Medical College of Georgia and Wellstar MCG Health, specializing in neurogastroenterology and gastrointestinal motility.

It's also not well understood, but physicians like Sharma are beginning to find that it's a dysfunction in the two-way communication between the gut and the brain. More common problems like irritable bowel syndrome, also are thought to be a disorder of this gut/brain interaction, he notes.

Sharma's lab has developed a painless, noninvasive magnetic stimulation therapy called ThorS-MagNT which they are using to target and reset the hyperactive firing of a small group of nerves at the midback, a sort of midpoint of communication between the stomach and the brain. He has good evidence from a small pilot study that one-hour sessions targeting this nerve group for five successive days can significantly reduce the disease's debilitating symptoms.

Sharma has received a three-year, \$958,000 grant from the National Institute of Diabetes and Digestive and Kidney Diseases to conduct a larger trial. 🍷



PUTTING ON THE BRAKES

Antiretroviral cocktails can make human immunodeficiency virus, or HIV, undetectable and untransmittable, but both the virus and its treatment can also accelerate aging of bone and muscle.

Now Medical College of Georgia scientists are looking at drugs already being studied in clinical trials for cancer to help put the brakes on these classic indicators of aging that can lead to falls, fractures and early frailty.

"These drugs are doing what they are supposed to be doing: They are extending lifespan. Now what we need to do is deal with the side effects so you can extend healthspan as well as lifespan," says Meghan McGee-Lawrence, PhD, biomedical engineer in MCG Department of Cellular Biology and Anatomy at Augusta University.

"They call it 'accentuated' aging," says Mark Hamrick, PhD, bone and muscle biologist and co-director of the MCG Center for Healthy Aging. "Bone and muscle changes you normally see in a 75-year-old person start to show up in a 65-year old," he says as he looks at graphs of walking gait and speed and how they decline with age.

Hamrick and McGee-Lawrence are co-principal investigators on a \$3.2 million grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases to identify logical points to put the brakes on the unhealthy acceleration and determine whether drugs already in hand are the ticket.

In normal aging and with the accelerated circumstances with HIV and its treatment, the damage plays out like this: Tryptophan is an essential amino acid, which is important to metabolism. Indoleamine 2,3-dioxygenase 1,

is a natural enzyme that helps break tryptophan down into usable products like kynurenine, which is important for the production of fuel for our cells. With age, levels of tryptophan tend to decrease while IDO1 levels increase.

One result is more of the available tryptophan tends to get converted to kynurenine, which is known to activate the aryl hydrocarbon receptor, or AhR.

AhR normally has a pretty global role, helping sense what is happening in the environment of the body and making the proper adjustments, including to the immune response and gene expression. It also has important roles like glucose regulation and toxin removal, both of which help prevent disease.

This receptor already is highly expressed in bone and muscle cells and is considered to have a key role in aging and lifespan, the scientists say.

But with aging, and even more so with HIV and its treatment, come too much of what was a good thing.

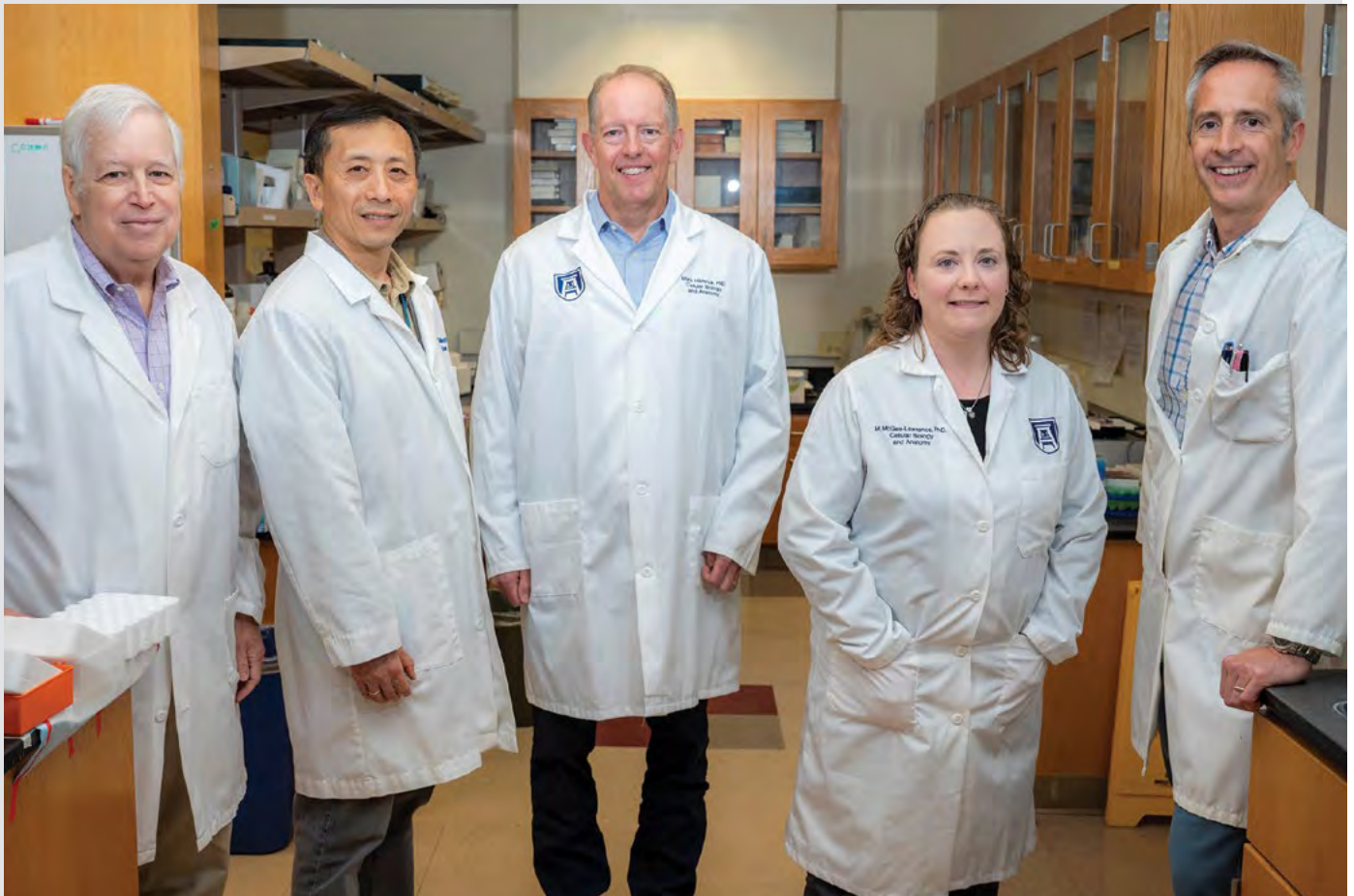
Higher AhR expression is associated with stiff, aging blood vessels in mice and humans. Higher kynurenine produces higher levels of destructive oxidative stress, which damages cell powerhouses so our cells don't get all the energy they need, increases inflammation and generally ages our bone and muscle.

MCG aging experts Hamrick and McGee-Lawrence, along with Carlos Isales, MD, chief of the MCG Division of

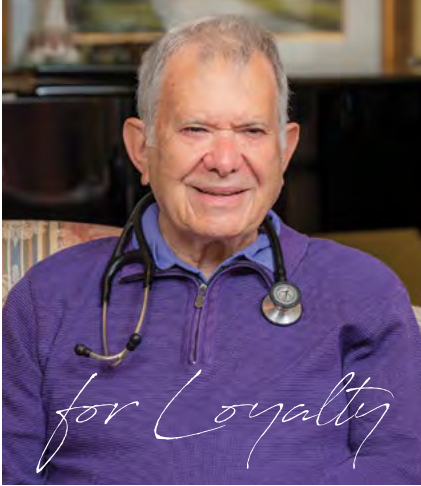
Endocrinology, Diabetes and Metabolism and codirector of the Center for Healthy Aging and aging researcher Sadanand Fulzele, PhD, are the first to find and explore how these essential systems turn against our aging bone and muscle. Work by others in cancer first connected kynurenine to AhR and the potentially bad consequences.

Their studies also are further testing the key hypothesis that excessive AhR activation is key to the bone and muscle loss that come with aging and to the accelerated problems with HIV infection and treatment. They are using AhR knockouts both in bone and in muscle to learn more about what the receptor is doing. ♡

Rodger MacArthur, MD, (from left), Huidong Shi, PhD, Mark Hamrick, PhD, Meghan McGee-Lawrence, PhD and Eric Belin de Chantemele, PhD



2023 MCG DISTINGUISHED ALUMS HONORED



Dr. Melvin Haysman, a 1971 graduate and retired allergist/immunologist from Savannah who served as past president of the MCG Alumni Association and on the MCG Foundation Board of Directors was honored as Distinguished Alumnus for Loyalty. During his presidency year, the MCG alumni association launched several programs, including the Help Our Students Travel (HOST) program and Dinner with 12 Strangers, a program in which an alum hosts incoming first year medical students.



Dr. Van Cise Knowles, a 1966 graduate and longtime general surgeon in Albany whose contributions as a medical missionary earned him the 2007 Surgical Volunteerism Award from the American College of Surgeons, is the 2023 Distinguished Alumnus for Professional Achievement.

*for
Professional
Achievement*

AT ALUMNI WEEKEND



2008 MCG graduate Dr. Sherita King, a urologic surgeon specializing in male and female sexual medicine and prosthetic urology, who also happens to have been a track star at Evans High School and at the University of Georgia, where she is still in the top 10 for speed in the 55, 100 and 200 meter dash, is the 2023 Outstanding Young Alumnus.

*Outstanding
Young
Alumnus*



The late Dr. Daniel Sullivan, a 1949 graduate who practiced surgical oncology in Augusta and was a longtime medical leader here, including helping start important community resources like St. Joseph Hospice and our Georgia Radiation Therapy Center, was posthumously honored as a 2023 Distinguished Alumnus.



Buying Time

ECMO sustains life in critical situations

*Craig and Lisa Churchill
with son Tyler and
daughter Kayla*



Lisa Churchill didn't realize until later what this really was. On September 26, 2021, her friend arranged a visit to the crowded ICU as her chance to say goodbye to the love of her life.

Craig and Lisa had met at their small Christian school in the city of Clarksville in north Tennessee near the Kentucky border. They were and are opposites in ways. She is outgoing, today a paralegal for Wright McLeod Attorneys at Law, who won't choose a confrontation but won't walk away from one either, a force in her family who keeps lists and plans the near-perfect lives she and Craig would live with their two children Kayla and Tyler.

Craig is quieter and super methodical. Kayla laughs that her dad will drag them to seven stores searching for the right clothes at just the right price. But that persistent approach means they all have nice

cars, nice homes, and yes good clothes. "Because of him we as a family have rarely made a bad decision," says Kayla Hogan, 23 a married, marketing and public relations specialist for Meybohm Real Estate in Augusta. "He taught me to save and I taught him to live a little," Lisa chimes in.

Kayla's dad started his working life as a teen doing odd jobs at a small airport in Clarksville, would become an aircraft mechanic who would help keep big jets in the air, and today works in sales for StandardAero, an international provider of aerospace maintenance repair and overhaul. He would grow into an interesting mix of easy-going and doing, who might spend an entire Saturday cleaning up the yard and fixing around their home and cars whatever needed fixing. If something needs to be done, he does it, Lisa says.

Craig likes to walk, sometimes run and play golf. He coached his youngest, Tyler, in competitive skeet shooting. Tyler, who clearly inherited his father's ability to figure out what's wrong and fix it, now works full-time for Augusta-based Sig Cox Heating and Air Conditioning.

On May 1, 2023, the Churchills piled onto a couch together for a laid-back family portrait and to share how they came way too close to losing the most methodical among them.

COVID kills

The world and the country were still scary, isolating, and sick places that September 2021, with the onslaught of Sars-CoV-2, the primary reason many hospital halls like the ones Lisa and Kayla walked that September day were eerily quiet while the ICUs were jam-packed and chaotic.





His wife and daughter could hardly recognize the man they came to see, who was extremely swollen with tubes coming and going everywhere. “I thought they sent us to the wrong room. It was very otherworldly,” Kayla says. Many of the patients were lying face down in their beds on ventilators in a technique called proning, which was thought to improve the exchange of oxygen and carbon dioxide. The staff told them to take Craig’s belongings home with them when they left.

The situation had started innocently enough about two weeks earlier for this active, healthy family. First Tyler, then Lisa, then Craig caught COVID, and the wife and son got pretty sick. Craig, then 51 and with no health problems or medications in his life, seemed comparatively fine for days and kept working from home except when he was helping take care of the others.

Then the morning of Sept. 20, 2021, Craig sat up on the bed and Lisa could tell he was having to focus on breathing. The pulse oximeter showed an oxygen saturation of about 86 - 95 to 100 is considered normal. Lisa took Craig to prompt care, where he was quickly transported by ambulance to Piedmont Augusta, the former University Hospital, a large, community hospital in Augusta.

“I watched him get in the ambulance,” Lisa says because prevention measures in place at that time meant she could not get in with him. She knew that too many people were going to hospitals and never getting out. “It was terrifying and very, very lonely,” Lisa says.

Craig again seemed OK those first days. Her husband was still texting her, but it was not good news when the hospital called. He had experienced pneumothorax on both sides of his chest further burdening his COVID-infected lungs. Craig, who remembers nothing after arriving at the emergency room that Monday, sent her a text: “Dude, I just got a chest tube. Bam, I feel like I am on an episode of ER.”

His oxygen saturation had dipped into the 70s by then and he was moved to the ICU Sunday morning. He would go into cardiac arrest and need to be resuscitated. He was placed on a ventilator despite best efforts to keep him off this double-edged device that can damage the lungs it is trying to support.

But what Craig really needed was lifesaving support called ECMO, extracorporeal membrane oxygenation, a temporary method that uses a device that takes over the work of the lungs and/or the heart and lungs and allow those





Vijay S. Patel, MD
Cardiothoracic Surgery

Vijay Patel, MD, cardiovascular surgeon and medical director of the adult ECMO Program reviews a case with the team.

essential organs to recover or physicians an opportunity to find a longer-term solution.

So-called destination therapies include an implantable left ventricular assist device, or LVAD, that supports the essential function of pumping oxygen-rich blood throughout the body, which is usually flawlessly and continuously sustained by a strong and healthy left ventricle of the heart. LVADs can be used temporarily if there is a high likelihood the patient's heart can recover or inserted for permanent support to help improve the quality and length of life for patients who do not qualify for a heart and/or lung transplant to replace these irrevocably damaged organs.

The Churchills had never heard of ECMO before that day when Craig was put on a waiting list for an ECMO bed at Emory University Hospital in Atlanta.

Intense intervention called ECMO

Vijay Patel, MD, cardiovascular surgeon and medical director of the adult ECMO Program at Wellstar MCG Health, first came across ECMO while doing a research fellowship in clinical transplant and research at the Texas Heart Institute in Houston from 1993-95.

At Texas Heart, he learned among greats like O.H. 'Bud' Frazier, MD, who would become Patel's mentor. Frazier's mentors, which included the renowned Michael DeBakey, MD, and Denton Cooley, MD, were preeminent pioneers who implanted the first long-term LVAD and an artificial heart. Now in his 80s, Frazier remains a pioneer as co-director of the institute's Center for Preclinical Surgical and Interventional Research. To this day, Patel keeps in touch with the man he says taught him at the bedside how to be a better physician, surgeon, and human. The self-effacing Patel seems to have learned those lessons well.

Patel came to the Medical College of Georgia in 2004 with the goal of bringing these types of complex care capabilities with him. His training took him from medical school and general surgery residency at the University of Texas Health Sciences Center in Houston

and a research fellowship dedicated to mechanical cardiac support devices, extracorporeal membrane oxygenator devices and heart transplantation at The Texas Heart Institute to New York to study cardiovascular surgery at The Albert Einstein College of Medicine to North Carolina and Duke University Medical Center for fellowships in cardiopulmonary transplant and mechanical circulatory support devices and robotic and minimally invasive heart surgery. He was recruited to MCG by like-minded Kevin Landolfo, MD, whom he studied with at Duke and who had joined the MCG faculty that year to lead the cardiothoracic surgery program. They would start a heart transplant program and work to establish an LVAD program, but Landolfo would move to the Mayo Clinic in Jacksonville in 2009. Patel was disappointed with Landolfo's loss and would find himself MCG's lone cardiovascular surgeon for a time. But the calm, committed Patel refused to bail just because things were tough.

Long story shortened, the heart transplant program, which he plans to restart, had to go on hold and Patel would get the LVAD program up and running to provide support to patients at imminent risk of dying because of heart failure, which can lead to cardiogenic shock, a potentially deadly state where the heart simply cannot meet the body's need for blood and oxygen.

Five years ago, well before anyone had even thought about the pandemic, Patel also started in earnest developing a formalized adult ECMO program because he continued to see patients that could not be helped otherwise. It became a hugely collaborative program that includes ECMO specialists, respiratory therapists who pull 12-hour shifts directly at the bedside of an ECMO patient; perfusion specialists; critical care nurses; nutrition specialists; physical therapists; cardiologists specializing in intervention and advanced heart failure; cardiovascular surgeons, pulmonologists, and critical care intensivists. The 18-bed cardiovascular ICU that opened in late 2021 became the place where these caregivers gather

to provide patients on ECMO with the critical care management they need.

ECMO is a big-time intervention that is only used as a lifesaver when it's relatively clear that meaningful quality of life can also be regained.

There was no COVID in the earliest days of adult ECMO, but heart or lung failure from other problems like a massive heart attack or other aggressive viral infections could quickly render these vital organs dysfunctional.

"We all get the flu and sometimes other types of viruses, in some individuals, severely attack the lung and/or the heart muscle, and then their inflammatory and immune systems can further exacerbate the injury," Patel says.

Venovenous, or VV ECMO, temporarily takes over the work of the damaged lungs so they can rest and maximize the potential for recovery; Venoarterial, or VA ECMO, is used when the heart and sometimes the lungs as well are failing. "It bypasses the work of the native cardiopulmonary system," Patel says. Not surprisingly, the complexity of the underlying organ failure requiring VA ECMO carries a higher complication rate compared to VV ECMO.

While it literally feels like the heart and lungs would always live or fail together, that is not always the case. But there can be some unfortunate circumstances, like if the heart is failing acutely, fluid can back up in the lungs and cause them to also fail. The adult ECMO team may opt for VA ECMO support for these patients, Patel says, to allow the lungs to recover first, and the heart won't have to work so hard, maximizing its potential to recover.

ECMO use in both adult and pediatric populations began in the 1970s, and the first decades of experience with adult ECMO worldwide were not exceptional. Many adult patients died, most likely because of the early technology and poor timing and patient selection, Patel says, in addition to the numerous risk-contributing medical illnesses and comorbidities common in adult patients compared to the more resilient pediatric populations.

Today, oxygenators, essentially external artificial lungs, are better; the pumps that keep blood circulating are better; and the multidisciplinary critical care teams that today include ECMO specialists like Wellstar MCG Health's Sangley George constantly at the bedside are significantly better as well.

So is the patient selection, which is key and likely one of the hardest pieces because these patients face essentially certain death without ECMO. But this level of intervention carries big risks as well, including the extremes of bleeding and clotting, new infections, seizures, muscle wasting and stroke, among many other potential complications that can all influence outcomes and meaningful survival. Patients can have cognitive impairment and mental struggles afterward, like post-traumatic stress disorder. A different harsh reality is that ECMO is resource intensive and expensive.

For these reasons and more, there must be viable long-term options for patients, like good evidence the heart and/or lungs can recover given time and the right medication, or that an LVAD or transplant could work for them. "They are going to die if you don't put them on ECMO, but they have to be able to survive if you do," says Patel. Older age and comorbid conditions that already likely shorten lifespan must be considered. So, Patel talks with the adult ECMO team members about those decisions, but ultimately the buck stops with him.

ECMO versus COVID

COVID made those tough decisions more challenging across the globe and at the new adult ECMO program at MCG and Wellstar MCG Health because it was overwhelming the entire health care system and wearing out brave frontline healthcare workers.

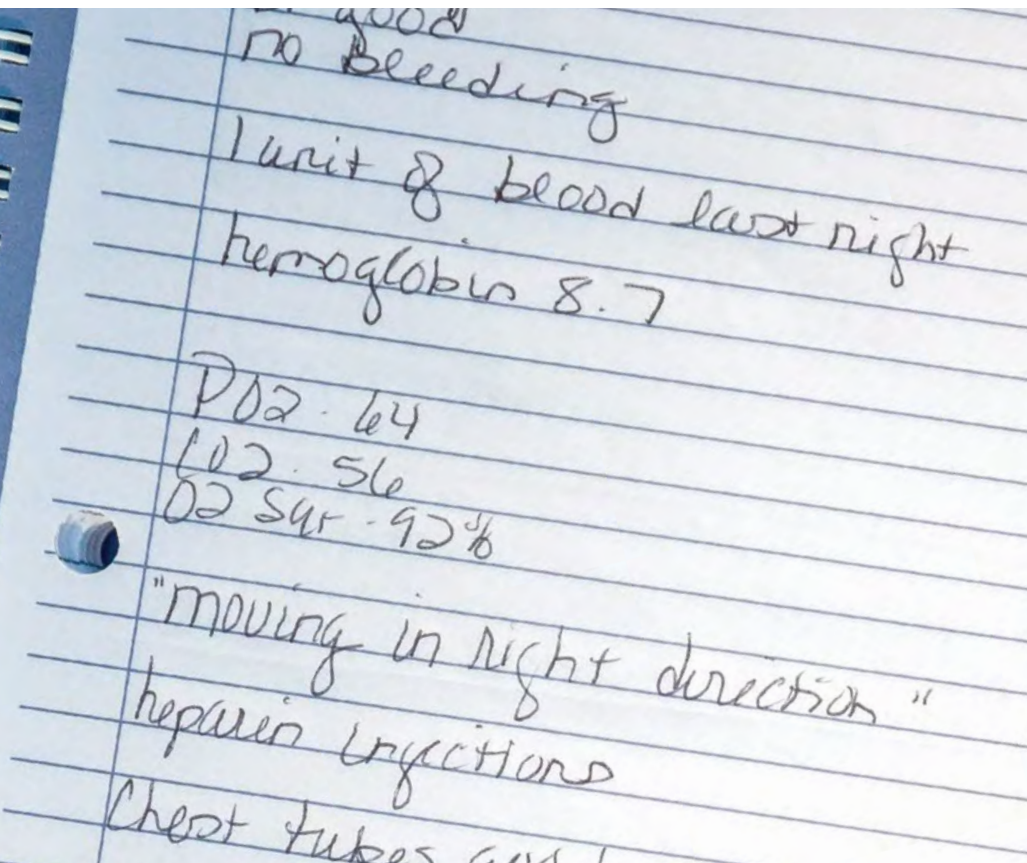
The ACE2 receptors prevalent in the lungs, as well as the heart and kidneys, are like a lock and key with this spiky coronavirus. Adult respiratory distress syndrome, or ARDS, which results primarily from bacterial and viral infections, became a death sentence for

Sangley George with an ECMO machine





Lisa Churchill kept a detailed journal of husband Craig's ordeal



many patients as millions of tiny air sacs in the lungs fill with fluid, a surfactant that helps keep air sacs open breaks down and oxygen levels drop. Pressure mounted as ECMO teams across the country realized that if you were going to use ECMO, it was best to intervene early. While he doesn't seem like that person, Patel acknowledges that he was on edge for the duration of COVID as local and national discussions ensued about how best to guide teams about when and how to use ECMO.

Patel and his team found their capabilities often maxed out during the pandemic. So, they would call nearby adult programs like the one at Emory Hospital in Atlanta, and Medical University of South Carolina in Charleston, as well as programs in Tennessee, Florida, and Alabama. He remembers receiving calls from other states asking him to accept eligible ECMO patients for care at Wellstar MCG Health. His most memorable call was for a young woman from Florida who was pregnant, who called him directly. The ECMO program was at capacity and people were still walking in sick. He still wonders what happened to her and her baby.

As the Churchills waited precious minutes to hear from Emory about an ECMO bed becoming available, Lisa uncharacteristically went to social media Monday morning, Sept. 27, sharing that her family needed the prayers of their people.

Two houses up, Amanda Wright, who at the time was the trauma nurse manager at Wellstar MCG Health and had helped spearhead COVID vaccinations for her fellow healthcare workers, texted Lisa the news that MCG's adult teaching hospital had an adult ECMO program. Its Children's Hospital of Georgia had one of the first half-dozen neonatal and pediatric ECMO programs. Tyler had grown up with Amanda's children, but this was no doubt the best news she had ever shared with them. At about the same time, a good friend of Craig's saw a local news piece about the adult ECMO program. "God's handprint is just all over it," Lisa

“He became so hypoxic because his lungs could just not support him no matter how much oxygen you gave him. He was never going to survive by standard treatment.”

–Vijay Patel, MD

says. A doctor at Piedmont called to say Craig would be transferred to Wellstar MCG Health later that day, but there were concerns about his surviving even the one-block trip.

Patel met Craig in the operating room and by 8 p.m., Craig was on ECMO.

“He became so hypoxic because his lungs could just not support him no matter how much oxygen you gave him,” says Patel, and the ventilator, while invaluable most times, could not fully accommodate for that. “He was never going to survive by standard treatment.”

Craig’s heart was fine, so they used VV ECMO which would just take over the work of his lungs. Patel put a large cannula into the right side of his heart to drain the oxygen-poor blood. After running through an oxygenator, the blood, now rich in oxygen and low in carbon dioxide was put back into the cannula and continued its rapid, normal path – from the right side of the heart, through the pulmonary artery and to the lungs, then finally to the left side of the heart and out to the body. In Craig’s case and often, they started with ECMO support wide open.

Antivirals and old-school diuretics and steroids help deal with the underlying issues — the causative virus itself and resulting excess fluid and inflammation. Rest and healing for the lungs should result. As the lungs start to shake off their injured state, their contribution to helping Craig’s body get adequate oxygen increases and the ECMO machine can start to be turned down. The ECMO team starts thinking about how to get a patient off ECMO as soon as they are put on it.

But again, this is big-time critical care, and the course is not always so direct. Craig would end up having the team’s longest course on ECMO, a total of 44 days while the “normal” for COVID is closer to 2.5 to 3 weeks and maxing out on ECMO support. One probable reason was Craig

would develop severe gastrointestinal bleeding, likely resulting from the severe stress he was under and the powerful steroids he needed. Arthur Freedman, MD, chief of Vascular and Interventional Radiology at MCG and Wellstar MCG Health, identified and embolized the problematic blood vessels. Craig’s recovery improved after that. A confounding issue that remains an issue today is that at some point over the course of his illness, Craig also had a stroke. Stroke is a clear risk of ECMO, but Patel suspects Craig’s likely occurred when he developed cardiac arrest due to a severe lack of oxygen arrested and needed CPR before his ECMO course.

Patel notes that while ECMO has been around for decades, COVID has not, consequently it provided a tremendous learning curve for those around the world who would step up to take COVID on. The lessons the medical community learned over many decades managing these very sick patients and the advances in technology that made ECMO therapy possible became even more valuable in the face of the pandemic.

Better sooner than later

The experience was how they would learn that sooner is better if you are headed toward ECMO and that if you put patients on ECMO beyond seven days of being on a ventilator, they are less likely to recover. Not surprisingly, they found that being young, improved survival chances, and being older decreased them. That the multiplier effect of existing medical conditions, particularly those that increase inflammation was a negative, and inflammation is a factor in most major illnesses as well as obesity.

Seemingly amazingly, and ultimately, Craig’s lungs began to heal, and indicators of inflammation went down as his oxygen levels crept up. Lisa and Kayla watched as the number of medicine drips beside



his bed decreased and as all those tubes started to come out.

Craig thought it was the next day when he woke up at Select Specialty Hospital in Augusta, an inpatient rehabilitation hospital where he spent about three weeks before going to the renowned neurorehabilitation center, Shepherd Center in Atlanta for another month.

Lisa would keep a detailed notebook of the entire dramatic course and share the often-rocky path on social media and continue to ask their people to pray. Kayla was her goal-oriented right arm while Craig was in the hospital and Tyler was her support when she got home.

Today a visitor would never know that Craig Churchill was any worse for the significant wear. He smiles a lot, plays golf, is walking and running again, goes to the gym several times a week, and was back at work full-time on March 1. The man who could barely get up to go to the bathroom alone when he got home, has gained about 30 pounds of muscle in the last year.

But there are reminders of the dizziness he still feels, the fact that he still must focus on his breathing, particularly when



he is talking or eating, and to make sure the words he is saying are what he wants to say. He says he can't yet hold a cup of coffee in his left hand, which was news to Kayla that May 2023 Day.

It's been tough and still is tough on everyone in the tight-knit family. Tyler didn't see his father until he was at Select, admitting that he did not want to see his "big, strong father figure" lying on his back. "It was hard for him. It was hard for me to see. It was hard for his mom. It was hard for Kayla," Tyler says.

But Kayla says there also are additions to her father, as he talks more, he is funnier and more emotional, quicker both to kindness and to anger.

Lisa says she thinks the whole family has PTSD and does not disagree that the whole country does.

Craig says no one has not been touched in some way by COVID and that his battle with it was the hardest thing he has ever done. Was it worth it? "Yeah."

The adult ECMO Team

Akbar Herekar, MD, says it's natural for anesthesiologists to also function as critical care specialists at the bedside of patients like Craig.

"What happens in the ICU over three or four days, happens over a couple of hours in the OR. So naturally anesthesiologists are very good at managing the ventilators, putting patients on ventilators, managing the breathing tubes, and then managing their blood pressure and hemodynamics because we must know the details and the nitty-gritty of the way the medications work, how they work, how we push them, how we get access."

It's like doing intensive care at super speed, says the young physician, who completed his anesthesiology training at MCG and Wellstar MCG Health and an anesthesiology critical care fellowship at Johns Hopkins University in Baltimore before joining the MCG

Anesthesiologist, Akbar Herekar, MD

faculty in 2020. Among the sickest of the sick, critical care specialists essentially become frontline physicians looking out for the whole patient, for everything from nutrition to blood pressure to urine output to alertness to signs of a new infection from all the devices the patient has in place. At Hopkins, Herekar found himself in the thick of the pandemic at a center leading the nation in treatment and in providing the near real-time updates on COVID cases.

Herekar's immersion and expertise quickly became a huge asset in bringing cohesion to the new team caring for ECMO patients at MCG and Wellstar MCG Health, and in helping orient the critical care fellows in the MCG Department of Anesthesiology and Perioperative Medicine, Patel says. Herekar returns praise to Patel for championing an effort that was sorely needed and eerily timely.

He loves what he does at the bedside of truly sick individuals, like those on ECMO, and the privilege of helping save a life. But getting them back to life is always on his mind and the mind of every team member.

"COVID especially has helped us realize that it's not just about keeping patients alive, but about helping bring them to where they can live a meaningful life," he says.

With that ultimate goal in mind, Herekar is part of a national movement to get critically ill patients, including those on ECMO, out of bed and off the ventilator as soon as possible. You can find videos online of this somewhat astounding feat.

When the team does rounds, he likes to have everyone stand inside the door to ensure that the patient can hear what is being said if possible and any family members present know as well. "They need to be part of the team. They need to know what decisions we are making and it's important that we ask them where you want to go from here." Back to his good life, is how Craig Churchill answered that question when he could.

It's really because these patients are so sick and because they are likely to be sick for so long that this sort of revolution is happening, Herekar says. The culture has been to keep sick patients like these deeply

medicated and on traditional ventilation, but both can be problematic. Patients with ARDS, for example, have a portion of their lungs already significantly damaged, likely by infection, and the positive pressure of even modern ventilators which push air into the lungs can damage the healthy portion of the lung and nothing helpful for the already unhealthy portion.

Most people don't recognize the energy it takes to just breathe, but when patients get so sick like Craig, they do feel it and the ventilator can help support the essential function until they do have the energy, adds ECMO Specialist George. "When we pull ECMO off the shelf, is when a patient is in severe ARDS, and what we are doing on the ventilator is not making a difference. Their lungs are so stiff, so non-compliant. A ventilator is great in situations outside of severe ARDS because we have lots of people on ventilators right now that will come off and be no worse for the wear," he says.

And afterward, these patients can experience "post-intensive care syndrome," which the Society of Critical Care Medicine defines as health problems that linger after the critical illness, from problems with muscle weakness to troubles with thinking and judgment.

Under constant heavy sedation and without any movement, caregivers can't see signs of a stroke or whether the patient can even move their arms.

"We would keep them alive, but they would have some sort of memory deficit, they wouldn't recognize who they are, and it would take them a long time to recover afterward," Herekar says.

"When we pull ECMO off the shelf, is when a patient is in severe ARDS (acute respiratory distress syndrome), and what we are doing on the ventilator is not making a difference. Their lungs are so stiff, so non-compliant. A ventilator is great in situations outside of severe ARDS because we have lots of people on ventilators right now that will come off and be no worse for the wear." – Sangley George

Eugene Wesley Ely, MD, pulmonary and critical care medicine specialist at Vanderbilt University School of Medicine, wrote *Every Deep Drawn Breath* about this unnatural state in which patients can spend weeks or even months and which can leave them with a form of PTSD, sometimes seeming normal, but unable to do normal things.

"They wake up, now they have their hands and legs tied, they have a breathing tube and are on a breathing machine, they have things in their neck, so they wake up and every normal human being is going to be agitated at that point," Herekar says. "We give more medicine because they are agitated, and they wake up again and the cycle happens over and over." At the busy ECMO unit at Johns Hopkins, Herekar learned: "When it's time to decannulate just do it."

A delicate dance

Still, it's a delicate dance. Patients with ARDS, like Craig, clearly need help getting oxygen into their bodies, so they are placed on a ventilator and medications to optimize their comfort and adjust to being on a ventilator, in an effort to avoid being placed on an ECMO.

But the realities also are that the sedation drugs they receive linger in the body and artificial intelligence has helped to be on a ventilator feel more like breathing and likely less scary. Being sedentary also is not good for the physical or mental health of anyone, and these patients can have challenges in both places.





“Are they dancing in the halls now? No, but at times they will sit up in bed and turn the television on.” That is when Herekar pulls up a chair beside them. “We are not sitting there talking about them, we are talking to them. Treating people like people.”

It’s not good for blood to sit around either, Musa Sharkawi, MD, says. Team members agree that the respite for the lungs and/or heart that ECMO provides is a technique like what happens during the 350,000 coronary bypass surgeries, or CABGs, performed each year in the U.S.

But for bypass surgery, the vital organs rest for a few hours. With ECMO it can be for days, weeks, or longer, like with Craig.

If their heart rests that long, blood essentially starts to curdle. “It has 100 percent mortality,” says Sharkawi, an interventional cardiologist. That’s why, particularly patients on VA ECMO, may also need an Impella

heart pump, essentially a miniature LVAD that can be inserted via a catheter into the left ventricle, the major pumping chamber of the heart, to keep blood moving along through the ascending aorta and out to the body.

“Having an ECMO program is much more nuanced and complex than just putting catheters in, putting a pump on and that is it,” Sharkawi says. That’s why there are many educated eyes always watching, including Sharkawi and heart failure specialist Evan Hiner, MD, Herekar, ECMO Specialist George, and Patel.

The heart is now the main matter

Now that the pandemic has passed and with heart disease Georgia’s and the nation’s steadfast number one killer, most of the adult ECMO cases the team is seeing are heart-related so cardiologists like Sharkawi and Hiner often get the first call.

Interventional cardiologist Musa Sharkawi, MD (left) and heart failure specialist Evan Hiner, MD



Like the January day 42-year-old Steven Herrington's heart stopped twice in the Emergency Department, and Patel and Sharkawi placed Herrington on VA ECMO while they were still doing CPR with chest compressions. Despite Steven being on the VA ECMO, his heart wasn't moving and the blood was pooling. The team, never having encountered this before, had to think fast. They strapped on a chest compression device, called a LUCAS device, at that critical moment. Then Sharkawi took him immediately to the cardiac catheterization lab to put in the Impella. "Man, it really did take a village," says Sharkawi, who is proud of what the village did that day and more.

Sharkawi, who did his cardiovascular medicine fellowship at the University of Connecticut School of Medicine and interventional cardiology and structural heart and peripheral vascular intervention fellowships at Brigham and Women's Hospital of Harvard Medical School, says the adult ECMO program Patel pursued was "absolutely" a drawing card for him when he joined the MCG faculty in 2021. Hartford Hospital in Connecticut and Brigham and Women's Hospital both have ECMO programs.

"If, for example, we were at another institution without these capabilities, particularly having a young patient like (Steven) come into the emergency room, it would feel a little bit helpless not being able to help him," Sharkawi says. "Now there is almost nothing in acute cardiac care that we are unable to do."

That's a good thing, since there is increasingly more that needs doing. Colleague Hiner, the heart failure specialist on the adult ECMO team, says. "Heart failure is a growing epidemic, we are seeing greater prevalence in this disease as patient's continue to live longer due to improvement in overall therapies that are now available."

Oddly the heart can be in failure both because it can't pump sufficiently because it's weak and because this important muscle can't relax sufficiently to pump sufficiently. Patients go into cardiogenic shock because the heart is no longer meeting the demands of the body and a major heart attack that puts 40% of the heart muscle at risk is the most common

cause. "So, it's a pretty serious heart attack to get to cardiogenic shock and the need for ECMO for these patients is at the extremis end, but when patients need it, they need it quickly," Hiner says.

The goal is to identify the cause of a patient's heart failure, establish a treatment plan and provide prognosis during their hospitalization. The causes are a diverse list that also includes hypertension, valve disease, alcohol consumption, viral infections, chemotherapy, radiation and irregular heartbeats.

His goal is to get these patients in "remission" ideally with guideline directed therapies aimed to remodel the heart and prevent further negative consequences. He notes his cardiac colleagues have changed their language and terms of 'remission' instead of 'recovered' to emphasize patient trajectory and importance of maintenance medications.

Getting back to their lives

In his 12-hour shifts at the bedside of patients who do need ECMO, Sangley George's eyes continuously monitor the intricate, temporary network holding about a third of the patient's blood volume at any one moment. His eyes shift from the pump itself which functions like a lung or heart/lung; to the big plastic tubes cannulas in the neck or groin area that are sending blood to the pump, where it

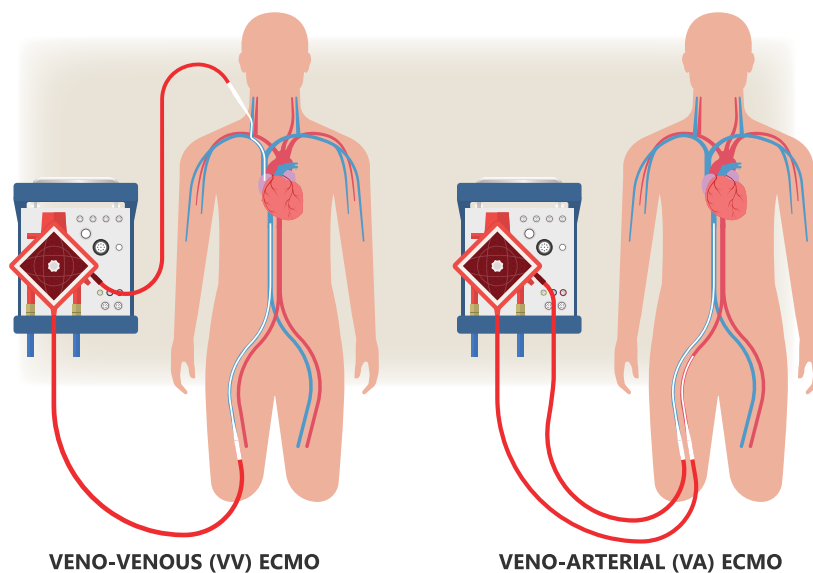
picks up oxygen and loses carbon dioxide before being pumped back to the heart and lungs; to the tubing connecting the patient to the pumps; and at the pressure on the blood flowing through the generator, a good indicator of how it's working. "If we see a spike in post-pressure, for example, that tells us there might be an increase in clotting that is happening," he says. Without adequate speed, the blood will quickly form those dangerous blood clots.

It was both the intensity and potential of ECMO that made George raise his hand to join the adult ECMO team. He'd only been a respiratory therapist for a few years, but was ready for more, ready to be one on one with patients like Craig who needed super-critical care. "I think of it as therapy that is buying time for the patient," he says. "Can we buy them a little bit more time to where we can allow the lungs to heal, we can allow the heart to kind of heal up."

The ECMO team bought Craig more than a little time. Thirty days were the longest George had seen a patient on ECMO before Craig. And after 30 days, it usually didn't go well.

George would see Lisa most days of the extraordinarily long journey. Lisa says he and his ECMO specialist colleagues quickly became like her best friends. The Churchills, in turn, helped define hope for George in these also extraordinary times.

"You just kind of gravitated toward the hope that they had." ❧



Craig spent a total of
44 days
on ECMO, the longest
course for the team.



Former ECMO patient, Craig Churchill

Auto Dealership Owner Advocates for Children's Hospital of Georgia



Andy Jones and wife Connie

Andy Jones has two key takeaways to share with everyone about Children's Hospital of Georgia. The first is this: "I know intuitively that the care and quality of the people we have at Children's Hospital is second to none. If one of my children was sick, that's where I'd take them. No question," said Jones, owner of the Gerald Jones Auto Group and a longtime supporter of the Children's Hospital of Georgia.

As the past chair of the Children's Hospital of Georgia Philanthropy Board, Jones could be called out for favoritism. But the facts speak for themselves. Over the past decade, Children's Hospital of Georgia has been ranked among the highest performing in the nation for pediatric quality and safety when compared to pediatric care at peer academic health centers across the U.S.

Jones' second point is the outstanding medical advances and innovation that draw patients and families to Children's Hospital of Georgia. "Advances places like M.D. Anderson, Duke and St. Jude do not have," Jones boasts. "Patients come here from Europe,





the Middle East and, of course, from all over Georgia and South Carolina. You wouldn't think that, but Children's has a broad reach."

One of those medical advances with a broad reach is the ECMO program. The first ECMO machine in the Southeast was established in 1985 at Children's, and for more than three decades, ECMO has provided life-saving care to more than 650 infants and children with critical illnesses at Augusta's only children's hospital.

Extracorporeal membrane oxygenation, or ECMO as it is more commonly called, works like a heart-lung bypass machine in infants and children. ECMO helps stabilize a young patient's lungs and/or heart while an underlying disease or issue is managed. The ECMO system uses a pump to remove blood from the baby or child, infuse the blood with oxygen, and then re-circulates the oxygen-rich blood through an artificial lung and back into the child's bloodstream.

So far this year, five children have been placed on pediatric ECMO and two babies on neonatal ECMO at Children's. The demand for pediatric ECMO has increased so much that Children's needed another machine so that no pediatric patient would have to be turned away from ECMO care.

Andy and his wife Connie Jones decided to meet this vital need for the hospital by giving \$350,000

to Children's to purchase the additional ECMO machine.

ECMO treatment is considered for infants, children and adolescents with a variety of illness and injuries, such as aspiration pneumonia; asthma; congenital diaphragmatic hernia; congenital heart disease – supportive treatment before or after cardiac surgery; meconium aspiration syndrome (MAS); myocarditis; near drowning; pulmonary hypertension; sepsis; severe pneumonia or sudden cardiac arrest. ECMO can be used for a period of days, or weeks, to give the child's organs a chance to develop, heal and recover.

ECMO is available 24/7 and is operated by teams of highly trained critical care medical specialists in the NICU or PICU, depending on the age and diagnosis of the patient. These expert teams at Children's are able to care for up to four patients simultaneously who require this intense, lifesaving therapy. Children's is the only hospital outside of Atlanta in Georgia that provides ECMO therapy.

The team at the Children's Hospital is also highly acclaimed, having earned the Gold Award for Excellence in Life Support from the Extracorporeal Life Support Organization (ELSO) consecutively since 2006. Another endorsement for the quality of care provided at Children's Hospital of Georgia, *U.S. News & World Report* and *Parents*

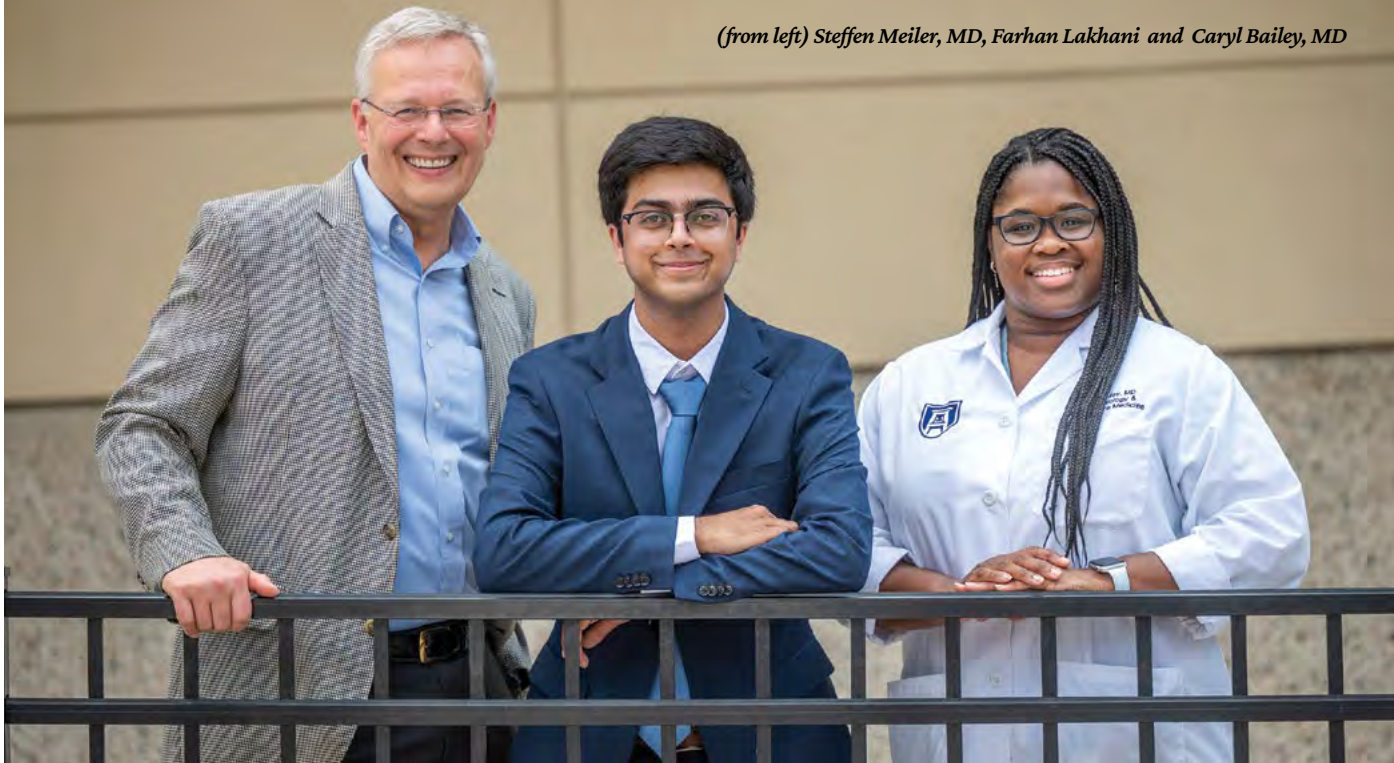
magazine recognize the ELSO Award as criteria for top pediatric hospitals.

"I don't think people realize how blessed we are to have the Children's Hospital in Augusta," Jones said. "It's such a wonderful asset, and we have got to help make it better known."

This is one of the reasons that Jones serves on the Children's Hospital Philanthropy Board and why he personally and professionally supports Children's. Last summer the dealerships within the Gerald Jones Auto Group raised more than \$50,000 for Children's through a special "Buy a Car, Support Children's Hospital" promotion.

"I'm always trying to encourage people to give to the Children's Hospital," said Jones, explaining that the ECMO gift was something he felt strongly about. "It's hard for me to simply go ask somebody for money. But if I can go to them and say, 'Hey, I ponied up personally, then it makes a huge difference.'" As a not-for-profit, the Children's Hospital still has many needs.

"What we are looking for are the big families that can give big. Hopefully, they will read about our gift, comment on it, and it will open the door for a conversation about another donation." ♡



MCG ANESTHESIA EXTERNSHIP PROGRAM HELPS GROW PROFESSION

A unique program that sees students at the Medical College of Georgia working as anesthesia technologists throughout their four years of medical school can influence more of them to pursue the specialty as a career, investigators report.

The MCG Department of Anesthesiology and Perioperative Medicine's nearly 100-year-old Externship Program is one of only five or six in the country and allows interested medical students to work nights, weekends and holidays, as a critical part of the anesthesia and operating room teams. Anesthesia techs are typically responsible for sterilizing, cleaning, assembling, calibrating, testing and troubleshooting various pieces of machinery in the operating room. Students in the externship program also routinely perform airway management, maintain vascular access and help perform rapid transfusions in emergent cases.

"This program was actually started in 1938 by our first chair Dr. Perry Volpitto, and originally it was designed to get medical students to fill the demand for additional anesthesia techs and personnel," says fourth-year MCG student Farhan Lakhani, corresponding author of the study in the *British Journal of Anesthesia*. "Now it's a program where medical students are paid an hourly rate and given the same job

responsibilities as a daytime tech. You are offered more clinical responsibilities and educational opportunities. You're also able to build trust and relationships with the people in the department, all of which is valuable in developing a sense of belonging to the health care team and contributing to the professional development of medical students into physicians."

The externship, which students can start as early as the first year of medical school, is mutually beneficial for students and the department, says study senior author Caryl Bailey, MD, assistant professor and director of the anesthesiology clerkship for medical students. "In addition to giving students anesthesia experience, it gives them perioperative experience, so the program is useful for students who are not only interested in anesthesia, but in almost any surgical subspecialty," she says. "It gets them used to the operating room environment, and learning team dynamics. We are also getting very engaged and interested workers. They want to stay around. They want to learn, so they tend to be more present in the operating room."

The program also ultimately translates to more anesthesiologists, the authors found. Of 38 current and former MCG externship participants, only 12 – or 32% — were interested in anesthesia as a career before they took part in the program. That

number climbed to 21 – or 55% - who chose anesthesia as their specialty after their externship.

"There is obvious benefit to our department and to our specialty, and very importantly, I think it gives our medical students who are interested in anesthesia a running start," says Steffen Meiler, MD, department chair. "When our students start their residency, either here or elsewhere, they are already familiar with the nuts and bolts of providing anesthesia and the workflows in a complex operating room environment. There is no doubt that when I am reviewing applications for our residency program that participation in our anesthesia externship is a strong positive."

While there are only a handful of externship programs in the country, Meiler also hopes this study will help that number grow. "This is a very high impact journal, and we can clearly demonstrate the long-term value of an externship program like ours," he says. "I hope this article will increase the interest among other academic anesthesia departments in establishing a similar medical student-focused experience."

Farhan Lakhani, who is currently serving as chief extern, will complete medical school in May 2024 and hopes to pursue a residency in anesthesiology. ♡

OB/GYN RESIDENCY PROGRAMS SHOULD OFFER MORE MENOPAUSE TRAINING

A nationwide assessment of Obstetrics and Gynecology residency programs reveals the need for more training in how to provide the best care for women going through menopause, according to investigators at the Medical College of Georgia.

“When you look at projections over the next few decades, by 2060, there will be around 90 million women in the US alone, who will be in the post-menopausal range,” says Jennifer Allen, MD, associate professor and director of the Obstetrics and Gynecology Residency Program at MCG and Wellstar MCG Health. “Yet it’s a tiny fraction of the curriculum, if any at all, in most OB/Gyn residencies. Compare that to something like pregnancy. In 2020, there were about 3 million live births, but we teach about pregnancy every single day in residency training.”

This is not a new problem, Allen says, noting that she received very little menopause education during her own residency at MCG and Wellstar MCG Health. It was not until she began practicing that she realized the enormous need. She sought out additional training and became certified as a menopause practitioner from the North American Menopause Society — one of only four in Augusta and the surrounding area. She also created lectures that she offers to residents at MCG and Wellstar MCG Health, and she began having them spend time rotating through her menopause clinic. “Our curriculum really needed to be built up,” she says.

When Allen became director of the OB/Gyn Residency Program in 2020, she set out to do just that, in Augusta, and nationwide.

Allen recently surveyed 145 residency program directors across the country. Of the 99 who responded, almost all — 93% — strongly agreed that residents should have access to a standardized menopause curriculum, she recently reported in *Menopause*, the journal of the North American Menopause Society. Only 31% of programs reported having any menopause curriculum at all.

“A lot of program directors don’t actually practice a ton of menopause medicine themselves, so it is hard for them to figure out how to teach residents about it,” she says. “Unless you have a menopause expert or someone having a menopause clinic at your institution, that’s a challenging thing to teach your learners. That is the basis for what I hope to do in the future, which is to help create a national curriculum.”

As a member of the Education Committee of the International Menopause Society Allen explains that there is a system in place for practicing providers called IMPART, short for International Menopause Society Professional Activity for Refresher Training, which features eight online training modules. “We are trying to modify and expand those modules to meet resident learner needs and that way we’re not completely reinventing the wheel. I’m hopeful that this is going to finally move the needle in a forward direction.”

More menopause education could also be helpful to other types of physicians — primary care providers like family medicine physicians or internists, and even subspecialists like endocrinologists, for example, because their female patients could present with symptoms in their offices first.

Menopause symptoms are more than the signature hot flashes, Allen says. Women can

experience symptoms from head to toe, including things like sleep disturbances, hair, nail and skin changes, bone loss, mood instability, depression and anxiety. And treatment options can include both hormone and non-hormonal therapy.

“When a physician is well informed about all of these things, then the patients get better counseling, they learn about safe options, and can make the best joint decision with their doctor about how to best manage their care,” she says. “Without menopause education for physicians, patients may get a response such as ‘Well, that’s just aging’ or ‘That’s menopause and you’ve just got to deal with it’. That’s not fair to our patients. They deserve better care, so that’s my goal — better training for physicians and ultimately improving patient care.”

Jennifer Allen, MD



2023 PEACH STATE SCHOLARS



The MCG3+ Primary Care Pathway Program allows students to finish their medical school training in three, rather than four years, before directly entering a primary care residency in Georgia. In exchange for their commitment to serve in a rural or underserved area of the state, these students will receive a scholarship for tuition.

The scholarship fund and ongoing support for the MCG3+ Primary Care Pathway Program were made possible by a \$5.2 million donation from Peach State Health Plan in 2021. In 2021, Governor Brian Kemp and the Georgia General Assembly matched Peach State Health Plan's initial \$5.2 million in funding help to kickstart the program. In 2022, Governor Kemp and the Georgia General Assembly added an additional \$8.7 million to the program, which was matched by the Medical College of Georgia Foundation.

The 2023 Peach State Scholars, their hometowns and intended specialty are as follows (from left):

Blayne Thomason of Dalton, GA, OB/GYN

Jessica McElrath of Woodstock, GA, Pediatrics

Jordan Bothwell of Roswell, GA, Emergency Medicine

Samantha Feinstein of Hartsfield, GA, Pediatrics

Caleb Padgett of Langley, SC, Internal Medicine

Brianna "Taylor" Nicholson of Suwanee, GA, Psychiatry

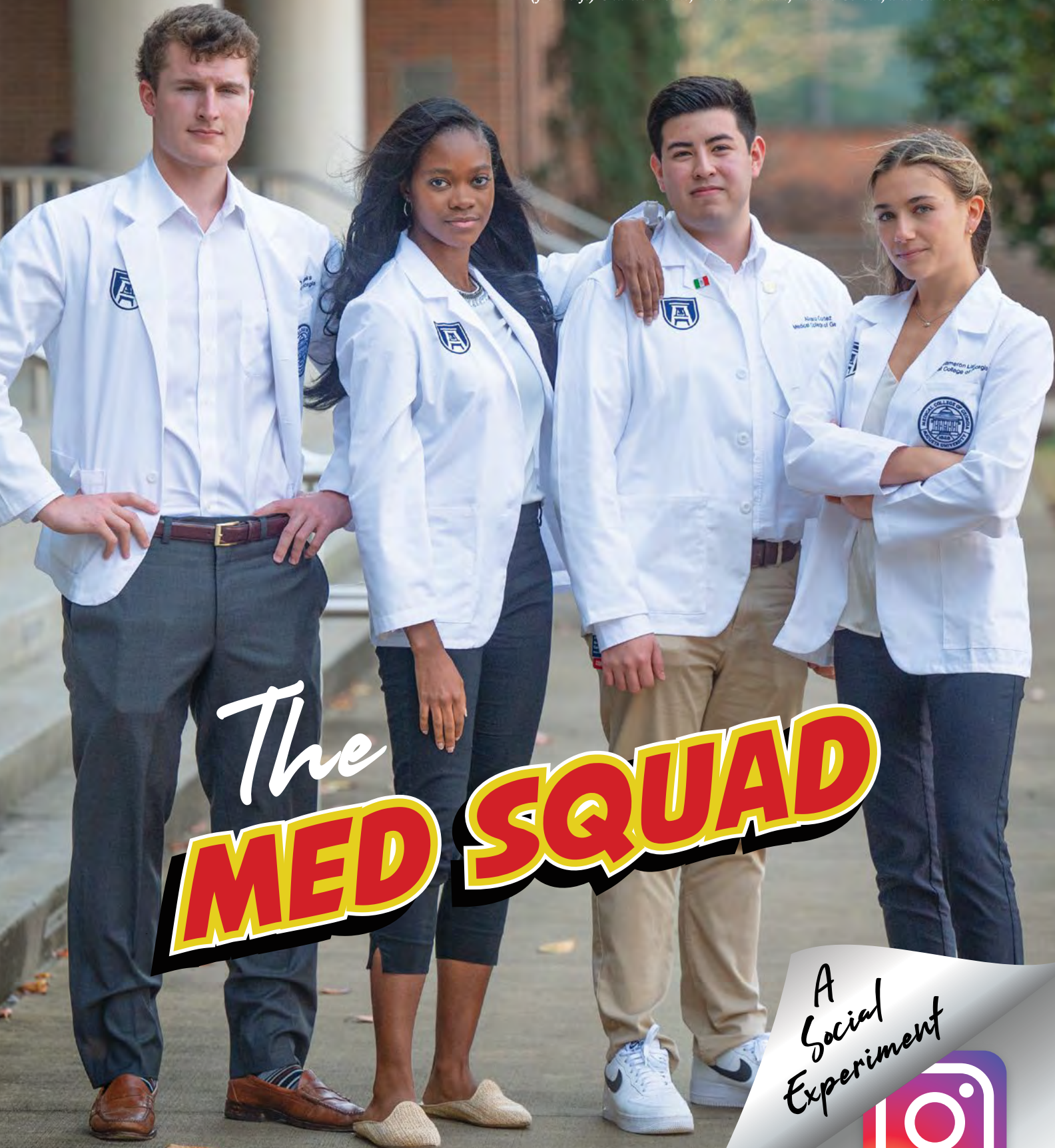
Christopher "Chris" Dick of Dunwoody, GA, Internal Medicine

Madison Chimenti of Canton, GA, Emergency Medicine

Peter-Jon Williams of Douglasville, GA, Internal Medicine



(from left) Charlie Weeks, Irielle Duncan, Alvaro Cortez, and Cameron Liss



The MED SQUAD

A Social Experiment





aug_university Meet the Med Squad! A group of first-year medical students at the Medical College of Georgia are going to take us along their journey throughout medical school. Join us as we follow along! #MCGMedSquad

41w



the.k.lynn 🥰🥰🥰 love to see it

40w Reply



anaschung so cute, best people

41w Reply



bigredcounseling ❤️❤️ we would love to schedule a virtual time to see if they can talk to our students!!

41w Reply



emma.buchanan QUEEN @irieeeee_ ❤️❤️❤️

41w 1 like Reply



itslibriaj Love it!!!! Good luck everyone! 🙌❤️

41w Reply



ahdaysiam My favorite future doctor ❤️ @irieeeee_

41w 2 likes Reply



On a small screen, a 30-second capsule flies by like a whirlwind. First-year medical student Irielle Duncan makes coffee, drives to campus, eats breakfast before class, shows a brief tour of a learning commons, walks campus, volunteers as a gamer with a child patient, studies in a group for a lab test and then signs off.

"I had a super busy day, so I hope you had fun following along and seeing what we do every day as medical students," Duncan says in her Instagram Reel video.

At the beginning of the 2022-23 academic year, the Medical College of Georgia launched a social media experiment: follow four students for four years through videos encapsulating their experience to become physicians.

Branded as the Med Squad, the students are Duncan from Lawrenceville, Ga.; Alvaro Cortez from Chatsworth, Ga.; Cameron Liss from Atlanta; and Charlie Weeks from Chattanooga, Tenn.

Although it is common for medical schools to produce student videos portraying a day in the life of a medical student, it is unique for a school to plan four years of that journey through the eyes of a cohort.

The Med Squad's videos are self-produced and appear on Augusta University's Instagram feed (@aug_university). Instagram is a smartphone-based photo and video sharing app, although it can be accessed through a web browser as well.

They are becoming ambassadors to prospective students through social media.

"I was really excited to be able to represent first-generation, low-income, and underrepresented-in-medicine medical students through this project," Cortez explains his rationale for participating. "My hope is that other students who identify in those categories can see someone through these videos that not only persevered throughout these four years, but also someone they can relate to."

Duncan says the first few months have already been a valuable experience in lessons of marketing and social media. Those lessons will be applied later when branding herself as a practicing physician.

"I have enjoyed building lifelong relationships with the rest of the Med Squad, and I am looking forward to seeing how our diverse experiences and involvements at MCG complement each other over the years," she adds.

Weeks says, at the end of the project, he will look back and see how his life changed over the four years.

Follow them by searching Augusta University's Instagram for #MCGMedSquad.



**IRIELLE
DUNCAN**

Age: 24

Undergraduate degree:

University of Georgia, Bachelor of Science in Biology and Psychology, and Mercer University School of Medicine, Master of Science in Preclinical Sciences

Why I chose medicine:

I like to say that medicine and I chose each other. Medicine chose me from my innate desire to understand, heal, and uplift those around me. Likewise, I chose medicine because it fulfills my passion for community health and satisfies my drive to be a servant leader, leaving an impact bigger than myself.

**CHARLIE
WEEKS**

Age: 25

Undergraduate degree:

Washington and Lee University, Bachelor of Science in biochemistry

Why I chose medicine:

I was a high school teacher before coming to medical school. I ultimately decided to go into medicine because I grew up with type 1 diabetes and knew that I wanted to work in a field where I could truly impact people every day. The management of my chronic condition affects me in so many ways. Therefore, having an endocrinologist that guided me to the quality of life that I have today was a gift that I want to impart on others as I become a physician. Also, I have a love for teaching, so medicine will allow me to combine my desire to treat patients with teaching as I can work in an academic setting and do research while teaching medical students.

**ALVARO
CORTEZ**

Age: 24

Undergraduate degree:

Dalton State College, Bachelor of Science in Biology

Why I chose medicine:

I was inspired to pursue a career in medicine when my sister was diagnosed with Trisomy 18, also known as Edwards' Syndrome. Watching my Mexican immigrant parents navigate my sister's health needs, especially in a language that is not their native tongue, showed me that the Hispanic/Latino population face many barriers in healthcare and there is a great need for Hispanic/Latino physicians. I want to be a part of that mission to serve this patient population.

**CAMERON
LISS**

Age: 25

Undergraduate degree:

University of Georgia, Bachelor of Science in Biology and Psychology

Why I chose medicine:

Obviously, I think it's the coolest job in the world! I have always wanted to become a physician and devote my career to improving the quality of people's lives. With extensive knowledge and training, I'll have the ability to gain patients' trust and spend my workdays using my passions and skills to serve others. 🤝



Amanda Delgado
Medical College of Georgia



For Better and Worse

How COVID changed my medical education

BY AMANDA DELGADO LOSSNER, MD
MCG CLASS OF 2023

I was a first-year medical student when the COVID-19 pandemic put a halt to in-person learning MCG. The changes that disrupted our learning shaped my experiences in the classroom and hospital in obvious ways. However, the unique experience of training during the pandemic also subtly contributed to my interest in medical education and influenced my future career goals.

My earliest memories of the COVID-student experience start in March 2020 when our class was instructed to return home for a two-week hiatus to in-person learning. We quickly dispersed across the state to eventually complete the final months of our first year at MCG. This announcement was made during our brain and behavior module – a module which contained elements of head and neck anatomy dissections as well as neuroanatomy labs. Initial feelings of relief that came with the two-week pause in learning were quickly replaced by worries about studying for anatomy via a virtual platform. Concerns about access to technology and an exam enforced with virtual proctoring seemed insurmountable. In response, professors collaborated with student leadership – including myself as the VP of Curriculum for our class - to provide study sessions via Zoom, crowdsource high quality anatomy images for the exam, and establish a virtual proctoring system to ensure fair enforcement of the honor code. From early on, concepts of flexibility and adaptability drove the quick transition to virtual learning and led to little disruption to our pre-clinical education.

In Fall 2020, the next challenge which faced students was returning to campus safely to continue our second year of medical school. The second year was critical to developing our understanding of pathology while furthering clinical skills through in-person small group activities and standardized patient encounters in the simulation lab. In response to the pandemic, students were given the option to view lectures online or in-person. In

hopes of combating the isolation I felt while studying alone from my hometown in Spring 2020, I chose to attend every class in-person. To my surprise, attending in-person introduced a new sense of isolation; the 200+ seat auditorium was often nearly empty with only 2-5 students showing up for in-person lectures each day. There were days I was the only student in attendance, making active participation mandatory. However, the kindness which I was met with by the professors was incredibly encouraging. During breaks between lectures, I was often asked for feedback about the module schedule or content delivery. It was evident that the MCG faculty were continually attempting to improve the student experience, even amidst the uncertainty of the pandemic.

Spring 2021 was an exciting time for my class. With the introduction of the COVID-19 vaccine, students felt safe to return to in-person learning and ready to focus on our clinical education which began in April 2021. Moreover, students jumped at the opportunity to volunteer at vaccine clinics to hone their rudimentary clinical skills while serving the community. I remember volunteering at one such clinic where we vaccinated teachers from a local school district; I was overwhelmed by a sense of gratitude now that I was finally able to contribute something to the medical efforts of the pandemic.

At the start of clinical rotations, my class was eager to do the same. However, our passion for helping others was quickly met by frustrating restrictions in the clinical setting. At the start of our rotations, students were deterred from visiting COVID-positive patients. This policy was a challenging barrier to overcome since at times, the patient census on some teams contained over 80% COVID-positive patients. The solution was once again online learning. For patient conditions we couldn't see in-person secondary to the COVID restrictions, we were required to complete online modules

describing patient cases. I personally found these interactions unengaging and more difficult to tie to academic content than in-person clinical encounters. Fortunately, attendings on many services took notice and took the time to present extra informal learning sessions to ensure our medical knowledge did not suffer.

By our fourth year of medical school in Spring 2022, the hospital seemed to return to a post-COVID state in many ways. Masking mandates were loosened, and patient lists had significantly fewer COVID-positive patients. My classmates and I hit the ground running to prepare for away rotations and residency applications. As I began to work on my personal statement for pediatric residency programs, I was forced to reflect on how the pandemic impacted my career trajectory. Despite the feelings of physical and emotional isolation that infiltrated my medical school experience, I felt reassured at each step of my medical training by the faculty and administration who worked tirelessly to ensure that the quality of our education was not compromised.

Even today, I continue to think about the different ways in which medical education was adapted to meet our unique needs, and I am inspired to pay forward the education I received to future generations of medical students. Since graduating in May 2023 and starting my residency orientation, I am encouraged now more than ever that I will have the opportunity to use my unique experiences as a learner during the COVID-19 pandemic to guide my passion for medical education. ♡

**At the 2023 Hooding Ceremony, Dr. Lossner was awarded the Physician's Physician Award, which is presented to graduating medical students who demonstrate the greatest aptitude for and devotion to the profession of medicine. MCG students vote for the classmate they would most likely seek out as a personal physician. Dr. Lossner started her pediatrics residency at Boston Children's Hospital in July.*



POWER COUPLE

BY DANIELLE WONG MOORES

You can't think of the Medical College of Georgia without thinking of Charles and Betty Wray.

Charles Wray, MD, '59, and Betty Wray, MD, '60, have spent their entire careers at MCG — about the same length of time as they have been married, and they celebrated their 66th anniversary this August. The Wrays led in their respective sections and departments — Charles in vascular surgery and Betty in pediatric allergy and immunology — and served in multiple academic roles and, in Betty's case, national roles as well.

Today, they live a quieter life, but for generations of alumni and faculty, the Wrays are remarkable as two people whose loyalty, dedication and support of MCG is unsurpassed.

"They are givers," says former longtime MCG president Francis Tedesco, MD. "They were not looking out for themselves at all but wanted to support the institution.

"If you asked me to personify what MCG stands for, it would be the Wrays."

'It was always fun'

Charles was a vascular surgeon, vice chair of the Department of Surgery and chair of the Section of General Surgery, and Betty an allergist-immunologist who founded the Section of Allergy and Immunology and served as its chair. Both are now emeritus professors.

Their giving goes far beyond their faculty and clinical roles. Both served as interim dean of their medical school — in Charles' case, twice, in 1988-89 and in 1992, and Betty in 2000-02 — and as president of the MCG Alumni Association. Charles also oversaw the badly needed renovation of MCG's teaching hospital, then called Eugene Talmadge Memorial Hospital in the 1970s; overhauled its program delivering medical care to prisoners; presided over its physicians practice group; and served as vice president for the university's clinical activities.

Betty meanwhile is a past president of the American College of Allergy, Asthma and Immunology (ACAAI) and served on many national committees.

That includes the Food and Drug Administration's Advisory Committee for Allergenic Products, which reviews and evaluates data on the safety, effectiveness and adequacy of labeling for allergy-related products. She has also served on the Review Committee for Allergy-Immunology of the Accreditation Council for Graduate Medical Education, assuring that fellowships in her field meet certain standards.

Although she retired in 2000, Betty continued as a faculty member, teaching and seeing patients until November 2022. Today, she still attends the weekly allergy and immunology section conference, which reviews complex patient cases. And until recently, both also were active in the alumni association and attended MCG events such as the annual Moretz Society Surgical Conference.

Their service, says Tedesco, is based on their love of medicine and their loyalty and respect for an institution that embraced them. "Neither of them sought [these roles]," says Tedesco.

As a student at MCG, Charles Wray had the good fortune to be mentored by the late William H. Moretz, MD, chair of the Department of Surgery and later president of the university. "Dr. Moretz took me under his wing," says Charles; in fact, Moretz and Wray would later work together to pioneer the Moretz vena cava clip for preventing pulmonary embolism. "He was my close friend."

In this collegial environment, Charles became known as the person you would go to for advice, whether you were a medical student or the president of the college. Charles Howell, MD, '73, chair emeritus and emeritus professor of surgery, was one of those students. "When things were not going well in the operating room, no matter who the surgeon was, they'd always ask for [Charles'] advice or for his help," says Howell, who calls Charles his mentor. "Even though he was a vascular surgeon, he knew how to get out of trouble, no matter what that trouble was. He was a great person for a consult. He had great ideas on how to help people get well....And when he said something, it was worth listening to."

Tedesco and Charles knew each other first as colleagues; Tedesco joined MCG in 1978 as chief of the Section of Gastroenterology and was named MCG president in 1988. “He was a strong mentor to so many physicians who came out of MCG and a strong mentor of mine when I became president, no question about it,” says Tedesco.

In cases where Tedesco needed to bounce an idea off someone or wanted a different perspective, “I would say, ‘Maybe it’s time to call Charles,’” adds Tedesco’s wife, Luann.

“I knew he’d give a truthful response, whether he agreed with you or not,” says Tedesco. “He didn’t have an agenda; you got an honest response, knowing there

was no secondary goal ... Betty was the same way. Both were always honest, looking out for the wellbeing of the institution.”

As Charles advanced in his career, Betty was still pursuing hers. She completed her training in between babies — four in all. “I did anything I could part-time so I could stay with the children,” she said.

After passing her boards, Betty was hired by Frank Anderson, MD, a pulmonologist who she describes as her mentor. She worked with him as a fellow at a respiratory center, and through that experience, Betty says, “I became fascinated with asthma and immune deficiencies.”

But as MCG’s only allergist/immunologist, “I didn’t have anyone to talk to about interesting patients,” she says, plus there were many more patients who needed care. She set her sights on starting an allergy/immunology fellowship at MCG to help draw more specialists into the field. It took six years, but with the help of Chester T. Stafford, MD, codirector and an internist at Eisenhower Army Medical Center, the fellowship was approved in 1978. It recently celebrated 45 years, and to date, 77 fellows have been trained or in process of being trained. “One of the things I really wanted to do was fill up the state with well-trained allergist-immunologists,” she says.

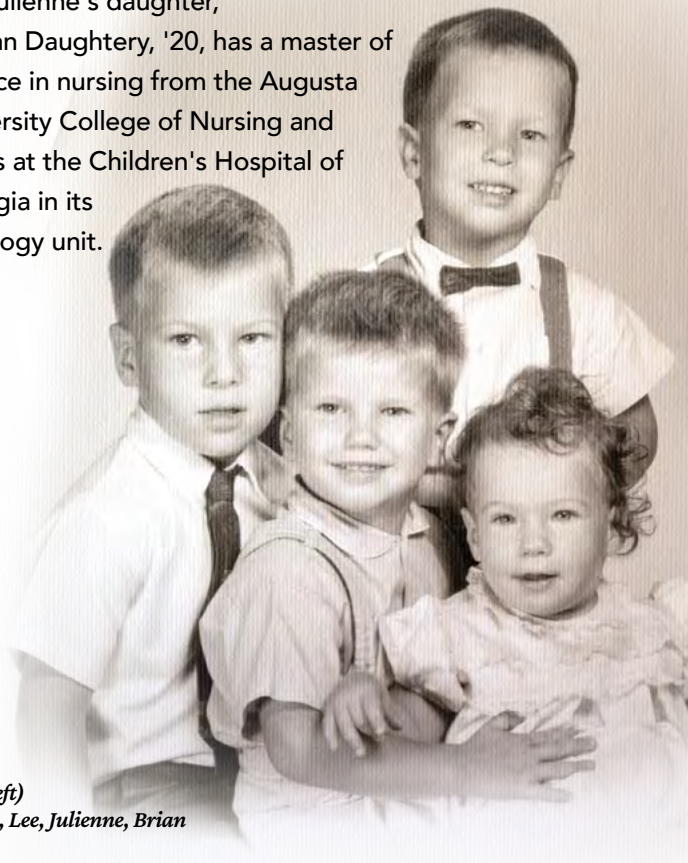
She worked steadily to build the practice and fellowship and served on multiple committees for the ACAAI, which named her its president in 1996. Of that committee work, “I was silly enough to think I was supposed to be doing something,” says Betty in her naturally self-deprecating way. “I worked my way up, though not intentionally.”

Betty was ACAAI’s second female president and led the way for other MCG allergist-immunologists such as Bill Dolen, MD, and current president and chief of the MCG section, Kathleen May, MD, to serve in that role. (May also holds the Betty B. Wray MD Distinguished Chair in Pediatrics.)

THEIR LEGACY

For the Wrays, their children—Charles, Brian, Lee and Julianne—and their grandchildren are their greatest legacy. None went into medicine, but Julianne’s daughter,

Megan Daughtery, '20, has a master of science in nursing from the Augusta University College of Nursing and works at the Children’s Hospital of Georgia in its oncology unit.



(from left)
Charles, Lee, Julianne, Brian



Brian, Lee, Charles, Julianne

Betty also served as vice chair of pediatrics for a year, and like her husband, was tapped by Tedesco as interim dean in 2000. “The staff,” she says, “was very helpful since I had never been in administration like that before. I’m very proud of some of the people I was able to recruit at that time,” including naming current dean David Hess, MD, as chair of the Department of Neurology.

Soon after Betty became interim dean, she also welcomed visits from the Joint Commission and the Liaison Committee on Medical Education, which, respectively, are the accrediting bodies for hospitals and medical education programs. She recalls that the LCME, in particular, was concerned that women in medical schools were not being given leadership roles. After Betty and Ruth-Marie “Rhee” Fincher, MD, then-vice dean for academic affairs met with them, “we never heard any more about lack of leadership for women in the school that year. We passed and we did well, so I was proud of that.”

She adds, “I was always so proud of [Charles’] role at MCG, all those important things he mentioned.”

“You had to try to keep things going and in the right direction,” adds Charles. “It was always fun.”

It reminds Betty of the advice Charles gave her when they were both students at MCG. She was about to start a rotation in emergency medicine and was worried about how it would go. Said her future husband, “Do what you know.”

“That was pretty clever,” says Betty.

A lifetime of giving

In 1970, Charles and Betty gave their first gift to the Medical College of Georgia: A crisp \$10 bill.

It was the start of a lifetime of giving to their alma mater, including consecutive annual gifts starting in 1978. Many were small gifts, most for a specific cause or another, but all told, the Wrays have now donated nearly \$1 million to the state’s only public medical school, including supporting the Betty B. Wray MD Distinguished Chair in Pediatrics and the Nesbit Wray Chair in Surgical Education, which honors Charles and former MCG vascular surgeon Bob Nesbit, MD, and supports educational opportunities for residents that are necessary, but not already covered as part of the program.

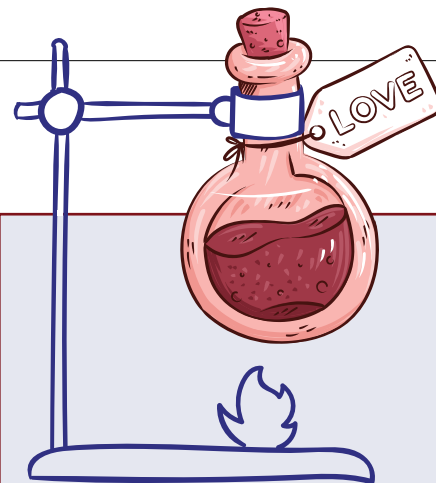
“I’m not surprised that they’ve been giving since day one,” says Howell. “They both started here right out of training...I think they got a lot of personal satisfaction of out working here, like I have.”

The reason they’ve given back, say the Wrays, is simple: “We’re grateful to MCG for giving us the education and the ability to practice and make a living and enjoy it at the same time,” says Betty.

The other side

The Wrays don’t make it to as many MCG functions as they used to. Health problems have taken precedence on their schedule. “We go there all the time — to our doctor,” says Betty. “It’s interesting to be on the other side.”

“But on Monday,” she adds, “I’ll go to conference.” ☺



MAKING CHEMISTRY

In 1953, Charles Wray of Union Point, Georgia, walked into the chemistry lab at Mercer University. He was a bit of a duck out of water. Just a few months ago, he’d been a ministerial student, planning to work overseas in Africa just like his missionary uncle. But during his senior year, he became discouraged about his choice of career, mainly due to personalities in the church he was serving at part-time.

So, it was back to medicine, an earlier interest. Finding a Medical College of Georgia scholarship that would pay for medical school sealed the deal.

Meanwhile, sitting inside that same chemistry lab, Betty Beasley was in a hurry to become a doctor. After briefly considering vet school, Betty, who hailed from Dixie, Georgia, was on track to meet all her medical school prerequisites in a record two years by taking summer classes.

When Charles walked in and saw Betty sitting there, “He claims we made chemistry in the chemistry lab,” says Betty Wray with a laugh. ☺

HONOR THE WRAYS

To support the Betty B. Wray MD Distinguished Chair in Pediatrics, the Nesbit Wray Chair in Surgical Education or other funding needs in allergy-immunology, please contact

Emily Calkins-Reed, ecalkinsreed@augusta.edu, 706-421-6004 or visit mcgfoundation.org/give-now and specify a fund.



A Colorful Life

BY DANIELLE WONG MOORES

During the accident, the 60-year-old Nigerian motorcyclist's spleen had ruptured, and he was bleeding to death.

With the hospital administrator — and the only trained surgeon — out of town for a meeting, Allen Pelletier, MD, the only other physician at Nigeria's Egbe Hospital, and a visiting U.S. medical student looked at one another.

"Have you ever seen a splenectomy?" Pelletier asked. The student shook his head. "OK, well, I've seen one, so I guess I'm the surgeon."

The anesthesiologist refused to put the patient under general anesthesia but agreed to local. So, with the patient wide awake and a nurse holding a textbook open to the page on the procedure, Pelletier performed the splenectomy, with the medical student assisting. But first, he called his wife, and said, "Marge, pray. Get everyone to pray."

Pelletier prayed also. The next day, when he visited the patient on the ward, Pelletier had to ask, "Weren't you worried?"

"No," the man replied. "When you prayed, I knew you were going to do it and God was with us and that it was going to be a success."

Marge recalls that Pelletier responded with a grin, "Boy, I wish I had your faith." She adds, "A week later, that man walked out of the hospital."

For about a decade, the late Dr. Allen Pelletier, family medicine physician and professor at the Medical College of Georgia, served overseas as a medical missionary in Nigeria with Marge and their three children, Ken, Lisa and Daniel. His



experiences are partly the reason why, after Pelletier's death in 2019, Marge reached out to the Medical College of Georgia to set up a fund in her husband's memory.

The Allen L. Pelletier, MD Global Education Fund supports MCG family medicine residents who want to participate in overseas humanitarian postgraduate medical training rotations, covering travel, room and board.

"Allen's time overseas helped him to see his place in the world, more so than just getting to use his medical training to heal people," says Marge. "So that's what I hope this scholarship will do. I hope it will help the residents learn about themselves as they practice family medicine in an overseas setting and learn about opportunities that are out there."

A Calling

Marge and Pelletier met in the summer of 1976 as college students on a Campus Crusade for Christ beach project at Virginia Beach. She was a junior at Virginia Tech, while he was a senior at University of Louisiana Lafayette. The story Pelletier always told was, "I fell madly in love, but she was not impressed."

"I asked him what he wanted to do after graduation," says Marge, "and he said he didn't know yet. Until he knew where he was going, I wasn't going to get serious."

At the time, Pelletier was a history and philosophy major. Whether or not Marge's response had an impact, Pelletier did find his calling that fall. The way he described it to Marge was that he pictured himself as a doctor in a foreign setting.

Fortunately, Pelletier had an uncle who was an OB/GYN, who gave him the practical advice of working in a hospital first to see if he liked it. He did, both the work and the patients. So, Pelletier threw himself into catching up on his pre-med requirements. He and Marge married in 1979 just as he was about to enter Louisiana State University School of Medicine in Shreveport.

Later, as a resident, Pelletier would say he was glad he chose surgery initially—especially given cases like the man with the ruptured spleen. But a year in, he decided surgery wasn't for him and switched to family medicine. "Family medicine allowed him to be trained in everything from OB and pediatrics all the way up to geriatrics, and there was a lot of infectious disease in there too...he just thrived on the variety," says Marge.

Pelletier completed his medical training and went into practice for a couple of years to pay off student loans. He and Marge both took a year of Biblical training at Reformed Theological Seminary in Jackson, Mississippi, and spent another year fundraising to go overseas.

The family left for Nigeria in December 1990, spending two terms at Egbe Hospital and a third term with Pelletier as a traveling doctor, visiting rural villages — just him, a nurse, a pastor and a driver for two weeks at a time. Although Nigeria is one of Africa's most populous countries, the area where the Pelletiers served is marked by dusty red-dirt roads, homes built of clay with thatched roofs, frequent blackouts (if electricity is even available), and local streams and wells as the only source of water.

During this time, Marge ran the Sunday school, and raised and homeschooled

their children. When the family came back to the U.S. for regular visits, more often than not, people wanted to know how hard it really was. But for all of them, it was an adventure. "It was," Marge says, "a colorful life."

"When you have a job that you really love, it's, 'I can't believe people pay me for this.' He never thought of it as a deprivation. It was always a privilege," says Marge.

Back Home

It was, says Marge, "a sad thing" when their decade overseas came to an end. At that point, their oldest son was about to start college, Pelletier needed to retool and refresh his credentials, and three of their four parents had recently passed away. "A door was closing, but another one was opening," she says.

During the regular rounds of visiting churches to share their mission story,

Pelletier was in Germantown, a suburb of Memphis, when a parishioner and resident at the University of Tennessee Health Science Center told him that a faculty position in family medicine had come open.

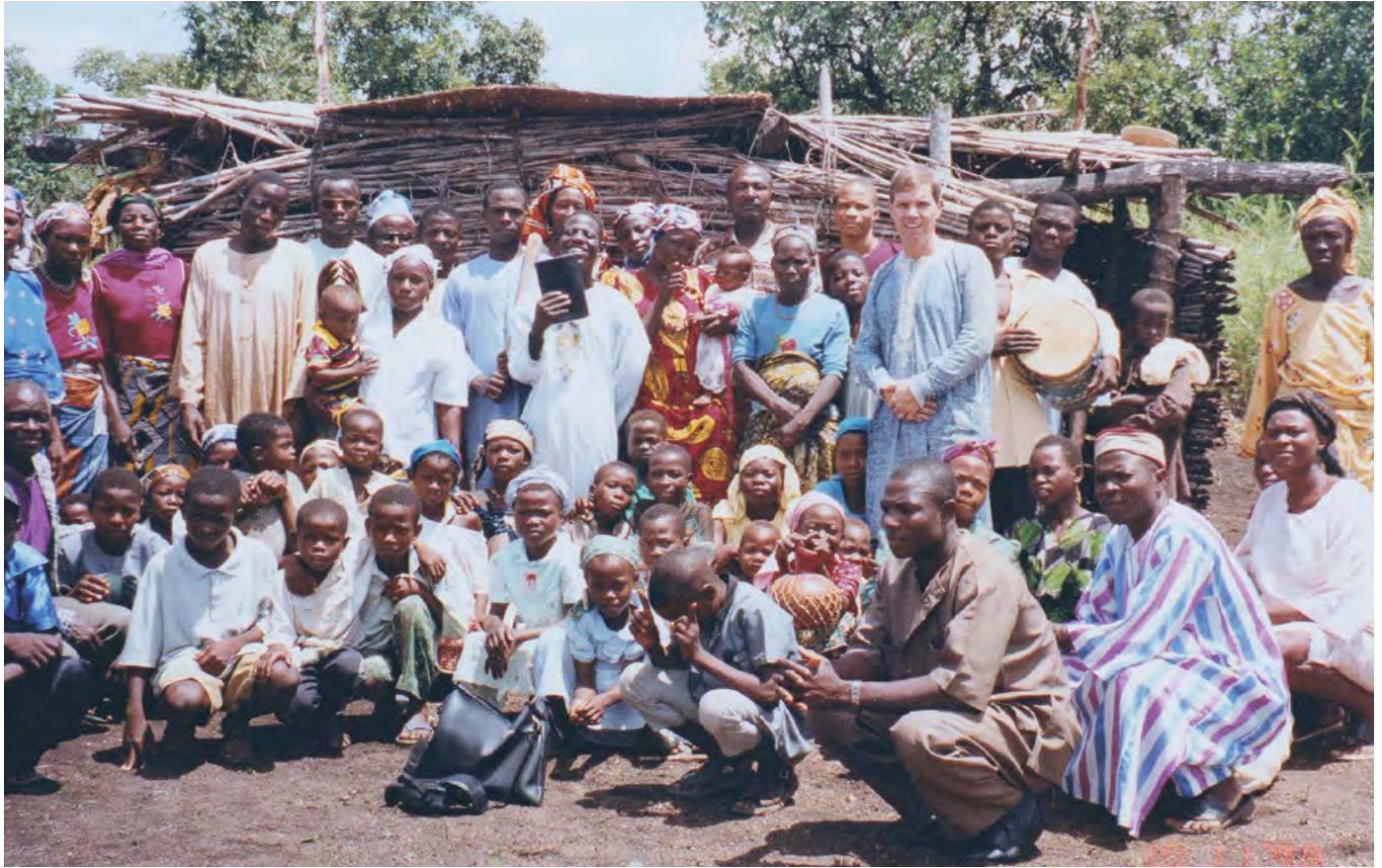
So, the Pelletiers found themselves in Tennessee. But there wasn't room for advancement at the time, and Pelletier happened to meet Joseph Hobbs, MD, '74, now chair emeritus of the MCG Department of Family and Community Medicine, at a conference where Hobbs spoke. What happened next was "so like my husband," says Marge: After the talk, Pelletier came up to Hobbs, shook his hand and said, "If you ever need another teacher coming your way, I would love to work for you."

Six months later, Pelletier had interviewed and was offered a faculty position at MCG. But then, before Pelletier could move to Augusta, he fell off a ladder while cleaning out gutters, shattering his hip socket, breaking his pelvis in two places, and breaking his arm.

"I called Dr. Hobbs [and told him,] 'He is not going to be there on time,'" says Marge. Pelletier ended up bedridden for three months and had to learn to walk again. "[Hobbs] said, 'Marge, I just want you to not worry at all. We will hold this job for him. Just make sure that you're there for him and you just tell him we'll be ready for him when he gets here.' It was just a confirmation that MCG was the place we should be."



Dr. Allen Pelletier and wife Marge with their children



Another Calling

The Pelletiers never went on a long-term overseas mission trip again. But Marge earned her doctor of pharmacy degree, and she and Pelletier became involved in the Christian Medical and Dental Association, which provides resources, networking opportunities, education and a public voice for Christian health care professionals and students. Pelletier also still regularly traveled overseas to conferences to give continuing medical education to medical missionaries so they could maintain their credentials without having to return stateside.

At MCG, Pelletier had a reputation as “the quintessential caring physician,” says Rick Sams, MD, medical director of the Georgia War Veterans Nursing Home and a family medicine physician, who worked with Pelletier and became a close friend. After Pelletier passed away, so many patients told Sams that they were only alive because of Pelletier working to refer them to the optimum treatments.

“He tried to inspire residents to really go the extra mile for patients, and he mostly did that by demonstrating that himself.”

The years Pelletier spent overseas as a full-time missionary doctor stayed close to his heart. Before he retired from MCG, he talked about starting a program that would support residents on an overseas rotation. While opportunities like this exist for medical students, few are available for residents. Not only did Pelletier feel that the experience would be beneficial for residents, but he also thought it would attract more of them to family medicine at MCG. His own time overseas, says Marge, “helped him develop more compassion for the underserved and the underprivileged [and] opened up his mind to opportunities and increased his world view.”

Pelletier never got to see the overseas program he envisioned adopted at MCG. He retired in May 2019 and passed away unexpectedly three months later from a heart attack. “I knew that was one thing he wished he’d been able to do,” says Marge.

Soon after her husband’s death, Marge reached out to Dean Seehusen, MD, chair of the Department of Family and Community Medicine, and to the MCG Foundation. The endowment was fully funded in January 2023.

“I think when you go on a short-term trip like this, it’s not that you do so much for people there, it’s more how it changes you,” says Marge. As for Allen, “I think he’d be very pleased,” she adds. “And I think he will see the results more than I will from his view.” ☺

To support family medicine residents in overseas education through **The Allen L. Pelletier, MD Global Education Fund**, please contact Nancy Hannan at 706-832-5564 or visit mcfoundation.org/donation-fund-8429p.

Champ Baker III, MD, '02

*Orthopaedic Surgeon &
Sports Medicine Specialist,
Hughston Clinic, Columbus, Georgia;
Head Team Physician,
Columbus State University*



from the Alumni Association President



For as long as I can remember, I always wanted to become an orthopaedic surgeon and practice with my father, the late Champ Baker Jr., MD. After graduating from the University of Virginia, I was grateful to return to Georgia and the Medical College of Georgia in 1998. At MCG I received a great medical education and was well prepared for my orthopaedic surgery residency. After a sports medicine fellowship I returned home to Columbus, Georgia and was able to practice with my father at the Hughston Clinic until he retired.

My family and I owe a lot to MCG. My wife Karin graduated from the same class — 2002 — and practices physical medicine and rehabilitation here in our community taking care of the disabled population. Not only did we earn an incredible medical education, but we made great friendships during our time there that still continue today.

I have always strived to find ways to give back to our medical school, through donations of my time and money, and it is one of the reasons why I am particularly honored to be serving this year as alumni association president.

As a graduate of this great institution, I feel it is our responsibility to pay it forward, supporting not just the place that gave us our careers, but the place that is also working to educate the next generation of great physicians for communities like mine and yours, for this state and for this country. Exciting things are happening at MCG: increasing enrollment, expansion of regional campuses and innovations to the curriculum designed to help keep our students well trained and also to keep them here in Georgia to help meet our state's ever-expanding needs for high quality medical care.

There are so many ways to get involved - through joining the alumni association for instance. A membership is only \$50 annually, or \$1,000 for a lifetime. Or perhaps by volunteering to serve as a host and/or mentor for a student who is considering a career like yours or is in your area on an away clinical rotation. Even by simply attending alumni events, like regional receptions in your own communities, or our annual Alumni Weekend festivities in Augusta, you can be involved.

You can also make an enormous impact on our medical school with donations to things like student scholarships to help offset the cost of tuition, or to our successful stethoscope program, which ensures that each freshman medical student receives the gift of a stethoscope at their orientation. It is a small gift - each stethoscope costs just \$250 - that has an immense impact and is a tangible way to remind the future generation of their connection to and the support of those of us who have come before them.

I hope you will join me and consider these and other ways we can all support our alma mater. 🍷

My best to you,

Champ Baker Jr.

Honoring a Mentor



By *Mary L. McCormack*,
Associate Vice President for Gift and Estate Planning
for the Medical College of Georgia and Augusta University

When Dr. Kay Kramer, '84, decided to support her alma mater, the Medical College of Georgia, she not only honored a role model, but also learned along the way the smartest way for her to give back. Kramer has given over \$100,000 to the Margaret DeVore, M.D., Professorship in Anesthesiology through a planned gift using her IRA Required Minimum Distribution.

After learning about how valuable professorships are in attracting quality academicians and professors, Kramer said she was more than happy to contribute. She hopes her gift of assets will inspire others to review their assets to make additional contributions and ultimately grow the professorship to an endowed chair.

"We are so grateful to Dr. Kramer for her willingness to give generously in honor of her mentor and an admirable and longtime faculty member, Dr. Margaret DeVore," says Dr. Steffen Meiler, chair of the Department of Anesthesiology and Perioperative Medicine. "Dr. Kramer is making a key difference in ensuring our anesthesiology residents receive the best training possible."

Now retired, Kramer got her start in medicine working at Grady Memorial Hospital in Atlanta as a ward clerk and nurse's aide to pay for her last years at college in the mid-1970s. Originally a German major, Kramer realized the operating room was where she wanted to be from working nights and watching the OR technicians. After graduating with her bachelor's degree, she was accepted into a nine-month program at Piedmont Hospital where she received on-the-job surgical and technology training and certification.

"I wanted to do what the surgeons were doing," said Kramer. "I wanted to know what they know, so I just started taking my pre-med courses at night. It took me awhile. I took one course a quarter down at Georgia State."

Kramer went on to graduate from the Medical College of Georgia in 1984 and to complete her internship in 1985 and her residency in anesthesiology in 1988, both at MCG. In those days, there were few

female leaders in the field, but it was during those years that Kramer got to work with anesthesiology attending Dr. Margaret DeVore.

For nearly 30 years, DeVore helped students and residents progress through medical school and residency. She received the Distinguished Faculty Award for her contributions to the School of Medicine in 1978 and was named MCG's first associate dean of students the very next year. She also chaired the department's Residency Education Committee and received the department's first Resident's Choice Award in 1989, which was thereafter named in her honor.

"It was just wonderful to have someone like [DeVore] as a mentor and somebody to look up to," Kramer said. "She was then in her early 50s, so that meant she had gone to medical school at a time when there weren't a lot of women in the field."

DeVore, who retired as a beloved anesthesiology professor emerita and MCG associate dean of students emerita, passed away in 2016.

Dr. Meiler was influential in Kramer's decision to give so generously to the

Margaret DeVore, M.D., Professorship in Anesthesiology, but it was under the advisement of her financial planner to use funds from her IRA distributions to make the gift. Not only will Kramer's gift honor her mentor, Dr. DeVore, and support her alma mater, but by using her IRA distributions, she will see the impact of the gift in her lifetime while also saving on taxes.

There are many ways to leave a legacy at MCG whether you want to use a planned gift to create an endowment to honor a mentor or someone who influenced you, or like Dr. Kramer, by contributing to an existing fund. The planned giving team is available to help you and your advisors explore what your best options are for supporting MCG. ♡

For more information on
creating a legacy,
please call 706-721-4001
or email
philanthropy@augusta.edu.



Dr. Margaret DeVore



*Dr. Kay Kramer and
husband Frank Cohen*

In Memoriam

- Clarence Flanigan, MD, '75*, Feb. 19
James D. Stillerman, MD, '87, Feb. 25
William H. Terry, MD, '71, March 10
Eugene P. Bargeron, MD, '59, March 10
Thomas W. Jackson, MD, '82, March 20
Robert E. Tanner, MD, '61, March 23
Reuben J. Smith, MD, '64, March 26
Daniel J. Kleinman, MD, '89, March 30
Jeremy S. Miller, MD, '03, Apr. 4
Terrell L. Davis, MD, '63, Apr. 6
Alfred M. Zimmerman, MD, '57, Apr. 13
Fred A. Trest, MD, '68, Apr. 25
Ralph W. Hajosy, MD, '58, Apr. 30
Elizabeth M. Heimburger, MD, '67, May 6
Lionel D. Meadows, MD, '94, May 7
Frank C. Robert, MD, '67, May 24
Thomas J. Ferrell, MD, '58, June 18
James E. Smith, MD, '68, June 18
Henry A. Wilkinson, MD, '60, June 28
Timothy S. Holdredge, MD, '88, June 30
Karen A. Yeh, MD, '88, July 18
Donald H. Manning, MD, '66, July 25
James V. Shanni, MD, '00, July 25
Charles R. King, MD, '68, July 30
James L. Cross, MD, '55, Aug. 30
Joseph T. Stubbs, MD, '63, Sept. 19

George P. Sessions, MD, '55, a physician who guided the establishment of the anesthesia departments at three Atlanta hospitals, died March 1.

In 2021, he and his wife, Martha, made one of the first gifts to the MCG 3+ Program, an estate gift of \$250,000, to assist students to graduate medical school in three years and immediately enter a primary care residency program in Georgia. In exchange for their service to an underserved area in Georgia, the students receive a scholarship for tuition.

He actively mentored friends and employees in a variety of subjects. He approached all with respect and dignity and he tailored his guidance and wisdom to the person and situation. Most recently, he has served as a mentor and guide to one of MCG's newest graduates, Katrina Hazim, MD, hooding her in 2021.

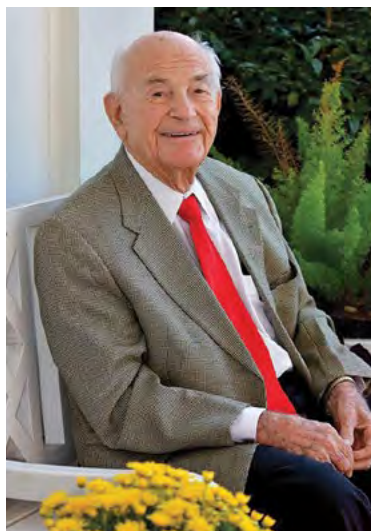
After graduating from MCG, he served as a medical officer at the U.S. Coast Guard Academy and then completed an anesthesiology residency at Charity Hospital in New Orleans. In 1961, he founded the Department of Anesthesia at DeKalb General Hospital and was chief of that department for 20 years. He also established departments of anesthesia at the Scottish Rite Hospital and the Decatur



Hospital, serving as chief of anesthesia for 10 years at each institution.

In addition, he founded DeKalb Anesthesia Associates, P.A. and served as its president for 25 years, retiring in 1997. ♡

In 2021, Dr. Sessions traveled back to MCG to officially hood Dr. Katrina Hazim. The Sessions and Hazims called themselves a "blended family," growing close in the years after Dr. Sessions and Katrina's father, Daniel, who came to Emory in 1975 from Lebanon, were matched through a program that paired foreign students with host families.



Henry Gordon Davis, MD, '45, a family physician for 47 years in southwest Georgia, died Apr. 23 at age 104.

After a brief stint in the Army following his medical school internship, he practiced family medicine in Sylvester from 1948 until his retirement in 1995. During that time, he delivered 3,465 babies, including two of his daughters and six grandchildren.

In commitment to his community, he built nursing homes in Sylvester, Tifton and Albany between in the mid 1960s.

He and his late wife, Francis, endowed a scholarship to help more generations of physicians choose small towns. The H. Gordon Davis Jr., MD and Francis S. Davis Scholarship Endowment Fund provides scholarships for

medical students from southwest Georgia who want to spend their third and/or fourth years of medical school at MCG's Southwest Campus, based in Albany.

In service to his medical school, he was chairman of the board of the MCG Foundation and president of the MCG Alumni Association.

He was a charter member of the American Academy of Family Physicians and has served on the Georgia Chapter's board of directors three times, including as president in 1977 and as chairman of the board in 1978.

He won the academy's Family Physician of the Year award in 1982. He is also the 1980 recipient of the Medical Association of Georgia's Distinguished Service Award. ♡

Joseph Hobbs, MD, '74, chair emeritus of the Department of Family and Community Medicine at the Medical College of Georgia, was recently honored with a University System of Georgia Foundation Regents Hall of Fame Alumni and Distinguished Friends Award. Hobbs dedicated 45 years of service and leadership to MCG.

George Willis Williams Jr., MD, '76, an OB/GYN, has been inducted into Marquis Who's Who. He was selected on factors such as position, noteworthy accomplishments, visibility and prominence in a field.

Mark Eanes, MD, '82, an ophthalmologist, has joined the Georgia Department of Public Health as director of the South Health District, comprised of ten counties in south central Georgia: Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift and Turner. He succeeds **William Grow, MD, '70**, who had served the district since 2010.

Ricky Leff, MD, '96, and OB/GYN, has joined ShorePoint Medical Group in Port Charlotte, Florida.

Diana Koelliker, MD, '97, an emergency medicine physician, is the interim CEO of Telluride Regional Medical Center in Colorado. She has also served as emergency department director and medical director for Telluride's emergency medical services (EMS) team.

Brian Shimkus, MD, '98, an oncologist, is leading the newest location of the American Oncology Network, LLC, Lone Star Oncology, in Georgetown, Texas.

William "Bill" Fricks, MD, '00, who practices family medicine and has long taught MCG students at the Southwest Campus in Albany, has been appointed by Gov. Kemp to the Georgia Board of Health Care Workforce, which strives to ensure Georgia communities have improved access to physicians and other health care providers. They also provide crucial workforce information that helps identify the areas most in need, and offer loan repayment programs to health care workers who commit to practice in those areas.

Mark Toney, MD, '00, a pediatric hospitalist, has been named vice president of medical affairs for Wolfson Children's Hospital in Jacksonville, Florida.

Jason Smith, MD, '03, a family medicine physician, has been named chief medical officer at Phoebe Putney Memorial Hospital in Albany, which serves as the homebase for MCG's Southwest Campus in Albany.

Harshpal Singh, MD, '04, a neurosurgeon, has been acknowledged by The Inner Circle, which recognizes leaders in health care, business and law, as a "Most Trusted Healthcare Professional for his contributions to the Neurological Field." Singh practices at Premier Brain and Spine, with offices located throughout New Jersey.

Fatima Cody Stanford, MD, '07, an internist/pediatrician has been appointed to the Scientific Advisory Board of Clearmind, a biotech company focused on discovery and development of novel psychedelic-derived therapeutics to solve major under-treated health problems. Stanford is currently an associate professor of medicine and pediatrics at Harvard Medical School in Boston.

Alexander "Beau" Wielaard, MD, '07, has been named as chief executive officer of the Guam Regional Medical City. Wielaard has served as an emergency physician on Guam since 2016, working at both the Guam Memorial Hospital Authority and GRMC. Two years later, he joined GRMC on a full-time basis and became a core developer of GRMC's institutional response to the COVID-19 pandemic.

Brian Brewer, MD, '14, an internist who was a member of the first class of medical students at the Augusta University/University of Georgia Medical Partnership, has joined St. Mary's Internal Medicine Associates in Athens, Georgia. Brewer also completed a primary care sports medicine fellowship at the University of Kentucky in Lexington.

Krupal Hari, MD, '17, a general cardiologist, has joined Piedmont Athens Regional Medical Center and Piedmont Heart of Athens, Oconee Health Campus.

Ashlee Nicole Sharer Tillery, MD, '17, has been named to the University of Georgia's 2023 class of 40 Under 40. Tillery is a 2013 graduate of the College of Agricultural and Environmental Sciences' Jere W. Morehead Honors College at UGA and an OB/GYN at Meadows Memorial Hospital in Vidalia, Georgia.

Nina Paletta, MD, '18, has joined Memorial Health in Pooler, Georgia as an internist.

Elena Diller, MD, '23, who is completing an internal medicine residency at the University of Texas Medical Branch in Galveston, recently served as the guest editor for the American Medical Association's *Journal of Ethics*, focused on meat production and consumption and the effects of both on people's health.

Hunter Meyer, MD, '17, a general/minimally invasive surgeon, has joined AdventHealth Medical Group in Calhoun, Georgia.

William Hughes, MD, '18, a urologist, has joined Singing River Gulfport and Urology Associates in Gulfport, Mississippi.

Sashia Malone, '19, an OB/GYN, has joined Memorial Health University Physicians Women's Care in Richmond Hill, Georgia. ♡



■ 214 MCG students in the Class of 2023 celebrated Match Day

■ They obtained residencies in 22 specialties in 31 states

■ 63% matched in primary care

■ 24% will stay in Georgia for their first postgraduate year,

■ 14% at MCG-affiliated residencies

■ As of Match Day, 99% of MCG graduates had a residency position, more than the national average.

Photos for the Blind

Jack Xhemali, a third-year student from Macon, Georgia, is the president and founder of Feel 3D, a nonprofit organization that provides the vision impaired with 3D printed "portraits" of their families, which are more similar to sculptures than to photos of each family member's head and face. 3D printers use digital files to create solid objects by "laying down" sequential layers of material.



Deborah Lovell

Keith Morris

Ronald Worley

Stanley Lopez

Dexter Durrante



It's an idea that got its start while he was an undergraduate student at Mercer University in Macon. Xhemali worked with Sinjae Hyun, PhD, professor and chair of biomedical engineering at Mercer, to create 3D printed yearbooks for students at the Georgia Academy for the Blind, also in Macon.

"When he came up with the idea, I thought it was fantastic and wondered why everyone wasn't doing this. Once I started working on them, I enjoyed it so much that I wanted to keep working on it, but right after I graduated (from Mercer), COVID happened, (temporarily halting the project)," he says. He wanted to continue something similar after arriving in Augusta for medical school "so I thought, 'I'll make family portraits instead.'"

Explaining that the creative process is usually not the most challenging, Xhemali says that "Getting families together in one place at one time is often the hardest part. Once we can do that, we bring in a 3D scanner, which are like small, handheld cameras. Then we scan around their face – kind of above and around, from ear to ear and sometimes even the shoulders."

Once the scan is done, Xhemali or another team member takes an actual photo of the face, so they can ensure the accuracy of the scan. They then use 3D modeling software to "model the scan," he explains. "You can use different (digital) tools to add texture or take it away like sculpture work."

After sculpting is completed, the model is fed to a 3D printer and then the final products are mounted in a wooden frame that also features a voice box with recorded messages from family members and nametags produced by a braille typewriter underneath each face.

For now, Xhemali is working mostly with people who have lost their vision over time and likely have some recollection of the way their families look. "A large part of the blind population in the United States are actually veterans who lost their sight through some sort of combat injury," he says, noting that he is hoping to also work people who have been blind since birth and have never seen their families' faces. There has been some research done on how, in those who were born blind, the brain is rewired and allows their sense of touch to overtake their sense of sight, but that is not well understood, he says.

"I just want to give these people something they may not ever otherwise have. I have plenty of pictures of family on my phone. They don't really have access to anything like that. They can't see their own pictures if they take them. This is me giving them pictures," he says. "As human beings, we want to see our friends. We want to see our families. What parent doesn't want to see their kids?"

Xhemali is working with organizations, including the Lions Club and Georgia Council for the Blind, to find families. ♡

The portraits are paid for through donations and are provided to the families completely free of charge. For more information, visit [Feel3D.org](https://www.Feel3D.org)

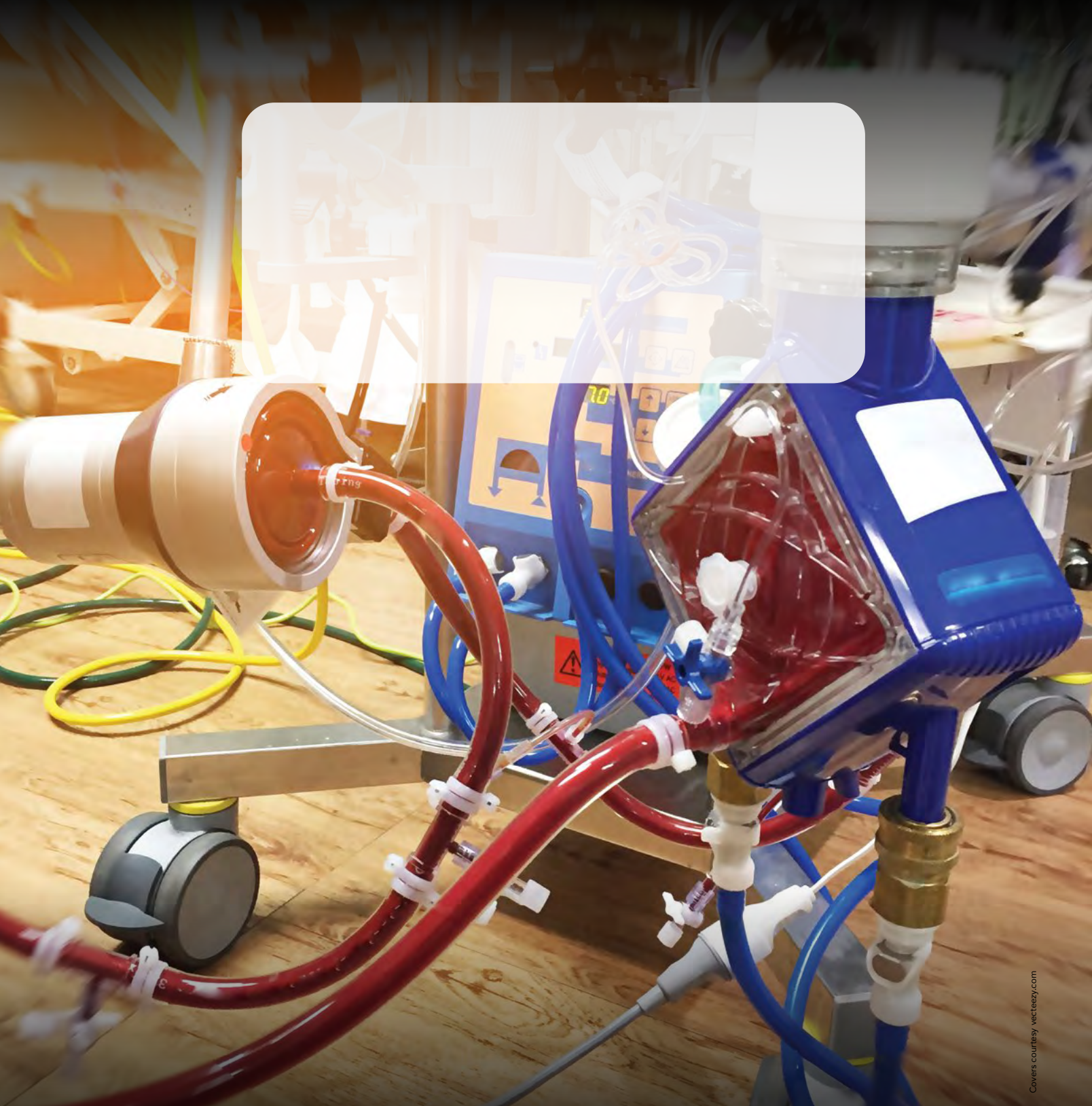


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