DukeMed

Alumni News, Spring 2022

MAKING CHANGE

School of Medicine alumni are forging the future of biotech and the business of health care

Native American Heritage Inspires Med Students • Saving Sight in Sierra Leone

Dear Friends,

Greetings to all of you. As summer soon begins, we are navigating a new phase of the pandemic and learning how to live with intermittent surges in COVID-19 cases. We have learned so much over the past two years and are in a much better place with tools to manage the disease. Incredible advances have been made in a remarkably short time, and exciting new discoveries continue to emerge. There has never been a time in our lives when the importance of biomedical science has been more clearly illustrated.

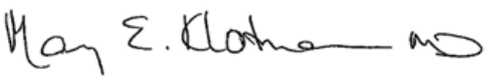
Here at Duke, our commitment to scientific leadership and discovery plays out in labs and clinics across the medical campus and beyond. Among those efforts is ongoing research by Duke scientists to develop a universal COVID vaccine. That work has yielded significant progress to date, as researchers in the Duke Human Vaccine Institute (DHVI) have developed a pan-coronavirus vaccine that demonstrates protection against the current COVID-19 virus as well as variants and related coronaviruses in animal models. The National Institutes of Health (NIH) and National Institute of Allergy and Infectious Diseases (NIAID) have awarded DHVI grants to proceed with development of these "next-generation" vaccines. Clinical trials to further study the vaccine are expected to begin later this year or early in 2023.

The Duke Science and Technology (DST) initiative, aimed at expanding Duke's scientific leadership in areas where we are poised to make transformational advances, continues to make great strides. Within DST, the School of Medicine is focused on generating knowledge that will lead to new approaches to prevent and treat disease concentrated in three main areas: the brain, cancer, and immunology. This effort depends in large part on our ability to recruit and retain the top minds in these areas of biomedical science. We'll soon welcome our sixth and seventh DST Scholars to the School of Medicine.

This year, the School of Medicine once again has been recognized nationally for our excellence. In February, we were ranked third for federal medical research funding, with 10 of our departments ranked among the top 10, as determined by the Blue Ridge Institute for Medical Research. And in March, we were ranked sixth among medical schools for research by *U.S. News & World Report* — with seven of our specialty programs placing in the top 10. These standings are a testament to our institutional commitment to scientific discovery and to the dedication and innovation of our faculty, staff, trainees, and students.

And you can add "alumni" to that list. School of Medicine alumni are fanned out across the globe, making a difference in innumerable ways: as providers caring for patients, as researchers generating breakthrough discoveries, as innovators bringing new ideas to the health care market, as educators passing knowledge and experience on to new generations, as administrators and policymakers guiding institutions and charting new paths, and — as you will see in this issue of *DukeMed Alumni News* — as leaders at the cutting edge of health care delivery and biotechnology, generating bold ideas to bring advanced care to more people. I know you will enjoy reading about four of our many alumni who are making a difference in their fields.

As you know, we could not do any of the things we do without the close partnership and support of our alumni and friends. Thank you for everything you do for the School of Medicine. I encourage each of you to remain actively engaged with the School of Medicine as we work to fulfill our missions of patient care, research, education, and community engagement to advance human health.



Mary E. Klotman, BS'76, MD'80, HS'80-'85
Dean, Duke University School of Medicine,
Vice Chancellor for Health Affairs, Duke University

In DukeMed Alumni News, the names of alumni of Duke University and its constituent schools and degree programs are printed in bold along with their degrees and class years. HS (House Staff) signifies residencies, fellowships, or internships. Names of current students are printed in bold.

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Your comments, ideas, and letters to the editor are welcome.

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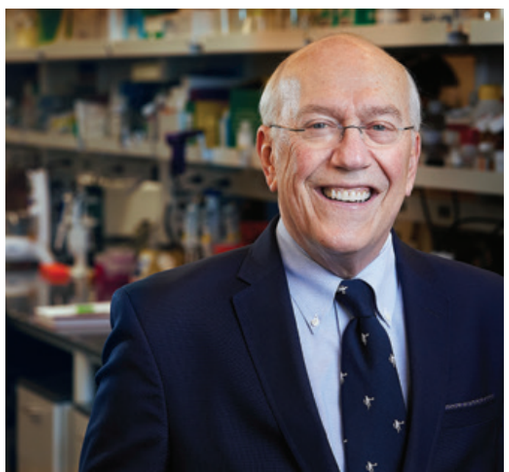
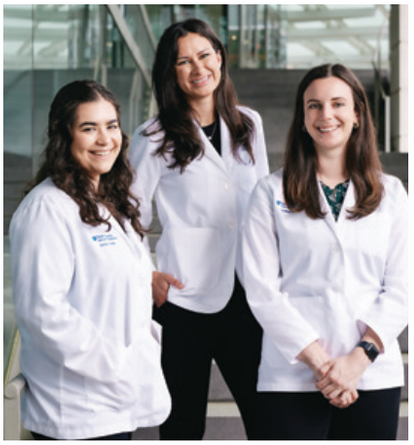


DEB LINDSEY



ALEX BOERNER

MAKING CHANGE

School of Medicine alumni are forging the future of biotech and the business of health care

LOOK AT ALMOST ANY ARENA

within the world of medicine, science, and health care across the nation and beyond, and you will find individuals serving as leaders who learned and trained at Duke University School of Medicine. For more than 90 years, the School of Medicine has been one of the nation's premier health professions training grounds not only for outstanding physicians and researchers, but for leaders and innovators.

Duke alumni are leading change and discovery as clinicians caring for patients, as researchers making the discoveries that transform knowledge and improve health, and as policymakers and innovators at the cutting edge of health care discovery, delivery, and biotechnology.

As national and international leaders, School of Medicine alumni are creating new models for increasing access and equity in health care delivery, developing cutting-edge therapies for devastating diseases, using artificial intelligence to craft solutions to vexing challenges, and leading efforts to realize the promise of biotechnology to improve health.

"Science, medicine, and health care are evolving very rapidly, and the world needs exceptional leaders with the vision and expertise to anticipate change and drive innovation," said School of Medicine Dean **Mary E. Klotman, BS'76, MD'80, HS'80-'85.** "I am proud to say that many of these leaders were educated and trained at Duke in the School of Medicine."

Meet four of the many Duke University School of Medicine alumni who are making a difference in health care delivery and biotechnology.

By Mary-Russell Roberson

MICHAEL CUFFE, MD'91, HS'91–95, MBA'09

Current Position: Executive Vice President and Chief Clinical Officer at HCA Healthcare, one of the nation's leading providers of health care services. Before joining HCA, he practiced medicine and held numerous leadership positions at Duke for 24 years.

Q: Why did you choose Duke for medical school?
A: I picked Duke explicitly because of the third-year research opportunity.

Q: Why did you choose a career in health care operations?
A: I always wanted to be in health care operations. U.S. health care is one of the largest components of the U.S. economy. Leading in that space meant the ability to have a great impact on both health and the nation.

Q: How did Duke support your interest in leadership?
A: Duke gave me the opportunity and the ladder to grow into a leader. As a medical student, I had a conversation with [then chancellor] Ralph Snyderman and told him I wanted operational responsibility at the earliest possible moment. I was a cardiology fellow when I was asked by Rob Califf [former director of the Duke Clinical Research Institute, now commissioner of the U.S. Food and Drug Administration] to serve as the director of site management at the Duke Clinical Research Institute. I completed my fellowship nights and weekends. After that, I practiced medicine at Duke and had a rapid cascade of leadership positions —vice chair of the Department of Medicine and vice president of medical affairs for the health system.

Q: What is your goal at HCA Healthcare?
A: I love taking care of patients, but my role here gives me the broadest footprint I could ever imagine. HCA Healthcare provides over 5% of all U.S. hospital care. I am blessed to be able to work with our caregivers to improve medicine — health disparities, health access, the cost of health care. There's more to do.

NATHAN MORGAN

TONY COLES, MD'86

Current Position: CEO of Cerevel, a biopharmaceutical company focused on the discovery and development of new therapies for neurological diseases. He is also co-chair of the Black Economic Alliance and is working with Morehouse College and Spelman College to create a Center for Black Entrepreneurship on both campuses.

Q: Why did you choose Duke for medical school?
A: I loved the curriculum approach where you had one year of basic science, one year in clinic, and the third year as a research elective. That suited my need to explore how I could best express my love of science and medicine.

Q: How did your Duke experience inform your current career?
A: Duke helped me understand there are career choices that can complement the practice of medicine. In my third year, I chose a clinical research project that opened my eyes to epidemiology. I went on to get a master's degree in public health. What I found attractive about it was the large-scale change you could effect by focusing on population-based health care.

Q: How did you enter the pharmaceutical industry?
A: I was interested in epidemiology and clinical research and I was thinking about careers where I could have that kind of scale impact when Merck called with an opportunity to participate in a two-year rotational program for physicians. Once I got to Merck and I better understood business, I knew instinctively I was destined to play a role in the delivery of new therapies. I wanted to work at the interface of commerce and medicine.

Q: What is your goal at Cerevel?
A: The mission of the company is to identify new therapies that will provide better opportunities for patients with epilepsy, schizophrenia, anxiety, and Parkinson's and to really unlock the mysteries of the brain. That may sound daunting but, in my experience, if you don't articulate a big agenda, you can never realize what's possible.

DEB LINDSEY

MICHELLE MCMURRY-HEATH, PHD'99, MD'00

Current Position: President and CEO of the Biotechnology Innovation Organization (BIO), the world's largest biotechnology advocacy association. She previously held leadership positions at Johnson & Johnson and the U.S. Food and Drug Administration, and she serves on the advisory board of the Duke Margolis Center for Health Policy.

Q: Why did you choose to earn both PhD and MD degrees at Duke?
A: I was always interested in how science got applied to human health, and there is no better way to learn about that than at the intersection of research and medicine. Two of my undergrad advisors at Harvard had recently come to Duke to join the immunology program. And they said, "You should really take a look at Duke."

Q: How did your Duke experience inform your career?
A: I was breeding transgenic mice while taking science policy classes and medical anthropology classes. I got interested in the policy dynamic of science and innovation, which I still work on to this day.

Q: Did you always aspire to lead an organization?
A: I always wanted to be an agent of change. I always liked to see how organizations and groups of people moved forward to do things in a new way. As I went along, it was clear the way to have that kind of impact was through leading.

Q: What is your goal at BIO?
A: BIO is an organization of about 1,000 biotech companies, the majority in the biopharma space. We advocate for innovation. I'm a believer in how biotech companies can change the world and make it a better place. Most of the health care scourges that affect minority communities don't have ready solutions and will only be solved through innovation.

Q: Final thoughts?
A: I made it through Duke in no small part due to a fellowship program Tony Coles helped start — the UNCF/Merck fellowship — that provided funds for research and travel and mentorship from Merck scientists.

YIDING YU, MD'12

Current Position: Chief Medical Officer at Olive, a health care automation platform that delivers AI solutions to providers and payers. She also serves on the Duke Medical Alumni Council.

Q: Why did you choose Duke for medical school?
A: I came to medical school deeply interested in health innovation, so the flexibility of the Duke curriculum was incredibly attractive.

Q: How did your Duke experience inform your career?
A: Not only was I incredibly well trained as a physician, but I was given the opportunity to pursue my interests at a broad level. I worked with the Institute of Healthcare Improvement during medical school. It helped me think about the systems that drive health care outcomes and quality.

Q: Why did you pursue a career as a tech entrepreneur?
A: I realized I could have an impact by using technology to better deliver medicine to people who need it. I started my first company, Twiage, while I was a resident at Brigham and Women's hospital. Twiage helps first responders communicate with hospitals so patients can get faster care on arrival. Once I started building tech, I got hooked. I've since led multiple start-ups, the latest of which was acquired by Olive.

Q: What is your goal at Olive?
A: Olive delivers automation to create the internet of health care. We deploy artificial intelligence and automation to make care more efficient and bring the joy of medicine back to practitioners.

Q: You see patients at the VA Medical Center in Boston. Why do you continue to practice as a physician?
A: It's part of who I am. I love the practice of medicine. Seeing patients gives me inspiration for my work. In my day job at Olive, I get to think about how to solve the problems I see in clinic and lend my skills to improving the world.

ARAM BOGHOSIAN

OPENING DOORS OF OPPORTUNITY

ANDY DUBACK, UVM LANER COLLEGE OF MEDICINE

The moment **Richard "Rick" Page, BS´80, MD´84, HS´87-´89,** set foot on the Duke campus, he felt he belonged. He stayed at Duke for two degrees, returned for his fellowship, and then joined the Division of Cardiology faculty. When opportunity beckoned him elsewhere, he was more than ready for the challenge, and his trajectory has been steadily upward ever since: director of the cardiac electrophysiology program at UT Southwestern, head of Cardiology at the University of Washington, chair of the Department of Medicine at the University of Wisconsin, and now dean of the Robert Larner, M.D. College of Medicine at the University of Vermont.

"I give back because my Duke education provided me with the great opportunities I've had," said Page, a generous supporter of the **Davison Club** and the School of Medicine. "My wife, Jeannie, and I focus on financial aid because I graduated from college and medical school with debt, and education has only become more expensive. **I want to provide Duke students with the opportunity to pursue their medical education with as little debt as possible** and to make their choices, as I was lucky enough to do, based on what they love."

To learn more about how to support the **Davison Club**, please contact **Jill Malley,** director of Davison Club & Special Gifts, at jill.malley@duke.edu.

You can make a gift online at **gifts.duke.edu/dmaa**

A Fountain of Youth for the Brain

Neurobiologist Lindsey Glickfeld is pushing the limits of brain plasticity

By Mary-Russell Roberson

Wisdom may come with age, but young people have the advantage when it comes to learning. Duke neurobiologist Lindsey Glickfeld, PhD, wants to know why.

More to the point, she wants to know how. What are the mechanics in the brain, and how do those mechanics change from childhood to adulthood?

What she discovers could one day help older people regain some ease of learning. Perhaps it could even lead to a treatment that could help stroke survivors relearn important early skills, like walking and talking.

From an evolutionary perspective, young brains need to be flexible so that kids can pick up language, social skills, and physical abilities in a short period of time.

Brains become more stable moving into adulthood, as it becomes more important to retain hard-won skills rather than soak up new ones. Of course, adults are still capable of learning, but it can require more of an effort.

Duke SCIENCE *and* TECHNOLOGY

Think of grandparents struggling with a new phone or television. "If we can figure out how we might be able to give them back a little bit of that learning ability [that children have]," Glickfeld said, "that could really impact their lives in a worthwhile way."

Glickfeld studies the brain at a cellular level, looking for changes in the circuitry that support learning over stability, or vice versa. She does her research in the visual cortex because it's one of the most well-understood areas of the brain, so it's a good jumping-off point for pushing frontiers.

She looks at how neurons and synapses — the connections between neurons — work and how different mechanisms in the brain make those connections stronger or weaker. Neural pathways that are used over and over again to, say, identify a familiar object, become well-worn paths along which information travels easily and quickly. But plasticity, aka the ability to learn, depends on neurons and synapses being able to get out of those ruts to make new connections.

"If we can understand the molecular and circuit mechanics that set this balance of stability and flexibility, then potentially we could intervene in order to re-establish that flexibility that adults at all ages need to continue to learn new things," Glickfeld says.

There are two metaphorical knobs that govern neural pathways in the brain: One makes synapses stronger and another makes them

weaker, which frees up energy and resources to allow new pathways to form.

Glickfeld and her collaborators are learning more about the knob that makes connections weaker. They are studying a specific protein called ARC that appears to play a role in turning down the volume on unneeded connections, essentially pruning them. "We think this protein might be really important in this balance of stability versus flexibility in the visual system," Glickfeld said. "And we're trying to see how it contributes to potential ongoing plasticity that might be happening in the adult."

One of Glickfeld's collaborators at Duke, neurobiologist Anne West, MD, PhD, said, "Later in life, your brain is thought to be more fixed, but what Lindsey has actually found with some of the measurements in the visual cortex is that it's changing a lot day to day — more than we expected."

The research has exciting implications not just for adults hoping to learn how to use their new televisions, but for those who have lost neurons due to stroke. "If we could figure out how to tap into this mechanism," West said, "we could open up plasticity in the rest of the brain, and those [lost] functions could move to a new part of the brain."

> "...potentially we could intervene in order to re-establish that flexibility that adults at all ages need to continue to learn new things."
>
> LINDSEY GLICKFELD

Glickfeld and West work with Charles Gersbach, PhD, the John W. Strohbehn Distinguished Professor of Biomedical Engineering.

"We each have an expertise the other doesn't have," West says. "This was a perfect storm of collaboration."

In addition to potentially making learning easier for adults — stroke survivors or not — the work of the trio could inform artificial intelligence research by providing a better model for how brain circuits are set up.

But in any case, the first step is understanding the actual mechanics in a healthy brain.

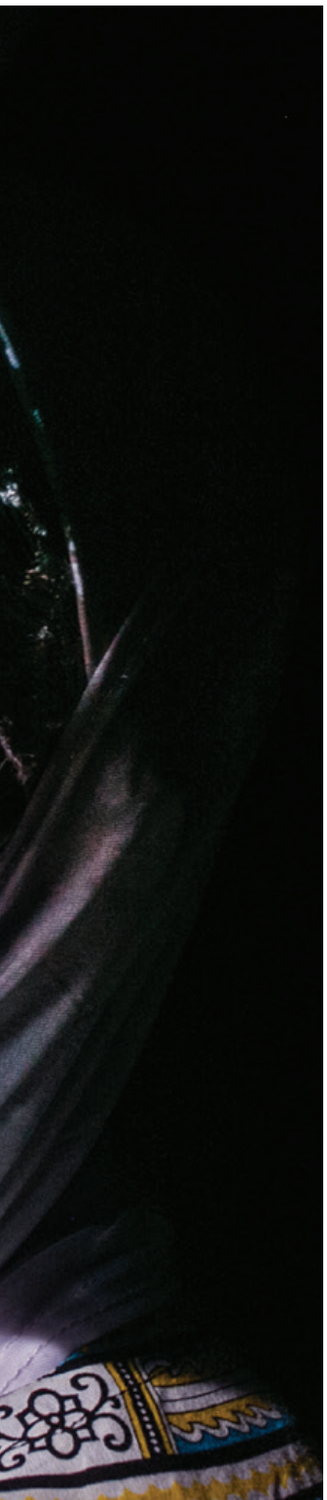
"We need to understand what is regulating the balance of stability and flexibility before we can address or fix dysregulation in different disease states," Glickfeld said. "We can't know how to fix the brain when it's not working until we have a basic understanding of how the brain is working."

To support research and learn more about Duke Science and Technology, visit bit.ly/DMdst

Restoring Sight *in* Sierra Leone

▶ Duke eye surgeon Lloyd Williams walks through an airport terminal in New York on his way to Sierra Leone. He carries a cooler filled with ice to preserve corneas that will be used in transplant surgeries in Africa.

Surgeon Jalika Mustapha, right, who leads Sierra Leone's National Eye Programme, performs a corneal transplant while Williams observes and another Sierra Leonean surgeon watches the procedure on a video monitor.



Using the light from his phone and flashlight, Williams examines a potential transplant recipient.

In April 2022, Duke eye surgeon Lloyd Williams, MD, PhD, traveled to Sierra Leone to perform corneal transplant surgeries, restoring sight for patients who had suffered corneal-related blindness for years. Williams, associate professor of ophthalmology and director of the Duke Global Ophthalmology Program, performed 19 corneal transplants and four non-transplant surgical procedures during the visit.

The trip followed one Williams made in July 2021, when he performed the first corneal transplants ever done in Sierra Leone. The most recent visit brought another milestone — the first corneal transplant performed by a Sierra Leonean physician: Jalika Mustapha, MD, who leads the National Eye Programme in the West African nation and trained with Williams on the surgical technique.

The trip was coordinated by Williams as part of the renewed Duke Global Ophthalmology Program. Williams and other Duke ophthalmologists have made dozens of trips to countries in Africa,

Photographs by
CHRIS HILDRETH

The day after her corneal transplant, grateful patient Firdauc Jalloh thanks Williams for restoring her sight. She was one of 19 patients to receive a corneal transplant during his visit.

Asia, and Central America. The renewed focus will enable a coordinated effort to further increase research, education, and patient care across the globe.

Countries such as Sierra Leone often have few trained eye specialists and lack the infrastructure for comprehensive eye care, contributing to a global burden of preventable vision loss and blindness. According to estimates by the World Health Organization, nearly half of the world's 2.2 billion people who suffer vision impairment or blindness could be helped by treatment or surgery.

"We believe that this work will generate important research findings regarding the genetics and treatment of major blinding conditions in Africa," said Williams. "We also believe this work will help elevate the status of international medical leaders to enable the expansion and improvement of eye care abroad."

— Michael Penn

▲ The smiles say it all. Adbulai Kamara and Samuel Kargbo wait for their post-operative exam the day after surgery.

"Most importantly, this work will help reduce avoidable blindness and human suffering."

LLOYD WILLIAMS

▲ The operating room team poses for a photo with Williams.

◀ A patient has her sight tested in the eye that received a corneal transplant.

Native American Heritage Inspires Lumbee Students

By Angela Spivey

Third-year Duke medical student **Emily Alway** grew up near Detroit, but every July, her family would travel to North Carolina for Lumbee homecoming, which includes a parade and a pow-wow. The Lumbee Tribe is the largest Native American tribe in North Carolina, and its members have traditionally lived in Robeson, Cumberland, Hoke, and Scotland counties in the southeastern part of the state.

Alway chose Duke for medical school in part because of its proximity to the tribe.

She is one of three current Duke medical students who have Lumbee heritage. Being Native American has influenced each of them in different ways, but all said it's part of what inspires them as they pursue medicine. Alway, a student in the Medical Scientist Training Program, said that the feeling of isolation that can come from being Native American helps her relate to patients. "When I walk into a room, I am often the only Native person there," she said. "I'm almost certainly the only Lumbee person there. That was especially true having grown up outside of North Carolina."

"It gave me a unique lens through which I can understand my patients who feel like they are walking this medical journey alone," she said. "Many of them have things going on that they do not understand, and that maybe even the medical team around them doesn't fully understand because they have such a confusing constellation of symptoms."

Alway hopes to start a group at Duke to encourage conversations about Indigenous people in medicine. "It's very important for students and prospective students to see that there is a community here," she said.

Native Americans make up 3% of the population in the United States, but they account for less than 1% of physicians in the work force. And less than 10% of medical schools have more than four Native American students, according to the Association of American Medical Colleges.

Alway recently joined the lab of neuroscientist Diego Bohórquez, PhD, who studies the gut-brain connection. "My project will probably focus on how the gut senses sugar and how sensory signals from the gut change the way we eat," she said. "Why is it that people with a depressed or anxious brain end up craving sugar?"

She wants to help reduce health disparities in Native American communities, many of which have inadequate access to health care and high rates of metabolic diseases like diabetes and heart disease, mental health issues, and substance abuse, she said. According to the Indian Health Service, the life expectancy of Native Americans is 5.5 years less than the U.S. all-races population.

First-year student **Seneca Oxendine**, also in the Medical Scientist Training Program, grew up believing she could do something extraordinary. She was inspired by her paternal grandfather, Thomas Oxendine, who was the first Native American to be commissioned as a pilot in the U.S. Navy, during World War II.

Her father's work as a lawyer piqued her interest in medicine. She remembers hearing about one case in which a man had become a quadriplegic because of a car accident. "That was a split second in which, through no fault of his own, he was paralyzed forever. And there really wasn't anything that the doctors could do to fix that," Oxendine said.

As an undergraduate at Yale, she conducted research trying to understand how a major class of receptors that are involved in memory (NMDA receptors) shape the cortical circuit during development. During a gap year, she studied the role of immune system cells called B cells in myasthenia gravis, a rare autoimmune disease.

Oxendine plans to become a clinical neurologist who conducts basic research into the complex mechanisms behind neurological dysfunction, including injury and brain tumors.

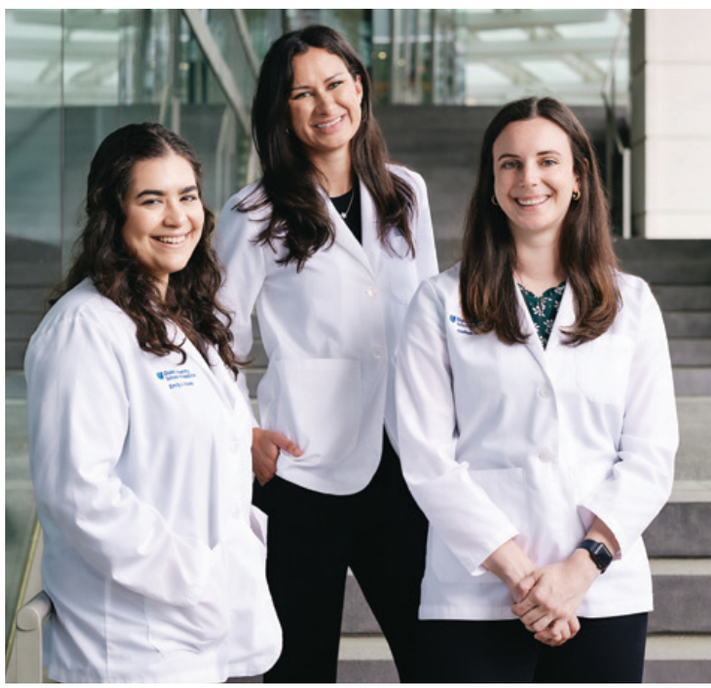
First-year medical student **Melissa Greene, MSBS'20,** grew up in Pinehurst, not far from Robeson County. She often visited her maternal grandmother, who is Lumbee. "Everyone in the community knows my grandmother. It's like one big family," she said. "And I've always wanted to make her proud."

> "Once I gained interest in medicine, I realized that Native Americans are one of the least represented minority groups in medicine."
>
> MELISSA GREENE

Greene loves the diversity of the Lumbee population. "It's a community that is very inclusive of everyone and wants to support each other," she said.

She wants to become a gynecologic oncologist, a specialty in which she would train in both medical and surgical treatment of cancers. "You get to know your patients very well," she said. "You treat them in a longitudinal manner instead of just completing the surgery and hoping they don't need you again."

"Once I gained interest in medicine, I realized that Native Americans are one of the least represented minority groups in medicine," Greene said. "That is inspiring me to want to keep going and to help change that."



ALEX BOERNER

Emily Alway, Seneca Oxendine, and Melissa Greene

SOM Ranked 6th for Research Nationally

Duke University School of Medicine ranked No. 6 for research among 124 medical schools nationally in the annual U.S. News & World Report graduate program rankings released in March.

The magazine's medical school research rankings are based on numerous indicators, including total federal research activity, assessment by deans and residency directors (reputation), as well as the faculty-to-student ratio and student admissions statistics such as MCAT, GPA, and acceptance rates.

In addition to the overall research rating, seven specialty programs in the School of Medicine placed in the top 10:

- Anesthesiology - third
- Surgery - third
- Internal Medicine - fifth
- Radiology - sixth
- Obstetrics and Gynecology - eighth
- Pediatrics - eighth, tied
- Psychiatry - ninth, tied

In addition, Family Medicine tied for 13th.

"Year after year, Duke is recognized as a national leader in patient care, discovery, and training and education," said **Mary E. Klotman, BS'76, MD'80, HS'80-'85,** dean of Duke University School of Medicine. "This accomplishment must be attributed to the seminal achievements of our outstanding faculty and physicians, staff, and students. At Duke, we are stronger because we share a commitment to excellence in all of our missions and a vision to transform the future of academic medicine together."

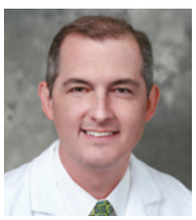
Duke tied for 16th nationally — up from 20th last year — among medical schools for the diversity of its graduates.

Duke Surgeons Perform World's First Heart Transplant/Thymus Procedure

Duke surgeons performed the world's first combination heart transplant and allogeneic processed thymus tissue implantation procedure. Six months after the two procedures, the young patient, Easton Sinnamon — who was six months old when he received his transplant — was doing well and appeared to be gaining the immune cells necessary to reduce or eliminate the need for prolonged use of toxic anti-rejection drugs.

The processed thymus tissue implantation method was pioneered at Duke by Louise Markert, MD. The procedures, performed at Duke University Hospital last summer under an expanded access application that was cleared by the Food and Drug Administration, represent a milestone in heart transplantation.

Joseph W. Turek, MD, PhD, HS'02-'10, Duke's chief of pediatric cardiac surgery and a member of the surgical team that performed the landmark procedure, said the procedure has the potential to change the face of solid organ transplantation.



Joseph W. Turek

Because the thymus gland stimulates the development of T-cells, which fight foreign substances in the body, implanting the processed tissue is hoped to establish the donor's immune system as the recipient's, so the donated heart is recognized as "self."

Easton needed both a heart transplant and processed thymus tissue implantation independent of one another, and he was a patient at Duke, where the processed thymus tissue implantation is solely available. Born with severe heart defects as well as thymic deficiency from an unknown cause, which severely impaired his immune system, Easton received his transplant on Aug. 6, 2021, when he was six months old, followed two weeks later with the implantation of the cultured thymus tissue from his heart donor.

CBS VIDEO:
cbsn.ws/3FcAErW

CHRIS HILDRETH

Dean Mary E. Klotman and Chancellor for Health Affairs A. Eugene Washington look on as Duke University President Vincent Price presents Betsy Rainoff with a commemorative book honoring the Rauch Family Foundation's philanthropic support for Duke University School of Medicine. The Rauch Family Foundation, established by Betsy's late brother, Dudley A. Rauch, last year made a historic $30 million gift to support financial aid at the School of Medicine. Also enjoying the moment is Ashley Salen, granddaughter of Sam Salen, president of the foundation.

School Ranks 3rd in NIH Funding

Duke University School of Medicine was awarded more than $608 million in federal funding from the National Institutes of Health (NIH) in 2021, ranking third nationally among academic medical centers, up from 10th last year, according to the Blue Ridge Institute for Medical Research.

The Blue Ridge ranking — an annual, independent analysis of NIH research funds to colleges and universities — placed eight clinical science departments and two basic science departments in the School of Medicine among the top 10 in the country, including two ranked No. 1.

- Pediatrics - first
- Surgery - first
- Orthopaedics - second
- Neurosurgery - fifth
- Internal Medicine - sixth
- Anesthesiology - eighth
- Genetics - ninth
- ENT - ninth
- Pharmacology- tenth
- Ophthalmology- tenth

The NIH is the largest public funder of biomedical research in the world, investing more than $41 billion a year to advance research aimed at improving health.

Duke Cancer Institute
50th Anniversary

DCI Marks 50th Anniversary

The Duke Cancer Institute (DCI) this year celebrates the 50th anniversary of its designation as a federal Comprehensive

Cancer Center. Duke was one of the first eight Comprehensive Cancer Centers designated by the National Cancer Institute following the passage of the National Cancer Act in 1971. The Act cemented America's commitment to science by establishing networks of cancer centers, clinical trials, data collection systems, and advanced research around the country.

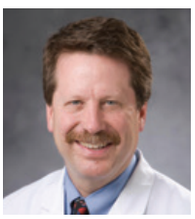
Fifty years on, more than 66,000 new cancer patients choose Duke Cancer Institute each year, and DCI receives more than $115 million annually in cancer research funding.

On April 14, 2022, DCI clinical providers, researchers, staff, leadership, and patients gathered in front of the DCI facility to celebrate the anniversary. The Duke University Marching Band kicked off the event, and speakers including DCI Executive Director Michael B. Kastan, MD, PhD; Duke University Health System Executive Vice President Craig Albanese, MD; and School of Medicine Dean **Mary E. Klotman, BS'76, MD'80, HS'80-'85,** traced the history of cancer care and research at Duke and recognized the staff, physicians, researchers, and residents who have made it one of the premier institutions of its kind.

"Whether you're a researcher, physician, provider, patient, or trainee, I truly believe there is no better place to fight cancer than at Duke," Klotman said. "Thank you all for what you do every day."

Califf Named FDA Commissioner for Second Time

Robert M. Califf, BS'73, MD'78, HS'78, HS'80-'83, former Donald F. Curtin, MD, Professor of Cardiology at Duke University School of Medicine and former director of the Duke Clinical Research Institute, was confirmed as commissioner of the U.S. Food and Drug Administration in February 2022.


Robert M. Califf

Califf's appointment to the position marks his second time heading the agency, which he also led during the final year of former President Barack Obama's administration.

Califf was nominated to the post by President Joe Biden in November, 2021. His confirmation was hailed by his colleagues in the world of clinical research and academic medicine.

Califf earned his undergraduate degree in psychology and his medical degree at Duke. Aside from three years of residency in internal medicine at the University of California, San Francisco, he spent his entire career as cardiologist, researcher, and senior leader at Duke until leaving in 2015 to assume the post of deputy commissioner and later his first stint as commissioner at the FDA.

After leaving the FDA in early 2017, Califf returned briefly to Duke to create and lead Duke Forge, a university center for health data science, before transitioning in 2019 to a leadership role as senior adviser at Verily Life Sciences, a Google-affiliated company focused on health data.

DHVI Lands Federal Contract to Make Vaccine Candidates

The National Institute of Allergy and Infectious Diseases awarded researchers at the Duke Human Vaccine Institute (DHVI) a contract that enables it to compete for projects advancing investigational vaccines to production for use in early clinical trials.

The contract, which could total nearly $365 million over seven years if fully funded, establishes DHVI as a site that is eligible to develop and manufacture potential new vaccines and treatments for HIV and other viruses that are ready for testing in humans.

The contract is issued under a new program called Preclinical and Translational Vaccine Development Support for HIV and Other Candidate Agents. The program aims to speed the development of vaccines or other biologic therapies by providing a means for researchers across the country to test potential vaccines and therapies such as antibodies that have shown promise in laboratory studies.

SoM Magnify

A closer look at the people of the Duke University School of Medicine and their inspiring stories

bit.ly/SoM-Magnify

Snakebites and Terrabytes

In Brazil's Amazon, simple geography costs many victims of venomous snakebites their lives or limbs: by the time they reach the urban hospitals where antivenom is available, it's too late. Joao Vissoci, MD, assistant professor of surgery and global health, is using data-driven solutions to help the country get antivenom closer to where snakebites tend to occur.

Role Model and Changemaker

Several mentors helped **Erica Taylor, MD'06, MBA'20,** stick to her dream of becoming an orthopaedic surgeon. Now — as the first Black female member of Duke's Department of Orthopaedic Surgery, chief of surgery at Duke Raleigh Hospital, and leader in diversity and inclusion — she's an influential mentor herself, ensuring that others have the support they need to excel.

'A Pandemic in Slow Motion'

As developing countries become wealthier, health outcomes generally improve — but the rate of heart disease tends to go up. Cardiovascular disease is on the rise worldwide, and cardiologists Waseem Akhter and **Titus Ng'eno, MS'18, HS'13-'21,** are calling for a new approach to stem a looming health crisis.

Grant Becomes Chair of Neurosurgery

Gerald A. Grant, BS'89, MD, became chair of the Duke Department of Neurosurgery on April 1, 2022.

Grant came to Duke from Stanford University, where he was an endowed professor and chief of pediatric neurosurgery. He is a preeminent clinician, scientist, and educator.

Grant specializes in treating pediatric and young adult patients with brain tumors and medically refractory epilepsy. His research focuses on innovative ways to open the blood-brain barrier to improve the delivery of novel drugs and immunotherapy to target brain tumors.

He received his undergraduate degree in neurosciences at Duke University and his medical degree from Stanford University School of Medicine. He completed his residency in neurosurgery at the University of Washington in Seattle and fellowship in pediatric neurosurgery at Seattle Children's Hospital. In 2006, Grant joined Duke's faculty as an associate professor in the Department of Surgery after serving in active duty in the United States Air Force. In 2013, he became chief of pediatric neurosurgery, vice chair of neurosurgery, and associate dean of academic affairs at Stanford.

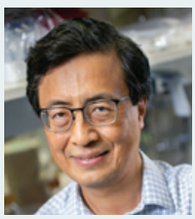
Faculty Named Distinguished Professors

Sixteen faculty members in the School of Medicine were awarded distinguished professorships by Duke University this spring. Distinguished professorships are awarded to faculty who have demonstrated extraordinary scholarship in advancing science and improving human health.

The School of Medicine's new distinguished professors are:

- Annunziato Amendola, MD, Virginia Flowers Baker Distinguished Professor of Orthopaedic Surgery
- Nicolas Brunel, PhD, Duke University School of Medicine Distinguished Professor in Neuroscience
- Carolyn Coyne, PhD, George Barth Geller Distinguished Professor in Immunology
- David D'Alessio, MD, James B. Wyngaarden Distinguished Professor of Medicine
- Sandeep Dave, MD, Wellcome Clinical Distinguished Professor of Medicine
- **David Harpole, MD, HS'84-'93,** George Barth Geller Distinguished Professorship in Cancer Research
- Josh Huang, PhD, Duke School of Medicine Distinguished Professor in Neuroscience
- Jeffrey Marks, PhD, Joseph W. and Dorothy W. Beard Distinguished Professor of Experimental Surgery
- **Carmelo Milano, MD, HS'90-'92, HS'94-'99,** Joseph W. and Dorothy W. Beard Distinguished Professor of Experimental Surgery
- Steven Olson, MD, Goldner Jones Distinguished Professor of Orthopaedic Surgery
- **Scott Palmer, MD'93, HS '93-'99, MHS'00,** Donald F. Fortin, MD Distinguished Professor of Medicine


Gerald A. Grant


Josh Huang


Susanna Naggie


Sudarshan Rajagopal


Rasheed Gbadegesin


Patty J. Lee

- **David Ruch, AB'84, MD, HS'94,** Virginia Flowers Baker Distinguished Professor of Orthopaedic Surgery
- Ehsan Samei, PhD, Reed and Martha Rice Distinguished Professor of Radiology
- Geeta Swamy, MD, Haywood Brown, MD Distinguished Professor of Women's Health
- Raphael Valdivia, PhD, Nanaline Duke Distinguished Professor of Molecular Genetics and Microbiology
- Christopher Willett, MD, Mark W. Dewhirst Distinguished Professor of Radiation Oncology

Huang Elected to Academy of Arts & Sciences

Josh Huang, PhD, professor of neurobiology at Duke University School of Medicine, is one of four members of the Duke University faculty recently elected to the American Academy of Arts & Sciences. Huang, who was recruited to Duke as a Duke Science and Technology Scholar in August of 2020, studies the development and function of cortical circuits underlying motor control and cognitive processing.

Duke's other new members are:

- Robert Calderbank, PhD, Charles S. Sydnor Distinguished Professor of Computer Science and director of the Rhodes Information Initiative.
- Avshalom Caspi, PhD, Edward M. Arnett Distinguished Professor of Psychology and Neuroscience, and Terrie E. Moffitt, PhD, Nannerl O. Keohane University Distinguished Professor of Psychology and Neuroscience.

Naggie, Rajagopal Elected to ASCI

Susanna Naggie, MD, HS'02-'09, MHS'13, and **Sudarshan Rajagopal, MD, PhD, HS'06-'13,** have been elected to the American Society for Clinical Investigation (ASCI), one of the nation's oldest and most respected nonprofit medical honor societies.

Naggie is an associate professor of medicine and vice dean for clinical research. She focuses on the care of patients with HIV and viral hepatitis and leads a research program aimed at understanding the mechanisms of accelerated liver fibrogenesis in this patient population and the development of biomarkers to guide medical decision making.

Rajagopal is an associate professor of medicine and assistant professor in biochemistry. He is co-director of the Duke Pulmonary Vascular Disease Center. He has a research focus on G protein-coupled receptor signaling in inflammation and vascular disease and a clinical focus on pulmonary vascular disease.

Gbadegesin and Lee Elected to AAP

Rasheed Gbadegesin, MD, MBBS, and Patty J. Lee, MD, have been elected to the Association of American Physicians (AAP). Election to the AAP is extended to physicians with outstanding credentials in basic or translational biomedical research.

Gbadegesin is the Wilburt C. Davison Distinguished Professor of Pediatrics. He is also associate dean for physician-scientist development, director of the Office of Physician-Scientist Development in the School of Medicine, and a professor in medicine. His research focuses on understanding the critical pathways that are involved in the pathogenesis of nephrotic syndrome and ultimately identifying novel and non-toxic therapeutic targets for treatment.

Lee is a professor of medicine, professor of cell biology, and a professor in pathology. Her research focuses on acute and chronic oxidant-induced lung injury and repair, specifically the distinct roles of stress-response pathways depending on the lung compartment or cell type(s) involved and their regulation by the immune system.

Evans Receives Sloan Research Fellowship

Chantell Evans, PhD, assistant professor of cell biology, has been selected to receive a 2022 Sloan Research Fellowship from the Alfred P. Sloan Foundation. The two-year, $75,000 fellowships are awarded annually to early-career researchers in recognition of distinguished performance and a unique potential to make substantial contributions in their field.

Evans, an inaugural recipient of the Hanna Gray Fellowship from the Howard Hughes Medical Institute, joined Duke in September 2021 as a Duke Science and Technology Scholar.

Evans is one of two Duke faculty receiving a Sloan Research Fellowship this year; the other is Daniel M. Scolnic, an assistant professor of physics in Trinity College of Arts & Sciences.

Wilson Receives North Carolina's Highest Honor

Blake Wilson, BSE'74, DSc, DEng, PhD'15, adjunct professor in the Department of Head and Neck Surgery & Communication Sciences, whose seminal work developing the cochlear implant has restored hearing to millions of people around the world, was one of two Duke faculty members honored with the state's highest civilian honor, the North Carolina Award.

He is director of the Duke Hearing Center and is also an adjunct professor in the Department of Electrical and Computer Engineering. Inventor of many of the sound processing systems used in modern cochlear implants, Wilson received the 2015 Fritz J. and Dolores H. Russ Prize, considered the top prize in the world for bioengineering, and in 2013 won the prestigious Lasker Award, presented to researchers who have made significant contributions to medical science.

Martinez-Bianchi Named NC Family Physician of the Year

Viviana Martinez-Bianchi, MD, associate professor in Duke's Department of Family Medicine and Community Health, was named North Carolina's 2021 Family Physician of the Year by the North Carolina Academy of Family Physicians (NCAFP). The honor is the most prestigious award from the NCAFP, the state's largest specialty medical association.

Chantell Evans

Blake Wilson

Viviana Martinez-Bianchi

Stephen Lisberger

Martinez-Bianchi is director of health equity for the Department of Family Medicine and Community Health at Duke University. She is a co-founder of the Latinx Advocacy Team & Interdisciplinary Network for COVID-19, better known as LATIN-19. The group was established in March of 2020 to address inequities in the COVID-19 pandemic response, the health system in general, and communities in Central North Carolina.

Faculty Awarded Strong Start Awards

Four School of Medicine faculty members received 2022 Physician-Scientist "Strong Start" awards. The awards program, funded with a gift from the Nanaline H. Duke Fund, supports promising, early-career physician-scientists at Duke as they develop independent research programs.

Recipients this year are:

- **Nicholas DeVito, MD, HS'15-'18,** medical instructor, Department of Medicine, Division of Medical Oncology
- **Samuel Francis, MD, HS'11-'14,** assistant professor, Department of Surgery, Division of Emergency Medicine
- **Lindsay Rein, MD, HS'08-'14,** assistant professor, Department of Medicine, Division of Hematologic Malignancies & Cellular Therapy
- Jeffrey Russ, MD, PhD, medical instructor, Department of Pediatrics, Division of Neurology

The Strong Start program is administered by the School of Medicine's Office of Physician-Scientist Development (OPSD) and integrates with other physician-scientist development programs including the Medical Scientist Training Program (MD/PhD students) and the Lefkowitz Society (clinical residents and fellows).

Lisberger elected to National Academy of Sciences

Stephen Lisberger, PhD, the George Barth Geller Distinguished Professor for Research and chair of Neurobiology in the School of Medicine, is one of three Duke faculty newly elected to the National Academy of Sciences.

Lisberger's research investigates how the brain learns motor skills, and how we use what we see to guide how we move.

Also elected from Duke this year were Anne Pusey, the James B. Duke Distinguished Professor Emerita of Evolutionary Anthropology in Trinity Arts & Sciences; and Kate Scholberg, the Arts & Sciences Distinguished Professor of Physics in Trinity Arts & Sciences.

The National Academy of Science announced the election of 120 new members and 30 international members in recognition of their distinguished and continuing achievements in original research.

2022 MEDICAL ALUMNI ASSOCIATION AWARDS

HONORARY ALUMNUS

Blake Wilson, BSE'74, DSc, DEng, DMed (honoris causa), PhD'15

Blake Wilson, BSE'74, PhD'15, is director of the Duke Hearing Center and adjunct professor in the Department of Head and Neck Surgery & Communication Sciences at Duke University School of Medicine, adjunct professor in the Department of Electrical and Computer Engineering, and consulting professor in the Department of Biomedical Engineering at the Pratt School of Engineering at Duke University.

He developed innovations in signal processing that have transformed the treatment of hearing loss using cochlear implants, an accomplishment recognized by the 2013 Lasker-DeBakey Clinical Medical Research Award — second only to the Nobel Prize in Physiology or Medicine for recognizing advances in medicine and medical science — and the 2015 Fritz J. and Dolores H. Russ Prize, the world's top honor for bioengineering.

Wilson is co-founder of Duke Hearing Center and has transformed the fields of otology, audiology, speech and language pathology, and deaf education, making previously unthinkable achievements possible for countless deaf and hard-of-hearing children and adults. He has collaborated with colleagues across the world with the goal of making cochlear implant technology more widely available, especially in low- and middle-income countries.

EDUCATION: Duke University, University of Warwick (United Kingdom), University of Technology Sydney (Sydney, Australia)

CURRENT TITLE:
Director of the Duke Hearing Center; Adjunct Professor in the Department of Head and Neck Surgery & Communication Sciences, Duke University School of Medicine; Adjunct Professor in the Department of Electrical and Computer Engineering; Consulting Professor in the Department of Biomedical Engineering, Pratt School of Engineering at Duke University.

Wilson is chair of the Lancet Commission on Hearing Loss, the foremost initiative to address the growing global burden of hearing disabilities. One of his papers, in the journal Nature, is the most highly cited publication in the principal field of cochlear implants and has been since 1999.

He is a member of the World Hearing Forum in the World Health Organization in Geneva, Switzerland. He is a recipient of the Distinguished Alumni Award from the Pratt School (in 2007) and from Duke University (in 2019). Other honors and memberships include two honorary doctorates in medicine; membership in the USA's National Academy of Engineering; recipient of the North Carolina Award (the state's highest civilian honor); and Fellow of the Acoustical Society of America, the Institute of Electrical and Electronics Engineers, and the National Academy of Inventors.

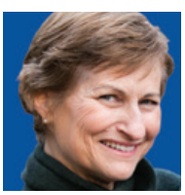
DISTINGUISHED ALUMNA

Laura Schanberg, MD'84, HS'84-'91

Laura Schanberg, MD'84, HS'84-'92, is a professor of pediatrics at Duke University School of Medicine and a faculty member in the Duke Clinical Research Institute.

She is a founding steering committee member and past chair of the Childhood Arthritis and Rheumatology Alliance (CARRA), which changed the culture of research so all patients with a rheumatic disease can participate and contribute to finding a cure. The CARRA Registry has enrolled more than 12,000 patients with rheumatic disease from 74 sites internationally and enabled the engagement of patients, advocacy groups, and clinical investigators in various types of research, including observational studies, comparative effectiveness research, clinical trials, and pharmacosurveillance.

Schanberg has strategically elevated the role of patients and parents in research from solely participants to active partners on the study team. Patient engagement is now part of all CARRA studies and is a model recognized and funded by the Patient-Centered Outcomes Research Institute (PCORI).



EDUCATION:
Duke University School of Medicine

TRAINING:
Duke University School of Medicine

CURRENT TITLE:
Professor of Pediatrics, Duke University School of Medicine

She was the first investigator to prove that juvenile idiopathic arthritis is a painful condition that significantly impacts children's health outcomes. She was principal investigator for the Atherosclerosis Prevention in Pediatric Lupus Erythematosus (APPLE) trial, a multicenter randomized controlled trial to evaluate the efficacy of atorvastatin in preventing cardiovascular complications of systemic lupus erythematosus. It was the largest randomized controlled trial in pediatric lupus performed in North America and the first clinical trial accomplished by CARRA. The APPLE trial was a unique collaboration between industry, The National Institute of Arthritis and Musculoskeletal and Skin Diseases, the Duke Clinical Research Institute, and 23 CARRA sites.

Schanberg has been instrumental in inspiring and mentoring young trainees. She received the Department of Pediatrics Excellence in Mentorship Award for her outstanding mentorship of trainees and faculty. She serves as associate editor of Lupus Science & Medicine and is a member of the Lupus Foundation of America Medical Advisory Board.

DISTINGUISHED FACULTY

Michael Kastan, MD, PhD

Michael Kastan, MD, PhD, is the William and Jane Shingleton Professor of Pharmacology and Cancer Biology and professor of pediatrics at Duke University School of Medicine and executive director of the Duke Cancer Institute. He was previously a professor of oncology, pediatrics, and molecular biology at the Johns Hopkins University School of Medicine prior to becoming chair of the Hematology-Oncology Department and later Cancer Center director at St. Jude Children's Research Hospital.

Kastan is a pediatric hematologist-oncologist and renowned cancer biologist who has made numerous seminal discoveries in elucidating pathways involved in DNA damage signaling. His discoveries have made a major impact on our understanding of both how cancers develop and how they respond to chemotherapy and radiation therapy. His highly cited publications on the roles of the genes p53 and ATM in DNA damage served as a major building block in establishing the signaling pathways that are now called the DNA Damage Response pathways. He became an international resource in helping to understand the nature of increased cancer susceptibility in families with two hereditary cancer syndromes that affect children and adults, Li-Fraumeni Syndrome and Ataxia-Telangiectasia (A-T).

EDUCATION: Washington University in St. Louis

CURRENT TITLE: William and Jane Shingleton Distinguished Professor of Pharmacology and Cancer Biology and Professor of Pediatrics, Duke University School of Medicine; Executive Director, Duke Cancer Institute

Kastan is an elected member of the National Academy of Sciences, the National Academy of Medicine, and the American Academy of Arts and Sciences. He received the AACR-G.H.A. Clowes Memorial Award for outstanding contributions to basic cancer research. He serves on numerous institutional advisory boards, has served as chairman of the Board of Scientific Counselors of the National Cancer Institute, and has served on the boards of directors of the American Association for Cancer Research and the American Association of Cancer Institutes. He was also the founding editor-in-chief of the journal Molecular Cancer Research.

DISTINGUISHED SERVICE

Diana McNeill, AB'78, MD'82, HS'87-'88

Diana McNeill, AB'78, MD'82, HS'87-'88, is a professor of medicine, endocrinology, metabolism, and nutrition and assistant professor of obstetrics and gynecology at Duke University School of Medicine, and associate dean and inaugural director of Duke AHEAD (Academy of Health Professions Education & Academic Development), which has over 800 interprofessional members in Duke Health.

She was program director for the internal medicine residency program at Duke from 2001-2011, where she was a stalwart advocate for trainees, supporting their professional development while working to increase the program's diversity.

She led Duke's involvement in the Accreditation Council for Graduate Medical Education's Educations Innovation Project, which developed and implemented novel approaches to improve residents' educational experience. She has held many national leadership positions as part of the Association of Program Directors in Internal Medicine and Alliance of Academic Internal Medicine, including the AAMC National Chair of Academies Collaborative. She is a member of societies including the Davison Society, Alpha Omega Alpha Honorary Society, American Diabetes Association, American College of Physicians (named a Master and recipient of the North Carolina ACP Laureate Award), and Alliance of Academic Internal Medicine, where she received the Dema Daly Founders Award for her contributions as an education leader and innovator.

EDUCATION: Duke University School of Medicine

TRAINING: University of Arizona, Duke University School of Medicine

CURRENT TITLE: Professor of Medicine, Duke University School of Medicine

She is a nationally recognized endocrinology faculty member, specializing in the treatment of Type 1 diabetes, diabetes during pregnancy, obesity, and thyroid disease. She is a thought leader in work-life integration, wellness in the medical profession, and resiliency. She has mentored and coached many students, residents, fellows, and faculty at Duke and nationally.

Among her many honors are the Duke Health Excellence in Professionalism Award, Endocrine Educator of the Year, Duke Medicine Master Clinician Educator Award, Stead Teaching Award, Thomas Kinney Teaching Award, and Golden Apple Teaching Award.

EMERGING LEADER

Kanecia Zimmerman, MD'07, HS'07-'15, MPH

Kanecia Zimmerman, MD'07, HS'12-'15, MPH, is an associate professor of pediatrics with tenure in the Division of Critical Care Medicine in the Department of Pediatrics at Duke University School of Medicine.

She serves as scientific director and provides program oversight for the Pediatric Trials Network, a $98 million National Institute of Child Health and Human Development-funded alliance of clinical research sites cooperating in the design and conduct of pediatric clinical trials. She is principal investigator (PI) or co-PI for six federally funded or industry funded grants. Zimmerman is co-PI for the Duke Summer Training in Academic Research (STAR) Program and for the National Institutes of Health-sponsored Duke-UNC T-32 Unified Program for Therapeutics in Children.

EDUCATION: Duke University School of Medicine, University of North Carolina at Chapel Hill

TRAINING: Duke University School of Medicine, Chief Resident, Department of Pediatrics 2011-12

CURRENT TITLE: Associate Professor of Pediatrics with Tenure, Duke University School of Medicine

She is co-chair of the ABC Science Collaborative, a national initiative connecting scientists and physicians with school and community leaders to help understand the most current and relevant information about COVID-19 and child and family health and well-being.

She is passionate about teaching and mentoring young scientists, and she serves as the faculty mentor in the Bridging the Gap to Enhance Clinical Research Program, providing one-on-one career development guidance for post-graduate students.

Zimmerman is a member of the American Academy of Pediatrics (Fellow), North Carolina Pediatric Society, Society of Critical Care Medicine, Society for Pediatric Research, and AAP Delegate to the United States Pharmacopeia.

Study Estimates 1 in 7 Breast Cancers are Over-diagnosed

About one in seven breast cancers detected by mammography screening are over-diagnosed, according to a Duke Cancer Institute study designed to clarify the risk of breast cancer over-diagnosis using contemporary screening technology in the U.S.

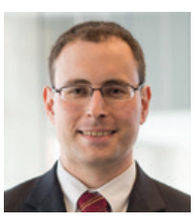
The study, published online Feb. 28 in the Annals of Internal Medicine, should inform decision-making about mammography screening for women aged 50 and older.

While mammography has been a key reason that breast cancer death rates have declined over the past three decades, over-diagnosis remains a downside. Defined as the detection of cancer with mammography that would not become clinically evident in the woman's remaining lifetime, over-diagnosis can lead to unnecessary treatments and stress.

Lead author Marc Ryser, PhD, assistant professor in Duke's Department of Population Health Sciences and the Department of Mathematics, and colleagues analyzed a dataset that included nearly 36,000 women, 82,677 mammograms, and 718 breast cancer diagnoses.

No Link Between Cognitive Changes, Alzheimer's Markers After Major Surgery

Cognitive changes following non-neurologic and non-cardiac surgery were not associated with changes in Alzheimer's disease-related biomarkers in older patients, according to a study led by a team at Duke University School of Medicine.


Miles Berger

The finding, published online in the journal Annals of Clinical and Translational Neurology, could help ease concerns that Alzheimer's disease risk might be increased by major surgeries and/or general anesthesia.

Lead author **Miles Berger, MD, HS'11-'13,** an associate professor in Duke's Department of Anesthesiology, and colleagues analyzed over 100 patients undergoing a wide variety of major surgery types under general anesthesia and found no correlation between post-operative changes in thinking/memory and in Alzheimer's disease-related biomarkers in the fluid surrounding the brain and spine.

Early Prostate Cancers Can Harber Aggressive Tumor Cells

Many cases of early prostate cancer are dominated by cells that are slow-growing, often leading to a clinical decision to monitor for progression before initiating treatments that can have adverse side effects.

But some of these cancers might also include a small number of aggressive cells hiding among the indolent ones like wolves in a herd of sheep. Researchers at Duke Health have identified a molecular signature that can spot these lurking threats.

Published online in the journal European Urology, senior author Jiaoti Huang, MD, PhD, chair of Duke's Department of Pathology, and colleagues said the genomic signature they have identified makes it possible to develop a test to identify which men should undergo treatment early in their diagnosis, versus those who could safely postpone therapy, if needed at all.

Huang said the goal now is to develop a clinical assay that identifies the more dangerous cells, which could trigger earlier, aggressive treatment in some patients to avoid disease progression.

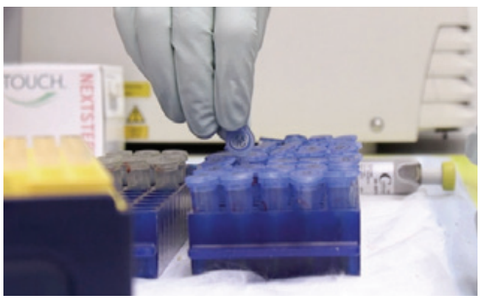
Study Shows mRNA Vaccine Technology Can Be Used For HIV Vaccines

Using mRNA technology like that used in COVID-19 vaccines, researchers at the Duke Human Vaccine Institute have demonstrated a successful way to deliver a potential HIV vaccine.

Published online in the journal Cell Reports, the research team described an important advancement in what is a complex vaccine development process. The approach uses mRNAs within lipid nanoparticles that are capable of stimulating HIV antibodies.

"This work demonstrates that we now have a practical platform for producing a complex HIV vaccine," said co-senior author **Barton Haynes, MD, HS'74-'75,** director of the Duke Human Vaccine Institute. "This is a major step forward."

Haynes and colleagues — including co-senior author Drew Weissman, MD, PhD, the Rob-



erts Family Professor in Vaccine Research at the Perelman School of Medicine at the University of Pennsylvania — found that mRNAs, which use genetic material to teach immune cells to recognize the targeted pathogen, are able to encode complex antigens that are key to HIV vaccine development.

Duke Team Finds That COVID-19 Can Infect Kidney Cells

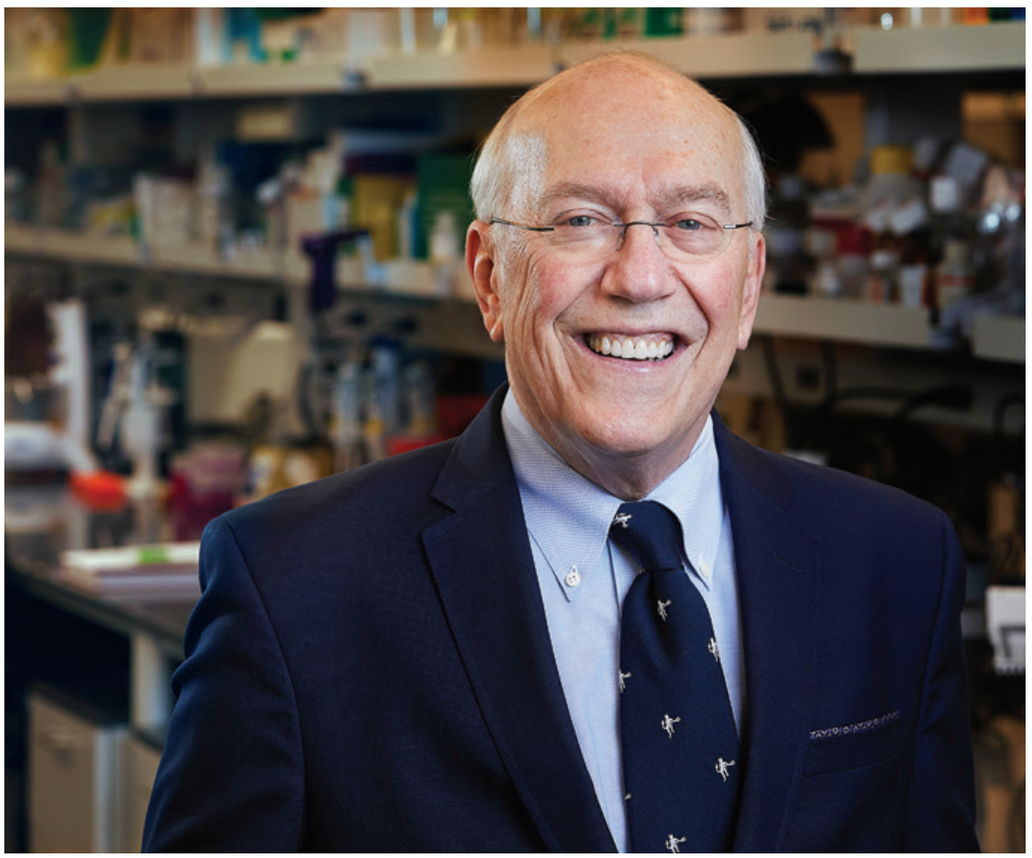
Duke researchers have discovered that the virus that causes COVID-19, SARS-CoV-2, can directly infect a specialized type of kidney cell. The discovery helps explain why acute kidney injury is one of the main complications observed in patients with severe COVID-19.

The research appeared online April 20 in the journal Frontiers in Cell and Developmental Biology.

Physicians learned early in the pandemic that the virus primarily infected cells in the respiratory tract. But as the case numbers began to grow, physicians were surprised to see that many patients — especially those with severe COVID-19 — were also developing injuries to their kidneys.

Samira Musah, PhD, an assistant professor of biomedical engineering and medicine, and Titilola Kalejaiye, PhD, a postdoctoral fellow in Musah's lab, teamed up with Maria Blasi, PhD, an assistant professor of medicine and a researcher in the Duke Human Vaccine Institute, to try to determine why.

The team discovered that the spike protein of SARS-CoV-2 can directly bind to numerous receptors on the surface of podocytes, a type of kidney cell that helps control the removal of toxins and waste from the blood. Once the virus infected the cells, it damaged the podocytes. If the injuries to the cells were too severe, the podocytes would die.



DEB LINDSEY

Putting Children First in a Pandemic

Health care professionals found themselves facing a whirlwind of unknowns at the start of the COVID-19 pandemic in March 2020. Among the many unanswered questions was what effect shutdowns, social isolation, and the virus itself would have on children. Despite what some stated at the time, **Kurt Newman, MD'78,** and his colleagues at Children's National Hospital in Washington, D.C., believed there was cause for concern.

"As reports started coming in from the West Coast, the early wisdom was that children weren't affected as much," said Newman, president and CEO of Children's National. "We didn't totally believe that, because in every pandemic and epidemic in the past, children have been powerfully impacted. So, we prepared as if it was going to impact children and impact them significantly."

The first order of business was to set up a testing site. A month after Children's National received its first COVID-19 case on March 15, the testing center was up and running.

Newman said the testing site offered valuable information. It validated his suspicions about the pandemic's effect on children: providers saw that COVID-19 was indeed having a significant impact on children, especially Black and Hispanic children and children living in disproportionately affected areas.

Equipped with this knowledge, and as vaccines became available, Newman said the focus became: "How do we protect our children?" One answer was to set up clinics in parts of the city where many didn't have access to vaccines.

Throughout the pandemic, new challenges continually arose for Children's National, particularly financial hardships. However, Newman, who has been at the hospital since he completed a surgical fellowship there in 1984, said he and other leaders were determined to keep their workforce intact.

"We made a big decision not to have layoffs because we knew our team members were facing their own challenges," he said. "We wanted to make sure they were well taken care of throughout this. That was a difficult, and remains a difficult, pathway. But through it all, the community stepped up and supported us."

Newman's success leading the hospital through some of the toughest times in its 150-year history caught the attention of the Washington Business Journal, which late last year named him the 2021 CEO of the Year.

Finding ways to protect children from COVID-19 and securing the livelihoods of Children's National employees were priorities. Leaders also were determined to position the hospital at the forefront of research and care, especially for those hit hardest by the pandemic. Last July, Children's National and the National Institute of Allergy and Infectious Diseases launched a $40-million multi-year study to examine the long-term effects of COVID-19 and multisystem inflammatory syndrome in children. It was the hospital's largest National Institutes of Health grant ever.

Before COVID-19 hit, Newman and his colleagues had been planning ambitious initiatives including a new research and innovation campus.

> "Let's continue our investment, because the pandemic may never totally go away, and we need to stay focused on the needs of children."
>
> KURT NEWMAN

The pandemic created unique challenges, but hospital leadership determined to press ahead with its plans.

"We made very strategic decisions," Newman said. "We said, 'Let's continue our investment, because the pandemic may never totally go away, and we need to stay focused on the needs of children.'"

The project continued, and the Children's National Research & Innovation Campus, a first-of-its-kind pediatric research and innovation hub, opened in 2021. "The vision is to create an ecosystem that enables the

Continued on page 20

Continued from page 19

organization to accelerate the translation of potential breakthrough discoveries into new treatments and technologies which benefit children," Newman said. "Washington, D.C., Mayor Muriel Bowser designated the construction industry as essential, so we were able to continue working on the campus throughout the pandemic."

Children's National also will play an important part of a new hospital called Cedar Hill Regional Medical Center, GW Health. Children's National will operate an emergency department and neonatal intensive care unit there, filling a much-needed gap in care in Southeast Washington, D.C.

"It's the first new hospital in that part of the city in probably 50 years," Newman said. "Patients have had to come across the river to another part of the district to where all the hospitals are, but now we'll be able to provide care closer to home."

Well before making an impact on health care in Washington, D.C., Newman was a student at Duke University School of Medicine, where he worked in the lab of his mentor, biochemist and now Nobel laureate Robert Lefkowitz, MD. The two have remained close, and this April Newman hosted Lefkowitz as a keynote speaker at the Children's National Research, Education, and Innovation Week, which celebrates the scholarly achievements of the hospital's faculty, staff, and trainees.

Newman says that attending Duke and learning from Lefkowitz not only influenced his career path, but also probably saved his life. In the lab one day, Lefkowitz noticed a lump on Newman's neck. After getting it checked out, Newman learned he had thyroid cancer.

The news was a shock for the then 25-year-old. "Thinking about me and cancer in the same sentence was really scary," Newman recalled.

But his Duke surgeon, William P.J. Peete, MD, put him at ease. "The surgeon who took care of me changed my life and gave me confidence that I was going to be fine."

In the end, he was, and Newman rarely thinks about his cancer diagnosis anymore. However, it forever changed how he viewed patient care and led him to specialize in surgery rather than cardiology. "It gave me a sensitivity to what people have to face," he said.

The experience also deepened his bond with his classmates. While awaiting his own surgery, Newman said seeing older patients with advanced cancer on his hospital floor was sobering.

"But my classmates picked me up," he said. "They got me out of the hospital the night before to play intermural basketball over in Card Gym. There was just this sense of family, and I've never forgotten that."

— Bernadette Gillis

August 29, 2011

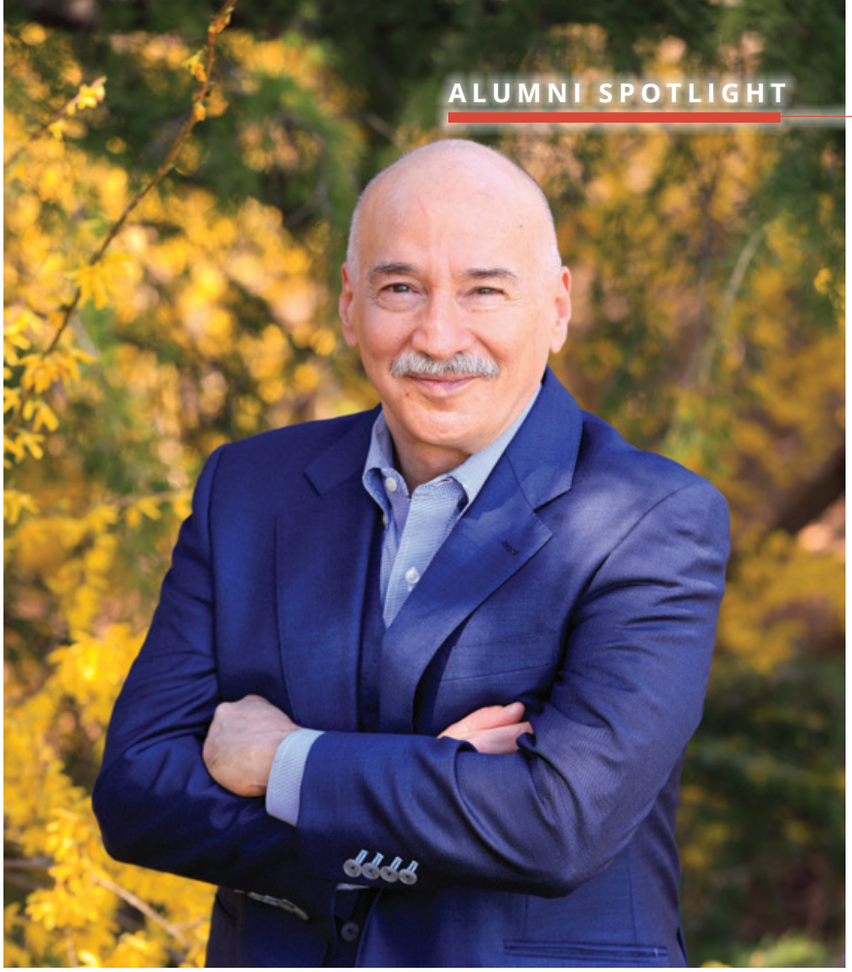
Construction of the Trent Semans Center for Health Education building.

We've missed you! Where are you today?

Have you taken on a new job (or retired from one)? Won an award? Written a book? Your fellow DukeMed alumni want to hear about it! Please email updates and photos for Class Notes to ↘ dukemed@duke.edu

ABOVE PHOTO: Steel girders were in place as construction began on the Marty Duke Biddle Trent Semans Center for Health Education. Jumping for joy are **Manisha Bhattacharya, MBA'13, MD'15,** now a medical instructor in the Departments of Medicine and Neurology at Duke; **Brian Jiang, BS'11, MD'17; Tony Nelson, MD'13, HS'13-'16; Matt MacCarthy, MD'12, HS'12-'15; Karen Scherr, PhD'18, MD'18,** now a clinical associate in the Department of Family Medicine and Community Health at Duke; and **Katie Yang, MD'09, MD'13.**

Learning the Hard Way



MICHAEL DEVITO

One of the most powerful moments **Phil Lister, MD'79,** had in medical school came during a lecture by **Adhemar "Jim" Renuart, BS'52, MD'56, HS'57.** Renuart shared with the students the challenges he experienced as both a doctor and a father to a child with medical issues.

"I remember being dazzled," said Lister, a psychiatrist and psychoanalyst for adults and children. "It was unlike anything I had heard before. He was speaking from his heart of facing pain and rising to the occasion. I feel like he was showing us — me — that kind of care is possible."

Years later, after Lister himself had faced the challenge of raising a child with a devastating diagnosis, he took a page from Renuart and wrote from his own heart. In his book, "A Short Good Life," published in November 2021, Lister chronicles his family's journey following his daughter Liza's diagnosis of childhood leukemia. Liza's battle began when she was 4 years old and ended 12 days after her sixth birthday when she succumbed to the disease.

"After Liza died," Lister said, "I became frantic and worried that I would forget things." Not wanting to lose more of Liza than he already had, he began writing down everything he could remember: what she said, how she said it, the way they interacted as a family.

At first, putting it on paper helped him heal and process what had happened. Then he wrote for his other children: Molly, who was 9 when Liza died, and Solomon, born 18 months after Liza's death. "I imagine there will come a time in the future when they will become curious about their sister," Lister said, "and what I could say in a conversation would be incomplete. Writing it meant I'd have it for them."

Through writing, Lister realized he had something to offer a broader audience. He began to hone the text as a craftsman, editing it down to its essence. The resulting book not only tells Liza's story but also highlights areas where he believes medical care can be reimagined.

As a psychiatrist, he has learned to be attuned to the mind of a child. "It's rich, it's prone to distortion," Lister said. "Telling something important should be viewed as a process rather than an event." A process, he says, that is based on honesty, allows for questions, and balances how much information to share at any given moment.

Many doctors and care providers, he said, don't have adequate training and expertise in knowing when, where, and how to have difficult conversations with a young patient about serious health issues. "Right now, it's rare for a doctor to be attuned to how a conversation about a kid is going to land in the ears of that kid," he said.

He recalled his own experience of sitting in the doctor's office and hearing Liza's diagnosis for the first time. Liza sat on the floor beside him and his wife and busied herself with a toy. "It would have been better for everyone if she could have been occupied outside," Lister said. Then he and his wife could have had the chance to absorb the information fully without having to manage their own emotionality for her sake. "And we could have delivered the news to her however we thought was called for."

> "There are too many circumstances where our reflexes to turn away from suffering cause us to change the channel, and we miss the opportunities to support one another in ways that would be wonderfully valuable."
>
> PHIL LISTER

Lister thinks training in how to hold challenging conversations with families and children should begin in medical school, perhaps through connecting preclinical medical students to families experiencing medical challenges.

He also advocates having palliative specialists join the team of medical professionals in cases of severe illness early in the process. "It's those specialists' mindsets that I would draw on to help a family and team think about what is appropriate for this kid at this time in this family," Lister said. A palliative specialist, he believes, could help support the whole family through the stress, anxiety, and despair a family is likely to face during the child's illness.

Just as he was inspired by Renuart's lecture in his first year at Duke, Lister is hoping his words can inspire change. "Culturally, if we can expand our tolerance to acknowledge and bear suffering," he said, "it puts us in a position to help one another. There are too many circumstances where our reflexes to turn away from suffering cause us to change the channel, and we miss the opportunities to support one another in ways that would be wonderfully valuable."

"A Short Good Life" is available at select bookstores and on the website ashortgoodlife.com, which also includes author interviews, family photographs, poems, and illustrations that provide an intimate look at a challenging but inspiring story.

— *Alissa Kocer*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Charles Johnson and his Legacy of Change

The late Charles Johnson transformed the School of Medicine forever when he became its first Black faculty member in 1970

When **Charles Johnson, MD, HS'65-'67,** wasn't busy seeing patients during his early days on the Duke University School of Medicine faculty, he spent time walking the halls and lobbies of the hospital. He did it, as he did most things, with a purpose: to be visible, to help hasten the day when seeing a Black physician at Duke would be considered nothing out of the ordinary.

"He told me he would walk the hospital just so people would get accustomed to seeing him," recalled his son, Charles D. Johnson, PhD, a history professor and director of the Public History Program in the Department of History at North Carolina Central University. "I think that helped people over time to see — and expect to see — an African American physician."

The elder Johnson was the first Black faculty member at Duke University School of Medicine. He was a beloved physician to his patients, a role model to his colleagues, a rock for his family, a mentor to many, and an inspiration to all who knew him.

Born in 1927 in Acmar, Alabama, he came from humble beginnings, and although none of his eight siblings finished high school — "Jim Crow pretty much chewed up the rest of his family," said his son — Johnson graduated, joined the U.S. Air Force, and became a fighter pilot.

He went to Howard University on the GI Bill. He completed medical school at Howard, his internship at the District of Columbia General Hospital, his residency at Lincoln Hospital in Durham and Duke, and a fellowship in endocrinology at Duke.

In 1970, Eugene Stead, MD, then the chair of the Department of Medicine, asked Johnson to join the faculty at Duke.

"He came to Duke recognizing that his role wasn't just to be the first," Charles D. Johnson said. "It was to be a transformation agent, helping to spearhead getting more talented African Americans at Duke and keeping them there, and serving as a role model and as a guide."

Johnson died on December 14, 2021, at 94. His legacy lives on in the Duke University School of Medicine, among the individuals he mentored, and in the many who followed him.

At his funeral, School of Medicine Dean **Mary E. Klotman, BS'76, MD'80, HS'80-'85,** who was among the many physicians taught by Johnson when she was a trainee, said, "To say he paved the way for others somehow seems to be an understatement of the impact he made. Throughout his 26 years at Duke, he was committed to diversifying the profession as an imperative to delivering the best patient care. He was a pioneer and an outstanding clinician, mentor, and leader. He improved our profession, and he made Duke a better institution."

"Throughout his 26 years at Duke, he was committed to diversifying the profession as an imperative to delivering the best patient care. He was a pioneer and an outstanding clinician, mentor, and leader. He improved our profession, and he made Duke a better institution."

MARY E. KLOTMAN

During Johnson's years on the faculty, he frequently spoke about the need for Duke to recruit more Black students and faculty, support them, and change the environment to become more welcoming to a diverse group of people. He served on innumerable committees, engaged in spirited discussions, pushed, and persuaded.

"People assume that the hospital just naturally evolved into what it is today, and that's not the case," his son said. "It wasn't just my father, but it took a concerted effort and people pushing hard to bring about these changes."

Although Johnson constantly prodded the institution to be better, his son said, "He loved Duke. He loved that the standard was perfection. He thought a lot of himself and his ability, like a lot of physicians do, and he enjoyed being associated with that."

His clinical acumen and patient-centered approach were legendary. Johnson inspired countless individuals by his actions and advice, and sometimes just by his presence.

Ralph Snyderman, MD, HS'65-'67, former chancellor of health affairs and dean of the medical school at Duke, remembers Johnson as a great physician and a trusted friend and colleague who somehow made blazing a trail look almost effortless.

"He was a pioneer, but he did it so naturally and fit in so quickly and completely that you almost weren't aware of it," said Snyderman. "He just made the right thing to do so glaringly obvious. It cannot always have been easy. I'm sure he carried burdens that were not apparent to anybody else, but he did that the same way he did everything: with grace, dignity, and compassion."

— Mary-Russell Roberson

PHOTOS COURTESY OF DUKE UNIVERSITY MEDICAL CENTER ARCHIVES AND CHARLES JOHNSON'S FAMILY.

William Raymond Bender, MD'65, died on August 27, 2021. He was 81. He practiced radiology for 35 years, with over 25 years at Pensacola Radiology Associates in Pensacola, Florida. After completing medical training at Grady Hospital in Atlanta and at Duke University Hospital, he moved to Pensacola in 1971. After medical school and during the Vietnam War, Bill joined the U.S. Air Force. He spent most of his military tour at Clark Air Base in the Philippines.

Preston Hatcher Bradshaw Jr., MD '60, HS'62, died on September 10, 2021. He was 87. He began his urology practice in Raleigh, North Carolina, in 1967. He did internships at Yale University and St. Thomas' Hospital in London, England, and completed his surgical residency at Duke. He entered the U.S. Air Force, completing his service as a captain and general surgeon. Following his service, he completed a urological residency at the University of Virginia, where he was chief urologist. He was certified by the American Urological Association and the American College of Surgeons in 1967.

William "Bill" Franklin Bryant Jr., AB'54, MD '58, HS'58-'60, HS'62-'63, died on August 24, 2021. He was 88. He completed his residency at Duke University Hospital and then joined the Charlotte Pediatric Clinic in Charlotte, North Carolina, with his partners. He treated children for 53 years, serving four generations of Charlotteans.

C. Thomas Caskey, MD'62, HS'63-'65, died on January 13, 2022. He was 83. He was a pioneering human geneticist whose research focused on the genetic basis and molecular diagnosis of human diseases. He initiated a program in genetics at Baylor College of Medicine that grew into the renowned Department of Molecular and Human Genetics. He joined Merck Research Laboratories in 1994 as senior vice president, Human Genetics and Vaccines Discovery, and president of the Merck Genome Research Institute. Among many honors, he was a member of the USA National Academy of Sciences, National Academy of Medicine, a Fellow of the Royal Society of Canada, and the recipient of awards including the William G. Anlyan Duke Lifetime Achievement Award, the William Allan Award of the American Society of Human Genetics, and the Giovanni Lorenzini Foundation Prize for Basic Biomedical Research.

Karen E. Chancellor, MD,'84, died on September 10, 2021. She was 64. She completed a residency in forensic pathology at the University of Kentucky and became board certified in forensic pathology and neuropathology. She served as the associate chief medical examiner for North Carolina before being appointed as the chief medical examiner of Shelby County. She also served as deputy chief state medical examiner for Tennessee and was a professor of pathology at the University of Tennessee Health Science Center. In 2012 she was awarded the Outstanding Alumna Award from the University of Memphis.

Edwin Branan Cooper Jr., MD'66, HS'74-'75, died on September 10, 2021. He was 79. He was a gifted orthopaedic surgeon and served in the U.S. Air Force as a captain. He conducted quadriplegic patient rehabilitation studies and studies on awakening comatose patients. He was a well-known speaker, traveling frequently to make presentations at medical conferences and hospitals. After leaving Duke to begin his private practice in Kinston, North Carolina, he returned often for grand rounds and consultations at Duke. He taught at Arendell Parrott Academy, where he was also a board member, for nearly three decades.

Clifford David, AB'68, MD'72, died on October 2, 2021. He was 75. He practiced pediatrics for 50 years. He completed his pediatric training at Great Ormond Street Hospital for Sick Children in London, England, and in 1975 moved to Yemen, where he worked as a volunteer doctor in a children's clinic. He completed a master's degree in public health at Harvard University and then opened a private practice in Pittsboro, North Carolina. He worked in Baghdad during the Iran-Iraq War and then returned to Jacksonville, Florida, to work at Wolfson Children's Hospital. In 2018, he joined the Italian medical charity Emergency and worked as a volunteer in Afghanistan and Sudan.

Joseph Wayne Fay, MD, HS'72-'74, HS'76-'77, died on February 18, 2022. He was 75. He served as a lieutenant commander in the U.S. Navy for the National Cancer Institute in Washington, D.C., and returned to Duke in 1976 to develop a bone marrow transplant program. In 1982, he went to Baylor University Medical Center, where he established the Sammons Bone Marrow Transplant program. During his 35-year career at Baylor he helped pioneer the Marrow Transplant Service and was named director of the Baylor Institute for Immunology Research.

Robert "Bob" Lewis Heacock, MD, HS'76-'80, HS'80-'82, died on March 18, 2022. He was 70. He received his medical degree summa cum laude at the Ohio State University College of Medicine and completed his residency in internal medicine at Duke in internal medicine, where he was chief resident. He finished with a fellowship in gastroenterology. He remained close with his special Duke friends and their families, continuing yearly North Carolina beach vacations for over 40 years. He joined Blanchard Valley Medical Associates in Findlay, Ohio, in 1982 and served the community for 38 years.

J. David "Dave" Jones, MD'54, HS'54-'57, HS'59-'63, died on November 30, 2021, He was 92. He was a child psychiatrist at Duke University Hospital and the School of Medicine for more than 40 years. He served two years in the U.S. Air Force. He completed residencies at Duke and was board certified in both pediatrics and psychiatry. He practiced in the Private Diagnostic Clinic and was an associate professor emeritus of psychiatry and behavioral sciences at Duke. He won the Professor of the Year Award several times.

Robert Howard Jones, MD, HS'65-'66, HS'68-'75, died on January 26, 2022. He was 81. He graduated from Johns Hopkins University School of Medicine in 1965 and started his lifelong career as a cardiothoracic surgeon at Duke University Hospital in 1965, a vocation that continued until he retired in 2014 as the Mary and Deryl Hart Professor of Surgery. He trained countless medical students and residents who continue his legacy of compassionate care.

Bernard S. Levy, MD'61, died on December 3, 2021. He was 85. He did a residency in psychiatry at Johns Hopkins Hospital. While in the Public Health Service, he authored the first scientific paper in the United States

on the use of lithium to treat bipolar illness. He was recruited to Massachusetts General Hospital and Harvard Medical School in 1968 to lead the inpatient psychiatry unit and later set up the Physician Health Services Program at the Massachusetts Medical Society.

Kelly Ann Machovec, MD, MPH, HS'09-'13, died on March 30, 2022. She was 43. An associate professor of anesthesiology at Duke University School of Medicine, she focused her research on the homeostasis management of children following open heart surgery performed on cardiopulmonary bypass. She co-founded the Homeostasis Interest Group and served on the Board of Directors of the Congenital Cardiac Anesthesia Society. She was chair of the Clinical Competency Committee for Duke's Pediatric Anesthesiology Fellowship. She took part in medical missions in India, the Philippines, and Haiti. Earlier this year she received the Duke Pediatric and Congenital Heart Center Impact Award and the Leonard Tow Humanism in Medicine Award from the School of Medicine.

Henry G. Magendantz, MD'62, died on January 27, 2022. He was 85. He earned his bachelor's degree from Harvard College and served as a U.S. Army major in the Army Medical Corps at Fort Campbell, Kentucky. He was an obstetrician/gynecologist for the Rhode Island Group Health Association and Harvard Pilgrim Health. He would later work for OB/GYN Associates in Providence, Rhode Island, before entering private practice. He was a fertility specialist and was involved in the delivery of more than 3,000 infants over the course of his long career. He served as an attending physician at Miriam Hospital, Rhode Island Hospital, and Women and Infants Hospital. He was also a clinical associate professor of obstetrics and gynecology at the Warren Alpert Medical School at Brown University.

Calvin Vere Morgan Jr., MD '62, died on September 25, 2021. He was 84. He was commissioned in the U.S. Navy as a lieutenant commander. He practiced at Johnson City Surgical Associates in Tennessee. He was a fellow of the American College of Surgeons and the Tennessee Chapter of the American College of Surgeons, where he served as the chapter president. He was on the staff of Johnson City Medical Center and served as an associate professor of surgery at the James H. Quillen College of Medicine at East Tennessee State University and the Quillen Veteran Affairs Medical Center.

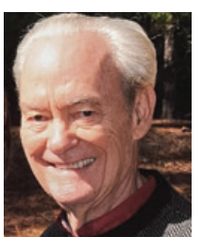
Marty A. Nathan, MD'77, died on November 29, 2021. She was 70. She was a physician who worked at Baystate Brightwood Health Center in Springfield, Massachusetts, and helped started a medical clinic to serve immigrants and others in Brightland. She was a lifelong activist who fought for social and racial justice, immigrants' rights, universal health care, peace, and environmental justice. On November 3, 1979, her husband, Michael Nathan, who was chief of pediatrics at the Lincoln Community Health Center in Durham, was among five people killed at an anti-Ku Klux Klan demonstration in Greensboro, North Carolina. Afterward, she started the Greensboro Justice Fund. In 2012, she co-founded Climate Action Now.

George R. Parkerson Jr., BS'50, MD'53, HS'52-'53, MPH, died on May 7, 2022. He was 94. He served on the faculty of Duke University School of Medicine for 46 years, including nine years as chair of the Department of Family Medicine and Community Health. A visionary leader, he obtained Duke University Hospital admission privileges for family doctors and moved the Duke Family Medicine Center from Durham Regional Hospital (now Duke Regional) to the Duke campus. He served on Duke's Institutional Review Board for 20 years, including 15 as chair. His principal research interest was the measurement of health as self-reported by individuals. He was instrumental in the development of the Duke-UNC Health Profile, Duke Health Profile, Duke Severity of Illness Checklist, Duke Social Support and Stress Scale, Duke Anxiety-Depression Scale, and the Duke Case-Mix System.

Thomas Baker Price, MD '64, died on December 22, 2021. He was 83. He served as a captain in the U.S. Army and practiced general surgery in Greensboro, North Carolina. He was president of the medical and dental staff, chief of the Department of Surgery, and a member of the Medical Executive Committee and the Board of Trustees at Wesley Long Community Hospital. He served on the medical board of Moses H. Cone Hospital and on the Board of Trustees of the Moses Cone Health System. He was a member of the American Medical Association, Southeastern Surgical Congress, American College of Surgeons, North Carolina Chapter of the American College of Surgeons, American Society of General Surgeons, North Carolina Medical Society, Greater Greensboro Society of Medicine, and North Carolina Surgical Association, where he served as president.

James Joseph Salz, MD'65, died on March 19, 2022. He was 82. He served as a lieutenant commander in the U.S. Navy. He was among the pioneers who first inserted intraocular lens implants during cataract surgery and was principal investigator in 12 clinical trials for the approval of lasers used in LASIK and other procedures. He was a clinical professor in the Department of Ophthalmology at the Keck School of Medicine at the University of Southern California for over 40 years. He was a founder and editor-in-chief of the Journal of Refractive Surgery, co-editor of the textbook Refractive Corneal Surgery, and editor-in-chief of the seminal textbook Corneal Laser Surgery. His many honors include the Barraquer Award, the USC-Doheny Eye Institute Distinguished Alumnus Award, and the American Academy of Ophthalmology's Lifetime Achievement Award.

Donald K. Wallace, MD'59, HS'59-'62, HS'62-'63, died on February 14, 2022. He was 79. He served as a captain in the U.S. Army from 1963 to 1965 as chief of gastroenterology at Womack Army Hospital at Fort Bragg, North Carolina, and received the Army Commendation Medal for his research on treatment-resistant malaria. He helped establish and grow the Pinehurst Medical Clinic in Pinehurst, North Carolina. He served on the boards of organizations including the Sandhills Mental Health Center and Moore Regional Hospital and was founding board president of the Medical Review Of North Carolina. He was the medical director of St. Joseph of the Pines and Penick Village. His honors included the Ewald W. Busse Award, the T. Reginald Harris Memorial Award from the North Carolina Medical Society, and the Donald K. Wallace Endowment, which provides scholarships for nurse practitioners.



Eddie Meek Williams III, AB '71, MD'74, HS'78, HS'79, HS'83, died on August 17, 2021. He was 71. He graduated magna cum laude as an undergraduate at Duke University and went on to complete medical school, internship, and residency at Duke. He began his practice of pulmonary and critical care in the early 1980s and practiced internal medicine with the Columbia Medical Group.

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MATCH DAY 2022

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On Friday, March 18, 2022, fourth-year medical students at Duke opened their envelopes and learned where in the country they will complete residency training. The ceremony took place in person this year at Trent Semans Center for Health Education, after two years of virtual ceremonies. Students are headed to some of the nation's most prestigious residency programs, with 27 matching at Duke.

Experience the excitement of Match Day 2022 on video:
bit.ly/DukeMatchDay2022

MOST MATCHED FIELDS

Internal Medicine: **26**
Obstetrics/Gynecology: **11**
General Surgery: **10**
Emergency Medicine: **8**
Orthopaedics: **6**
Psychiatry: **6**

MOST MATCHED INSTITUTIONS

Duke: **27**
Harvard-affiliated hospitals: **10**
Stanford: **6**
Northwestern: **5**

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