# DukeMed

ALUMNI NEWS
Spring 2024

Duke CENTENNIAL 100

# A Century of Excellence

How the School of Medicine Grew From a Visionary Philanthropist's Dream to a Premier Academic Medical Institution

Dear Friends,

There is an air of celebration across campus this year, as 2024 marks the 100th anniversary of the founding of Duke University. We kicked off the Centennial with an extravaganza in Cameron Indoor Stadium on January 9 — a date, 1-9-24, that deliberately echoes 1924, when James B. Duke established The Duke Endowment and designated a portion of its funds to transform Trinity College into a comprehensive research university. I encourage you to visit **100.duke.edu** for articles, videos, events, and more that trace Duke's growth and evolution over the past 100 years.

The School of Medicine is one of the defining features of this university, and I am proud that the Centennial year offers the opportunity to share the stories of the people, achievements, and milestones that have made us who we are today.

Here are just a few of the highlights I found particularly interesting:

- Interest in the new medical school and hospital was so intense that large crowds gathered to watch the construction proceed, and when the hospital held a public open house on a sweltering July 20, 1930, thousands of people surged in to explore the new facility. Founding Dean Wilburt C. Davison, MD, reported that during eight hours of guiding tours and repairing overloaded elevators, he lost six pounds and ruined his white linen suit.
- School of Medicine alumni have been making a difference from the beginning: **Jay Arena, MD'32, HS'33**, a member of the very first graduating class, joined the Duke faculty and saved untold numbers of lives by founding the nation's first Poison Control Center and leading the drive to persuade drug companies to adopt childproof safety caps.
- While Duke's role in creating the Physician Assistant profession is well-known, fewer people may be aware that Duke is also the birthplace of the Pathologists' Assistant profession. Thomas Kinney, then chair of the Department of Pathology, piloted the nation's first Pathologists' Assistant curriculum at the Durham Veterans Administration Medical Center in 1969, launching an educational program that we continue to this day.

We are celebrating these stories and many more over the course of this year in this issue and the next of DukeMed Alumni News, on the 100.duke.edu site, and on the Centennial page on the School of Medicine website at **medschool.duke.edu.**

I want to take this opportunity to celebrate you, our alumni, friends, and supporters who are so much a part of our collective history. You are essential partners in everything we do. Duke University and the School of Medicine are a testament to the power of service and support, the direct result of James B. Duke's vision and determination to make a difference.

I am proud of what we have achieved together, and excited about what lies ahead as we advance biomedical science and improve health and health care for people regionally, nationally, and around the world. While we celebrate the past, we are excited to engage you in forging our future!

Thank you for everything you do, and I encourage you to remain actively engaged with the School of Medicine.

With warm wishes,

**Mary E. Klotman, BS'76, MD'80, HS'80-'85**
Executive Vice President for Health Affairs, Duke University
Dean, Duke University School of Medicine
Chief Academic Officer, Duke Health



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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DAVID WALTER BANKS

# The Rewards of Sustained Engagement

**Bancroft "Banny" Lesesne, AB'68, MD'76,** began giving to the School of Medicine in 1978, right after completing his residency. At first the amounts were small. As he established his practice, first in internal medicine and then in oncology, they grew.

In addition to his 46 years of sustained financial support for medical education, Lesesne has been very active as an alumni volunteer and leader. He served on his reunion committee immediately after graduation and on the Medical Alumni Council and Davison Club, including terms as president of both. In recognition of his leadership and extraordinary longtime support of Duke, Lesesne was awarded the Charles A. Dukes Award in 2018.

"Duke provided me with an excellent medical education and opened doors for further training and professional opportunities. Being a part of the extended Duke community has been an important part of my life. I encourage others to serve. It's always interesting and has been hugely rewarding."

– Bancroft "Banny" Lesesne

Becoming an engaged volunteer is just one of many ways you can support Duke University School of Medicine. Please consider volunteering as well as providing philanthropic support. You can make a gift online at **gifts.duke.edu/dmaa**.

**TO LEARN MORE** about how to support the School of Medicine, please contact Stacy Davis, Assistant Vice President of Alumni Giving, at **919-385-3188** or **stacy.davis@duke.edu**.





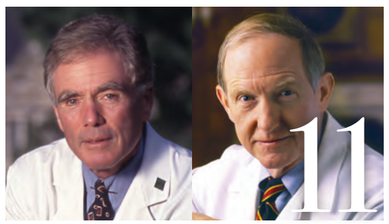
COVER STORY

## A Century of Excellence

*One School, Four Missions, 100 Years*
Since Duke University was established in 1924, the School of Medicine has become a leading academic health care institution by focusing on its core missions of research, education, patient care, and community partnership

THE DEANS

**Ralph Snyderman, MD, HS'65-'67** and
**Edward W. Holmes, MD, HS'70-'71, '73-'74**





CHRIS HILDRETH

Half Century Society Welcomes New Members


LES TODD

FEATURE

## Making a House a Home

Student group fills gap for those experiencing homelessness


EAMON QUEENEY

Duke
SCIENCE *and* TECHNOLOGY

## 'Extreme' cells

could provide new insights into cell biology, pregnancy diseases, and cancer

OTHER CONTENT






DUKE UNIVERSITY MEDICAL CENTER ARCHIVES

# A Century of Excellence

## *One School, Four Missions, 100 Years*

When James B. Duke signed the indenture of trust on December 11, 1924, that created The Duke Endowment and transformed Trinity College into Duke University, he expressed his wish that the new university would include a school of medicine. He hastened that eventuality by bequeathing $4 million for "erecting and equipping at Duke University a Medical School, Hospital and Nurses Home."

His immediate goal was to improve access to quality health care in North Carolina. Privately, he told friends he wanted to see Duke become the best medical institution between Baltimore and New Orleans. Guided by founding Dean Wilburt Cornell Davison, MD, and a long procession of exceptional leaders, the School of Medicine rose in prominence with breathtaking rapidity. It has sustained and expanded that distinction during the ensuing decades.

Over the past 100 years, Duke has grown from a visionary philanthropist's dream to the position it now holds as one of the world's premier academic health institutions.

The School of Medicine's story is one of excellence and innovation in health professions education, world-class patient care, biomedical research, and community partnership.

The pages that follow touch on just a few of the countless highlights within each of these core missions.

These four missions have brought James B. Duke's vision to life in ways he could never have imagined. They overlap, reinforce, and support each other in a virtuous cycle that simultaneously teaches and trains, improves outcomes, advances science, and engages the community.

"The integration of the missions is where the magic happens in academic health care," said **Dean Mary E. Klotman, BS'76, MD'80, HS'80-'85,** executive vice president for health affairs at Duke University. "It's what makes a place like Duke so important to the overall health care landscape." ***– By Dave Hart***

**THE NEXT HUNDRED YEARS**
Coming in the Fall 2024 Issue of DukeMed Alumni News:
What does the future hold for health care and biomedical science?

"From its beginning in 1930, Duke has been committed to and actively engaged in a program of training young men and women for academic and scientific careers, as well as for the practice of medicine, requiring exceptional clinical and preclinical preparation."

– Wilburt C. Davison, MD,
Dean, 1930-1960

## 1963

**Wilhelm Delano Meriwether, MD'67,** became the School of Medicine's first Black student in 1963, and four years later graduated with honors as its first Black MD, paving the way for students from all backgrounds to learn and grow at Duke. He went on to lead the U.S. Public Health Service's swine flu vaccination campaign and provide missionary health care in South Africa.

## 1965

In 1965, Eugene A. Stead Jr., MD, then the chair of the Department of Medicine, created a new profession called "Physician Assistant" to address gaps in access to health care. He launched a two-year training program, and in 1967 the first three students graduated. They were the vanguard of a PA workforce that now numbers almost 170,000 and is an integral part of the health care system nationwide. In 1969, Duke initiated another new career path, the nation's first Pathologists' Assistant training program.

## 1930

The School of Medicine opened for classes on October 2. Demand was very high: 3,000 prospective students sought enrollment. The new school accepted only the most outstanding applicants, and the first cohort numbered 70: 52 first-year students and 18 third-year students from seven different two-year medical schools.


## 2005

In 2005, Duke extended its reach to the far side of the globe by partnering with the National University of Singapore to open the Duke-NUS Medical School, a hub for research-intensive clinical training.

LES TODD

## 2013

The opening of the Mary Duke Biddle Trent Semans Center for Health Education dramatically transformed teaching and learning at Duke. The six-story, 104,000-square-foot facility provides state-of-the-art technology, flexible teaching and learning space, simulation labs, gathering spaces, and more.

From the beginning, Duke University School of Medicine was, first and foremost, a *school*. When it opened in 1930, Duke was the only four-year medical school in the state, and its immediate priority was preparing physicians to meet the need for quality health care across North Carolina.

The school combined a comprehensive basic science curriculum with hands-on clinical experience, setting a high standard for excellence and establishing a tradition of experiential learning that continues today.

The School of Medicine enrolled women from the start, but they made up a small minority of the student population until the last few decades, which have seen a dramatic expansion in the number of women entering medical professions. Women now make up a majority of the student body.

Duke opened during an era of systemic segregation, and it was 1962 before the School of Medicine admitted its first Black student. In the decades since, leaders such as the late **Brenda Armstrong, AB'70, MD, HS'75-'79,** have worked to ensure that exceptional students from all backgrounds have access to Duke's high-quality education and training.

The school has grown from its initial 70-student MD cohort to a total of almost 2,000 students in nearly 20 health professions degree and certificate programs and 16 biomedical PhD tracks. School of Medicine alumni span the globe, providing first-rate patient care, conducting breakthrough science, leading major institutions, guiding health policy, and improving human health around the world.

From founding dean Wilburt C. Davison, MD, on, the school has continually recruited exceptional teaching faculty, and as the health care landscape grows increasingly complex, Duke has placed a growing emphasis on innovative and interdisciplinary education.

"Health professions education continually transforms as new technologies, scientific advances, and innovative methodologies redefine how we approach teaching and learning," said **Edward Buckley, BSE'72, MD'77, HS'77-'81,** vice dean for education. "At Duke, we embrace these changes, integrating cutting-edge tools and ideas to enhance our educational practices. But our guiding foundational principle remains learning by doing. We are committed to equipping our students with the skills and knowledge they need to adeptly serve patients, communities, and society."

## 1966

The School of Medicine transformed medical education with its "New Curriculum," which compressed the basic sciences into one year, introduced patient care in the second year, and dedicated the entire third year to research. The new model provided students with firsthand experience in scientific inquiry and fostered a culture of lifelong learning.

SHAWN ROCCO

## 2020

Even amid the COVID-19 pandemic, the School of Medicine launched its new "Patient First" curriculum, which more closely integrates biomedical education and patient care.


DUKE UNIVERSITY MEDICAL CENTER ARCHIVES

JIM ROGALSKI

## 2024

The School of Medicine's new Occupational Therapy Doctorate program graduated its first class of students.

# Research

## 1937

Neurosurgeon Barnes Woodhall, MD, established one of the nation's first dedicated brain tumor programs at Duke in 1937. He later become the School of Medicine's second dean and led the development of the Duke Comprehensive Cancer Center, a driving force in making Duke one of the nation's leading cancer research institutions.

DUKE UNIVERSITY MEDICAL CENTER ARCHIVES

## 1974

Research by **Rebecca Buckley, AB'54, MD, HS'58-'64,** a pediatrician and longtime chief of the Division of Allergy and Immunology, led to the first treatment for severe combined immunodeficiency, or "bubble boy disease." Her revolutionary research enabled babies with the condition to develop normal immune systems.

Biomedical research began to emerge as a priority in the School of Medicine before its first decade was out. Funding from corporations and foundations fueled important early studies such as David T. Smith, MD's work on pellagra and Dr. Joseph and Dorothy Beard's transformative research on equine encephalomyelitis, which helped establish the viability of killed-virus vaccines.

After World War II, with the expansion of the National Institutes of Health and a procession of visionary leaders at Duke, the School of Medicine grew to become one of the nation's best and most innovative biomedical research institutions. Now the School of Medicine perennially ranks among the top 10 nationally in research funding by the NIH and boasts a long list of breakthrough discoveries in key fields.

The Beards' early work heralded a tradition of excellence in immunological science that continues to this day. Duke's standing as one of the nation's leading cancer research institutions began with brain tumor research in the 1930s and accelerated when Duke was designated one of the nation's first Comprehensive Cancer Centers in 1973. Duke researchers have made significant contributions to neuroscience, unraveling the mysteries of neurological disorders such as Alzheimer's disease.

> "We are going to stand or fall as an institution upon the scientific work done here... If Duke Medical School is to take top rank in the county, it can only do so by the production of medical advances."
>
> – Frederic M. Hanes, Chair, Department of Medicine, 1933-1946

The Duke Databank for Cardiovascular Disease, created in 1969, remains a pioneering resource that helped establish Duke as a leader in the field and presaged the era of Big Data. The databank spawned the Duke Clinical Research Institute, the world's largest clinical research institution.

In the 21st century, Duke's commitment to translation and commercialization facilitates the rapid translation of scientific discoveries from the lab to the clinic, and its culture of interdisciplinary collaboration generates innovative approaches to complex biomedical questions. Researchers in the School of Medicine span the scope of scientific investigation, from basic research that explores the body's fundamental systems and processes to clinical and translational research that accelerates the translation of scientific discoveries into clinical practice.

Through recent initiatives such as Duke Science and Technology, which has attracted a new wave of scientific stars, and Duke AI Health, which is leading the effective and ethical use of revolutionary new technologies, the School of Medicine is tackling the most vexing challenges in biomedical science.

## 1990

Led by **Barton F. Haynes, MD, HS'73-'75,** the Duke Human Vaccine Institute was formed in 1990 to support interdisciplinary efforts across Duke to develop vaccines and therapeutics for HIV/AIDS and other emerging infections. In the years since, DHVI has become one of the world's foremost research institutions in the battle against infectious diseases.

JARED LAZARUS

Duke CENTENNIAL 100

## 2006

Groundbreaking research by Y.T. Chen, MD, PhD, and clinical trials led by Priya Kishnani, MD, MBBS, resulted in the first FDA-approved treatment for Pompe disease, a rare genetic disease in infants that, untreated, is usually fatal before their first birthday. Today, Kishnani and colleagues are carrying on this pioneering work for families affected by Pompe disease.

## 2019

Chantell Evans, PhD

CHRIS HILDRETH

A $100 million award from The Duke Endowment fueled the launch of Duke Science and Technology (DST), accelerating the recruitment of leading scholars in the sciences. In the School of Medicine, DST Scholars are forging the future in fields including cancer, neuroscience, and immunobiology.

## 2012, 2015

To date, two Duke University faculty have won Nobel Prizes while they were active faculty members — both of them basic researchers in the School of Medicine. Robert J. Lefkowitz, MD, shared the 2012 Nobel with his former postdoc **Brian K. Kobilka, MD, HS'84-'87,** for their work on g-protein coupled receptors. Paul L. Modrich, PhD, won the prize in 2015 for his work on DNA mismatch repair.

JON GARDINER

## 1936

J. Deryl Hart, MD, chair of the Department of Surgery and later president of Duke University, identified airborne bacteria as the cause of high rates of post-operative staph infections. He devised and tested a disinfection system using ultraviolet light in the operating room, with dramatic results: infection rates and deaths plummeted.

## 1980

Duke medical operations began a sustained period of enormous growth with the opening of the new Duke University Hospital in 1980 under the leadership of **William G. Anlyan, MD, HS'49-'55.**

## 2023

Duke Health enacted a historic realignment by establishing the Duke Health Integrated Practice. The new model brings the clinical practice, which previously operated as a separate for-profit enterprise, into alignment with the research, education, and community partnership missions, creating a unified, integrated academic health system that will better serve patients, communities, faculty, and staff.

## 1930

Duke University Hospital opened to patients, with four floors and 416 patient beds, along with an outpatient clinic, operating rooms, and a teaching amphitheater. In addition to treating patients directly, the School of Medicine and hospital prepared hundreds of physicians, nurses, and other providers who staffed clinics, hospitals, and practices across North Carolina.

DUKE UNIVERSITY MEDICAL CENTER ARCHIVES

On Monday, July 21, 1930, the brand-new Duke University Hospital opened its doors to patients. Seventeen people came in for treatment: five cared for in the outpatient clinic and 12 admitted to the hospital.

That modest pace escalated rapidly. During its first decade, the hospital admitted over 144,000 inpatients and saw nearly half a million outpatient visits.

The acute demand was no surprise: indeed, it was the impetus for building the medical center in the first place. The need to improve health care in North Carolina was what drove the founders to include a hospital and schools of medicine and nursing in their plans for the university.

The degree to which they succeeded is evident in the remarkable growth in scope and impact that have turned a regional hospital into one of the nation's premier health care institutions.

Every decade has seen bold expansions in Duke's patient care operations. These include a dramatic growth in physical clinical space, not only on the central medical campus but across North Carolina. They include life-changing programs such as Duke Cancer Institute and the Hudson Eye Center. And they include groundbreaking clinical advances, from revolutionary improvements in surgical safety in the 1930s to an astonishing succession of heart transplant breakthroughs in the early years of the 2020s.

From its modest beginnings, what is now known as the Duke University Health System operates three full-service hospitals providing state-of-the-art care, with over 67,000 inpatient stays and nearly 5 million outpatient visits per year, as well as a broad network of primary and specialty care clinics and other services. Across that comprehensive network, Duke providers put the patient at the forefront of everything they do.



# Patient Care

## 1942

Duke met the urgent need for medical expertise during World War II by establishing the Duke 65th General Hospital in Suffolk, England. Staffed entirely by Duke faculty, alumni, and trainees, the 65th cared for sick and wounded Allied soldiers and airmen. The hospital treated some 17,250 patients, many of them with severe injuries, with an astonishingly low mortality rate of 0.4%. "The entire country has good reason to be proud of the fine work" the Duke team contributed to the war effort, said U.S. Surgeon General Norman T. Kirk. "Faithful effort put in by the 65th on apparently hopeless cases has resulted in saving many lives."

DUKE UNIVERSITY MEDICAL CENTER ARCHIVES

## 2014

A Duke surgical team implanted North Carolina's first "bionic eye," a retinal device based on research done at the Duke Eye Center. The procedure enabled the patient, Larry Hester, to see for the first time in 33 years.

SHAWN ROCCO

SHAWN ROCCO

## 2020

Duke became a national model for its effective response to the COVID-19 pandemic: providing exceptional patient care, delivering vaccinations, innovating new ways to teach and learn, and conducting surveillance testing and other measures to address public health while keeping faculty, staff, and students safe.

SHAWN ROCCO

## 2024

Duke's Centennial Celebration featured young Easton Sinnamon, recipient of the world's first combined heart transplant–thymus procedure, performed by Duke surgeon **Joseph Turek, MD, HS'02-'10, MBA'20,** in 2022. It was one of a series of breakthrough transplant procedures at Duke, one of the nation's leading transplant centers.

Duke CENTENNIAL 100

# Community Partnership

Until relatively recently, Duke University School of Medicine listed three official core missions: research, education, and patient care. After **Mary E. Klotman, BS'76, MD'80, HS'80-'85,** was appointed dean of the School of Medicine in 2017, she added a fourth: community partnership.

In practice, the School of Medicine has been deeply interwoven with the local community all along. Local residents built the school and university buildings, and they are the heart of the skilled and dedicated staff that powers the Duke Health enterprise. Duke is the largest employer in Durham and the second-largest private employer in North Carolina. Some 85% of Durham residents have received health care at Duke.

Duke's community engagements include partnerships with schools, churches, community institutions, and individuals. These collaborations promote health and wellness at the grassroots level by providing opportunities for connection, education, and support to individuals and families where they live, work, and play.

The School of Medicine's community partnerships enrich all the school's other missions. They help bridge gaps, foster communications, and build trust between the health care system and the people. They help train the next generation of health care professionals; through service-learning programs, volunteer opportunities, and community-based projects, students gain first-hand experience working with diverse populations and addressing social determinants of health. These immersive learning experiences broaden students' perspectives and cultivate empathy, cultural competence, and a deep commitment to communities.

> "Duke and Durham have a unique and mutually beneficial relationship. To be an effective provider of health care, we must be in partnership with the people we serve."
>
> – Mary E. Klotman, BS'76, MD'80, HS'80-'85

Most importantly, community partnerships improve health and save lives. In just the last two years, for example, a concerted community-engaged initiative by the Duke Department of Obstetrics and Gynecology has brought maternal morbidity in Durham County down by 40%, and by nearly 50% among Black patients.

By elevating community partnership to a core mission, the School of Medicine advances its overall goal of continually creating better ways to conduct research, teach and train, and deliver health care.


MURAL BY MAX DOWALE


## 1971

**Charles DeWitt Watts, MD, the first board-certified Black surgeon in North Carolina, founded the Lincoln Community Health Center in Durham and named Evelyn Schmidt, BS'47, MD'51, its first director. Schmidt collaborated with Samuel Katz, MD, Duke's chair of pediatrics, on a residency program that marked the beginning of an enduring partnership between Lincoln and Duke.**

LES TODD

## 2019

**Students and administrators created the Holton Leadership Elective, a course that gets students into the community to see patients at the Holton Wellness Center.**

## 2023

**A new mural at Duke Research @ Pickett Road symbolizes its role as a research site in, and for, the Durham community. The facility promotes integrated research and increases community engagement and diversity in clinical research populations.**



THE DEANS

## Ralph Snyderman, MD, HS'65-'67

# SYNERGIZING RESOURCES

**Ralph Snyderman, MD, HS'65-'67,** is chancellor emeritus of Duke University and James B. Duke Distinguished Professor of Medicine. He was dean of the School of Medicine from 1989-1999 and chancellor for health affairs from 1989-2004. He currently serves as executive director of the Duke Center for Personalized Health Care.

### What were your biggest priorities as chancellor and dean?

When I assumed the position of dean of the School of Medicine and chancellor for health affairs at Duke, I had little experience in large-scale academic administration. My first priority was to understand the complex organization and help it fulfill its potential to be a leading institution. The medical school was already outstanding, so my initial focus was to enhance the research enterprise and to better understand the opportunities and threats facing us. I hoped that during my tenure, Duke would obtain its full capabilities to provide national and international leadership in education, research, and clinical care.

### What was your biggest challenge?

Early on, I realized that I needed to fully understand the medical center in all its complexity. I met with faculty, students, and employees in each department and began learning the institution's operational and financial relationships. I learned that the economic viability of the medical center, and indeed the university, depended on the clinical performance of the faculty practice and hospital. The development of managed care and HMOs threatened the sustainability of the medical center. Addressing the rapidly changing clinical landscape became a high priority, since virtually all the other components depended upon our clinical operations. We needed to move from a specialty-driven clinical practice to one that enabled Duke to provide a full range of services to a large population. This required a major re-examination of our clinical structure and operations that ultimately led to the creation of the Duke University Health System, which positioned Duke as one of the nation's most highly innovative and important academic health centers.

In research, it was important to enhance our basic sciences. We brought in outstanding new departmental chairs and raised funds to recruit dozens of high-potential research faculty, many of whom became prominent leaders in their fields. Our strength in clinical research allowed us, with the leadership of Dr. Robert Califf, to create the Duke Clinical Research Institute, the world's largest academic clinical research institution.

Our School of Medicine was already highly innovative and outstanding. We needed to enable the School of Nursing to evolve into a leading specialty training institution, to create a new Master of Health Sciences track to support an evolving clinical research landscape, and to develop an international presence with the Duke-NUS Medical School in Singapore.

*Continued on page 12*

WILLIAM DENI MCINTYRE

**COMING IN THE FALL ISSUE:**
Deans Sandy Williams, Nancy Andrews, and Mary Klotman

*Continued from page* 11

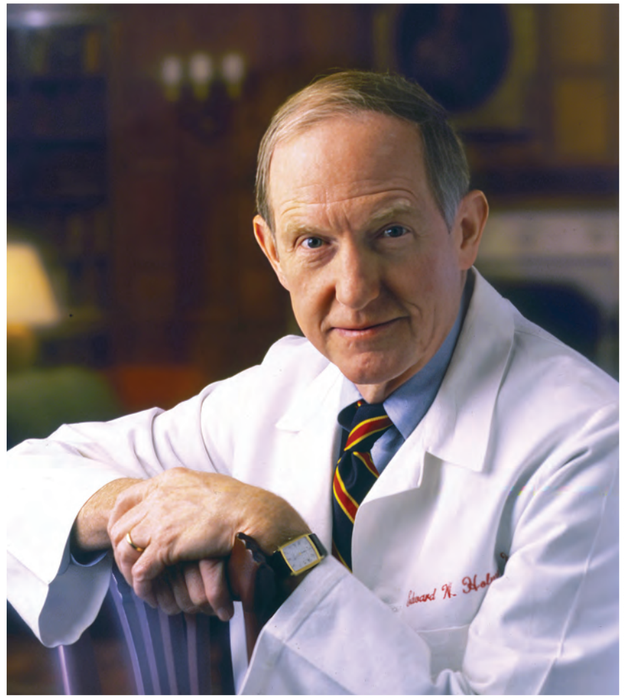
### Looking back, what is the thing you're most proud of?

I am most proud that during my tenure Duke became one of the most highly recognized academic medical institutions in the world. In addition to the Duke University Health System, we created the Duke Clinical Research Institute, one of the largest academic biomedical research enterprises, a leading School of Medicine, an innovative and growing Graduate School of Nursing, and a satellite international School of Medicine in Singapore. New approaches to health care, including personalized/precision medicine, originated at Duke and are now prominent forces in health care delivery.

These accomplishments are due to the quality, energy, vision, and collaboration of so many who not only love Duke but are compelled to improve the health of all. The ability of many individuals and entities to come together for the good of the institution and society gives me great satisfaction and pride. I had the opportunity to work with many outstanding people and make lasting friendships that continue to sustain me. Together, we envisioned and created new models of education, research, clinical care, and approaches to better health for all. We were recognized as the place for innovation in medicine and health care. This heritage has continued to grow in magnitude and excellence.

### What sets Duke apart, then and now?

Duke's distinction is the same now as it was then: outstanding and dedicated individuals who are committed to excellence in all they do, who value innovation, and who truly love Duke. Our institution is unique in that it not only appreciates the contributions of each individual but also is guided by the higher principle of synergizing all its resources to improve health. Most academic institutions have three core missions: education, research, and clinical care. At Duke, we created an overarching mission: to apply the core missions to improve the health of all.



DUKE UNIVERSITY MEDICAL CENTER ARCHIVES

**THE DEANS**

## Edward W. Holmes, MD, HS'70-'71, HS'73-'74

# HITTING ON ALL CYLINDERS

**Edward W. Holmes, MD, HS'70-'71, HS'73-'74,** served as vice chancellor for academic affairs and dean of the School of Medicine from 1999-2000. Prior to that, he was a Howard Hughes Medical Institute Investigator, James Wyngaarden Professor of Medicine, and chief of the Division of Metabolism, Endocrinology, and Genetics. He is CEO and president of the Sanford Consortium for Regenerative Medicine, vice chancellor and dean emeritus of University of California San Diego Health Sciences, and Distinguished Professor at the University of California.

### What were your main priorities when you were dean?

My main priorities centered on ways to make 1 + 1 + 1 — the clinical, research, and educational programs — be greater than three. Collaboration intrigued me the most, and I wanted to build deeper, more effective collaborations across not only the health system but also across the rest of campus. I thought that developing programs that encouraged and supported all of us working together would be more productive than any one of us working alone. This led to forming the Institute for Genome Sciences and Policy (IGSP).

### What were your biggest challenges? What was most fulfilling?

My biggest challenge was also my greatest fulfillment. When I arrived in the late 1990s, the Human Genome Project was just coming to fruition. Shortly after that, the sequence of the human genome was announced, and I think everybody recognized this was going to lead to a revolution in health care, education, and the way we did research. When I arrived at Duke, Chancellor Ralph Snyderman had already laid out the vision for IGSP and begun work on putting this program together. I decided to concentrate my effort on this project and help Duke to become a leader in genome sciences.

Provost Peter Lange was supportive of the health sciences and the rest of campus working together. With the help of hands-on people like Joe Nevins, Lange, and Elizabeth Kiss in the social sciences programs, and the guidance of Ralph, we put together a trans-campus institute, which became the IGSP.

We wanted to bring together basic sciences and clinical research. We knew educational programs would have to adapt to this new program, and there would also be many policy issues related to sequencing someone's genome. The addition of social sciences into IGSP allowed us to address policy and social science. In turn, there were a number of conferences that brought together people from across campus and beyond that shaped our thinking on what IGSP might be. The outcome of all these discussions was the IGSP.

### What distinguishes Duke from its peer institutions?

Duke University School of Medicine has excelled in bringing together the three components of the tripartite mission, which are the clinical, research, and education missions. Duke was a trailblazer in launching a novel curriculum. It has always been one of the leading clinical research centers in the world. The health sciences and main campus have an outstanding reputation in the basic sciences. Many institutions excel in one or two areas. Few excel in all three objectives of the tripartite mission.

At the core of this success is people. Duke has been very good at recruiting and retaining outstanding people.

### What will be the keys to continuing to succeed in science and health care?

New technology seems to come with each decade and reshapes the way we do things. The institutions that thrive in the future will be ones that embrace new technologies and integrate them in an effective way. The institutions that succeed will be those that are open-minded and willing to train and recruit the new people needed to embrace and adopt these new opportunities.





# Making a House a Home

## Student Group Fills Gap for Those Experiencing Homelessness

*By Bernadette Gillis*

A program led by Duke University School of Medicine students is helping people who have a history of homelessness make the transition to stable housing easier. In the process, the students are gaining a better understanding of the impact housing can have on health.

The WellNest Housing Support Program offers newly housed individuals support on the day of their move and, in some cases, well beyond. The idea for the program came about in 2019 when the Durham County Community Health Assessment identified affordable housing and homelessness as the top community health priorities. Fourth-year medical student **Tamar Chukrun** and a few fellow students talked with local organizations and discovered an existing gap in supporting unhoused individuals.

"We put resources into helping people find housing," said Chukrun. "But then when it comes to the move-in, there are not as many resources to help people pack up their belongings, move them, get furniture, and settle into their space. Students could help fill that gap."

When WellNest officially started in 2020, the program had about 10 volunteers from the School of Medicine. It has since grown to a group of more than 100 volunteers, including graduate, professional, and undergraduate students from across Duke. Durham community members, Duke employees, and students from UNC-Chapel Hill have also volunteered.

WellNest receives referrals mainly from two nonprofit organizations, Durham Homeless Care Transitions and the Community Empowerment Fund.

The students, who call the individuals they help "neighbors," plan the neighbor's move, including renting a moving truck, sourcing furniture for the new home through community donations, and recruiting volunteers to help with the move-in.

"People who are experiencing homelessness or are temporarily unhoused come from all kinds of backgrounds," said **Trisha Dalapati,** an MD/PhD student and one of WellNest's founders. "They are truly our neighbors."

Since spring 2020, WellNest has supported more than 40 Durham and Chapel Hill community members in their moves. The program's motto is, "Building a community where every neighbor feels at home."

LES TODD

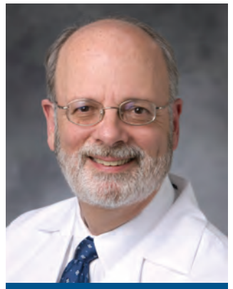
Medical student volunteers with the WellNest Housing Support Program help a neighbor move into a new home.

As future providers, many of the WellNest student volunteers are getting a better perspective of the impact homelessness can have on a patient's health. They are also learning about the barriers to care that unhoused patients can encounter, such as lack of transportation, which can make it hard to get to medical appointments or pick up prescriptions.

"If there's black mold in someone's apartment or a person with diabetes doesn't have a fridge to store insulin, those are very clear connections between housing and health," said **Maddie Brown,** a third-year medical student and a program manager for WellNest.

LIFETIME ACHIEVEMENT AWARD

## Barton F. Haynes, MD, HS'73-'75



**EDUCATION:** Baylor College of Medicine

**HOUSE STAFF TRAINING:** Duke University School of Medicine

**FELLOWSHIP TRAINING:** National Institutes of Health, NIAID, Laboratory of Clinical Investigation

**PRIMARY TITLES:** Frederic M. Hanes Distinguished Professor of Medicine; Director, Duke Human Vaccine Institute

**Barton F. Haynes, MD, HS'73-'75,** is the Frederic M. Hanes Distinguished Professor of Medicine, professor of integrative immunology and global health and, for 34 years, director of the Duke Human Vaccine Institute (DHVI). He is an internationally recognized researcher who has expanded our understanding of fundamental immune regulation and its role in disease pathogenesis and vaccine development. Haynes's early work on the biology of the thymus led to discoveries with **Louise Markert, PhD'81, MD'82, HS'82-'87,** that enabled successful thymus transplantation in children born without a thymus.

Haynes has worked for four decades on developing a vaccine for HIV and has received three large grants from the National Institutes of Health, known as the Center for HIV/AIDS Vaccine Immunology series of grants. His current research investigates the role of antibodies in protection from HIV infection.

Haynes and his team have also worked to develop coronavirus vaccines and therapeutics to combat the COVID-19 pandemic. DHVI teams are developing novel approaches to tuberculosis control and helping to develop a "universal" flu vaccine.

Previous positions at Duke include chief of the Division of Rheumatology and Immunology, chair of the Department of Medicine, and chief of staff at Duke Hospital. Honors include the Alexander Fleming Award from the Infectious Disease Society of America; the Lee Howley Prize from the Arthritis Foundation; the Ralph Steinman Award for Human Immunology Research from the American Association of Immunology; the Duke University Diversity Award for Commitment to Improving Ethnic and Gender Diversity; and election to the National Academy of Medicine, National Academy of Inventors, and the American Academy of Arts and Sciences.

"In recognition of his lifetime contributions in science and leadership that have contributed significantly to the fields of T-cell immunology, retrovirology, and HIV, Dr. Haynes is beyond deserving of this award."

–NOMINATION LETTER

DISTINGUISHED ALUMNI AWARD

## Denise J. Jamieson, MD'92, MPH

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

**PRIMARY TITLES:** Vice President for Medical Affairs, University of Iowa; Tyrone D. Artz Dean, Roy J. and Lucille A. Carver College of Medicine

**Denise J. Jamieson, MD'92, MPH,** is vice president for medical affairs and dean of the Carver College of Medicine at the University of Iowa. She previously served as chair of the Department of Gynecology and Obstetrics at the Emory University School of Medicine and chief of gynecology and obstetrics for Emory Healthcare.

Jamieson is universally known and admired for her work to advance global maternal child health at the U.S. Centers for Disease Control and Prevention, where she rose to leadership positions culminating in chief of the Women's Health and Fertility Branch in the Division of Reproductive Health.

Her scientific work focuses on emerging infectious diseases in pregnancy, as well as maternal immunization. She has conducted landmark research and led efforts to reduce infectious diseases in women.

She served as a lieutenant, lieutenant commander, commander, and captain in the United States Public Health Service and was awarded the Distinguished Service Medal, the highest award granted to an officer in the Commissioned Corps, for "notable contributions to reproductive health and public health practice."

For nearly two decades, she continuously held leadership positions on multiple American College of Obstetricians and Gynecologists committees. She is a member of the National Academy of Medicine and has received honors including the David E. Rogers Award from the Robert Wood Foundation and the AAMC, the Luella Klein Lifetime Achievement Award from the American College of Obstetricians and Gynecologists, the Charles Shepard Science Award in Prevention and Control (twice) from the CDC, and the U.S. Commissioned Corps Outstanding Service Medal.

"An entire generation of OB/GYNs has turned to Denise Jamieson's contributions to our specialty as a trusted voice of integrity and source of vital information to guide our practices."

–NOMINATION LETTER



2024 Duke Medical Alumni Association Awardees

DISTINGUISHED ALUMNI AWARD

## Emily Wang, MD'03

**EDUCATION:** Duke University School of Medicine

**TRAINING:** University of California; University of California, San Francisco

**PRIMARY TITLES:** Professor of Medicine and of Public Health, Yale School of Medicine; Director, SEICHE Center for Health and Justice

**Emily Wang, MD'03,** is a professor of internal medicine and public health at Yale School of Medicine and Yale School of Public Health. She is an internationally recognized physician scientist and leader in the field of the health effects of mass incarceration.

Wang is the founding and current director of the SEICHE Center for Health and Justice, a partnership of Yale University School of Medicine and Yale Law School, committed to achieving health equity by ending mass incarceration. The Center works to identify the legal, policy, and practice levers that can improve the health of individuals and communities affected by mass incarceration. She is the co-founder of the Transitions Clinic Network (TCN), the nation's largest network of health centers dedicated to caring for individuals recently released from carceral facilities by employing community health workers with histories of incarceration. TCN is committed to reversing the harms of mass incarceration by eliminating racial health and economic disparities directly through the provision of care and health system-level transformation.

She is the recipient of a 2022 MacArthur Fellowship, commonly known as a "Genius Grant." During the COVID-19 pandemic, she served as co-chair for the National Academy of Sciences, Engineering, and Medicine's committee on "Best Practices for Implementing Decarceration as a Strategy for Preventing the Spread of COVID-19 in Correctional Facilities." She currently serves on the World Health Organization's Health in Prisons Programme Steering Committee and recently co-led a curriculum for European prison health providers. In 2023, she was elected to the National Academy of Medicine.

"I am inspired by her journey and her commitment to serve and advocate for social justice and health equity among a community of people who have experienced marginalization."

–NOMINATION LETTER

DISTINGUISHED FACULTY AWARD

## Kenneth Poss, PhD

**EDUCATION:** Massachusetts Institute of Technology

**PRIMARY TITLES:** James B. Duke Professor of Regenerative Biology, Duke University School of Medicine

**Kenneth Poss, PhD,** is the James B. Duke Distinguished Professor of Regenerative Biology in the Department of Cell Biology at Duke University School of Medicine. He is director of the Duke Regeneration Center and also holds appointments in the Department of Medicine and the Department of Biology.

Poss is a groundbreaking leader in the field of regeneration, the biological process by which body parts regrow after injury or amputation. His work on regeneration in non-human vertebrates is a key driver of research to develop regenerative clinical applications. His pioneering research using zebrafish as a model organism has shed important light on the molecular, cellular, and genetic mechanisms that underlie tissue regeneration. His elucidation of the processes by which zebrafish can regenerate heart muscle has informed the field of cardiac repair in humans, and he was the first to identify novel roles of the epicardium in cardiac repair.

Poss is the founding president of the International Society of Regenerative Biology, which provides an inclusive and integrated community of scientists to advance awareness, discoveries, and applications of regenerative biology. He founded the Regeneration Next Initiative at Duke, a multidisciplinary program formed to harness the potential of regenerative medicine across the university, and he is the current head of the Duke Regeneration Center, which brings faculty, trainees, and staff together to advance education, discovery science, translational research, and development of therapies.

His honors include the NHLBI Outstanding Investigator Award, the Early Career Scientist Award by the Howard Hughes Medical Institute, the Merit Award by the American Heart Association, and a Pew Scholar in the Biomedical Sciences.

"The regeneration field has grown in no small part from Ken's introduction of what to study, fundamentals of how it works, and tools for new questions."

–NOMINATION LETTER

# 2024 Duke Medical Alumni Association Awardees

TRANSFORMATIONAL LEADERSHIP AWARD

## N. Anthony Coles, MD'86, MPH

**EDUCATION:** Johns Hopkins; Duke University School of Medicine; Harvard University

**TRAINING:** Massachusetts General Hospital; Harvard Medical School

**PRIMARY TITLE:** Chair, Board of Directors, Cerevel Therapeutics

**N. Anthony Coles, MD'86, MPH,** has served since 2018 as chair of the board of directors for Cerevel Therapeutics, a company dedicated to unraveling the mysteries of the brain to treat neurological diseases. He was CEO of Cerevel from September 2019 to June 2023.

Coles is a pioneering leader who has founded and led important pharmaceutical and biotech companies that aim to improve the lives of millions.

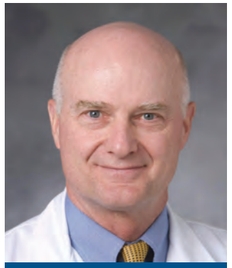
He co-founded and served as chair and CEO of Yumanity Therapeutics, a biotechnology company focused on transforming drug discovery for neurodegenerative diseases. He is chair and CEO of TRATE Enterprises, a privately-held company, and has held leadership positions at top global pharmaceutical companies, including serving as president, CEO, and chair of the board of Onyx Pharmaceuticals, Inc.; president, CEO, and member of the board of directors at NPS Pharmaceuticals, Inc.; and senior vice president of commercial operations at Vertex Pharmaceuticals, Inc. Earlier, he held executive positions at Bristol-Myers Squibb and Merck & Co, Inc. He is a former director of CRISPR Therapeutics AG; Laboratory Corporation of America Holdings; Campus Crest Communities, Inc.; and McKesson Corporation.

Coles currently serves on the board of directors of Regeneron Pharmaceuticals, Inc. He is the council chair for the Smithsonian Museum of African American History and Culture; a member of the Board of Trustees of the Metropolitan Museum of Art; and a member of the board of directors on the Council on Foreign Relations. He is the co-founder and co-chairman of the Black Economic Alliance. He has served on the Harvard Medical School Board of Fellows. He was inducted into the American Academy of Arts & Sciences in 2022.

> "Dr. Coles' impact has been transformational across civic life. He has served as an independent trustee and director of organizations at the heart of American innovation."
>
> –NOMINATION LETTER

DISTINGUISHED SERVICE AWARD

## Gregory Georgiade, MD'74, HS'73-'80



**EDUCATION:** Duke University School of Medicine

**TRAINING:** Duke University School of Medicine

**PRIMARY TITLES:** Professor of Surgery, Duke University School of Medicine

**Gregory Georgiade, MD'74, HS'73-'80,** is a professor in the Division of Plastic, Maxillofacial, and Oral Surgery in the Department of Surgery at Duke University School of Medicine.

Georgiade has served Duke continuously for 50 years in numerous capacities, from working as an undergraduate scrub assistant in the operating room to holding leadership roles in the Department of Surgery. He served as chief of the Division of Plastic, Maxillofacial, and Oral Surgery and vice chair of clinical operations in the Department of Surgery.

Georgiade is known for his meticulous technical abilities in a broad array of surgical fields, including oncologic and reconstructive breast cancer surgery, general surgery, trauma surgery, maxillofacial surgery, and cleft lip and palate surgery. He revolutionized the practice of breast reconstruction and helped pioneer the current practice of immediate breast reconstruction for women with breast cancer requiring mastectomy.

In 1985, he helped establish Duke Life Flight—the first hospital-based transport service in North Carolina — and remains medical director of that program. He has led numerous critical hospital systems, including perioperative services and the Duke Transfer Center. He led the creation of the Duke Aesthetic Center and has served as vice-chairman for finance for the Department of Surgery. He has trained many students and residents and was named a Master Surgeon, the Department of Surgery's highest honor. He has written more than 80 publications in major journals, as well as more than 50 book chapters. He has edited four major textbooks on plastic surgery, including "Georgiade Plastic, Maxillofacial, and Reconstructive Surgery."

> "Greg Georgiade is a human embodiment of 'Duke Stone': he is strong, difficult to break, unique, and rare."
>
> –NOMINATION LETTER





## ARPA-H Funds Osteoarthritis Collaboration

Duke Health is part of a multi-institution research team that was awarded up to $33 million from the federal Advanced Research Projects Agency for Health (ARPA-H) to develop an osteoarthritis treatment that regenerates joints.

The team, which includes researchers from Boston Children's Hospital and the David Geffen School of Medicine at UCLA, will base its proposed new therapy on recent evidence that joint tissues can heal.

ARPA-H is a federal agency established to advance high-potential, high-impact biomedical and health research that cannot be readily accomplished through traditional research or commercial activity.

## Duke-Margolis Elevated to Institute Status

Duke University has elevated the former Duke-Margolis Center for Health Policy to the Duke-Margolis Institute for Health Policy.

The Duke-Margolis Institute for Health Policy is committed to improving health, health equity, and the value of health care through practical, innovative, and evidence-based policy solutions.

Founded in 2016 through a generous gift from **Robert Margolis, MD'71, HS'70-'72**, and Lisa Margolis and the Margolis Family Foundation, Duke-Margolis implements programs in health policy education, research, and innovation that involve ongoing partnerships with experts across the university and health system, and with diverse experts and stakeholders beyond Duke.

## World's First Partial Heart Transplant Proves Successful in First Year

The world's first partial heart transplant has achieved what researchers hoped for: functioning valves and arteries that grow along with the young patient, just as planned by the pioneering team behind the procedure at Duke Health.

The procedure was performed in the spring of 2022 in an infant who needed heart valve replacement. The previous standard of care used valves that were non-living and would not grow along with the child, requiring frequent replacement through surgical procedures that carry a 50% mortality rate.

A study led by Duke Health physicians, appearing online in the Journal of the American Medical Association, found that the patient has two well-functioning valves and arteries that are growing in concert with the child as if they were native vessels.

SHAWN ROCCO

Debra Clark Jones, associate vice president for community health at Duke Health, announces the new Health Sciences Early College at a press conference in January 2024.

## Bloomberg Grant Funds Innovative Early College Partnership

A partnership between Duke Health, Durham Technical Community College, and Durham Public Schools was awarded a $29.5 million grant from Bloomberg Philanthropies to establish an early college for high school students interested in pursuing health care careers upon graduation.

The grant was one of 10 awarded nationally through Bloomberg Philanthropies' "Student-centered, Market-driven Healthcare Education Initiative." The Durham partnership will provide the preparation needed for careers in nursing, allied health, surgical tech, and clinical research. Students in the program will simultaneously earn both a high school diploma and an associate degree or workforce credential for aligned health care occupations.

Upon graduation, students will have an immediate pathway to jobs or research roles at Duke Health.

The program is expected to open in the fall of 2025.

## School of Medicine 7th in NIH Funding

Duke University School of Medicine rose to seventh place in the most recent Blue Ridge Institute for Medical Research ranking based on its National Institutes of Health funding, which grew to $551 million.

Duke University ranked fifth in total grants and research and development contracts from the NIH, garnering $701 million.

Nine clinical science departments and two basic science departments in the School of Medicine placed among the top 10 in the country:

- **1st Pediatrics**
- **1st Orthopedics**
- **1st Surgery**
- **3rd Anesthesiology**
- **5th Pharmacology**
- **6th Internal Medicine**
- **7th Neurosurgery**
- **7th Ophthalmology**
- **9th Family Medicine**
- **10th Psychiatry**
- **10th Genetics**

## Gift Launches Heart Innovation Hub

Bob Keegan has made a transformational gift to kick-start the new Duke Heart Precision and Innovation Collaboratory, headed by **Manesh Patel, MD, HS'97-'06,** chief of the Division of Cardiology in the Department of Medicine at Duke University School of Medicine.

Manesh Patel and Bob Keegan

Keegan serves as the chair of the Duke Heart Leadership Council, and he contributed the first $1.5 million toward the Duke Heart Precision and Innovation Collaboratory's $10 million fundraising goal.

The Duke Heart Precision and Innovation Collaboratory aims to improve cardiovascular health worldwide with a comprehensive, long-range, and multi-phased team approach. Phase 1 will identify promising discoveries in precision genomics, device innovations, and human performance. Phase 2 will scale those discoveries to launch clinical trials, research grants, and new treatment options.

Gifts for early-stage or high-impact research can leverage much larger follow-on funding capable of propelling preliminary discoveries into exciting new therapies.

## Planned Gift Reflects Deep Connection to Duke

**Krista Patterson, AB'03, JD'06, LLM'06,** and **Jonathan Wigser, MBA'94,** have deep ties to Duke. Between them, they hold four Duke degrees and have served on five councils and boards. They even got engaged and married at Duke.

Krista Patterson and Jonathan Wigser

Now the couple has made a planned gift commitment of their estate to be split equally between the School of Medicine, Duke Cancer Institute (DCI), Duke Children's, and Fuqua School of Business.

Wigser has served on the DCI Board of Advisors since 2010 and chaired it from 2017 to 2022. In honor of his service, leadership, and commitment, he was presented with the William W. Shingleton Award in 2021. The award recognizes the outstanding service and generosity of individuals committed to advancing the fight against cancer.

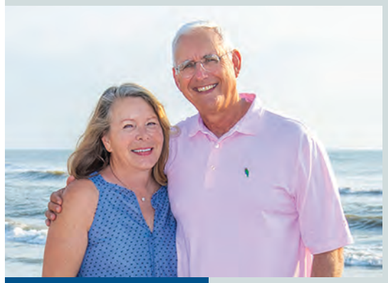
He serves on the School of Medicine Board of Visitors in addition to DCI's Board of Advisors. He has also served on the Fuqua Alumni Council and Board of Visitors.

Patterson has volunteered at the Ronald McDonald House and now serves on Duke Children's National Leadership Council.

*For more information on how to give to Duke Health, visit:* giving.dukehealth.org/

## The Gift of Sight Paid Forward

Mark and Wendy Stavish were so impressed with the clinical and surgical care Mark received from Lejla Vajzovic, MD, a Duke ophthalmologist and vitreoretinal surgeon, that they made a $1 million gift to support her research.



Wendy and Mark Stavish

Their gift provides two years of research support for Vajzovic's work using state-of-the-art imaging and machine learning analysis for the early diagnosis and treatment of pediatric retinal disease. Early diagnosis can be the key to saving a child's vision.

Vajzovic performed emergency surgery to reattach Mark's retina in 2022. That surgery and two follow-up surgeries restored Mark's vision to close to 20/20.

## Anonymous Gift Supports Heart Transplant Patients

A $1.5 million legacy gift from an anonymous family will help support Duke Heart transplant patients.

The donors have directed their gift to help with the financial challenges families undergoing transplant face. Their generosity will help transplant patients and families who face stresses beyond immediate medical care: transportation, lodging, family care, and so on.

Over the last two years, Duke has performed more heart transplants than any other center in the world, helping patients from 10 different states.





## Study Reveals Insights into Kidney Disease in African Americans

Duke Health researchers have detailed how two common gene variants among African Americans can cause kidney failure. The finding, reported in the Journal of Clinical Investigation, could point to new therapeutic approaches.

African Americans develop end-stage kidney disease at four times the rate of white Americans. Two variants in the APOL1 gene, which arose 5,000 years ago in West Africa, are known risk factors for kidney disease.

Today, 13% of African Americans carry these two gene variants. Approximately 20% of them will develop kidney disease.

Lead author Opeyemi Olabisi, MD, PhD, associate professor of medicine, and colleagues found that APOL1 G1 increases the flow of sodium into, and potassium out of, a type of cell in the kidney called the podocyte, triggering a series of events that damages the kidney.

The researchers found that an investigational molecule reduces the damage by blocking the function of the APOL1 protein.

## New Model Unveils Patterns in Alzheimer's Progression

A new mathematical model offers hope for better prediction and treatment of Alzheimer's disease.

Researchers at Duke University School of Medicine and Pennsylvania State University used real-world data from over 800 people with varying cognitive abilities to develop the Alzheimer's Disease Biomarker Cascade model.

This personalized approach, published in the Journal of the Prevention of Alzheimer's Disease, analyzes participants' cerebrospinal fluid, brain scans, and memory tests to find unique patterns in each individual. The model was able to predict with surprising accuracy how these markers might change in the future for a particular patient.

Researchers say the model opens doors for reclassifying individuals along the Alzheimer's clinical spectrum and tailoring treatment strategies.

## Palliative Care Eases Symptoms After Bone Marrow Transplant

A study co-led by Duke Health researchers found that palliative care significantly improves a patient's quality of life and eases symptoms during hospitalization for bone marrow transplant.

LeBlanc

Co-investigator **Thomas LeBlanc, AM'05, MD'06, HS'06-'13, MHS'16,** chief patient experience and safety officer for the Duke Cancer Institute, and colleagues enrolled 360 patients at three transplant centers.

Patients receiving a palliative care intervention reported better quality of life and lower depression, PTSD, and fatigue symptoms compared to those receiving usual care. Anxiety did not differ significantly between the two groups; however, caregivers of patients receiving palliative care had reduced anxiety symptoms.

## Tumor Biology May Underlie Differences in Breast Cancer Outcomes

Regardless of socioeconomic factors and tumor variables, Black women with triple negative breast cancer (TNBC) have a significantly poorer response to chemotherapy than white women, Duke researchers report.

The finding, appearing in the Journal of Clinical Oncology, suggests that this type of aggressive cancer may not be the same tumor in all patients.

DiNome

TNBC tumors appear to respond differently to chemotherapy in women of different races and ethnicities, said senior author **Maggie DiNome, MD'94,** chief of the Section of Breast Surgery in the Department of Surgery.

Historically, Black women develop TNBC at higher rates and have worse survival outcomes than white women. Overall, the researchers found that chemotherapy completely eradicated TNBC tumors in 29.8% of cases, but there were significant racial/ethnic differences in response rate. Response rates were 27% for Black women, compared to 30.5% in white women and 32.6% in Hispanic women.

## GPS-like Approach Shows Promise as HIV Vaccine Strategy

A team led by the Duke Human Vaccine Institute (DHVI) has developed a vaccine approach that works like a GPS, guiding the immune system through the specific steps to make broadly neutralizing antibodies against HIV.

Publishing in the journal Cell Host & Microbe, the study describes an approach that provides step-by-step directions for the immune system to generate the elusive yet necessary antibodies for a successful HIV vaccine.

The new approach potentially could allow researchers to design vaccines to direct the immune system to make any antibody they want, said lead author Kevin Wiehe, PhD, associate professor in the Department of Medicine at Duke University School of Medicine and director of research at DHVI.

## Tighe to Lead Climate Change Research Strategy

**Robert M. Tighe, MD, HS'06, HS'10,** has been appointed to lead the development of the School of Medicine's research strategy on the impact of climate change on health.

Tighe will be responsible for developing a coherent research strategy in consultation with relevant stakeholders within and outside the School of Medicine.

Tighe is an associate professor and chief of research in the Department of Medicine's Division of Pulmonary, Allergy, and Critical Care.

## Gerardo Named Chair of EM

**Charles (Chuck) J. Gerardo, MD, MHS'13,** is the new chair of the Department of Emergency Medicine in the School of Medicine.

Gerardo previously served as interim chair, starting in July 2022, when the former Division of Emergency Medicine in the Department of Surgery was elevated to department status. He earlier served as chief of the division.

During his time in the division and then the department, he has served in multiple leadership roles, including director of undergraduate medical education, director of the Emergency Medicine Global Health Program, and vice chief of clinical operations.

## Duckett, Li Named to AAAS

Two members of the Duke University School of Medicine faculty have been elected as 2023 fellows by the American Association for the Advancement of Science.

Elected from the School of Medicine were:

Colin S. Duckett, PhD, professor of pathology and vice dean for basic science, for distinguished contributions to the field of immune cell signaling and for distinguished service in academic administration.

Chuan-Yuan Li, DSc, adjunct professor of dermatology, for distinguished contributions to the field of radiation and cancer biology.

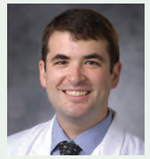
## Eroglu Elected to American Academy

Cagla Eroglu, PhD, Chancellor's Distinguished Professor of Cell Biology and vice chair of research in the Department of Cell Biology, was elected to the American Academy of Arts & Sciences for 2024.

Eroglu, who is also a professor of neurobiology and a Howard Hughes Medical Institute investigator, explores how central nervous system synapses are formed.

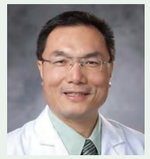
## Kirk Awarded Flance-Karl Award

**Allan D. Kirk, MD'87, HS'87-'95, PhD'92,** David C. Sabiston, Jr. Distinguished Professor, chair of the Department of Surgery, and surgeon-in-chief of the Duke University Health System, has been awarded the 2024 Flance-Karl Award by the American Surgical Association.


Robert M. Tighe


Charles J. Gerardo


Colin S. Duckett


Chuan-Yuan Li


Cagla Eroglu


Allan D. Kirk

The Flance-Karl Award recognizes a surgeon in the U.S. who has made a seminal contribution in basic laboratory research that has application to clinical surgery.

## Distinguished Professors Named

Twenty School of Medicine faculty members were honored with distinguished professorships at the annual ceremony on May 23.

Distinguished professorships are awarded to faculty who have demonstrated extraordinary scholarship in advancing science and improving human health.

The 2024 recipients from the School of Medicine are:

- Lisa Amaya-Jackson, MD, MPH: Michelle Winn, MD, Distinguished Professor
- Huiman Xie Barnhart, PhD: James B. Duke Distinguished Professor
- Chris Beyrer, MD, MPH: Gary Hock Distinguished Professor in Global Health
- **Kafui Dzirasa, PhD'07, MD'09, HS'10-'16:** A. Eugene and Marie Washington Presidential Distinguished Professor
- Simon Gregory, PhD: Margaret Harris and David Silverman Distinguished Professor
- **Christoph Hornik, MD, HS'08-'13, PhD, MPH:** Samuel L. Katz Distinguished Professor of Pediatrics
- **Kimberly S. Johnson, MD, HS'97-'02, MHS'05:** Brenda E. Armstrong, MD Distinguished Professor
- Hui-Kuan Lin, PhD: Fred and Janet Sanfilippo Distinguished Professor
- **Xunrong Luo, PhD'95, MD'98:** Boyce Haller Distinguished Professor in Nephrology
- **Michael Pignone, AB'88, MD, MPH:** Rebecca & John Kirkland Distinguished Professor
- Thomas Polascik, MD: Lawrence C. Katz Distinguished Professor
- Jonathan Posner, MD: J. P. Gibbons Distinguished Professor of Psychiatry
- **Kevin Saunders, PhD'10:** Norman L. Letvin, MD Distinguished Professor in Surgery and the Duke Human Vaccine Institute
- **Kevin Thomas, MD, HS'99-'03, HS'04-'07:** Donald F. Fortin, MD Distinguished Professor of Cardiology
- Georgia Tomaras, PhD: A. Geller Distinguished Professor for Research in Immunology
- Miriam Treggiari, MD, PhD, MPH: Paul G. Barash Distinguished Professor
- Qianben Wang, PhD: Banks Anderson, Sr. Distinguished Professor
- **Heather Whitson, MD, HS'00-'06, MHS'09:** Duke School of Medicine Distinguished Professor in Neuroscience
- **Kanecia Zimmerman, MD'07, HS'12-'15, MHS:** Wilburt C. Davison Distinguished Professor
- Lee Zou, PhD: George Barth Geller Distinguished Professor

## Faculty Receive Strong Start Awards

Six Duke University School of Medicine faculty members have been selected to receive 2024 Physician-Scientist "Strong Start" awards. The awards program, funded with a gift from the Nanaline H. Duke Fund, supports promising early career physician-scientists.

This year's recipients are:

- **Tarannum Jaleel, MD, MHS'19,** assistant professor of dermatology
- Neill Li, MD, assistant professor of orthopaedic surgery
- Justin Low, MD, PhD, medical instructor in the Department of Neurosurgery
- Sarah Nystrom, MD, assistant professor of medicine
- Mara Serbanescu, MD, assistant professor in anesthesiology
- **Aaron Vose, MD, HS'22,** medical instructor in the Department of Medicine

## PhD Students Honored with DARE Awards

Duke University School of Medicine celebrated exceptional graduate PhD students with Dean's Awards for Research Excellence (DARE) to honor their achievements in basic science research.

The 2023-24 DARE award recipients include:

- **Robin Blazing,** a doctoral candidate in the neurobiology lab of Kevin Franks, PhD.
- **Josh Ginzel,** a doctoral candidate in the cell biology laboratory of Joshua Snyder, PhD.
- **Duc Huynh, PhD,** a biochemistry graduate student mentored by Mike Boyce, PhD.
- **Shane Killarney,** a doctoral student in the Medical Scientist Training Program and the Molecular Cancer Biology program, mentored by Kris Wood, PhD.

## Four Elected to ASCI

Four Duke University School of Medicine faculty members are among the 100 researchers elected to the American Society for Clinical Investigations.

Elected to the society from the School of Medicine are:

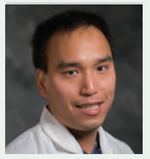
- **Miles Berger, MD, PhD, HS'11-'13,** associate professor of anesthesiology
- **Brent Hanks, MD, PhD, HS'06, HS'12,** associate professor of medicine


Tarannum Jaleel


Sarah Nystrom


Neill Li


Mara Serbanescu


Justin Low


Aaron Vose

- Li Lan, MD, PhD, instructor in the Department of Molecular Genetics and Microbiology
- **Steve Taylor, BS'98, MD'04, HS'07-'12, MHS,** associate professor of medicine.

## Schweitzer Fellows Named

Four students at Duke University School of Medicine have been named to the 2023-24 class of the North Carolina Albert Schweitzer Fellowship program and will spend the next year working on projects that address social factors that impact health and health care.

The Duke Schweitzer Fellows are:

- **Katherine Kutzer** and **Eden Singh.**
- **Dana Rowe** and **Antoinette Charles.**


CHRIS HILDRETH

## Class of 1973 Inducted into Half Century Society

Duke University School of Medicine's Half Century Society welcomed its newest members in honor of their 50th reunion during the 2023 Medical Alumni Weekend festivities last November.

Inducted into the Half Century Society were members of the Class of 1973.

The Half Century Society celebrated and toasted the new members, who wore doctoral regalia and received a medallion to commemorate the occasion.

Hosts for the event were **R. Sanders "Sandy" Williams, MD'74, HS'77-'80,** former dean of the School of Medicine; and **Ed Preston, AB'57, MD'60, HS'60-'62,** chair of the Half Century Society.

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# 'Extreme' Cells Could Provide New Insights into Cell Biology, Pregnancy Diseases, and Cancer

The textbook model of a cell with a single nucleus accurately describes most cells — but not all. In fact, many cells have more than one nucleus. The outermost layer of the human placenta is one giant cell with billions of nuclei. Laid flat, it would measure 12-14 square meters.

**Amy Gladfelter, PhD'01**, has been fascinated by such cells for decades. "As soon as I looked under a microscope at these very large fungal cells, I couldn't stop thinking about them," she said. "There were so many surprises and paradoxes because most of the rules of cell biology had been established in simple systems, and these cells just kept breaking the rules."

A professor in the School of Medicine's Department of Cell Biology, Gladfelter joined the Duke faculty last year as a Duke Science and Technology Scholar.

In her lab, she studies both marine fungi and placental cells. "We're interested in how being able to take on multinucleated organization and become quite large may help cells cope with dynamic and extreme environments," she said.

Gladfelter's work could refine models of cell biology, explain some diseases of pregnancy, and even open up new avenues for treating cancer.

## EXPLORING THE SECRETS OF THE HUMAN PLACENTA

The giant cell that makes up the outermost layer of the placenta has to juggle many conflicting signals related to the needs of the growing fetus and the mother. Gladfelter is exploring how the cell's size and organization may help it interpret and act on different signals to guide its behavior in the moment.

*By Mary-Russell Roberson*

She's excited about the work because the placenta's giant cell has not yet been well described in terms of its organization and function. "We're going to be understanding how the cell in the placenta works in a healthy pregnancy and what that might teach us about pregnancy diseases where there is not a lot known about what is going on at the cellular level," she said.

She studies cells with microscopes, analyzing the images with machine-learning techniques and modeling the data to better understand the cells' behavior. "For us, images are far more than a pretty picture," she said. "They are a place we extract a lot of information about the dynamics and physical structure of the cells."

A deeper understanding of the placenta could shed light on cancer, given the intriguing similarities between the two: both seek to evade the immune system, both make use of an unusual type of metabolism, and both upregulate some of the same genes. And cancer cells often have multiple nuclei.

## BASIC SCIENCE + COLLABORATION = MEDICAL APPLICATIONS

Gladfelter's investigations of marine fungi and the giant placenta cell are fueled by her curiosity to understand on a molecular level how these unusual cells function: how they move, how they respond to signals and stress, how they sense their own shapes. And she wants to use that information to improve and expand the current understanding of the inner workings of all cells. "Because these cells are so extreme,

EAMON QUEENEY

they often reveal features that all cells are using," she said. "They are magnified because of the massive size of the cells."

Gladfelter has no doubt that basic science is the first step to developing new medical therapies and other technological advances.

"We don't really begin to have enough of an understanding to solve all the problems that exist right now," she said. "There are just major gaps in our basic science knowledge that are holding back medical applications."

She is collaborating with colleagues in the Division of Maternal-Fetal Medicine, the Department of Biomedical Engineering, and the Tisch Brain Tumor Center, among others, to share what she's discovering with others who are seeking to translate new discoveries into new therapies.

The opportunity for collaboration was part of the reason she jumped at the chance to return to Duke as a faculty member, after having earned her PhD here in 2001. "The openness of people to collaboration was a big piece of it," she said. "I felt like I could really make interdisciplinary connections here."

**Robert John "Bud" Brandt, MD'58,** died on October 26, 2023. He was 91. After serving in the U.S. Air Force as a senior flight surgeon, he became the medical director at the National Institutes of Health and at Bethlehem Steel's Sparrows Point plant. He specialized in preventive and occupational health, safety standards, policy development, health education, substance abuse programs, wellness development, and researching workplace biohazards for private industry and federal agencies.

**Carlos 'Kent' Campbell III, MD'70,** died on February 20, 2024. He began his career with the U.S. Public Health Service at the Centers for Disease Control and Prevention, where he was chief of the Malaria Branch from 1982 through 1996. He was named president of the American Society of Tropical Medicine and Hygiene. He led the development of the University of Arizona College of Public Health, and he and his wife established the Kent & Liz Campbell International Public Health Internship. He was a consultant to the Bill and Melinda Gates Foundation and launched the Malaria Control and Elimination Partnership in Africa.

**George Cassady II, MD'58,** died on December 3, 2023. He was 89. He served in the U.S. Navy at the National Institutes of Health as a clinical associate and medical investigator in genetics. He became the chief of pediatrics at the Children's Hospital of San Francisco, California Pacific Medical Center, and St. Elizabeth's Hospital in Boston, Massachusetts, before joining the medical school faculty at Stanford University as a clinical professor of pediatrics.

**Robert "Bob" Edward Chambers, MD'52, HS'54-'56,** died on October 30, 2023. He was 97. He volunteered at 17 for the U.S. Army during World War II and later served as a lieutenant and medic in the Korean War. He and the late **Gerard "Jerry" Marder, MD'52, HS'54-'56,** established the Gastonia Pediatrics Association in Gastonia, North Carolina, in 1956. He was president of the Gaston County Medical Society and the Gaston County Cancer Society.

**Danis J. Christensen, MD, HS'73-'74,** died on July 21, 2023. He was 77. He practiced medicine at the University of Utah Medical Center and served as the chair of the Department of Family Medicine.

**Victor Constantine, BSM'60, MD'61,** died on November 28, 2023. He was 89. He served as an assistant professor of dermatology at the University of Alabama Medical Center, then as a clinical assistant professor of dermatology at Stanford University Medical Center. In 1976, he established Bakersfield Dermatology & Skin Cancer Medical Group, where he practiced until his retirement in 2018.

**Joseph Corless, PhD'71, MD'72,** died on September 27, 2023. He was 79. He joined the Duke faculty in 1972, first as an associate in anatomy and then as an associate professor of cell biology and neurobiology and assistant professor of ophthalmology. From 2008-2010, he was a visiting associate professor at the Duke-NUS Medical School. He was the first basic science faculty member at Duke to win the AOA Golden Apple Award two years in a row. In 2013, Duke honored him with a Master Clinician Teacher Award.

**Jennifer Crawford, MD'88,** died on September 28, 2023. She was 61. She received her undergraduate degree in chemistry at the University of Virginia before attending Duke for her MD. She completed a residency in pediatrics at Texas Children's Hospital before returning to Duke as a pediatrician. She served as the president of the Duke Campus Club and was on the boards of Durham Academy and Student U.

**Douglas Freeman Jr., MD'68,** died on February 12, 2024. He was 80. He completed his internship and residency in internal medicine at the University of Alabama in Birmingham. He served in the U.S. Army Medical Corps at Womack Army Hospital and Fort Bragg, where he established and managed an outpatient allergy clinic, treating active duty and retired military personnel and their families. After completing a dual fellowship at UAB in rheumatology and allergy-immunology, he became board-certified in both specialties and opened a private practice in Raleigh in 1977. He practiced there until retirement in 2011.

**Wilson Hendry, MD'59,** died on December 25, 2024. He was 90. He served as a captain in the U.S. Army Medical Corps at Walter Reed Hospital in Washington, D.C. He was a pathologist at Sarasota Memorial Hospital. In the late 1970s, he and his partners co-founded Sarasota Pathology.

**Edward Hoffman, MD'63,** died on September 24, 2023. He was 86. He spent two years serving in the U.S. Navy in Stockton, California, during the Vietnam War before completing a residency in neurosurgery at Huntington Memorial Hospital. After spending a year working at the Midland Center for Neurosurgery in Birmingham, England, he moved to Olympia, Washington, where he practiced neurosurgery at St. Peter Hospital for 20 years.

**R. Eric Lilly, MD'92, HS'92-'01**, died on October 19, 2023. He was 58. He worked as a cardiothoracic surgeon in Fond Du Lac, Wisconsin, for over 30 years.

**William Massey III, AB'58, MD'62,** died on December 4, 2023. He was 87. He served as a lieutenant commander in the United States Naval Reserve during the Vietnam War. He established a solo private practice in internal medicine in Williamsburg, Virginia. He was an attending physician at Williamsburg Community Hospital and Sentara Regional Medical Center and was the medical director for the Dow Badische Company. He served as a medical consultant for the Virginia Heart Institute in Richmond, Virginia, and as clinical instructor for Eastern Virginia Medical School.

**Michael McLeod, MD'60, HS'60-'66,** died on January 10, 2024. He was 88. He joined Duke's clinical faculty in the Division of Gastroenterology in 1967. He retired in 2000 but continued teaching with Duke University School of Medicine's Practice Course until 2016.





**Richard Anthony Mladick, MD, HS'61-'64,** died on December 6, 2023. He was 89. He joined the Duke faculty as a surgeon in 1967. He was also an assistant professor of plastic surgery at Duke, professor of plastic surgery at Eastern Virginia Medical School, president of Seaboard Medical Society, director of Old Dominion Cleft Palate Clinic, director of the plastic surgery residency program, burn unit, and head and neck services at Norfolk General Hospital, director of head & neck services at the Veterans Administration Hospital in Hampton, as well as director of Eastern Virginia Cleft Palate and Orofacial Deformities clinic.

**Thomas Runyan, MD'63,** died on August 18, 2023. He was 90. He graduated from the United States Military Academy in June of 1957. He served in the 82nd Airborne Division at Fort Bragg, North Carolina. He retired from the Army in 1977 and joined the medical faculty at the University of Tennessee Medical Center in Memphis, Tennessee. In 1979, he joined the Scott and White Medical Center in the Department of Ophthalmology. He retired in 1993.

**Clyde Vernon Sanders, MD'57,** died on October 12, 2023. He was 91. He completed a residency in internal medicine at Georgetown University and a research fellowship at the National Institutes of Health. In 1963, he began practicing medicine at Sandy Springs Internal Medicine in Atlanta. During his 37 years there, he was instrumental in the founding of Northside Hospital, where he served as medical chief of staff and as a longtime member of the Hospital Authority.

**Bob Threlkel, MD'66,** died on November 16, 2023. He was 83. He served in the U.S. Army in the medical center at Fort Bragg, North Carolina. He joined the Carithers Pediatric Group in Jacksonville, Florida. He held numerous positions in the American Academy of Pediatrics, American Board of Pediatrics, Children's Home Society, and Duval County Medical Society. He was a leader in founding and developing Wolfson Children's Hospital.

**Buna Joe Wilder BA'51, MD'55,** died on November 21, 2023. He was 94. He served in the U.S. Army at Fort Ord Hospital in Monterrey, California. He practiced general medicine in Fernandina Beach, Florida, and then joined the faculty at the University of Florida College of Medicine and Shands Teaching Hospital. He was chief of neurology at the Veterans Administration Hospital in Gainesville for 20 years.

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COLIN HUTH

## OTD Program Celebrates First Commencement

On May 4, 2024, the Duke Occupational Therapy Doctorate (OTD) Program honored its first graduating class of 36 students at a morning commencement ceremony at Duke University Chapel.

The School of Medicine launched its newest degree program in August of 2021. At the commencement, Barbara Hooper, PhD, founding program director and division chief, lauded the inaugural class as "pioneers, trailblazers, and graduates."

"Improving the health of individuals, communities, and populations by addressing what people want and need to do daily is what we envisioned Duke OTD graduates advancing," she told the graduates. "Today, we know it will happen."

*For a video, see* duke.is/DukeOTD2024


EAMON QUEENEY

## Match Day 2024

On March 15, 2024, 128 fourth-year medical students at Duke opened their envelopes and learned where in the country they will complete residency training.

Duke medical students are headed to some of the nation's most prestigious residency programs, with 29 matching at Duke.

### MOST MATCHED FIELDS

Internal Medicine: **24**
Obstetrics & Gynecology: **11**
Orthopaedic Surgery: **11**
General Surgery: **11**
Anesthesiology: **9**

### MOST MATCHED INSTITUTIONS

Duke: **29**
Massachusetts General Brigham: **9**
Northwestern University McGraw Medical Center: **5**
Stanford: **5**

*For a video, see* duke.is/DukeMatchDay2024

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