

OHIO STATE MEDICINE

Alumni

winter 2024

15 YEARS  ONE GOAL

The Ride *for* Research



THE OHIO STATE UNIVERSITY
COLLEGE OF MEDICINE

— ADVANCING
MED ED

p. 18

RESIDENT
RESEARCH

p. 26

Homecoming and Medical Alumni Reunion Weekend



Save the Date!

Oct. 25-26, 2024



**[go.osu.edu/
medreunion](https://go.osu.edu/medreunion)**

College of Medicine Alumni Reunion Weekend will be held at its new home in the Interdisciplinary Health Sciences Center at Hamilton Hall. The weekend will include tours of the new building, social activities, educational lectures, family events and plenty of time to reminisce with old and new friends alike.

Mark your calendar! More information will be available in the coming months.



**THE OHIO STATE
UNIVERSITY**
COLLEGE OF MEDICINE



Dean's Message

Never neglect an extraordinary appearance or happening. It may be ... the clue provided by fate to lead you to some important advance.

— SIR ALEXANDER FLEMING

In the early 20th century, Sir Alexander Fleming discovered penicillin and transformed modern medicine forever. Antibiotics now control diseases that once killed millions of people. How fascinating is it that such a profound discovery happened because a little mold grew in a petri dish?

Seeing familiar things in new ways is second nature to our teams at The Ohio State University College of Medicine. They leave no stone unturned as they search for answers to society's greatest health challenges. They work tenaciously to identify problems — both at the patients' bedside and in our communities — and find solutions that help people live longer, fuller lives.

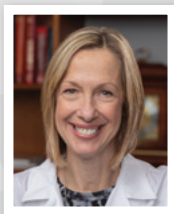
Our college is at the forefront of discovery, pursuing novel research and developing unique, effective therapies months, and even years, before others. Our tripartite mission areas of education, care and research

work together to advance science and health care. The intersection of these worlds drives innovation.

The results: Our patients have better access to the latest medical breakthroughs and clinical trials. We are partnering with the communities we serve to achieve improved health outcomes. Our college is on a rapid trajectory to be ranked among the nation's top 20 medical schools for research. And we just celebrated a record-breaking fiscal year 2023 for external research funding. Our future is very bright.

In this issue of *Ohio State Medicine Alumni* magazine, you will read inspiring stories about how our teams are educating the next generation of physicians and biomedical researchers while also conducting cutting-edge research and delivering extraordinary patient care. You will also read about the striking passion of our learners. I hope their infectious curiosity and eagerness to make a difference will bring back fond memories for you.

Thank you for everything you do to help us reach our ambition of transforming the health of our communities through inclusive and innovative education, discovery and care. It is my privilege to serve as the dean of this extraordinary and impactful institution.



Carol R. Bradford, MD, MS, FACS

Dean, The Ohio State University College of Medicine
Vice President for Health Sciences, The Ohio State University Wexner Medical Center
The Leslie H. and Abigail S. Wexner Dean's Chair in Medicine
Professor of Otolaryngology – Head & Neck Surgery

OHIO STATE MEDICINE Alumni

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If you wish to contact us about editorial content or a change of address, please send comments to medalum@osumc.edu or:

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Update your contact information through the college's Alumni Affairs website at go.osu.edu/medalum.

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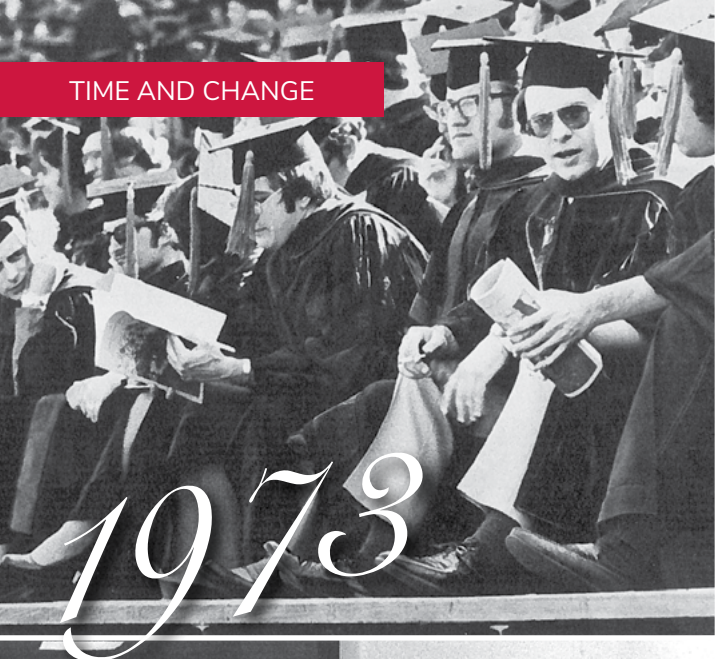
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TIME AND CHANGE



1973



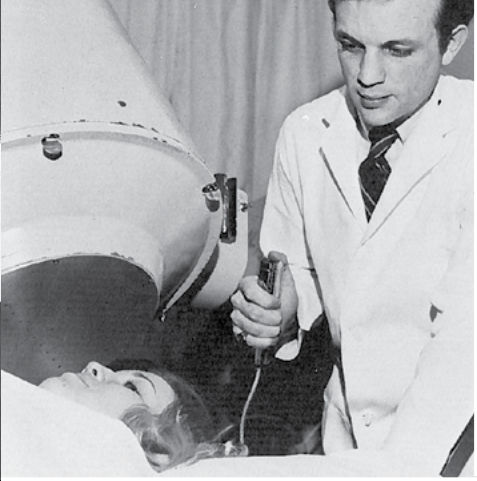
Then *and* Now

The Class of 1973
celebrated reconnecting at
the 50th Reunion Weekend

OCT. 6-7, 2023



2023



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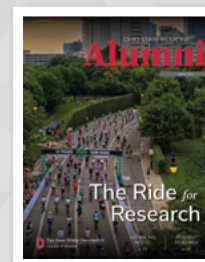
The Ohio State College of Medicine's innovative Lead.Serve.Inspire. curriculum continues to motivate students to thrive, with early opportunities for hands-on clinical and research experience.

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ON THE COVER:
The Columbus skyline greets Pelotonia participants at the start of the ride.

College News

Here's who and what made headlines recently at The Ohio State University College of Medicine.

Historic growth for College of Medicine research funding surpasses \$400 million

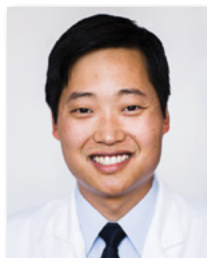
Fueled by advances in science across research disciplines, The Ohio State University College of Medicine ended fiscal year 2023 with record research funding. The college's unprecedented growth in areas of foundational research, community health, translational and implementation sciences, health services and clinical trials increased funding to more than \$400 million for the first time.

"This record year is a testament to the hard work, curiosity and commitment to research and innovation on the part of our faculty, learners and staff," says Carol R. Bradford, MD, MS, FACS, dean of the Ohio State College of Medicine and vice president for Health Sciences at the Ohio State Wexner Medical Center. See page 31 for more details.

Ohio State hosts prominent head and neck course for first time in new anatomy lab

In October 2023, 40 fellows and residents from across the United States and Canada participated in the annual prestigious Head and Neck Microvascular Fellow Bootcamp at The Ohio State University College of Medicine's anatomy lab in the Interdisciplinary Health Sciences Center. It was the first time Ohio State played host to the widely regarded preeminent course for microvascular head and neck surgery fellows.

The two-day boot camp focused on techniques to address functional and cosmetic impairments caused by head and neck cancer treatments. "This type of



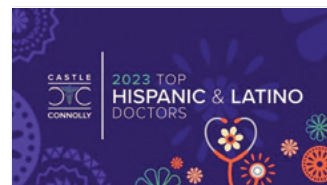
experience is as close to real surgery as fellows can possibly get," says **Stephen Kang, MD, '15 Fellow**, associate professor of Otolaryngology and course director for the fellow portion of the boot camp.

Castle Connolly names 15 Ohio State clinical faculty Top Hispanic and Latino Doctors

Fifteen clinical faculty members from The Ohio State University College of Medicine have been named Castle Connolly 2023 Top Hispanic and Latino Doctors. This is the first time Castle Connolly has recognized top Hispanic/Latin doctors for their outstanding expertise, patient care and contributions to health care.

"These exceptional doctors work to ensure patients feel seen and understood while receiving the highest quality care," says Carol

R. Bradford, MD, MS, FACS, dean of the Ohio State College of Medicine. **Ana Suelves Cogollos, MD, PhD**, assistant professor of Ophthalmology and Visual Sciences at the Ohio State College of Medicine, says she appreciates the opportunity to create lasting patient relationships and believes the resources available at Ohio State afford eye patients tremendous treatment options. See page 35 for the full list.



Health and Rehabilitation Sciences graduates nation's first advanced respiratory care therapist

The Ohio State University School of Health and Rehabilitation Sciences (HRS) is the first in the nation to offer the Master of Respiratory Therapy (MRT), an advanced practice clinical master's degree for respiratory care.

The MRT is designed to prepare advanced practice respiratory therapists (APRTs) to become clinical specialists in a variety of settings and to open additional career doors in the burgeoning field. The first class of learners graduated in the spring of 2021, and **Mindy Conklin, '21 MRT, RRT-RCT**, an alumna from that first class, is now the first APRT in the nation, recently landing a job at the Department of Veterans Affairs Maryland Health Care System.



Six Ohio State health science colleges honored for diversity efforts

Six health science colleges at The Ohio State University were recognized with the 2023 Health Professions Higher Education Excellence in Diversity (HEED) Award, given by *INSIGHT Into Diversity* magazine, the nation's oldest and largest diversity-focused publication in higher education. The colleges of Medicine, Nursing, Optometry, Pharmacy, Public Health and Veterinary Medicine were honored. Ohio State is the only academic institution in the country to have six graduate programs receive the Health Professions HEED award. It is the only national honor recognizing institutions of higher education for their outstanding commitment to diversity, equity and inclusion.



Ohio State launches PhD program in immunology and immunotherapeutics

In August, the Department of Microbial Infection and Immunity welcomed its first cohort of students — seven in all — to the newly established Immunology and Immunotherapeutics Graduate Program, also

called I2GP. “We feel that now is the ideal time to leverage this growth and launch I2GP to train the next generation of immunologists,” says **Ken Oestreich, PhD**, associate professor of Microbial Infection and Immunity at the Ohio State College of Medicine and director of the new program.

“The need for graduate programs like this one, which emphasizes both basic and clinically applied aspects of immunology research, is greater than ever, given exciting advances and new opportunities in cancer immunotherapy,” he says. I2GP has 45 principal investigator-led laboratories, as well as training and research space in the Pelotonia Institute for Immunology and Oncology and The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute.

Jasmine Neal, MPH, receives Engaged Scholarship Consortium grant

In September, the Engagement Scholarship Consortium awarded an Engaged Scholarship Research/Creative Activities Grant to Jasmine Neal, MPH, of The Ohio State University Center for Clinical and Translational Science (CCTS). The program manager of the CCTS Pilot and Collaborative Studies Program is one of only 18 awardees nationwide to receive the grant, which funds collaborative and interdisciplinary research between member universities and the community.

Neal plans to use the award to help train and develop the Academy of Community Reviewers, a CCTS program that provides patients and community members the opportunity to engage in the research process. “The grant will help us study various approaches for identifying, engaging and empowering patients and community members to contribute to publicly funded research and keep the program moving forward,” Neal says.

NEW RELEASES...

- *Saving Babies: The Moms2B Story*, Patricia T. Gabbe, MD
- *Honoring the Past and Leading for the Future: The History of The Ohio State University Department of Surgery*, edited by **E. Christopher Ellison, MD, '83 Res**, and Timothy M. Pawlik, MD
- *A Specialty Indeed: The History of Emergency Medicine at The Ohio State University*, Douglas A. Rund, MD, **Richard N. Nelson '78 MD**, **David P. Bahner, MD, '98 Res**, and Jeffrey M. Caterino, MD

Publisher: Medical Heritage Center, The Ohio State University Health Sciences Library

Leadership News

Whitney Luke, MD, '13 Res, appointed chair, Department of Physical Medicine and Rehabilitation



Whitney Luke, MD, '13 Res, MBOE, was named chair of the Department of Physical Medicine and Rehabilitation (PM&R) for a four-year term that began July 1, 2023. Luke, who had served as interim chair of the department since July 2021, joined PM&R in

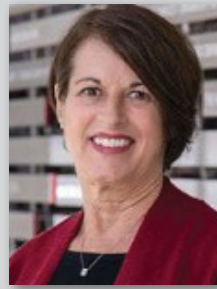
2013 as a clinical assistant professor, becoming vice chair of Clinical Operations in 2018 and rising to clinical associate professor in 2019 and clinical professor in 2023. She is the Dr. Ernest W. Johnson Endowed Chair, and she also serves as the medical director of Oncology Rehabilitation and as program director for the Cancer Rehabilitation Fellowship, which is one of only 11 such fellowship programs in the nation.

She created and implemented Ohio State's inpatient cancer rehabilitation program — which was the first in Ohio, second in the United States and third in the world to be accredited by the Commission on Accreditation of Rehabilitation Facilities — as well as the outpatient cancer rehabilitation and interventional pain program.

Under Luke's leadership, PM&R has maintained its longstanding recognition as one of the top programs in the U.S. In 2023, PM&R ranked No. 27 in the nation on the *U.S. News & World Report* list of Best Hospitals by specialty, rising six spots over the previous year.

A pain management specialist, Luke is nationally recognized for her clinical expertise in cancer pain management, cancer rehabilitation, chronic interventional pain management and neuromodulation.

Julie Johnson, PharmD, named director, Center for Clinical and Translational Science



The Ohio State University appointed **Julie Johnson, PharmD**, an internationally recognized leader in clinical pharmacology, pharmacogenomics and genomic medicine, as director of the Center for Clinical and Translational Science (CCTS).

She will also serve as associate dean for Clinical and Translational Research in the College of Medicine and as associate vice president for Research at Ohio State. Her appointment began Oct. 9.

She also holds the Dr. Samuel T. and Lois Felts Mercer Professorship of Medicine and Pharmacology. Johnson earned her BS in Pharmacy from The Ohio State University, and her PharmD from the University of Texas at Austin and the University of Texas Health Science Center at San Antonio.

She returned to Ohio State to complete a postdoctoral fellowship in pharmacokinetics/ cardiovascular pharmacology before embarking on an exceptional career as a talented leader, educator and translational clinician-scientist.



Honoring Our Exceptional Alumni

In September 2023, The Ohio State University College of Medicine recognized distinguished alumni with awards that recognize excellence in teaching, service and the practice of medicine.

2023 Alumni Achievement Award

HANS E. GROSSNIKLAUS '80 MD

"I thank my family, friends, mentors and colleagues for their support, and dedicate this award to my patients."



Hans Grossniklaus is recognized as the world's foremost authority in ophthalmology and pathology. The Phinizy Calhoun Jr. Professor of Ophthalmology and Pathology at Emory University School of Medicine, Grossniklaus is director of the L.F. Montgomery Laboratory, a world-renowned eye

pathology laboratory. His research has led to important understandings of choroidal neovascularization, retinoblastoma and melanoma. He completed his residencies in ophthalmology and pathology at Case Western Reserve University, and fellowships in ophthalmic pathology at the Wilmer Institute and the Armed Forces Institute of Pathology. Grossniklaus has served on faculty at Emory University and as director of the L.F. Montgomery Ophthalmic Pathology Laboratory since 1989, and as founding director of the Ocular Oncology Service since 2007.

A member of numerous national and international organizations, he has served as past president of the American Ophthalmological Society, the American Association of Ocular Oncologists and Pathologists, the Verhoeff-Zimmerman Society and the Association for

Research in Vision and Ophthalmology. In addition to receiving numerous awards, he has trained 30 fellows from around the world, most of whom now hold academic positions.

2023 Early Career Achievement Award

PRASAD R. SHANKAR '09 MD

"This award belongs to the teachers, students, friends and family who have guided me along this journey. Thank you for your support, wisdom and camaraderie."



A lifelong Buckeye, Prasad Shankar is a dedicated clinician-researcher who has made notable contributions in genitourinary radiology through his leadership, clinical expertise and academic pursuits. While on faculty at the University of Michigan, he served as the departmental associate chair for Quality and Safety. He has held leadership roles

within the Society of Abdominal Radiology and national peer-reviewed radiology journals.

A passionate researcher and patient care advocate, Shankar has led both prospective longitudinal studies and retrospective big data assessments to better understand prostate cancer testing from multiple perspectives. He has also helped in quantifying the risk of nephrogenic systemic fibrosis associated with certain gadolinium-based MRI contrast agents.

A dedicated mentor to undergraduates, medical students and postgraduate trainees, Shankar continues to contribute to the field through clinical care and academic pursuits as a clinical professor of Radiology at the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University.

2023 Alumni Service Award

JOEL GOODNOUGH '79 MD

“God has blessed us with resources to manage in a way that honors Him. Encouraging and supporting our learners, faculty and facilities in the College of Medicine will have a positive impact on generations to come.”



A proud triple Buckeye, Joel Goodnough went on to practice at Northwest Community Hospital in Illinois, giving his best care to patients and leading major efforts in quality assurance, including establishing the first obstetrical hospitalist program at Northwest.

Upon retirement, Goodnough supported research and scholarships at the Ohio State College of Medicine, including the Medical Careers Pathway Post Baccalaureate Program — also known as MEDPATH, a program designed to increase the number of students from underrepresented populations in medicine, including those from economically and educationally disadvantaged backgrounds, and the Dr. Joel Goodnough and Family Fellowship Fund in Medicine. Goodnough continues to mentor students and to champion and support the College’s Interdisciplinary Health Sciences Center. He is also proud to represent the College of Medicine on the Ohio State Alumni Advisory Council and to serve on the board of the Ohio State Medical Alumni Society.

2023 Community Practice Alumni Award

MARY S. APPLLEGATE '87 MD

“This award is a tribute to the people of Ohio and my patients who moved me to actively be part of health system transformation. Also, nothing this great happens without the never-ending support of my spouse and family.”



Mary Applegate serves as medical director for the Ohio Department of Medicaid, with a keen focus on improving health outcomes for individuals enrolled in the Medicaid program across the state. A fellow of both the American Academy of Pediatrics and the American College of

Physicians, Applegate has been caring for infants, youth, older adults and families in hospital and primary care settings for over 30 years.

Applegate has also been instrumental in leading and driving transformational change in perinatal health, safer opioid prescribing and integrating behavioral health care throughout her career. In conjunction with Ohio’s Perinatal Quality Collaborative, she forged partnerships and developed new processes that improved preterm birth rates for high-risk mothers by 6% across the state, and 17% for those in the Medicaid program. As co-author of Ohio’s safe prescribing guidelines for opioids and other controlled substances, she contributed meaningfully to safer care and innovation in clinical practice. Applegate’s recent work has been focused on effective population health management by bringing health systems and payers together for collective impact, harnessing opportunities related to paying for real value in health care.

2023 Faculty Teaching Award

MELISSA QUINN '15 PHD

"I wouldn't be here without the support from my amazing family (including Dexter, Stan and Waffles), friends and my wonderful OSUCOM students. This award is truly dedicated to all of them. Always remember, 'Be somebody who makes everybody feel like a somebody!'"



A fierce educator and cheerleader for her students, Melissa Quinn earned her doctorate in Anatomy from The Ohio State University in 2015. Quinn is a clinical associate professor in the Department of Biomedical Education and Anatomy, Division of Anatomy, in the Ohio State College of

Medicine, where she teaches human gross anatomy and embryology to medical students. Quinn is also the academic program co-director for Part One of the Lead.Serve.Inspire. (LSI) medical curriculum and director of the division's Outreach and Community Planning program. She's a strong advocate for medical students, and master's and doctoral anatomy students, mentoring them along their path toward medicine, professional school, research and/or academia.

She serves on the board of directors for the Human Anatomy and Physiology Society and is the society's incoming president-elect. She has received numerous Ohio State teaching awards, including Best Teaching and Learning Methods for her work in LSI Part One in 2019, 2021 and 2023, as well as the 2020 Ohio State University Alumni Association Distinguished Faculty Award, the 2021 Part One Excellence in Education Award, the 2021 LSI Medical School Curriculum Inspire Award and the 2022 Division of Anatomy's Excellence in Education Award. In May 2022, she received the College of Medicine's highest teaching award, Professor of the Year, for her significant impact on the training of medical students.

2023 Community Practice Alumni Award

STEVEN J. STACK '98 MD, '01 RES, MBA, FACEP

"What a wonderful legacy the Ohio State College of Medicine creates through its alumni! We are fortunate, indeed, to be members of this family of physicians united in service to others."



Steven Stack was appointed Commissioner for Public Health for the Commonwealth of Kentucky in February 2020, and was subsequently elected secretary-treasurer in fall 2020 and president-elect in 2022 of the Association of State and Territorial Health Officials.

Stack is a board-certified emergency physician with more than 20 years of emergency medicine clinical practice and emergency department management experience. Throughout his career, Stack has served in numerous medical professional association leadership roles. In 2006, he was the first board-certified emergency physician ever elected to the American Medical Association Board of Trustees, and in 2015, he served as AMA president.

Born and raised in Cleveland, Stack graduated magna cum laude in classical studies from the College of the Holy Cross in Worcester, Massachusetts. He completed his medical education and emergency medicine residency at Ohio State and his MBA at the University of Tennessee Haslam College of Business.



Honor a deserving alumna or faculty member and submit a nomination for the 2024 Alumni Awards by March 15, 2024. For more information, visit go.osu.edu/medawards.



The Ride *of a* Lifetime

As Pelotonia turns 15, Ohio State clinicians, residents and students share what the ride to end cancer means to them.

By Diane Haddad

Mom. Sarah. Uncle Jim. So many names, each representing someone who survived cancer or lost their life to it.

The names, inscribed on jerseys, bikes, arms, legs and handmade signs, belong to loved ones of cyclists, volunteers and onlookers during Pelotonia Ride Weekend, held each August in Columbus.

Their purpose — what Pelotonia calls their “One Goal”? To end cancer by accelerating innovative cancer research at The Ohio State University through inspirational events.

Pelotonia offers riders several route options, each with a minimum fundraising commitment.

For the 2023 ride, seven routes ranged from 24 to 184 miles, winding through downtown Columbus and along back roads in Pickerington, New Albany and Gambier.

Now 15 years strong, the weekend event has grown from 2,265 riders who raised more than \$4.5 million in 2009, to 6,559 riders and 1,992 virtual participants who raised more than \$25 million in 2023.

Because funding partners cover operating costs, all of the more than \$283 million that Pelotonia participants have raised directly supports life-saving cancer research at The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James).

Many Ohio State clinicians and scientists take part, fighting cancer not only in labs and hospitals, but also on their bikes. Here, five of these passionate Buckeyes share their Pelotonia experience and what the ride means to them.

PAIN INTO PURPOSE

For **Santino Cua '22 MD**, a neurosurgery resident at The James, Pelotonia offers healing and hope.

“[My mom] passed away in 2014 from glioblastoma, which is a high-grade brain tumor. Going through that struggle and fight with her ... I'd always been interested in medicine, but that was what reinforced that I'm going to commit my life to this.”

He took on the 100-mile “century” ride at his first Pelotonia in 2019, and now does the 50-miler. Either way, the ride is a roller coaster: At the starting line, it's all anticipation and energy. Then around the midpoint of the route, tiredness and soreness set in. And remember, this is August in Ohio.

The struggles aren't just physical. “You're going through your own



Above left: **Santino Cua '22 MD**, a neurosurgery resident at The Ohio State University College of Medicine, celebrates his first 100-mile ride in 2019 with fellow MD Candidates, Class of 2022; right: in 2023 with his wife **Gabrielle Brokamp Cua '22 MD**, a dermatology resident at the college. Opposite page: Pelotonia riders get a scenic stretch in the country.



Left: A morning rainbow greets riders along the Columbus skyline. Right: Carol R. Bradford, MD, MS, FACS, dean of the Ohio State College of Medicine, enjoys the camaraderie of fellow riders Emily Christian and Shane Peterson.

personal battle during that ride, because you're struggling with your own pains and soreness," Cua says. "But for me, too, it's going through a little bit of re-encountering the reality of my mother's absence and re-encountering the times cancer has affected my life, and the loved ones I've lost."

Many of those cheering along the route know this battle. Cua calls it "turning pain into purpose."

"It's been a really cool full-circle moment," he says. "As I get each step closer in my ultimate career path, I can see more and more the impact and synergy of all these efforts."

CREATING A CANCER-FREE WORLD

Almost everyone who works with cancer patients at Ohio State is

involved in Pelotonia in some way, says **Carol Bradford, MD, MS, FACS**, dean of The Ohio State University College of Medicine and vice president for Health Sciences at the Ohio State Wexner Medical Center. She also holds the Leslie H. and Abigail S. Wexner Dean's Chair in Medicine, and is a professor of Otolaryngology – Head and Neck Surgery.

But it's also a community event. "Almost every road you go down and every corner you turn, people have signs and bells and they're clapping," says Dean Bradford, who has tackled Pelotonia's 50-mile route each year since she became dean in October 2020. "I find it incredibly inspirational to see how the entire community comes out to support cancer research here at Ohio State."

As a clinician-scientist, Dean Bradford recognizes the value of Pelotonia's role in funding

discoveries that will bring an end to cancer. A new five-story, 305,000-square-foot laboratory building, which opened in June, is named for the partnership.

Two floors of the Pelotonia Research Center are focused on cancer. The second floor houses the Center for Cancer Engineering; the third floor is the second home to the Pelotonia Institute for Immunology. The center has nearly 80 open clinical trials, with plans to open 130 more over the next five years.

"Immuno-oncology is a brilliant investment because it's really helping your own immune system fight cancer. Advancements are being made every day and already saving a lot of lives," Dean Bradford says. Pelotonia funds also support the Pelotonia Scholars Program for student researchers (read more on page 17) and the Pelotonia Idea Grants Program for investigative

teams studying prevention, detection and treatment of individual cancers.

Dean Bradford adds that the facility and funding attract world-class cancer scientists. “I believe we have some of the best researchers and clinicians here at Ohio State, making huge discoveries with the goal of creating a cancer-free world.”

CHALLENGE AND ACHIEVEMENT

Matthew Marquardt, a third-year Ohio State College of Medicine student planning to specialize in head and neck cancer surgery, was destined for Pelotonia. He has always sought athletic challenges and used them to help people with cancer. At 15, he climbed Mount Kilimanjaro and raised \$6,100 for Make-A-Wish in honor of a friend who was diagnosed with leukemia. As a senior at Princeton

University, he biked from San Diego, California, to Jacksonville, Florida, in just 20 days, raising \$15,500 for St. Jude Children’s Research Hospital. And after coming in second in a half Ironman triathlon during his first year in medical school, he turned pro and now wears The James logo when he races.

Despite growing up an avid bicyclist less than two hours away in Cincinnati, he’d never heard of Pelotonia. “I got here, and it was everywhere,” he says. “I thought, this is an incredible thing, and I have to be a part of it.”

Not only did he sign on for the 100-miler, he also became captain of the Spin Doctors, the College of Medicine peloton (cycling team). Part of his triathlon prize money supports his Pelotonia ride.

“[Triathlon] is a monotonous sport, so if you’re only doing it for yourself, I think some professional triathletes find it difficult at times

to stay with it. But when I’ve had those hard days or training sessions I haven’t wanted to do, I think about how much more challenging the patients at The James have it than I do and I’m inspired by their grit.”

This year’s Pelotonia held extra meaning for Marquardt. He dedicated his ride to the memory of classmate and 2022 Spin Doctors co-captain Mason Fisher, who passed away from an unexpected medical condition at the 100-mile mark of his route.

“It’s been incredible to see the support of his friends and family,” Marquardt says. “The medical school peloton was historically medical students only, but this year we allowed anyone to ride in it. And that was all because of people coming together and wanting to do it for Mason.”

Marquardt will slow down — and even go the wrong way — to enjoy the fellowship of Pelotonia. “This year I started with the front group



Left: Third-year Ohio State College of Medicine student **Matthew Marquardt** (forefront), captain of the Spin Doctors, a college cycling team, rides alongside second-year medical student **Dennis Grenciewicz**. Right: a view along the ride.



and was riding fast and that was fun and all,” Marquardt says. “But the whole point of Pelotonia is to do it with other people you care about. So, I rode with the fast group for about an hour, and then I turned around.” He got some curious glances, but spent the rest of the day bouncing between groups of classmates.

WORKING IN TANDEM

Spouses **Steven Gabbe** and **Patricia Temple Gabbe**, both MDs, have been part of Pelotonia since the beginning. Steven helped plan and promote the first event, and they’ve ridden every year except 2020. Not on regular bikes, though. They’re known for pedaling their tandem bicycle.

“We had ridden a tandem on vacation and enjoyed it, and we thought if we got individual bikes, we wouldn’t see much of each

other,” says Pat, a pediatrician and clinical professor of Pediatrics at the Ohio State College of Medicine, and founder and director of the Moms2B program.

Riding tandem is harder than it looks. “People pass us and say, ‘Boy,

“It’s participating, seeing our friends and knowing that we’re all riding for the same purpose.”
STEVEN GABBE, MD

I wish I could persuade my husband or wife to ride a tandem with me,” says Steven, professor emeritus and CEO emeritus of the medical center. “Then I point out there’s a

saying, ‘Whatever direction your relationship is going, a tandem will get you there faster.’”

The biggest challenges are starting together, stopping together and communicating when the road is bumpy, takes a turn or starts to climb.

After practicing and watching instructional videos, the Gabbes learned the roles of each rider. “The captain is the one who steers and brakes and changes the gears. And the stoker, Pat, is our energy boost when we have difficult hills to go up.”

“We’re some of the oldest riders,” Pat adds. “Steve is the captain and he’s so careful on the road that I can relax back there. It’s a wonderful ride for me.”

For the Gabbes, Pelotonia is a ride, not a race. “It’s participating, seeing our friends and knowing that we’re all riding for the same purpose.



Proud Pelotonia supporters, spouses Steven Gabbe, MD, a cancer survivor, and Patricia Temple Gabbe, MD, have been a part of the event since its launch.



Investing in the Next Generation of Scientists

Starting in 2010, Pelotonia has allocated \$2 million a year to the Pelotonia Scholars Program. The program offers promising students an opportunity to take a year off from their studies and immerse themselves in independent cancer research projects.

To date, 606 applicants have received awards — including Ohio State College of Medicine student Matthew Marquardt.

His lab is developing anatomical guides for cancer surgery by using 3D printing and modeling based on MRIs and CT scans. “We can show the bone, and if there are important blood vessels nearby, we can highlight those,” he says.

“We can show where the tumor is, and we can print in different colors so the surgeon can visualize the tumor better.” The technology also can be used to create cutting guides for precise incisions.

The scholars program encourages innovation in tomorrow’s cancer scientists. “What we need is innovative, groundbreaking, never-before-thought-of ideas, not something that just marginally builds on something else,” Marquardt says. “And the only way you’re going to do that is if you take some risk. I think Pelotonia allows scientists to take that risk.”

Everyone who’s riding can tell their story about how their family member, friend, colleague, has been a cancer patient,” says Steven, himself a cancer survivor.

As the namesake of the Gabbe Health and Well-Being program for Wexner Medical Center faculty and staff, he adds that Pelotonia also impacts the well-being of those who take part.

“Along about February, March, people start to talk about, ‘When are you going to start training? What bike will you be riding? Who are you going to train with?’” Steven says. “It’s also created a culture of people riding together, friendship and well-being.”

HOPE AND HEALING

Pelotonia can be trying, both physically and emotionally. But it’s also healing for those who gather to remember their loved ones — all the names they’ve taken with them as they ride, volunteer or cheer — and turn their grief into better outcomes for others.

Diane Haddad is a writer and editor in West Chester, Ohio.
To learn more about Pelotonia, visit pelotonia.org.



Advancing Medical Education

The Ohio State College of Medicine's innovative Lead.Serve.Inspire. curriculum continues to motivate students to thrive, with early opportunities for hands-on clinical and research experience.

By Kitty Munger

Introduced in 2012, The Ohio State University College of Medicine’s “Lead.Serve. Inspire.” (LSI) curriculum remains an innovative program of study, with its competency-based framework focused on early clinical experience and a plethora of research opportunities for students.

“One thing that makes our curriculum stand out, and it’s also one of its strengths, is early clinical exposure for medical students,” says Jennifer McCallister, MD, associate dean of Medical Education and a clinical professor of Internal Medicine, Division of Pulmonary, Critical Care and Sleep Medicine, at the Ohio State College of Medicine.

“Our goal is to give first- and second-year students consistent and frequent contact with patients and not wait until their third or fourth year. It allows them to apply classroom knowledge to patient situations throughout medical school.”

The LSI curriculum has three parts: Clinical Foundations (first and second years), Clinical Applications (third year) and Advanced Clinical

Management (fourth year).

First- and second-year medical students get a foundation in biomedical, behavioral and clinical sciences, as well as early exposure to patient care. Integrated blocks include content in anatomy, physiology, biochemistry, pathology and core sciences for medicine.

Third-year medical students apply foundational sciences in clinical settings doing clerkships and getting first-hand knowledge of what it is like to work as a doctor in a hospital or clinic.

In their fourth year, students choose clinical rotations and electives to round out their education and prepare them for residency. Advanced Competencies and Elective options include a wide range of choices, from critical care to emergency preparedness, global health and research.

Research in the LSI curriculum

“Between their first and second years, many students choose

to do research as part of the MD Summer Research (MDSR) program,” McCallister says. “This may be the first time students are involved in medical research, and their involvement sets a strong foundation for their understanding of the role research plays in medical education.”

McCallister says all students must learn and understand principles of evidence-based medicine, so the curriculum includes an inquiry thread to help students learn how to work through questions before making clinical decisions, a key practice in learning the principles of research and how to interpret it.

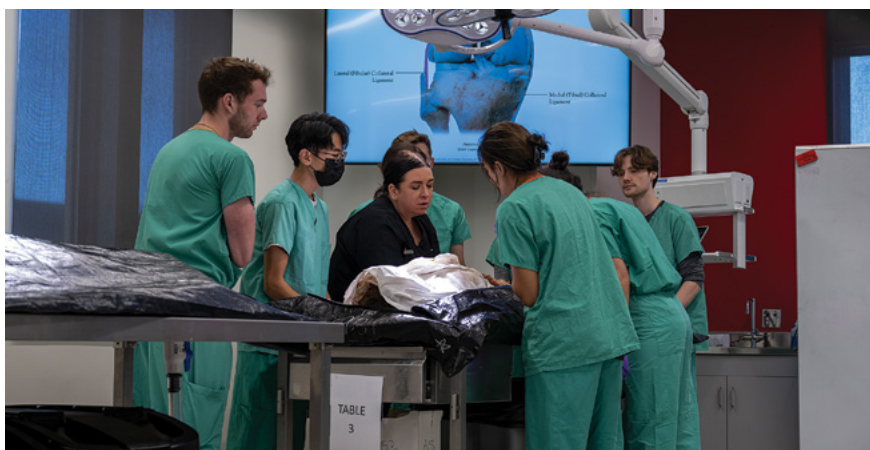
“For example, during COVID-19, research came at us so fast and we were desperate for it,” she says. “We had to appraise what we received because we wanted answers quickly. But we had to objectively and critically look at what was presented before making health care decisions. That is the kind of thinking we teach our students.”

McCallister says that’s an important practice, whether a student is actively involved in research projects or using it to understand a disease or treatment.

Part 1: Clinical foundations — learning, using the tools

As co-director for Part 1 of the LSI curriculum, **Melissa Quinn ’15 PhD**, associate professor in the Department of Biomedical Education, Division of Anatomy, oversees all the elements of curriculum and helps facilitate block schedules.

“In Part 1, students master basic physical exam skills, not



Opposite and above: **Melissa Quinn ’15 PhD**, associate professor in the Department of Biomedical Education, Division of Anatomy, enjoys leading students in Part 1 of the curriculum — helping them understand the clinical foundations of medicine.



necessarily to make a diagnosis, but to have an understanding of the mechanics behind different diseases,” Quinn says. “At this point in their medical career, they haven’t decided their specialty yet. We give them the tools they need to figure it out.”

Part 1 is a mix of traditional classroom and clinical work, including time in the anatomy lab. Not all classroom work is done in person; some learning is done on students’ own time.

For clinical work, there are two components: Longitudinal Groups and Longitudinal Practice.

Longitudinal Groups are included in each block in Part 1, giving students early exposure to the basics. Students meet weekly in small groups with 12 peers and a facilitator physician. They learn and practice physical exam skills, clinical reasoning, behavior and social sciences, and interpersonal communication.

“One of the most important skills students need to master is patient communication,” Quinn says. “They need to know how to communicate in a professional manner and be able to simplify explanations the general public will understand. They learn how to be approachable and empathic and be able to ask follow-up questions. Longitudinal groups are very helpful with this skill.”

Several weeks into their first year, students participate in a Longitudinal Practice session in a clinical site for a half day every other week. Students are paired with a clinician where they interact with patients using the skills they gained in longitudinal groups. They are assessed by the clinician at the end of each block.

Students also participate in three Exploration Weeks to learn about different medical specialties. During the first semester, Exploration Week 1 consists of mini presentations from each specialty, such as Plastic Surgery or Family and Community Medicine. The other two weeks occur in the second year when students choose the specialties they want to shadow to gain exposure to different experiences.

“Throughout Foundations 1 and 2, students start to get evidence-based inquiry and research experiences where they have the opportunity to learn the different parts and processes in order to do and understand research and how to review scientific research,” Quinn says.

“Research allows us to move forward, to see the process of thinking and putting together the sequence of different processes. We teach the foundational knowledge of disease, but also foundational knowledge of research. Sometimes this experience is so strong that students want to be physician-

scientists to move medicine and humanity forward. It keeps people curious and moves them along that path.”

Part 2: Clinical applications —“rings” and connecting concepts

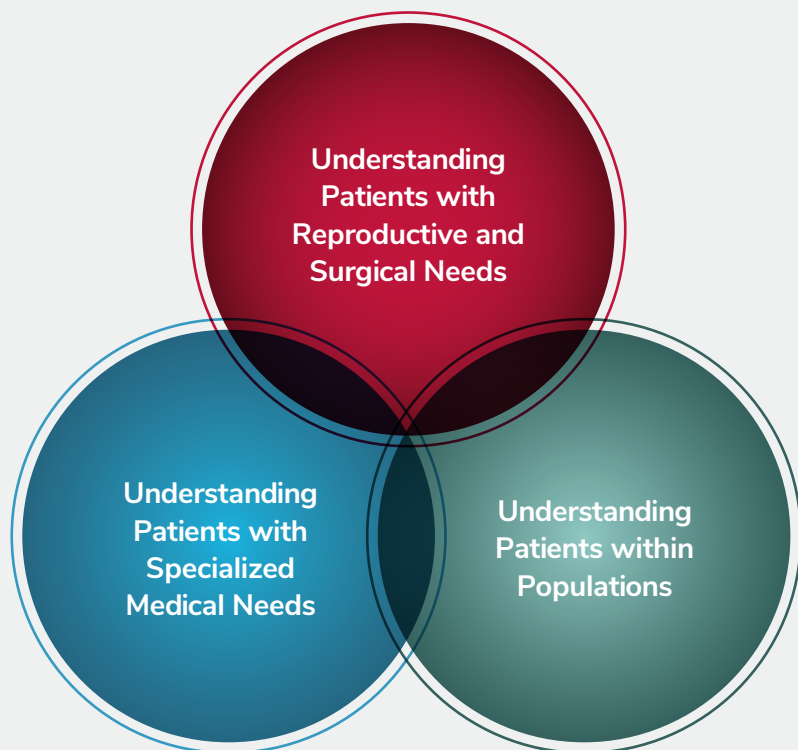
Kim Tartaglia, MD, clinical professor of Internal Medicine, Division of Hospital Medicine, is director of Part 2 of the LSI curriculum, the core clinical year for third-year medical students.

“You can look at Part 2 as a year of foundational clinical exposure,” Tartaglia says. “Most of their time is spent in clinical environments, and the curriculum is arranged so that students revisit various specialties. For example, students may spend four weeks on surgery, move on to anesthesia or obstetrics for a few weeks, then go back and revisit a surgical specialty for two more weeks. The goal is to help them connect concepts and realize that medical skills are not siloed. In the classroom, students work in small



Kim Tartaglia, MD, clinical professor of Internal Medicine and director of Part 2 of the curriculum, prepares students as they move from “Ground School” clinical practice in the clinical skills lab to real patients during multiple specialty rotations.

Part 2: Clinical Applications



● Ring 1: Understanding Patients with Specialized Medical Needs

Students get hospital experience in internal medicine, neurology and psychiatry. Mostly acute care-focused, the experience helps students to think about how specialty care overlaps; for example, how brain health overlaps among neurology and psychiatry.

● Ring 2: Understanding Patients with Reproductive and Surgical Needs

Students spend time in surgical specialties and Ob/Gyn, including experiences regarding peri-operative needs, such as pre-op assessments, anesthesia, radiology and pathology.

● Ring 3: Understanding Patients within Populations

Students work with vulnerable patient populations in community-based, outpatient settings. This ring covers the life span, from pediatric to adult care and geriatrics (from birth to death), and includes a lot of chronic care.

In general, students don't conduct new research during Part 2, but some might be finishing a research project started prior to their third year. Those interested in advanced research opportunities can do that in their fourth year.

groups to practice how to think about things that cross multiple specialties.”

Tartaglia says students in Part 2 start to work like a doctor every day, applying book knowledge, practicing communication skills and writing assessments. Students work with professional medical teams, helping care for patients at clinics at Ohio State, Nationwide Children's Hospital for pediatrics, and other community-affiliated hospitals and clinics. About 80% of a student's experience is through Ohio State hospitals.

Part 2 of the curriculum has three semesters, termed rings, each beginning with a week called “Ground School” where students practice in the clinical skills lab to

prepare for their clinical rotations. Sessions range from practicing simulated procedures, such as lumbar puncture, to working with standardized patients to practicing clinical assessments of vulnerable populations, including people with different abilities or mental health concerns.

“Part 2 offers students brand-new experiences that can be overwhelming,” Tartaglia says. “This might be the first time they see a patient with an acute psychotic episode or someone who is unable to verbally communicate. This is why students don't see real patients during Ground School. By creating an opportunity to experience this in a standardized patient setting, students can feel

safe in their learning. Ground School sets the foundation for the patients they will see in the upcoming clinical rotations.”

During those rotations, Tartaglia says students spend their time listening, learning, observing and being helpful when they can. “It's usually a firehose of experiences, unlike anything they've ever experienced. By the end of Part 2, they'll have foundational skills and experience in the core disciplines of medicine and see which one speaks to them most,” she says.

Part 3: Advanced Clinical Management

The curriculum's final part focuses on the breadth of what students can



do, taking them from students to doctors in three areas:

- Advanced Management in Hospital-Based Care — acute care management of the hospitalized patient
- Advanced Management in Relationship-Centered Care — team-based care of patients with complex or chronic diseases
- Advanced Competencies and Electives — variety of specialty electives

“What’s unique and interesting about Part 3 is that students can pursue things that inspire them, like global health or working in underserved communities. These are passion areas for students, so they can choose to do things that inspire them,” says **Nick Kman '04 MD**, clinical professor of Emergency Medicine and co-director of Part 3 of the LSI curriculum. “It allows future physicians to pursue their passion areas through robust elective courses.”

One of those electives is Advanced Competency in Research, where students get longitudinal support from physician advisors and enhance their research skills. Students can conduct research in a less structured way, sometimes taking a month or more to continue research they worked on in the MDSR program.

Not every physician must do research, Kman says, but they must be able to interpret research and evidence-based medicine.

“We teach our students that in medicine, we have to do what the evidence tells us to do,” he says. “COVID taught us that. We had to look at the evidence to know if hydroxychloroquine would help patients survive or if it wasn’t an



Nick Kman '04 MD, clinical professor of Emergency Medicine and co-director of Part 3 of the curriculum (through 2023), prepares students for patient and team communication during emergency scenarios.

appropriate treatment.”

Kman says there’s more emphasis on simulations and assessments during the fourth year to ensure students are ready to graduate. For example, a physician may observe a student in the clinical skills lab taking care of a patient — in this case, a mannequin simulator — who was in a car accident. The physician sees how the student acts under pressure and how they communicate with the patient and the emergency department team.

“It’s important for all medical students — and all doctors — to be able to take care of someone with an emergent condition,” Kman says. “They might be on a plane or at their kid’s sporting event and someone has a heart attack or is injured in some way. We get students ready for that kind of scenario.”

Kman, who transitions out of his role as Part 3 director after 2023, also conducts first responder training in virtual reality, a cutting-edge tool also used by clinical

faculty to observe how students take care of emergency patients.

“Virtual reality is a good balance for the clinical skills lab,” McCallister says. “It’s feasible in some environments where it shines, but there are times when the clinical skills lab works better. It’s a fun and innovative technology and the students really enjoy it.”

The technology, along with research, is just one more aspect that drives the spirit of innovation in the LSI curriculum, McCallister says.

“We need to provide the infrastructure for research as well as the opportunities, resources and mentorship to our students. They need a safe, supportive place to conduct that research and we need to train the next generation of investigators.”

Kitty Munger last wrote about siblings in medicine and Vietnam veteran alumni for *Ohio State Medicine Alumni* magazine.

Advancing Competency in Research

“By the time students get to Part 3 of the LSI curriculum, they have had ample opportunity to develop at least a foundational background in research,” says **Ben Kaffenberger '10 MD, '14 Res**, associate professor of Dermatology and director of the Medical Student Research Program.

That’s where the LSI’s Advanced Competency in Research elective comes in, he says, allowing students to become proficient in a specific competency. “They have a chance to spend dedicated time to expand their research skill set. This allows them to expand on an idea, a mentoring relationship, and skills and research experience that are most relevant to their future specialty.”

Under the elective, students engage in a hypothesis-driven research project under the supervision of a current Ohio State faculty research mentor.

Kaffenberger says research methods vary based on the topic. Typically, the research questions deal with unmet needs, such as the current limitations of radiation therapy in a type of cancer.

“Or a student may want to know why patients with a certain disease respond to a specific type of treatment, so they will review a clinical database to determine who responded to a treatment and why.”

A passion for the topic

Kaffenberger first looks for a student’s passion for the research topic.

“I look for students who are self-starters and problem solvers,” he says.

Some students want to dedicate more time to their research and choose to take a leave of absence from medical school to pursue their projects. In other cases, students are so passionate about their research they squeeze in lab work between classes, using their own time even without course credit. A goal for many, he says, is to complete and publish their research before applying for a residency.

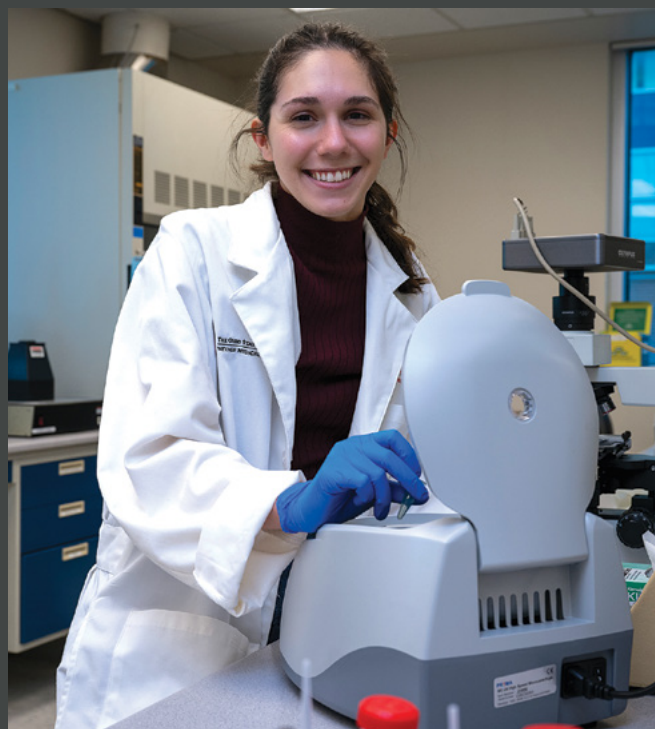
Two medical students are stellar examples of research in action and are immersed in research in their specialty areas — and they haven’t even taken the Advanced Competency in Research elective yet.

Transplant immunology research

Sydney Castellanos, a third-year medical student, participated in the MD Student Research (MDSR) Program between her first and second years, conducting research on transplant immunology, work she continues today. She has been interested in immunology since her undergraduate days when she studied microbiology, and researched skin infections and chronic wound sites in patients with diabetes.

Castellanos learned about the Bumgardner Lab when transplant surgeon Ginny Bumgardner, MD, PhD, associate dean for Physician-Scientist Education and Training, gave a speech on the intersection of immunology and surgery.

“When I started medical school, I knew I wanted to study immunology. My project specifically looks at two subsets of cytotoxic T cells and their roles in antibody-mediated rejection and viral infection clearance,” Castellanos says. “By better characterizing these cell subsets, we may one day be able to develop novel screening tools and treatments for antibody-mediated rejection in transplant recipients.”



*Third-year medical student **Sydney Castellanos** says her project provides an opportunity to learn more about transplant immunology.*



Castellanos is conducting her research on her own time, fitting in her lab hours around her regular coursework. She doesn't get class credit for her research, but it allows her to continue to learn more about transplant immunology.

Castellanos believes her research will have a positive impact on her career as a physician. "For me, research drove my career focus to begin with. To do academic medicine, we have to be able to discuss research, what is up-and-coming in the field and talk about what treatment options are available to patients. This experience helps me better understand and interpret research to better care for patients," she says.

Last year, she applied for and received the American Society of Transplant Surgeons Presidential Mentor Grant to continue her research.

Cardiovascular disease research

Medical student Will Schwartzman participated in the MDSR program working with Christopher Breuer, MD, director of the Center for Regenerative Medicine, at the Abigail Wexner Research Institute at Nationwide Children's Hospital. His work focused on the calcification of tissue-engineered vascular grafts designed for use in complex congenital heart patients. His undergraduate degree in biomedical engineering proved to be very useful.

"I did research as an undergraduate student, and I really enjoyed working with my mentor but wasn't sure if I wanted to pursue a career in academic medicine," Schwartzman says. "I have been very fortunate to work in Dr. Breuer's lab. He's an exemplary physician-scientist and dedicated mentor, and he showed me what that career looks like."

Currently between his second and third years, Schwartzman is on a leave of absence conducting cardiovascular genetics research with Rajat Gupta, MD, at Brigham and Women's Hospital in Boston.

"I wanted to lead a basic science research project from beginning to end, from hypothesis generation and experimental design through to data collection, analysis and presentation. That's what I'm doing right now," he says. "This kind of research experience starts with



*Thanks to a fellowship, **Will Schwartzman** is taking time between his second and third year of medical school to lead a basic science research project at Brigham and Women's Hospital in Boston.*

finding a funding mechanism to support yourself. With Dr. Breuer's support, I found the Sarnoff Fellowship."

Schwartzman received a Sarnoff Cardiovascular Research Fellowship, a competitive one-year award that supports non-PhD medical students to conduct intensive work in a biomedical research facility in the United States other than the medical school in which they are enrolled.

"Being able to take a year to learn something from scratch has been a valuable and gratifying experience," he says.

Schwartzman hopes to be a cardiologist and will do his clinical rotations when he returns to Ohio State.

Faculty Research News

\$3.6 million NIH award funds research to treat painful diabetic neuropathy

A \$3.6 million National Institutes of Health award will allow neurosurgical, neurology and neuroscience researchers at The Ohio State University College of Medicine and the Ohio State Wexner Medical Center to test a novel diagnosis and treatment combination for painful diabetic neuropathy. The approach combines spinal cord stimulation with measurement of small fiber nerve activity using a patent-pending device called Detecting Early Neuropathy.

Study corroborates research on teen overthinking

A new study from The Ohio State University College of Medicine and the Ohio State Wexner Medical Center, University of Utah and University of Exeter substantiates previous groundbreaking research that adolescent rumination (overthinking) can be reduced through an intervention called rumination-focused cognitive behavioral therapy (RF-CBT). Researchers also found that MRI technology allowed them to observe correlated shifts in the brain connectivity associated with overthinking.



“We know adolescent development is pivotal,” says corresponding author Scott Langenecker,

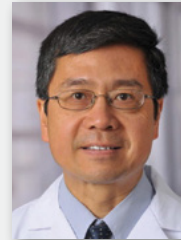
PhD, vice chair of research in the Department of Psychiatry and Behavioral Health at Ohio State, who started this project while at the University of Utah.

Center for Biomolecular Structure and Function to lead protein research

The Department of Biological Chemistry and Pharmacology at The Ohio State University College of Medicine was awarded a \$1 million Good-to-Great Grant from the university’s Office of Academic Affairs. The department plans to establish a Center for Biomolecular Structure and Function housing state-of-the-art instrumentation that will help expand protein research across Ohio State. The center will help researchers purify proteins from DNA constructs — isolating proteins individually — to better understand their structures and how they function.

Research group finds unexpected link between 2 schizophrenia risk proteins

The discovery of a physical interaction between two proteins in brain cells that can be traced in mice to control movement, anxiety and memory could one day open the door to development of new schizophrenia treatment strategies, say Ohio State College of Medicine researchers. The research group is the first to determine that the two proteins, both among the dozens of proteins related to the risk of developing schizophrenia, bind to each other under normal conditions



in multiple regions of the brain, and are found in mice to be key to maintaining normal movement, memory function and anxiety

regulation, says lead author Chen Gu, PhD, associate professor of Biological Chemistry and Pharmacology at Ohio State. The study was published in the journal *Molecular Psychiatry*.

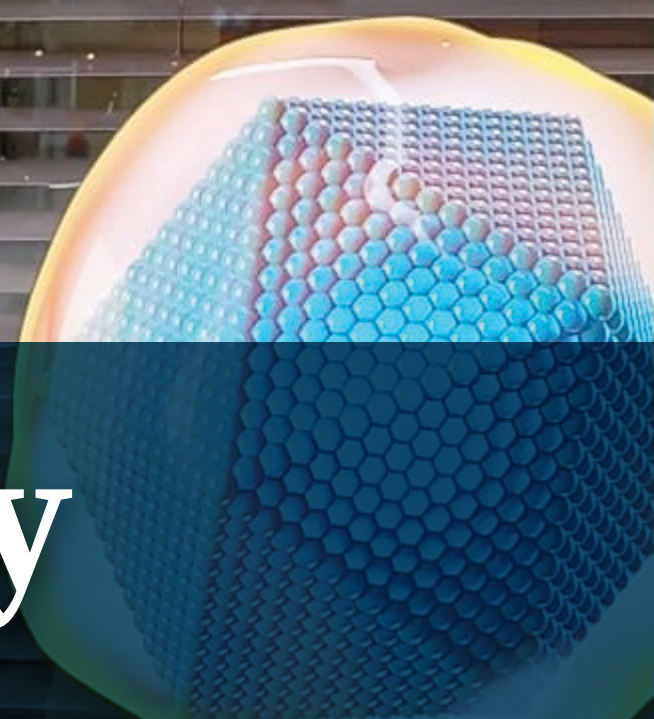
\$1.5M NIH grant to fund graduate research training

The National Institutes of Health awarded The Ohio State University Center for Clinical and Translational Science (CCTS) a five-year, \$1.5 million grant to fund six graduate students per year as they learn and conduct research in clinical and translational science.



“We are excited to be awarded the T32 to help us reach the goal of increasing the number of trained biomedical researchers who

can lead the design and oversight of future clinical and translational science,” says Ginny Bumgardner, MD, PhD, associate dean for Physician-Scientist Education and Training, professor of Surgery at the Ohio State College of Medicine and director of the grant.



Residency Research Takes Off

Ohio State College of Medicine residents are creating innovative solutions with clinical impact through their medical research.

By Alice Duncanson

Residents at The Ohio State University Wexner Medical Center are getting hands-on experience at the leading edge of research, thanks to top-tier residency programs that are gaining national attention. Four Ohio State College of Medicine residency programs are considered among the top 10 programs by physician reputation in the country: Otolaryngology, Combined Internal Medicine/Pediatrics in partnership with Nationwide Children's Hospital (NCH), along with General Surgery and Child Neurology, an NCH program in the Ohio State College of Medicine Department of Pediatrics.

A lot of the buzz is due to “the breadth of exposure we’re able to give to our residents, and even some of that very niche education they can explore,” says **Scott Holliday '94 MD, '98 Res**, clinical associate professor of Internal Medicine and Pediatrics at the Ohio State College of Medicine, who helps residents prepare for careers in medical research as associate dean of Graduate Medical Education.

The research scope

At any given time, many of Ohio State's more than 1,000 resident physicians engage in research experiences with the college's 80 accredited programs — as well as approximately 65 nonaccredited programs that are more highly specialized in nature and operate on more of an apprentice model. For example, notes Holliday, the Department of Plastic and Reconstructive Surgery recently started a nonaccredited “sub-sub”

specialty Peripheral Nerve and Orthoplastic Surgery fellowship focused on preserving nerve connection in major injuries.

“It's being used as part of our Military Medicine Program to improve amputation care,” he says. “This type of research experience drives a lot of interest in the specialty.”

While not every resident will go into research, many of those who stay in academic practice will most likely have some component of research in their careers. “We have many opportunities for residents to explore their research interests,” Holliday says. “We want to make sure we give them skills, including research methodology and ethics, and a true understanding of what research will be like if that's part of what they want to include in their careers.”

Here are just a few examples of Ohio State residents doing exciting

research with the potential to impact patients worldwide.

Radiotherapy in Paris

Radiation oncology resident **Benjin Facer, MD**, is helping to advance a promising new radiotherapy through a unique research fellowship that has taken him far from his suburban Columbus home.

Facer, along with his wife and two young children, is spending the year in Paris, France, as he completes an ASTRO-Industry (American Society for Radiation Oncology) Research Fellowship. The ASTRO Fellowship connects private companies with radiation oncology residents for a yearlong research experience. In

*Opposite and below: For **Benjin Facer, MD**, radiation oncology resident, pictured below with his wife Erin, a fellowship in Paris offers an opportunity to use his biotechnology and engineering background to further cancer research.*





Facer's case, that means working for the Paris-based startup Nanobiotix, which makes NBTXR3 — a product that, when injected into a tumor, increases the efficacy of radiotherapy.

NBTXR3 is currently in phase III clinical trials to get approval in the United States. The product was recently licensed by Johnson & Johnson, which is partnering with Nanobiotix on development and testing. Facer is part of the translational science team studying the effect of NBTXR3 on cancer cells in the lab, as well as the medical affairs team, which focuses on steps like clinical trial enrollment and regulatory approval.

It makes sense that Facer would enjoy this work, given his longtime interest in biotechnology and engineering. As an undergraduate at Brigham Young University, he took a biotechnology entrepreneurship course that immersed him in this space. “A lot of people in the class ended up working for pharmaceutical companies,” Facer says. “I went the clinical route, but always thought this was a cool world.”

Part of what makes his Nanobiotix experience exciting? “There’s definitely a ‘hey, we’re building something’ type of feeling there,” he says. “People who work here are passionate about making a difference.”

There are other perks to the Paris-based fellowship, of course, like being able to hop on the main metro line to visit the Eiffel Tower and the Louvre, and being able to see a castle from his kitchen window. There are challenges, too — like the three weeks it took Facer to open a French bank account.

And while Facer's colleagues largely

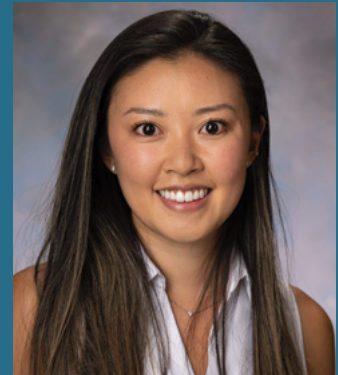
speak English, his 4-year-old son is gaining new language skills in a French-speaking school.

Facer hopes that fellowships like this will help raise interest in radiation oncology at Ohio State for students who are interested in engineering. “I hope programs like this will bring in medical students with an engineering focus and help them realize, ‘There’s a place for me here; I can keep my engineering focus and do clinical medicine. It’s a good marriage.’”

Making things better for kids

As a teenager, **Lindsay Gil, MD, '23 MPH**, underwent a spine surgery that frightened her family. “I still remember their faces — my dad, who never cries, tearing up, and my mom sobbing as I was wheeled off to the OR,” she recalls.

Now, as a pediatric general surgery resident, she carries that empathy forward when she speaks



“I saw how you can actually change clinical practice by doing good, well-thought-out research that makes things better for the kids.”

LINDSAY GIL, MD, '23 MPH



While in the surgical intensive care unit, Gil greets one of the therapy dogs in Ohio State's Buckeye Paws Program, which brings emotional support to patient care staff.

to families who are scared about their children's procedures. Part of Gil's empathy also comes from her pediatric surgery research fellowship, a partnership between Ohio State and Nationwide Children's Hospital.

Gil worked in the lab of Peter Minneci, MD, MHSC, on a randomized clinical trial studying the efficacy of laser hair removal for children with pilonidal disease, a chronic skin infection that develops in the gluteal cleft. "We found that laser hair removal reduces rates of recurrence by 25%," Gil says.

"It was pretty cool to be part of a big trial like that and to get to work with patients directly." And, because Minneci tasked her with writing an overview of management strategies for pilonidal disease as well as the results of the clinical trial, Gil has now been published in the *JAMA Surgery* — twice.

Her first exposure to research happened as an undergraduate at the University of Maryland, where she helped map bats' brain activity during echolocation. After college, Gil spent a year doing bench research on multiple myeloma — and how epigenetic changes make some patients resistant to certain chemotherapies — at the National Institutes of Health. As a student at Loyola University's Stritch School of Medicine, she learned how to code, analyzing administrative and discharge-based health care databases to investigate patterns in disease processes and surgical outcomes.

That experience served her well in her fellowship with Nationwide Children's Center for Surgical Outcomes Research, where she put her coding skills to work on datasets for specialties including general pediatric surgery, urology, plastic

surgery and more. Gil, who was also pursuing a Master of Public Health at the time, notes, "My research fellowship went hand in hand with the biostatistics and computer programming classes I was taking to learn how to manipulate and analyze data."

Despite her strong research experience, Gil didn't expect to incorporate research into her surgical career — but working in Minneci's lab changed her mind. "Now I definitely see myself doing research. I saw how you can actually change clinical practice by doing good, well-thought-out research that makes things better for kids."

Designing state-of-the-art medical devices

Since her undergraduate studies at the University of Pennsylvania, surgical resident **Dahlia Kenawy, MD**, knew she wanted to fix things with her hands. "I had the opportunity to take a preceptorship course where I partnered with a vascular surgeon to come up with engineering solutions for clinical problems. It was an eye-opening experience — I loved working with my hands to help patients, and that was when I realized I wanted to be a surgeon."

Her mentors at the Albert Einstein College of Medicine recommended Ohio State for her general surgery residency, knowing she would experience a wide variety of clinical cases in her specialty — while being adjacent to world-class engineering facilities for research into medical devices. "Ohio State fit with what I wanted in my career," Kenawy says.

As a surgical resident, she spent two years in the lab of vascular surgeon Bryan Tillman, MD, PhD, who designs retrievable

vascular stent grafts for multiple clinical applications. In one of these applications, the stent graft is deployed into the aorta through a catheter, allowing a surgeon to repair aortic injuries without stopping blood flow. After completing the repair, the stent can be completely removed in its entirety.

Kenawy and others in the lab helped transition the stent to being made almost completely in-house. "The scaffolds are laser cut by an outside company, but we were able to coat the stent in PTFE ourselves," Kenawy explains. "That meant we were able to play with the design and have a lot more creativity that wasn't dependent on going to a company. That really expedited the things we were able to do."

The experience in Tillman's lab helped shape Kenawy's future plans, which includes an additional fellowship in minimally invasive surgery. "I want to continue doing



"Ohio State fit with what I wanted in my career."

DAHLIA KENAWY, MD



translational research with medical devices,” she says. “It was great to have a mentor who does exactly what I want to do — and showed me a pathway forward to incorporate this into my future career.”

Continuing with research in her surgical career also helps Kenawy make a bigger impact. “Through medicine, you can do a lot in your community, but through research, you can have a much wider impact.

That has always really appealed to me.”

Alice Duncanson last wrote about first-generation students for *Ohio State Medicine Alumni* magazine.

Improving Life for Residents

The Residents’ Advisory Council (RAC) helps to promote residents’ well-being and education. RAC holds monthly meetings in partnership with the Office of Graduate Medical Education, with representation from every house staff training program at Ohio State.

Residents are “the future of medicine,” says Florencia Scaglia Drusini, MD, obstetrics and gynecology resident and RAC co-chair. “We encourage and believe that house staff should be active participants in shaping our health care system. Acknowledging this begins by fostering a supportive training environment that empowers house staff.”

Among other endeavors, RAC aims to facilitate effective communication between residents and entities that impact their training, practice environments and well-being, foster camaraderie, promote community outreach and advocacy, and further professional development opportunities. This year, RAC seeks to enhance the beloved 3 Doan lounge area, including adding refreshments; organizing social activities inside and outside the hospital to promote camaraderie; and utilizing their newly allocated budget to help improve the resident experience.

Samantha Lawson, MD, emergency medicine resident, notes the “wide diversity of our resident peers, each with different needs. I wanted to be a part of the group that advocates for them, elevates their voices, and helps ensure equitable and safe medical training/education for everyone in residency at Ohio State.”

While progress can be slow, the outcome is worth it when RAC members are able to facilitate



Residents’ Advisory Council co-chair **Samantha Lawson, MD**, says the organization gives her a chance to advocate for residents.

improvements that make residents’ lives easier — like the raise RAC helped negotiate on behalf of residents last year, she says. “When training is so hard, finding parking, a snack and a room to work or sleep in should be the least of your worries,” Lawson says. “This is why we’re focusing on community building, improving nutrition (and access to it) and a fair system for call rooms.”

The Ohio State University College of Medicine

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Hamilton Hall Re-Emerges

Interdisciplinary Health Sciences Center at Hamilton Hall

Hamilton Hall's renovation — phase three of reconstruction as part of the Interdisciplinary Health Sciences Center (IHSC) — continues at a steadfast pace. The exterior quadrangle is already revealing itself as a gathering space for students, faculty, staff and IHSC visitors.

Inside, terrazzo flooring, renovated offices, conference rooms and a cathedral-height 4-story Forum feature spaces large and intimate.



Clockwise from bottom left:

1. Scaffolding in the Forum frames a gathering space inside the entrance to Hamilton Hall, leading to the exterior quad.
2. Hamilton Hall's renovated hallways and administrative offices keep the grandeur, but create bright, daylit spaces.
3. The outside courtyard is framed by the Classroom Wing (right), Forum (middle) and Hamilton Hall north wing (left).
4. Work continues on Hamilton Hall's Gallery, which leads to the Forum.
5. Skylights frame the ceiling on the Forum's northeast and southeast corners.
6. Hamilton Hall's brick facade has been refinished.
7. The original stairways will be refinished.
8. Hamilton Hall stonework will feature the seals of each of the seven health sciences colleges.



4.



5.



8.



6.



7.



Alumni Notes

Classes of 1970s



William C. Koenig Jr. '71 MD, Res, published *The Spirituality of Running* (LuLu 2023),

a book describing his spiritual experiences while running and how the connection with nature has improved his overall state of mind. Koenig has found great joy in running for over 50 years.

Classes of 1980s

David A. Jones '80 MD, received the Florida State University College of Medicine Outstanding Clinical Faculty Educator Award for the Tallahassee Regional Campus for 2023.



Classes of 1990s



Quinn Capers IV '91 MD, was appointed professor and chair of the Department of Internal Medicine at

Howard University College of Medicine in Washington, D.C. An interventional cardiologist, Capers was previously associate

dean for Faculty Diversity and vice chair for Diversity in the Department of Internal Medicine at the University of Texas Southwestern, where he held the Rody P. Cox MD Professorship in Internal Medicine. From 2009-2019, he served as the associate dean for Admissions at The Ohio State University College of Medicine.



Paulette A. Smart-Mackey, MD, '96 Res, published *Meet Skulle* (AuthorHouse 2023), a science



book for elementary and middle school kids that offers a jump-start on studying the human body. Through

interactive questions, *Meet Skulle* provides an entertaining way for children to learn the skeletal system, memorize the different bones in the body and further their curiosity for science.

Classes of 2010s



Utkarsh H. Acharya, DO, '12 Res, co-authored *Hematology Rapid Review* (2021) and *Oncology Rapid*

Review (2021) while on faculty at Dana-Farber Cancer Institute and Harvard Medical School. Acharya's textbooks cover the Hematology and Oncology board exams so students can conveniently learn and review necessary information to feel confident for the tests.



Tell Us What You Think!

The Ohio State College of Medicine Alumni Office seeks your input to help us understand your interests as alumni and readers. To complete this brief survey, go to go.osu.edu/COMsurvey before Feb. 15, 2024.

Castle Connolly names 15 Ohio State clinical faculty Top Hispanic and Latino Doctors

Infectious Disease

Jose Bazan, DO
Carlos Malvestutto, MD

Internal Medicine

Jeanne Caligiuri, MD

Medical Oncology

Gabriel Tinoco Suarez, MD

Neonatal-Perinatal Medicine

Elizabeth M. Bonachea, MD

Neurological Surgery

Daniel Prevedello, MD

Ophthalmology

Ana Suelves Cogollos, MD

Pathology

Giovanni Lujan, MD
Martha Yearsley, MD

Pediatric Dermatology

Esteban Fernandez Faith, MD

Pediatric Neurology

Jorge Vidaurre, MD

Plastic Surgery

Cristiane Ueno, MD

Psychiatry and Behavioral Health

Ernesto Ortiz Cruzado, MD

Radiation Oncology

Alexandra Diaz Pardo, MD

Surgery

Carlo Contreras, MD

Class of 1998

The Class of 1998 shared the following updates as they celebrated their 25th reunion in October 2023.



Richard "James" Dom Dera '98 MD, is the vice president of Professional Standards and

Governance for Pioneer Physician Network in Northeast Ohio. He is also the medical editor of *FPM*, the American Academy of Family Physicians' peer-reviewed practice management journal. Dom Dera lives in Akron, Ohio, with his wife and two daughters.



Mark Hodges '98 MD, has been in practice in Internal Medicine in Washington Court House,

Ohio, for 22 years. He is married with two sons and two "bonus" daughters. "We have three grandchildren and one due in November," he says. "We love traveling and family time."

Jennifer O. Grube '98 MD, is a partner/owner at Red Rocks Ob/Gyn in Lakewood, Colorado, where she has been practicing for the past 21 years. "I have had various leadership roles including

department chair of both of our hospitals," she says. "I live in Evergreen, Colorado, with my husband, two children and our sweet dog Brutus. Outside work I enjoy skiing, hiking, trail running and tennis."

Amy Wermuth Rahl '98 MD, is an Ob/Gyn at Professionals for Women's Health in Columbus. She and her husband Scott have three children (Olivia, Rachel and Adam). "We enjoy time traveling now that our children have grown," she says.

Jennifer Richardson '98 MD, operates a rheumatology practice at the Columbus Arthritis Center. She and her husband Craig have been married for 28 years, and are parents to "three fun kiddos": Eleanor, 22; Cy, 19; and Claire, 18. "We are looking forward to more travel as empty-nesters next year," she says.



SHARE
YOUR
STORY

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The Ohio State Medical Alumni Society wants to hear from you! Share your news, including wedding announcements — 80 words or less. Tag us on social media or email us at medalum@osumc.edu by April 14, 2024, for the Summer 2024 issue of *Ohio State Medicine Alumni* magazine.

IN *Memoriam*

To view obituaries in full, please visit go.osu.edu/notesandobits.

2023

AUGUST

Stella B. Kontras '53 MD, Res
Howard W. Lowery '55 MD
James E. Mann '60 MD
Henry L. Danaceau '65 MD

JULY

Kenneth W. Blissenbach '70 MD
Clark W. Distelhorst '71 MD
Marilyn J. Huheey '75 Res
Robert A. Young '78 MD
Michael D. Fetters '89 MD

JUNE

Alan L. Edmonson '61 MD
Arden L. Hothem '68 MD
Carol L. Clinton '90 MD, '93 Res, Fellow

APRIL

Charles O. Chrysler '56 MD
James M. Coulter '56 MD

Richard L. Morgan '59 MD
Larry H. Bowers '68 MD
Frederick L. Finke '70 MD

MARCH

Edwin J. Clinger '46 MD, Res
Albert M. Bringardner '53 MD, Res
Richard D. Patterson '61 MD
Daniel C. Dunlap '64 MD
Elzworth C. Wiesenmayer '68 MD
Thomas J. Nickras '73 MD
Marilee L. Sipski '79 MD, Res
Karen A. Spletzer '87 MD

FEBRUARY

Denis J. Winder '67 MD
James W. Whetstone '87 MD
Jack D. Kyman '73 MD, Res
Ralph O. Dunker '70 MD
Mark H. Scheutzow '93 MD

JANUARY

Paul N. Montalto '50 MD, Res
Douglas S. Hess '59 MD, Res
Louis A. Schmidt '60 MD
Milford E. Gottlob '63 MD
Phillip D. Jeffers '73 MD, Res, Fellow
John F. King '76 MD
Richard P. Dickey, MD, '66 Res
Guy Golembiewski '80 MD
Kristin S. Robinson '16 MD
Kristin S. Philip '16 MD

2022

NOVEMBER

Manuel Sanguily '59 MD

Faculty in Memoriam

Gary E. Barnett, MD
Joseph J. Flood, MD
David K. Hirsh, MD
Hubert W. Porterfield, MD, Res

Alumni board welcomes new leaders

We're excited to announce the addition of two new alumni to The Ohio State University College of Medicine Medical Alumni Society Board.



George Fouras '90 MD, is a mental health psychiatrist with the Los Angeles County Department of Mental Health, where he has advocated for youth involved in child welfare and juvenile justice for more than 17 years. He completed his residency in

general adult psychiatry and his fellowship in child and adolescent psychiatry at the Los Angeles County and University of Southern California Medical Center in Los Angeles, graduating in 1995.

Fouras went on to work at the San Francisco Department of Public Health for 21 years as a consultant to the Juvenile Dependency Court before moving back to Los Angeles to work in specialized foster care for the LA County Department of Mental Health.



Grace Shih '92 MD, is a professor of Anesthesiology and director of Obstetric Anesthesiology at the University of Kansas Medical Center. She completed her training in anesthesiology at the Medical College of Virginia and her fellowship in

Obstetric Anesthesiology at the University of Alabama at Birmingham.

In 2019, Shih was awarded the Joy McCann Professor in Women in Medicine and Science. Her areas of interest include gender equity, medical education, faculty development and wellness. In her spare time, she enjoys traveling, biking, gardening and spending time with friends and family.

Closing the Information Gap

By Emily Glenn

For **Amy Speeckaert, MD, '16 Fellow**, and **Karilyn Larkin, MD, '13 Res, '16 Fellow**, a friendly acquaintance they made while in medical school more than 13 years ago has led to an unexpected collaboration that will help clinicians transform early care for some cancer patients.

After Speeckaert and Larkin graduated in 2010 from Albany Medical College in New York, they went their separate ways to pursue their residencies, Speeckaert to Geisinger Medical Center for orthopedic surgery and Larkin to The Ohio State University Wexner Medical Center for hematology and oncology.

They reconnected in Columbus in 2016 as Speeckaert started her hand fellowship at the Ohio State Wexner Medical Center, and even unknowingly found themselves living within walking distance of each other that first year. They became close friends, relying on each other over the years for support while each grew their careers and families.

Speeckaert, now a clinical associate professor of Orthopaedics at the Ohio State College of Medicine, specializes in orthopedic hand surgery. Larkin, an assistant professor of Internal Medicine at Ohio State, is a hematologist with specialties in acute myeloid leukemia and blood and bone marrow transplant, and is a member of the Leukemia Research Program at Ohio State University Comprehensive Cancer Center – The Arthur G. James Cancer Hospital and Richard J. Solove Research Institute.

As is bound to happen, they often found themselves talking about work, and in particular, a difficult patient population that they both treated: patients with blood cancers and concern for a joint infection. In some cases, patients' cancer treatments were being held up until a diagnosis could be made and a corrective course charted. Other times, patients were mid-intensive treatment, which leaves them at risk for sudden decompensation, and so their very lives hung in the balance.



More than 13 years after meeting in medical school, **Amy Speeckaert, MD, '16 Fellow** (left), and **Karilyn Larkin, MD, '13 Res, '16 Fellow**, reconnected during their fellowships at Ohio State.

While there are known laboratory values that guide physicians when determining if a joint is infected in healthy patients, no such guidelines exist in patients who are immunocompromised and undergoing cancer treatments. Speeckaert and Larkin noticed an information gap in medical science which they, as a team, felt well-suited to bridge.

“I’d be consulted on one of Karilyn’s patients where I was asked to assess if a wrist was infected,” Speeckaert says. “If it was, they would need urgent surgery

to evacuate the joint infection. If it wasn't infected, they could often resume life-saving cancer treatment. It's a difficult position to be in when there is a paucity of literature to guide us."

Together, through a series of conversations, the two specialists determined they had the resources here at Ohio State to do better — to find predictors of joint infection in this fragile patient population. With the help of a research team of medical students and residents, they created a large database of such patients and set out to determine unique predictors of joint infection in this patient population.

"It was really Amy's openness and inquisitiveness about these consults that hatched this research," Larkin says. "She would start a call by saying, 'I'm sorry to bug you,' but if she could see the smile on my face when she called, it was just a joy to be asked! Our relationship, and really our friendship, allowed us to listen without judgment, admit to each other where our expertise ran out, and learn from each other's training and approach to treating these patients."

"All too often we type a short note in the chart about a patient without ever picking up the phone and discussing with the consulting team the limitations we face when making tough decisions," Speeckaert says.

"My ability to ask Karilyn questions about how a cancer patient mounts a response to infection when they don't have many white blood cells was immensely helpful."

Their data set allowed them to pursue several projects, one looking at unique risk factors for joint infections in immunocompromised patients, and another at a subset of patients who have extremely low white blood cell counts due to their cancers or immunosuppressing medical treatments.

"There are fewer things you can rely on in somebody who is immune compromised, when you have an



Speeckaert's and Larkin's collaboration on joint infections among their shared cancer patients has led to further clinical research to advance cancer care.

inadequate immune system you don't mount the same response," Larkin says.

"However, in that setting, we demonstrated that one particular inflammatory marker is acutely elevated, even in cases where the baseline level is already high," she says. "This allows a provider to recognize that the risk of joint infection is significantly higher than when the marker is normal or closer to normal."

Larkin and Speeckaert hope that these findings

will save valuable time when a patient is evaluated for infection. "You don't have a delay when you're waiting for something like a culture to turn positive, which might take 24 or 48 hours to happen," Larkin says.

A second project demonstrated that patients who have a very low white blood count can have an infected joint with a very low white blood count in the joint itself. "It makes sense," Speeckaert says, on the normal lab values of white blood cell count in the joint fluid in these patients. "And we hope this can help others not miss infections in similar situations."

They published their results in the *Journal of Orthopaedics* and in the *Journal of the American Academy of Orthopaedic Surgeons* and are revising a third manuscript for submission.

Larkin and Speeckaert are currently editing a manuscript in which they created a scoring system that can place patients into groups based on their low, moderate or high risk of getting an infected joint, a common tool in medicine for many conditions. The result is a tool that they hope can improve the prompt diagnosis of infected joints, as well as allow physicians to resume life-saving cancer treatments when the joints are not infected.

Emily Glenn is a writer with The Ohio State University Wexner Medical Center Development Communications.



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