# ROLLING FALL 2022

# A CHAMPION FOR ROLLINS

Dani Fallin assumes her post as dean

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# STUDENTS MEET THEIR NEW DEAN

Rollins students surround Dean Fallin after spending the morning volunteering with organizations around Atlanta on Rollins-teer Day. The day of service is held each year during orientation as an introduction to the broader public health context and communities of need in Atlanta.



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Dangerous soil 16 Measuring environmental contaminants and their health costs in the Westside



Precision public health 22 Bringing genomic knowledge to the population level

### **COVER STORY**



M. Daniele Fallin became the James W. Curran Dean of Public Health on July 1. Photo by Kay Hinton

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When epidemics converge **26** The newest Rollins chair focuses on how such "syndemics" affect vulnerable populations



**CONTRIBUTIONS 32 MICHAEL UGWUEKE 86MPH** As president and CEO of Methodist LeBonheur Healthcare, Ugwueke serves vulnerable populations in and around Memphis, Tenn.



# FROM THE DEAN



Ithough I am only three months into my role as dean, I already feel deep pride and excitement about the work of our school's outstanding faculty, staff, and students. Rollins is truly a wonderful place, and I feel privileged to be a part of this impressive community of people who are passionate about the public's health.

In this issue we highlight some of the wonderful work of our people. Four years ago, Eri Saikawa, associate professor of environmental health, and a doctoral student identified high levels of lead in the soil in some vards and gardens in Atlanta's Westside, a low-income, mostly minority community. Their discovery led to the area being classified as an EPA Superfund site. Saikawa and her team are continuing their studies, and they are now trying to determine the health impacts on children living in the area.

> In this issue we also explore applications of genomics discoveries, a topic near and dear to my heart. Yue Guan and Colleen McBride colead the Emory Precision Public Health Research Program where they and other scientists explore ways to apply genomic discoveries in broad, population-based settings.

In July, Don Operario joined Rollins as the Grace Crum Rollins Distinguished Professor and Chair of the Department of Behavioral, Social, and Health Education Sciences. Operario is a social scientist who studies syndemics—the interaction between concurrent epidemics, such as the HIV/AIDS epidemic and the rising epidemics of violence and mental health issues.

I am joining Rollins during a challenging time for public health. In addition to the ongoing pandemic, we have faced the overturning of Roe v. Wade, continued gun violence, acts of racism, deteriorating mental health, newly emerging infections, natural disasters, wars, climate crises, and more. Public health education, practice, and research are needed now more than ever. We must be tenacious in our pursuit of public health. I am inspired by the work of our faculty, staff, and students and excited to work together to address these challenges.

Last, I want to thank the Rollins community for its warm welcome and generosity. I feel like I am inheriting a new family! I want to extend a particular thanks to Jim Curran, who has been wonderfully kind in sharing critical details and supporting my transition. He is an incredible leader, and I am grateful that he will continue to be a source of advice and support for the school for years to come.

### M. Daniele Fallin, PhD

James W. Curran Dean of Public Health **Rollins School of Public Health Emory University** 

@DeanDaniFallin

# CLIFTON NOTES — LAUNCHING THE LARGEST HIV SELF-TESTING PROGRAM

multiple sources, including order information, web traffic/referral tracking, ollowing a successful pilot program in 2020surveys, and gualitative interviews. 2021, Rollins researchers are preparing to Some populations are disproportionately affected by HIV and less launch the largest nationwide mailed HIV likely to have access to key prevention services. TTMH will work closely self-testing program in US history. Together with the CDC's Let's Stop HIV Together campaign to market the tests to communities disproportionately affected by HIV, including cisgender gay, TakeMeHome (TTMH) will deliver one million tests across bisexual, and other men who have sex with men; transgender people; the country, funded with \$8.3 million for the first of and Black or African American cisgender women. a five-vear CDC award.

HIV testing is a proven strategy for HIV prevention and a key first step in the continuum of care, yet still too many people are unaware of their HIV status. TTMH addresses common barriers to testing, such as stigma, privacy concerns, cost, and lack of access to HIV clinics by offering free HIV self-tests through mail delivery.

"Testing is a critical entry point for HIV prevention and treatment services, especially for people most affected by HIV," says Travis **Sanchez**, professor of epidemiology and executive director for the program. "Together TakeMeHome leverages proven HIV prevention strategies by allowing people to get tests delivered directly to their doorsteps and gives people who otherwise might not have tested an opportunity to know their status."

By early 2023, TTMH will begin distributing a free HIV self-test to people who enroll through its website. Orders will be processed through Amazon and mailed in discreet packages to all 50 states and Puerto Rico. Emory researchers will evaluate the program by assessing who used the tests, how many new diagnoses were made, and how many began HIV treatment or pre-exposure prophylaxis. The program will be monitored and evaluated with data from



Several organizations will play crucial roles in the implementation of the program. Building Healthy Online Communities will lead outreach and engagement with participants. Signal Group will manage the technical aspects of TTMH, including the website and back-end development. NASTAD will lead public health and community engagement activities. As the sole manufacturer of FDA-approved HIV self-tests, OraSure Technologies will be responsible for the production and logistics of the HIV self-test kits, and CDC's Let's Stop HIV Together campaign team will lead the marketing activities.-Brian Katzowitz



# **Curran receives Hatcher Award**

After presenting the Charles R. Hatcher Jr. MD Award for Excellence in Public Health since its inception, James W. Curran is now on the other side of the table. On September 8, Curran became the 20th recipient of the award, which was established in 1996 to honor faculty members in Emory's Woodruff Health Sciences Center who exemplify excellence in public health. A pioneer in HIV/AIDS prevention, Curran led the nation's efforts in the

battle against HIV/AIDS for 15 years. While at the CDC, he attained the rank of the assistant surgeon general. He has also been elected to the National Academy of Medicine and the American Academy of Arts and Sciences.

In 1995, Curran joined Rollins as dean and professor of epidemiology. He also has served as codirector of the Emory Center for AIDS Research. In 2009, the Rollins deanship was endowed and named the James W. Curran Dean of Public Health in his honor.

Under Curran's leadership, Rollins has grown to be ranked No. 4 among accredited schools and programs of public health by US News & World Report and No. 4 in NIH funding among all schools of public health.

When Curran stepped down as dean on July 1, he was Emory's longest-serving dean and the longest-serving dean at a school of public health. He remains at the school as a professor in epidemiology and global health. Curran was succeeded by M. Daniele Fallin.

"Jim Curran's career is legendary. For his work in the early 1980s on HIV/AIDS, the world owes him enormous gratitude," says Emory President Gregory L. Fenves. "At Emory, we are grateful for the vision and ambition he brought to the Rollins School of Public Health, which he led to become a premier school ranked at the very top of the field, and for bringing together other key agencies to make

Atlanta one of the public health capitals of the world."

# Goodbye to a good friend

Rollins lost a trailblazer and a passionate advocate with the passing of Dean Surbey, who died on May 28, 2022. Surbey worked as executive associate dean for administration and finance and joined Rollins nearly 27 years ago when the school was still in its infancy and James W. Curran was beginning his role as dean.

Surbey's many accomplishments include managing the construction projects for the Claudia Nance Rollins, Grace Crum Rollins, and R. Randall Rollins Buildings; leading, managing, and mentoring the school's service units-totaling approximately 100 staff; leading and advocating for the construction of the ablution rooms, the prayer and meditation spaces, the first lactation space, and gender-neutral restrooms; and keeping the school in the black for 27 years. Surbey also participated in university-wide strategic planning efforts as well as those associated with the Woodruff Health Sciences Center.

"Dean was by my side every step of the way during my nearly 27 years at Rollins," says Curran. "I could never have asked for a more committed, resourceful, or upbeat colleague."

Surbey's death occurred a month away from his retirement. Rollins



VANDA HUDSON, DEAN SURBEY, AND ERIN CAHILL POSING DURING A TOUR OF THE NEW R. RANDALL ROLLINS BUILDING.

kept the date of his retirement party and instead held a celebration of his life in its place on June 23. Due to Surbey's tremendous impact and popularity, the event numbered over 200 with more people joining by livestream. As his ex-wife and best friend, Marilyn Surbey, articulated during the ceremony, Surbey will be remembered as a true original.

Dean is survived by Marilyn Surbey; his son, Nicholas (Nick) Surbey 10C (Scottie Rowell); daughter, Kathryn (Katy) Surbey Brouse 09Ox 12C 15MPH (Jonathan); and two beloved grandchildren, Isaac and Elena.



# The legacy of Gene Gangarosa

Eugene "Gene" J. Gangarosa died on August 11, 2022, at age 96.

days-four of his mother's 14 children died of childhood infectious illnesses that are often attributable to poor water and sanitation. Gangarosa was a pioneer in the field of water, sanitation, and hygiene whose research and work has saved millions of lives. He was also a pioneer His interest in medicine and enteric pathogens took him to Walter in establishing public health at Emory as one of the founding fathers of Reed Army Institute of Research, where his intestinal biopsy studies are the program that grew to be the Rollins School of Public Health. credited with the widespread adoption of rehydration therapy, which has "Gene was a giant who made an incalculable impact on our school, on dramatically influenced the standard operating procedure for treating the field of public health, and on the untold number of people whose lives cholera and saves approximately one million children a year. He continued his research in intestinal pathophysiology in Lahore, Pakistan, as director have been saved by his work," says Jim Curran, who was dean during most of Gangarosa's tenure at Rollins. "His numerous legacies-science, public of the University of Maryland's Pakistan Medical Research Center. In health action, education, mentoring, and philanthropy-will inspire and 1964, he joined the CDC, where he subsequently held leadership positions assure public health success for decades to come." in the Epidemic Intelligence Service, the Enteric Diseases Branch, and Gangarosa began teaching in Emory's Master of Community Health the Bacterial Diseases Division. He retired from the CDC in 1978 to serve as dean at the American University of Beirut, where he transformed a program (the precursor of the MPH program) in 1975 when it was first established. When he became director in 1982, the program's continued graduate program into an independent school of public health.

existence was extremely tenuous. Gangarosa recruited former colleagues from the Centers for Disease Control and Prevention (CDC) to teach as adjunct professors, soothed concerns of university and medical school administrators, and expanded course offerings-"building a lot out of begged, borrowed, and stolen components," according to a colleague at school in 72 years in 1990.

Gangarosa is survived by his wife, Rose Christine née Salamone; the time. His efforts paved the way for the founding of Emory's first new his sons, Raymond Eugene 72C 90MPH, Eugene John Jr. (Marjorie Lynn), and Paul Charles 94MPH (Teresa); three grandchildren and Gangarosa stepped down as director that same year, but he continued a great-granddaughter. His daughter Peggy predeceased him. to contribute significantly. He was instrumental in establishing the school's Gifts in Gangarosa's memory may be made to the Gangarosa Center for Global Safe Water, Sanitation, and Hygiene (WASH), which is Department of Environmental Health, the Eugene J. and Rose S. now considered one of the top WASH centers in the country. Gangarosa Scholarship Fund, or the Eugene J. Gangarosa Global Field

Experience Fund. For more information, contact Kathryn Graves at With his wife of 72 years, Rose, Gangarosa has provided invaluable philanthropic support to the school. They established the school's first global 404-727-3352 or kgraves@emory.edu.

# CLIFTON NOTES —

field experience fund as well as a scholarship to attract outstanding WASH students. They have endowed three distinguished professorships and created an unrestricted endowment for the department of environmental health. To honor his leadership and philanthropy, that department was named the Gangarosa Department of Environmental Health in 2020. Following the Hubert Department of Global Health, this is the second department within Emory University to be named.

Improving people's access to safe water was Gangarosa's life's work dating back to World War II when he was involved with rebuilding the water system in war-torn Naples, Italy. But his connection to the importance of safe water stems from his earliest

Gangarosa has received the highest awards given by the CDC and Emory. He was awarded the CDC's Medal of Excellence for distinguished scientific contributions and Emory's Thomas Jefferson Award for outstanding contributions to the university.

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# Increasing rates of childhood obesity

The rates of new cases of obesity in elementary school are higher and are occurring earlier in childhood than they were even a decade earlier, despite numerous public health efforts to promote healthy behaviors and to improve living environments. That is the finding of a study by Solveig A. Cunningham, associate professor of global health, published in Pediatrics. Obesity in childhood and early adolescence can be linked to poor mental health and is often a precursor to chronic diseases in adulthood, including diabetes and cardiovascular disease.

The study found that approximately 40 percent of today's high school students and young adults had experienced obesity or could be categorized as overweight before leaving primary school. Also, the risk of developing obesity in primary school among the most economically disadvantaged groups increased by 15 percent during the past decade.

"These worrying data indicate that the childhood obesity epidemic in the United States continues to grow and get more serious. Our knowledge about effective interventions to fight this also seems limited," says K.M. Venkat Narayan, Ruth and O.C. Hubert Professor of Global Health, and co-senior author of the study. "We urgently need an aggressive national strategy for interdisciplinary research and public health to stem the tide of childhood obesity and its consequences."—Rosemary Pitrone



## **EIS** strong

ach July, the CDC's new class of Epidemic Intelligence Service (EIS) officers—its elite disease detectives—take classes and do training at Rollins. This year, 18 of the 86 members of the new EIS class are Rollins alumni. They are

pictured above with Eric Pevzner 98MPH, who leads the EIS (far left), Patrick Sullivan, Charles Howard Candler Professor of Epidemiology, who teaches one of the EIS courses (2nd from far left), and Jodie Guest 92MPH 99G, professor and vice chair of epidemiology, who teaches the EIS course with Sullivan (far right).

# WASH needs for the rural homeless

In the US, 2.3 to 3.5 million people experience homelessness every year. While often considered an urban issue, it's a problem that is growing in rural areas, where substance use can serve as a catalyst for homelessness. New research led by Rollins investigators and published in PLOS Water highlights the substantial barriers to accessing water, sanitation, and hygiene (WASH) services among people experiencing homelessness in rural areas.

To help combat this significant and growing issue, the authors call for developing place-based, stigma-free access to WASH facilities in rural areas, with specific focus placed on meeting the sanitary needs of women and people who inject drugs.

"Limited WASH access is not only concerning from an infectious disease transmission standpoint, but also from a dignity and human rights standpoint," says April Ballard, an environmental health PhD student and lead author on the article. "WASH, when sufficient, provides us the space to care for ourselves and have dignity."

The investigators conducted exploratory research on people experiencing homelessness in rural Appalachian Kentucky to better understand barriers to WASH resources and unique challenges facing this population, particularly in relation to substance use.

"The important link between WASH and substance use is rarely and laundry access, as well as free hygiene and menstrual products. recognized, despite the fact that harm reduction approaches to injection They also recommend that these services be spread throughout drug use ask people to use clean water to mix or dilute drugs and clean rural communities and for access to facilities to be made available their skin and hands prior to injecting," says Ballard. "Our findings reveal unconditionally (i.e. no ID requirements or felony or drug background nuances that researchers and practitioners should consider. For example, checks) alongside harm-reduction services.-Kelly Jordan

## **Defense of epidemiologic research**

A recent article published in Science Advances demonstrates the rigor and substantial advancements that have occurred in the field of epidemiology during the past 27 years. Led by Rollins researchers—including 33 Emory PhD students in epidemiology-the article revisited an influential article authored by journalist Gary Taubes that guestioned the utility of nonrandomized epidemiologic research. The new article, led by Lauren E. McCullough, associate professor of epidemiology, and Maret L. Maliniak 14MPH 24G, systematically evaluated the current evidence for 53 examples of associations Taubes claimed were doubtful in his 1995 Science article.

The researchers found that 25 percent of the associations Taubes deemed questionable are now widely viewed as causal, resting on a substantial body of epidemiologic research and tremendous innovation in the field during the past 27 years. Among Taubes' list of questionable associations that are now viewed as causal, and with public health policies to address them, are the links between alcohol consumption and breast cancer, residential use of tanning devices and melanoma.

radon exposure and lung cancer, and the For 27 years, Taubes' paper has been cited more than 1,000 times and has been used to cast doubt on the value of epidemiologic

# CLIFTON NOTES —



how can we ask people to perform these behaviors when they may not even have access to clean drinking water or a shower?"

The authors recommend that rural areas build onto the new public WASH infrastructure established during the COVID-19 pandemic and to provide public sanitation facilities equipped with showers, restrooms,



research. This new article-to the authors' knowledge—is the first to address all of Taubes' example assertions head-on and serves to dismantle Taubes' argument while verifying the rigor and reproducibility of epidemiologic research results.—Kelly Jordan



# A champion for **ROLLINS** FALLIN ASSUMES HER POST AS DEAN

By MARTHA NOLAN • Photography by KAY HINTON & SARAH WOODS

hen M. Daniele "Dani" Fallin took the helm of the Department of Mental Health for the Johns Hopkins Bloomberg School of Public Health, her first order of business was to listen. "I had lived in epidemiology for so long, I really didn't know much about the mental health department," says Fallin. "So I had to learn." She met and talked with faculty, staff, and students. She even gathered all the faculty together and had them go around the room explaining their definition of public mental health. "The definitions people gave were actually all over the board," says Elizabeth Stuart, executive vice dean for academic affairs and a professor in the mental health department at the Bloomberg School. "Dani really helped the department crystallize its role around pursuing research, advocacy, and communications. She elevated our conversations around what public mental health is and our role in increasing awareness of public mental health around the country and globe."

That experience provides a good picture of Fallin's management style as she assumes her post as the new James W. Curran Dean of Public Health. She's not afraid to make the hard decisions needed in leadership, but she makes sure everyone's voice is heard first. She also brings a rich and fruitful research history focused on applying genetic epidemiology methods to studies of neuropsychiatric disorders including autism. And she brings her tireless advocacy for public mental health, including workplace mental health.

"Dean Fallin is a one-of-a-kind academic leader," says Emory University President Gregory L. Fenves. "Her years of visionary research

Concerned about future job prospects in a field that was in a downturn, she switched her sights to biomedical engineering and pursued a major in animal physiology-the university did not offer a degree in human physiology, so that was the closest she could get. Her new concentration fell under the zoology department, so she graduated from college—the first in her family to do so—with a BS in zoology.

Having matriculated early and wanting to stay close as her friends enjoyed their senior year, she accepted a job at a local hospital rewriting national cancer protocols for local Institutional Review Board approval. Her career path took another turn.



and teaching coupled with a profound commitment to the people she serves-students, faculty, and staff-have enabled her to lead at Rollins from her very first day on the job this summer. For Dean Fallin, there is no goal that is too ambitious and no detail too small. She cares deeply about the Emory community, and there truly is no limit to what Rollins can accomplish with Dean Fallin at the helm."

### TURNING, JUMPING, AND STICKING THE LANDING

Fallin's route to the corner office in the Claudia Nance Rollins Building is marked with twists and shortcuts. She entered the University of Florida determined to become an aerospace engineer, spurred by her love of math and physics and the prevalence of that industry in the Fort Walton Beach area where she was raised. Timing intervened. This was the early 1990s, and the aerospace industry was in a major slump.

"That was the first time I heard about epidemiology and biostatistics," says Fallin. "We didn't have any exposure to those terms in undergrad, but that was exactly what these protocols were. I thought it was fascinating, combining math and biology, and that's how I ended up getting interested in public health."

Fallin enrolled in the University of South Florida to pursue an MPH in epidemiology, but her instructors quickly suggested she jump directly into the school's PhD program. She did. While there, she worked as a secretary for a lab whose scientists had discovered the original Alzheimer's mutations when they were in London. "Even though I was in the role of secretary, I started speaking up about science in meetings," she says. "I'd say, 'Oh, you're using 'prevalence' when I think you mean 'incidence'. They very quickly hired a new secretary and took me on as part of the research team. So I was able to do genetic research while I was getting my doctoral degree."

With this new research came the realization that she wanted to pursue statistical genetics and genetic epidemiology, for which her current university was not a good fit. She was able to transfer to Case Western Reserve University to study under the man considered the grandfather of genetic epidemiology, Robert Elston. There, Fallin joined the largest group of statistical geneticists in a single department.

Toward the end of her studies, she happened to meet a woman from Johns Hopkins who was doing a site visit for an NIH grant at Case Western. Impressed with Fallin, the woman told her they were looking for assistant professors and that she should apply. Fallin did, and without ever doing a postdoc, she was hired. "I defended in October 2000, and I started at Hopkins in November 2000," says Fallin. "Looking back, it was a bit of an unusual path, but I ended up being able to do all the things I loved."

### **BRINGING TOGETHER TWO RESEARCH WORLDS**

A newly minted genetic epidemiologist, Fallin joined Johns Hopkins and continued studying Alzheimer's, soon adding bipolar disorder and schizophrenia to the mix. At the time, genetic epidemiology was largely restricted to following conditions through extensive family lines in the hopes of identifying responsible genes. What was just emerging was trying to do this work in a broad population setting, and that is where Fallin dove in. "We were working to figure out if we could devise statistical approaches to apply in population-based samples that could accomplish similar discovery goals as familial study designs," she says. "It was a novel idea at the time."

A few years into the work, a fellow professor asked her for some help. His son had been diagnosed with autism, and he had been trying to dig into the epidemiology of the disorder. Finding very little, he had shifted his career to the pursuit of autism epidemiology. He asked Fallin to do a literature review with him to find out what was known about both the genetics of autism and nongenetic factors, with an eye to how that could play into population epidemiological research.

Fallin was hooked. Alzheimer's strikes late in life, leaving little room for mitigation. Schizophrenia and bipolar disorder generally appear in early adulthood, but the stigma attached to the conditions makes it hard to recruit people for studies. Autism, on the other hand, happens so early in life that there is a huge opportunity for changing the trajectory of the disorder. And children with autism are often surrounded with people hoping to help them-parents, grandparents, members of the community. "Autism presented a very different landscape in terms of research opportunities than what I was used to," says Fallin.

She began writing more and more grants with the professor who had asked her to do the review, and by the time he left for a position at another university, autism consumed all of Fallin's focus. She brought her consensus-building sensibilities to the table. "For the whole short history of autism studies, there were two camps of researchers-those looking at the genetic causes and those looking at everything else," she says. "The epi crowd tended to live in the 'everything else' camp, which considered chemical exposures, vaccines, maternal conditions, and more. The two

worlds didn't talk very often. What I have tried to do over the years is bring these two together. What can we learn from the genetics of autism that will help inform the larger epidemiology of autism and then vice versa."

Her inclusive approach set her on a path to lead groundbreaking studies of autism. She became the PI of the Maryland site of the SEED study (Study to Explore Early Development), a multisite case-control study of autism genetic and environmental risk factors and the EARLI study (Early Autism Research Longitudinal Investigation), a prospective pregnancy cohort focused on causes of autism. She also became co-PI of the conversion of the Boston Birth Cohort into an autism prospective birth cohort and co-led two NIH Roadmap-funded projects on epigenetic epidemiology as well as multiple NIH grants integrating genes and environment using data from these studies.

"Dean Fallin is an outstanding scholar whose work has contributed important insights into the genetic and environmental underpinnings of mental health and neuropsychiatric disorders," says Emory Provost and Executive Vice President for Academic Affairs Ravi V. Bellamkonda. "She is also a wonderful, collaborative leader who creates communities that help others thrive in the pursuit of scholarly excellence, innovative research, and exceptional learning opportunities. As the pandemic has revealed, public health research and policy touch nearly every aspect of life from economies to social interactions, and I am thrilled that Dani Fallin will lead the Rollins community of faculty, staff, students, and well-wishers into this new era. She is both ambitious for Rollins and Emory and gifted with the vision, wisdom, and skills to help chart our path to further eminence."

### A CHAMPION WHO LEADS WITH HER HEART AND HER BRAIN

Fallin's research was given a home following a tragedy. The dean of the school, who had three children including a high-school daughter with autism, lost his wife suddenly. To honor his late wife, he created a fund to support autism and developmental disabilities research. The fund quickly grew into a center, the Wendy Klag Center for Autism and Developmental Disabilities, and Fallin was named its director.

Just six months later, Johns Hopkins named Fallin chair of the Department of Mental Health. Both thrived under her leadership. At the Wendy Klag Center, she created pilot funding mechanisms for faculty and trainees that resulted in large payoffs in terms of later grants. She fostered collaborations with faculty across the campus, and she oversaw the creation of a public health autism course. Fallin significantly expanded the Department of Mental Health, hiring junior faculty in cohorts of twos, threes, and fours, with a focus on bringing in women and minorities. She expanded the department's mentoring program and perhaps her biggest point of pride-she "created continuity of community and wellness during the pandemic and period of social injustice."

In both settings, Fallin demonstrated her management style-create and nurture the optimal environment for people to enjoy and flourish in their work and then get out of the way and let them do it."I used to sit in on some of her meetings with junior faculty, and I was so impressed

with how she framed the conversations," says Stuart. "Her focus wasn't, 'To get promoted, you need to do X, Y, and Z.' She would help them think through what gives them value in their life and work and then create roles to help them achieve that.

"Many faculty members in the department are nervous about her leaving because they—across a range of research areas—say she was one of the biggest champions of their work," continues Stuart. "She was not an expert in all of their areas, but she was committed to helping everyone in the department reach their potential and do high-quality and impactful work."

Beth Resnick, assistant dean for public health practice and training at Johns Hopkins, puts it another way. "Dani is a champion who leads with her heart and her brain."

Underlying all the work she does is her passion for supporting

public mental health, most recently with a focus on workplace mental health. She recently co-led the creation of a research center funded by the National Institute for Occupational Safety and Health that will investigate how to improve mental health in workplaces around the country. She also led a task force across the university to



Gregory L. Fenves, President, Emory University

address student mental health issues. "In public health, we are often really good on focusing on other people and what they need to do but not as good at focusing on ourselves and our own people," says Resnick. "Dani never lost sight of that. She was always

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a clear, strong voice advocating for mental health policies and supports for faculty, staff, and students."

### **NEW SHOES IN TOWN**

Fallin left a lot behind in coming to Rollins and Atlanta. She left two endowed positions as the Sylvia and Harold Halpert Professor and a Bloomberg Centennial Professor. She left a city that catered to her family's love of all things water—sailing, paddle boarding, and fishing. And she left the only work home she had had since earning a PhD.

What lured her to Rollins? The usual suspects, to be sure—Atlanta's position as the public health capital of the world, the school's close ties

with the Centers for Disease Control and Prevention, and the school's rapid trajectory. But perhaps the main draw was the people. "The reason I never left Hopkins is because I believe in the people of Hopkins," says Fallin. "I didn't think you could find a better place where there are these really smart, top-of-their-game people who are also lovely. You actually want to hang out with them. I discovered Rollins has that same thing."

Fallin realizes she has big shoes to fill. Jim Curran was the school's dean for almost three decades, and the dean's position was named for him in 2009.

"It's safe to say I could never fill Jim's shoes," she says. "Instead of thinking of it as daunting, I think of it as a privilege to succeed such a strong leader, particularly one who will still be around. We've been having virtual coffee breaks every other Friday since the announcement

And she very much cares about people first-students, faculty, and staff."

Health, Fallin plans to spend her early days listening. "I led the strategic

planning committee when our new dean took over several years ago,"

she said."We got input from everyone-faculty, staff, students, alumni,

partners across campus and outside the university. Since we're a school

of public health, we used 'mixed methods,' incorporating qualitative

interviews and focus groups and quantitative surveys. In about six

months we were able to develop a plan for the route ahead. I would

we go charging down a path."

like to follow a similar model at Rollins, getting everyone's input before

mental health leading the list. She gives the school high marks for this

area. "Rollins already has a strong bench of mental and behavioral health

researchers, including substance abuse research," she says. "The school's

That said, there are some areas about which Fallin is passionate, with

As she did when she assumed the lead of the Department of Mental

was made, and he has been beyond generous in sharing the school's history, key relationships, and perspectives."

"I could not feel more confident passing the baton to a leader like Dani," says Curran, who is remaining at the school as a professor of epidemiology and global health. "She has the skills, the vision, and the passion to lead our school into a changing and challenging future.



student services department is already doing amazing work to support student mental health, and our dean for faculty has been paying close attention to the mental health of staff and faculty."

She hopes to build on this to continue to promote mental and behavioral health research, practice, and education while also nurturing the mental health and wellness of the faculty, staff, and students of Rollins. She also points out opportunities for expanded engagement with the mental health initiatives of The Carter Center and her excitement that a longtime colleague in pediatric mental health is coming to Emory School of Medicine and Children's Healthcare of Atlanta this fall, paving the way for expanded childhood and emerging adulthood mental health collaborations for Rollins.

Fallin sees science communications as another priority. "What we do really doesn't achieve impact if we can't articulate it well and aren't paying real attention to how and to whom we communicate," she says. "We have a huge responsibility to be part of the messaging of the importance of public health and how it touches literally all sectors of society. We also need efficient and empathetic internal communications to sustain our special sense of community, support each other through challenging times in public health, and celebrate each other's successes—both professional and personal."

each other's successes—both professional and personal."
 What does Fallin see as the biggest challenges facing public health in the coming decades? They are numerous, including pandemics, chronic disease, and health inequities. Three, however, rise to the top in her
 Fallin sees demanding and fulfilling days ahead as she settles into her new role and prepares to face these and other challenges. "This is an inspiring time to be in public health," she says. "There is much to be done. I believe Rollins can lead the field in this critical moment."

mind—mental health, climate change, and reproductive rights. With the pandemic, gun violence, and racism showing no signs of abating, public mental health will remain a strong need. Perhaps eclipsing all other concerns will be climate change. "Anything we do in the future will have to include how it will be touched by climate change—we won't be able to escape it," says Fallin. "We already have very strong environmental health sciences at Rollins that is doing important, impactful work. I can't see that doing anything but growing."

With the overturning of *Roe v. Wade* and Georgia's stunningly rapid enactment of the "heartbeat bill," reproductive health and rights has taken on a new and immediate urgency. Rollins is well prepared. The Global Elimination of Maternal Mortality from Abortion (GEMMA) Fund, established by renowned researcher and advocate Roger Rochat and his wife Susan, has been supporting abortion-related education, research, and outreach events since 2002. The school's Center for Reproductive Health Research in the SouthEast (RISE) has been analyzing the family planning and reproductive health landscape in the region since 2018. "Rollins is out in front in this area, and that means we have a huge role to play in navigating this new landscape," says Fallin.

ERI SAIKAWA (LEFT) WORKS WITH A STUDENT COLLECTING SOIL SAMPLES OUTSIDE THE APARTMENT OF LOUANA JOSEPH.

> t's a tight fit in Louana Joseph's living room on a muggy July afternoon. Eri Saikawa, associate professor of environmental health, and seven Emory undergraduate and graduate students from her lab crowd in a rag-tag circle around Joseph, who bounces her 10-monthold daughter, Marlie, on her hip. Two-year-old Maurice "MJ" alternates between hopping on the brown sectional sofa and squeezing between the students to check out their Apple watches.

> After introductions, the students disperse in small, busy groups. A few step outside to collect soil samples from the strip of land in front of Joseph's apartment and the playground around the corner. Others begin meticulously vacuuming small sections of the floor, while another records Joseph's answers to a lengthy list of questions. Saikawa squats in front of MJ, flapping her arms in an effort to get him to do the same before another student attaches a small device on his arm to painlessly draw a small sample of blood.

# Measuring environmental contaminants and their health costs in the Westside



By Martha Nolan • Photography by Kay Hinton

Joseph is unperturbed by the chaotic buzz in her apartment. "It seems like I always have a lot of people in here," she says. "I'm the baby of six, and everyone has children. For some reason, everybody always comes here, even though some of the others have houses. Maybe it's because I cook.

"So I'm fine with having this group here, especially if they can make sure nothing bad is happening here," she continues. "You want to do everything you can to make sure your children are safe and healthy."

And that's exactly what Saikawa and her team are trying to do. Joseph's apartment on Martin Luther King Jr. Drive in Atlanta's Westside is the first site visit in Saikawa's \$1.35 million US Environmental Protection Agency (EPA)-funded study. Her team will collect soil, dust, and paint samples from Joseph's apartment and its environs as well as blood and urine samples from MJ and Marlie. Everything will be analyzed back in Emory laboratories, testing for heavy metals and metalloids, including lead, and other environmental toxicants in the soil, dust, and paint. The children's bodily fluids will be assessed for exposure to such toxins.

This study builds off the work Saikawa and a Rollins graduate student started four years ago when they identified high levels of lead in the soil in some Westside plots, including some used for urban gardening. Their discovery led to the area, which is a low-income, mostly minority community, being classified as an EPA Superfund site. It was recently upgraded to the EPA's National Priority List. Saikawa and her team are now trying to determine the human health cost of high lead levels and other environmental toxicants in the Westside area.

"According to the CDC, there is no safe level of lead exposure," says Saikawa.

Especially for children, who absorb as much as 90 percent more of the powerful neurotoxin into their bodies than adults. Even at low levels, lead has been linked to intellectual disabilities and impulse control issues. At higher levels, it can stunt growth.

"Overall, we've done a good job of reducing exposure worldwide by eliminating lead in gasoline and paint products," says Saikawa, who is also associate professor of environmental sciences in Emory College of Arts and Sciences.

"But there can still be other sources of lead in and near the homes where children live and play," she continues. "We are trying to find some of these sources and how they affect children in the hopes the EPA and local governments can better regulate and mitigate environmental contaminants, especially in low-income, urban areas."

"Overall, we've done a good job of reducing exposure worldwide by eliminating lead in gasoline and paint products. But there can still be other sources of lead in and near the homes where children live and play. We are trying to find some of these sources and how they affect children."

— Eri Saikawa



### SOURCE OF A SUPERFUND SITE

In 2018, the City of Atlanta was encouraging city residents to take up urban gardening. At that time, Sam Peters was a PhD student in environmental health who was looking to add a health-related component to his dissertation. Saikawa suggested sampling the soil in some of the proposed urban gardens to test for levels of heavy metals and metalloids.

One of the 11 plots Peters tested was the Westside, and it came back with extremely high levels of lead—higher than the EPA threshold of 400 parts per million (ppm). By way of comparison, the University of Georgia's threshold for agricultural soil is 75 ppm. Concerned, Peters and Saikawa decided to test more sites. They teamed up with a community group active in the area, Historic Westside Gardens, and secured funding from Emory's HERCULES Exposome Research Center, which studies the interconnection between environmental exposures, biological responses, and societal factors. They assembled a team to gather more samples and found more lots that were tainted with lead.

"When we started, we thought we might find some levels of contamination," says Peters 19G, who is now a senior data scientist with Indigo Agriculture. "But we definitely did not expect to find



areas with such high concentrations of lead or to find the problem as widespread as it turned out to be."

Saikawa was able to attract the EPA's attention when she invited a colleague from the agency, Tim Frederick 96MPH, to attend a Westside tomato festival where she planned to offer testing of soil samples attendees brought. Frederick, chief of the Scientific Support Section for the EPA's Superfund and Emergency Management Division, would supply the testing expertise.

While they were testing samples, one resident came up with an odd-looking rock she found in her yard. "I took one look at it and said, 'That is not a rock. That is slag, and it's a good bet that is where the lead in the soil is coming from," says Frederick.

Slag is a waste byproduct of smelting and steel-making processes, and it can often contain lead. In the early-to mid-1900s, it was common practice to use industrial waste as infill for roads and low-lying areas. The Westside used to be home to several metal foundries.

The resident who brought the slag to Frederick's attention was Rosario Hernandez, an outspoken neighborhood activist, and hers was the first garden plot that was found with lead levels of greater than 400 ppm. Her daughter and grandchildren were living next door to her at the time, and the grandchildren, who ate food from her backyard garden and played in the yard, had developmental delays. Hernandez wanted to know if the lead in her soil could be the reason.

Frederick brought some people from the EPA's emergency response unit to Hernandez's house to inspect her yard. They found more pieces of slag, and across the street in an abandoned lot was an entire mound of it."It looked like a dump truck had just dumped a load of it and left it," Frederick says.

"After we got approval from the state thanks to a report submitted by Eri and Sam, we went back and started looking around the neighborhood," Frederick continues."We thought it was just going to be Rosario's yard and the pile across the street, but the more we walked around the neighborhood, the more slag we saw. Once it reached a critical mass, it outstripped the ability of our emergency response folks to handle it. That's when we started the process of having the area added to the Superfund program."

### THE SITE EXPANDS

Since its designation as a Superfund site in 2019, the boundaries have increased several times to now include 2,097 properties spread across nearly one square mile of the Vine City and English Avenue neighborhoods. The EPA has been able to obtain permission to test the soil on about half of those properties, and of those tested, about 40 percent have lead levels greater than 400 ppm. As of late August, 147 sites have been remediated, which involves

excavating the soil on the property, replacing it with clean soil and then adding a layer of topsoil. The EPA estimates the total cost of the remediation will be close to \$50 million and be completed by 2028.

In March, the site was added to the EPA's National Priority List (NPL), which is reserved for sites that the agency has found pose a serious risk to residents' health and the environment and will require a long-term cleanup. According to the EPA, nearly two out of three of the sites being proposed or added to the NPL are in underserved communities.

"This Westside site is definitely a priority for the EPA because of the environmental justice concerns it raises," says Leigh Lattimore, the EPA's remedial project manager for the site. "All children deserve the right to grow up in a neighborhood where it's safe to play in the vards of their homes, schools, and churches."

### TRYING DIY REMEDIATION

Remediation by the EPA takes time in the best of circumstances. Add a global pandemic and the process is slowed considerably. In the meantime, children continue being exposed.

So Saikawa and her students tried to find low-cost ways the residents could do it on their own. Alicia Wun 20MPH tried growing sunflowers in Hernandez's yard to test their ability to remove lead from the soil. "Sunflowers will grow in almost anything, and they grow fast," says Wun,

who is now a clinical research coordinator with Seattle Children's Research Division. "They can draw up lead from the soil and store them in their roots and stems-a process called phytoremediation. Plus, they are beautiful."

Unfortunately, the amount of lead the sunflowers were able to remove was low.

Xinyi Yao 20G tried a variation of that theme, growing four different plants in soil with high lead levels in the lab. Of the four plants tested, one was effective at removing the lead-cowpeas. However, the plant stored the lead in its edible part, making it a risky solution if children decided to eat the legume. "It was disappointing, but we were not able to find low-cost ways the residents could remediate their own soil," says Saikawa.

### THE HUMAN HEALTH COST OF DIRTY SOIL

The current project will involve areas of the Westside outside of the current EPA investigation site. The research team plans to test the homes and yards of willing participants for a total of 40 other organic and inorganic environmental toxicants. They plan to recruit 100 households to participate in environmental sampling and obtain permissions to gather biological samples of blood and urine from 140 children ages six months to six years to test for exposures.

Dana Barr, professor of environmental health, is co-principal investigator on the grant. Ziad Kazzi, associate professor in Emory





SAIKAWA EXPLAINS THE SAMPLE COLLECTION PROCESS TO JOSEPH, ABOVE, AND HELPS A STUDENT TAKE A BLOOD SAMPLE FROM MJ, RIGHT.

School of Medicine's Department of Emergency Medicine and an expert in medical toxicology, is a co-investigator. Saikawa's lab will focus on recruiting participants like Louana Joseph, conducting surveys with community members, and gathering environmental samples of soil, household dust, and paint chips. Her team will analyze these samples for heavy metals and metalloids, as well as modeling exposures from these various pathways.

Barr's lab will primarily focus on analyses of the biological and other environmental samples for a broader range of potential organic and inorganic toxicants. Kazzi will help address health and medical concerns that may arise from the community.

"This project is unique and important," says Barr, who co-directs Rollins' Laboratory for Exposure Assessment and Development in Environmental Research Lab (LEADER). "We're not just analyzing environmental samples for toxicants, we're also testing children for potential exposures and evaluating possible mitigation strategies."

If the study links health issues in the children with toxicants in their environment, Saikawa hopes the results can be used to inform community residents as well as federal and state policy makers. "Ultimately, we want to raise awareness of the Westside community members and provide them with educational materials specific to their needs to help lower the risks of their families being exposed to toxicants," says Saikawa. "We also hope our data will help in the development of holistic regulatory frameworks to prevent exposures to environmental contaminants in underserved communities around the country."

### A CAREER TURNING POINT

Saikawa describes the Westside project as a turning point in her career. After graduating with a degree in engineering in Japan, she came to the US with the goal of working in environmental programs in the United Nations or the World Bank. "I got into environmental science because I wanted to reduce air pollution," she says. "But I thought I would do that from my computer. I was basically a modeler. I didn't like the outdoors, and I'm not much of a people person. I actually enjoy staring at my computer and not talking to people much."

Then she got involved in the Westside project."That was the first time I really saw how people are impacted by the problem and how meaningful it was to work together to find solutions in ways I never thought about," she says. "Now I spend quite a bit of my time outdoors, and I don't even mind the bugs."

Saikawa now defines herself as a community scientist. "This project has really changed the way I see environmental science," she says. "It's not just the sciences; it's also humanities and social sciences. It's really how can we combine different knowledge and different disciplines to work on very big environmental problems. Science itself cannot do everything. You need also to be an activist to make sure that science is used in policymaking."

She says she is still not much of a people person. An observer may argue that point after watching Saikawa talk and laugh easily with her students and study participants while she flaps her arms for a toddler in between accepting his hugs.—Carol Clark contributed to this article.



# Bringing genomic knowledge to the population level

# PRECISION **PUBLIC HEALTH**

Completing the sequence of the human genome nearly two decades ago was heralded as the launching pad for "precision medicine." Scientists and physicians now would be able to test to see if an individual was at an elevated risk to develop a particular condition and, for those with the condition, determine the best-fitting and most effective treatment.

That breakthrough, however, has not been translated as widely or as meaningfully from the individual to the population level."There has been a massive amount of research around genomic discovery, figuring out which genes are associated with which diseases and how that knowledge can be used in a clinical setting," says Yue Guan, assistant professor of behavioral, social, and health education sciences (BSHES). "But, as a rule, we really haven't figured out how to apply these discoveries in public health."

The Emory Precision Public Health Research program is working to change that. Established in 2016, the program engages in research to identify effective interventions that capitalize on emerging genomic information with the goal of promoting population health and reducing health disparities. "We are trying to take the discovery research to the next step, asking how might we broadly apply this information at the

By Martha Nolan | Illustration by Charlie Layton

population level to have a positive impact on public health," says Colleen McBride, professor of BSHES, who co-directs the program with Guan. "For example, family history assessments can identify those at highest risk, but also those who are not at high risk—thus potentially enabling us to use our limited public health resources with greater population benefit. Yet, this potential raises a number of important implementation challenges that also are important to test."

McBride served as founding chief and senior investigator of the Social and Behavioral Research Branch of the National Human Genome Research Institute of the National Institutes of Health, where she pioneered interdisciplinary research merging social and behavioral sciences with genetics. She joined Rollins in 2014 as the Grace Crum Rollins Chair of Behavioral, Social, and Health Education Sciences, a post she left in December.

THERE HAS BEEN A MASSIVE AMOUNT OF RESEARCH AROUND GENOMIC DISCOVERY, FIGURING OUT WHICH GENES ARE ASSOCIATED WITH WHICH DISEASES.... BUT AS A RULE, WE REALLY HAVEN'T FIGURED OUT HOW TO APPLY THESE DISCOVERIES IN PUBLIC HEALTH. -YUE GUAN

McBride and Guan have assembled a group of like-minded researchers who are looking for ways to apply genomic discoveries in broad, population-based settings. Here's a look at a couple of projects.

### **CITIZEN JURY**

One area where the ties between genetics and disease are strong is breast and ovarian cancer. Women of African ancestry, for example, are more likely to develop and die from aggressive breast cancers than women from other ancestry groups (with the exception of women of Ashkenazi Jewish ancestry). That would make this group ideal candidates for more aggressive screening than the general population.

However, study after study has shown African American women are less likely to be referred for genetic testing and counseling than their White counterparts, and if they are referred, they are less likely to complete it. Why? Blacks are often mistrustful of the medical system, reflecting centuries of mistreatment, such as the infamous Tuskegee experiment. Blacks are historically underrepresented in genetic studies and clinical trials, so the interventions and treatments being offered may or may not be as effective for them as their White counterparts. And Blacks often have less access to health care, insurance, and all the things you need to take advantage of genetic counseling-particularly those living in rural and isolated settings.

Against this backdrop, Guan and McBride posed the question-how can you increase the uptake of genetic information among a marginalized community? They decided to test an intervention that relies heavily on community involvement to assess the feasibility of offering accelerated breast and ovarian cancer screening for women of African ancestry in southwest Georgia. The intervention relied on recruiting a citizen jury to engage in a process of democratic deliberation. This approach has been used in the health policy field in other countries but has not been tried in genomic research and translation interventions.

Modeled after juries in the criminal justice system, a citizen jury brings

together a small number of people from diverse backgrounds to deliberate an issue. The jurors are not experts in the field being discussed. Instead they bring their life experiences and cultural viewpoints to the table. The jurors are then presented with unbiased information provided by experts on the topic at hand, and skilled facilitators guide them through deliberations on the trade-offs of various options. The goal is to digest and understand the complex information presented, cast it within the context of the situations in which they live, and emerge with recommendations that go beyond their personal interests to reflect a societal perspective or a common good.

"Getting meaningful public engagement is critical when you are dealing with complex health topics, where setting health priorities requires balancing multiple tradeoffs," says McBride. "Most efforts to get public engagement have focused on more superficial methods-focus groups or structured interviews, where participants are limited by their depth of knowledge about a subject. We wanted to see if we could use the citizen jury approach to get more meaningful, deliberative, and even collaborative community input to evaluate the pros and cons from a societal perspective of targeting women of African ancestry for more aggressive breast cancer screenings."

Partnering with Horizons Community Solutions in southwest Georgia, McBride and Guan recruited 24 people of African ancestry of different ages, genders, and walks of life. The jurors were presented with two days of expert testimony via videotaped presentations (due to the COVID-19 pandemic), which covered topics such as: What is hereditary breast and ovarian cancer (HBOC)? Why is it important and how are people at risk for HBOC identified? What is the current HBOC screening program in Georgia? The participants were guided through deliberations weighing differing, and often competing, social values to consider the myriad tradeoffs involved in targeting Black women for screenings.

The citizen jury approach lived up to its promise. The jury paid attention and asked questions to make sure they truly understood the topics being presented. They were able to adopt a societal lens rather than considering their own interest. And when asked to explain their viewpoints, they justified them with accurate factual information from the testimony.

In the end, the jury generated a diverse, thoughtful slate of pros and cons for targeting women of African ancestry. When McBride and Guan shared the results with state-level cancer policy stakeholders, they complimented the perspectives generated, saying they could use this type of community input when developing policies and programs in the future. "And that's the whole point," says McBride. "By embedding citizens from marginalized communities in the process and baking their perspectives into the deliberations, you increase the chance that whatever program or policy you end up with will actually be relevant, successful, and acceptable."

### **CITIZEN SCIENTISTS**

Ovarian cancer is rare, deadly, and heritable. With about 20 percent of ovarian cancers being genetic, it's critical for first-degree relativessiblings, children, and parents—of women with ovarian cancer to be informed of their elevated risk so they can get genetic testing and counseling. However, current standard of care leaves that task up to the discretion of the cancer patient, and that means it often does not happen.

Guan and McBride wanted to see if they could engage survivors of ovarian cancer as citizen scientists. The goal was to collaborate in fashioning an online intervention that could entice and assist other survivors to contact their first- and second-degree relatives. They envisioned a website that would offer education around the heritability of ovarian cancer, the importance of informing close relatives, and tips for doing just that. They also needed to develop materials to direct people to that website.

The team recruited 14 participants, many of whom were connected

BY EMBEDDING CITIZENS FROM MARGINALIZED COMMUNITIES IN THE PROCESS....YOU INCREASE THE CHANCE THAT WHATEVER PROGRAM OR POLICY YOU END UP WITH WILL ACTUALLY BE RELEVANT, SUCCESSFUL, AND ACCEPTABLE. -COLLEEN MCBRIDE

with larger ovarian cancer communities such as support groups and foundations. Those connections gave this small group access to a much broader, national patient population.

These citizen scientists were trained—virtually, again thanks to COVID-in various data collection methods and coached on technical issues before reaching out to fellow ovarian cancer survivors within their groups for their input. The small team ended up collecting more than 200 surveys and conducting more than 40 structured interviews.

"The large online support groups are closed to anyone who is not an ovarian cancer survivor or loved one, so we could not have accessed women in these groups," say Guan. "And even if we could, women would not have responded to us the way they did to a fellow survivor."

Guan and Jingsong Zhao, a doctoral student in BSHES, mined all the data the citizen scientists collected in preparation for developing their intended website and support materials. They learned a lot. Participants relayed the challenges they faced related to talking to their family about their disease. As a result, Guan and her team developed tip sheets and offered different options for contacting relatives. The surveys also indicated a desire for a very positive focus. They also found out image issues that could challenge engagement of survivors. For example, pink is not the color to use to appeal to this group. "Ovarian cancer survivors feel overshadowed by all the national attention and funding that goes toward breast cancer," says Guan. "So you won't see any pink in this intervention. The website and printed pieces are all teal, so it's clear that this is specific for ovarian cancer communities."

All along the way, the team worked with the citizen scientists."They gave us feedback on the website; they did usability testing," says Guan,

"They weighed in on almost all aspects of format and content,"

Guan and McBride have now moved on to the next phase of the study-testing the website and materials they developed with the help of the citizen scientists to see if they do, in fact, prompt ovarian cancer survivors to contact first-degree relatives. "We are in the early stages of this phase of the study, but we have shown you can get a large amount of quality data in a short amount of time with the citizen scientist approach," says Guan."In fact, our whole program is still very young, but we are starting a lot of new exciting research initiatives."



# WHEN EPIDEMICS CONVERGE

The newest Rollins chair focuses on how such "syndemics" affect vulnerable populations

s a young man in California, Don Operario watched the tumult of the HIV/AIDS epidemic playing out in his backyard. As a postdoctoral student, he learned how community based research could address this and other critical health issues, especially for populations on the front lines of risk. He brings that understanding-and two decades of research across disciplines, continents, and intertwined epidemics-to his new role at Rollins.

Ten years ago, while attending a public health conference in Atlanta, Don Operario took a break from meetings. Wandering through neighborhoods always has been one of his favorite pastimes, and the Emory campus was inviting. When he reached Rollins, he suddenly had an epiphany. I'm quite happy at Brown's School of Public Health, he thought, but if ever I decided to leave, this is where I would come.

In July 2022 he did just that, becoming Grace Crum Rollins Distinguished Professor and Chair of the Department

of Behavioral, Social, and Health Education Sciences (BSHES). Rollins felt made for him, he said: its vision for transdisciplinary collaboration; its dedication to preparing the next generation of health-equity champions; its setting in an exciting city filled with public health expertise; and its opportunities to engage with a broad and diverse community. He had been moving in this direction his entire adult life.

### **SERVING OVERLOOKED POPULATIONS**

Operario was born in Los Angeles. His parents were recent arrivals from the Philippines, and like many in the immigrant first generation to go to college, he was encouraged to become a physician. After three years of pre-med, a mentor pointed out that the young man's interests seemed to lie more in the social aspects of health. That certainly rang true. At the time, in the 1980s, the global HIV/AIDS epidemic was raging. Living in its epicenter, Operario considered it personal. He knew people who were dying, knew activists demanding solutions. How could he help? "Public health wasn't the household word it is today," recalls Operario, "but changing my focus to social psychology set me on that path." He completed a bachelor's degree in psychology at UCLA,

then a master's and PhD in social psychology at the University

### By SYLVIA WROBEL • Photography by KAY HINTON

of Massachusetts, where he and fellow graduate students primarily conducted classic social psychology research projects with undergraduates eager for extra credit. He learned how to do research, certainly, but only when he returned home for a postdoctoral fellowship in behavioral medicine at UCSF did he find his answer about how he could best help with the health and social problems he saw around him. From then on, he would use behavioral-and community-based research to address critical community health problems, engaging marginalized, often overlooked populations.

After completing his studies, Operario worked as a research specialist at the UCSF Center for AIDS Prevention Studies; a lecturer on evidence-based social intervention at the University of Oxford; and—beginning in 2008—at Brown University, at first in the medical school's department of community health. The Brown School of Public Health's history resembles that of Rollins. Brown University began developing public health programs in 2002, offering an MPH, then created more academic lines with the goal of becoming an accredited school. It was successful. In 2013, Operario moved from the medical school to become a professor of behavioral and social sciences in the newly launched public health school.

As the school grew, Operario took on various administrative roles, including a stint as associate dean for academic affairs. In this role, he helped the school achieve full accreditation status, expanded the portfolio of graduate degree programs, and initiated a diversity and inclusion strategic plan. At the same time, his research was expanding in both size and scope. Interests in racial and ethnic minorities broadened to include sexual and gender minority populations in the US and abroad.

His former chair, Christopher Kahler, says Operario was instrumental in helping Brown develop a critical mass of research involving these too-often-neglected populations and in expanding and serving as a leader in the school's global health research efforts. Operario also played a key role in conceptualizing a program focused on HIV and alcohol use in Brown's well-known Center for Alcohol and Addiction Studies.

### **STUDYING SYNDEMICS**

Today, Operario describes himself as "a community-oriented behavioral social scientist who engages in analysis and interventions related to the experience of syndemics." It's not as complicated as it sounds, he says.

Syndemics is the idea that epidemics don't operate in silos. Multiple epidemics go on simultaneously, interacting with one another, each increasing the impact of the others. An example of syndemics in his own work is the relationship of the HIV/ AIDS epidemic with the rising epidemics of violence and mental health problems such as depression and suicidality. He focuses on how these syndemics create health inequities, disproportionately affecting communities of color and marginalized, often-stigmatized communities, such as sexual and gender minorities.

He uses multiple approaches to understand why such public health syndemics exist in the first place. Then, he develops and tests interventions to reduce or mitigate the prevalence of these syndemics and their impact on communities. For example, in a recent article on behavioral and social interventions to promote optimal HIV prevention and care, he calls on researchers to expand their focus from individuals to include the structural, environmental, and economic vulnerabilities that shape HIV inequities and to recognize interventions based within community-based organizations and local health care settings.

With research well-funded by the NIH and other sources, Operario has published more than 250 articles. He serves as editor or a member of the editorial board of half a dozen prestigious academic journals. He received the Dean's Award for Excellence in Teaching in the Brown School of Public Health and the University of Oxford's Excellence in Teaching Award.

In addition to working with colleagues and communities in the US, Operario has

developed long, productive international collaborations, which he brings with him to Atlanta. Pre-COVID-19, he was on an airplane every month (even though he hates to fly). Those trips are starting up again.

Wherever his research takes him, he works in conjunction with community-based groups, including members of the populations who are living with or affected by troubling public health conditions. He tries to "recognize their experiences, allow their voices to be heard, reinforce their expertise, and champion their rights."

### **POWER OF COLLABORATION**

Operario believes public health is at an important crossroads—and a time of reckoning. He says COVID-19 opened a window to show the world how pronounced health inequities really are. It also highlighted the strong interconnections between various health issues—infectious disease, mental health, violence, and substance abuse—and social determinants of health—housing, employment, education, and access to health care.

As he moved through his career, he has learned that public health research is an enormously collaborative process. Everything that matters must be done across departments, schools, disciplines, methodologies, and communities. And that takes time, resources, a willingness to speak across jargons, the necessity to understand what sociologists are doing in one part of the university and what statisticians are doing in another part, and what virologists are doing in their laboratories. "We all need to speak together to address public health problems most powerfully."

Such commitment to and practice of collaboration is a large part of what drew him to Rollins and Emory—and is also part of what makes him so excited about the possibilities going forward.



### **TAKING THE REINS**

Before coming to Rollins, Operario was well aware of the school's deep expertise in many public health domains relevant to the world today, including substance abuse, different types of violence, sexual and reproductive health, HIV, obesity, and general wellness. That awareness only intensified during his first weeks as chair, as he met one-on-one with faculty and administrators in the department and across Rollins. In these meetings he found "high motivation, even hunger" to work together.

And therein lies his first priority as chair. He wants to build more bridges across these health domains, finding more ways for faculty to work synergistically to address critical problems and their interactions, especially concentrated in marginalized communities. "That's something that Emory can do really well," he says.

He also looks forward to working closely with students in the department's master's and doctoral programs, to learning from and with these students, and to drawing inspiration from their scholarship. "BSHES students have expressed deep commitment to equity, antiracism, and justice as guiding principles of our science and praxis," says Operario. "I hope we can further strengthen these themes throughout our educational portfolio."

Operario sees another opportunity in what George Miller, former president of the American Psychology Association, once referred to as "giving psychology away." Operario wants to do exactly that with the BSHES department: "to give away, to strategically translate and disseminate, the department's many areas of expertise and abilities to the people, places, and organizations who could benefit from our knowledge."



Kahler, Operario's former chair and research colleague, says Rollins is fortunate to have him here—on so many counts. "At Brown, Don gracefully and effectively juggled an immense research portfolio and numerous administrative roles. But he also remained humble and approachable, a person of great wisdom and compassion, someone people trusted to go to discuss challenging issues."

Jennifer Nazareno could not agree more. After completing her doctorate at UCSF—another first-generation success story—she began a postdoctoral fellowship at Brown where Operario was "the best mentor I ever had. He was selfless with his time and with sharing his work. He created opportunities, opened doors, and made me see and believe in what was possible."

As Operario moved into his new post at Rollins, Cam Escoffery was able to transition out of her role as interim chair, which she had held since January 2022 following Colleen McBride. As chair for eight years, McBride had increased the department's size, scope, and reputation—and changed its name to better reflect its many areas of expertise. Both Escoffery and McBride have returned to their positions as professors in the department.

"Don Operario is a leader in areas that will continue to advance the BSHES department's mission to better the health of all people and prepare tomorrow's leaders to change behavior and social conditions that influence health," says Daniele Fallin, James W. Curran Dean of Public Health. "His experience, his domestic and international collaborations, and his commitment to give voice to all communities, especially those which are sometimes underrepresented, bring additional perspectives and increased energy to this dynamic, growing department."

# PHILANTHROPY

# Paying it forward



Dean's Council member CELESTE BOTTORFF has established the first endowment for the Rollins Earn and Learn (REAL) program. Work-study programs are near and dear to Bottorff's heart. When she was working toward her degree in physics at Purdue University, she got a job tending the school's particle accelerator at night. That job not only helped her in the classroom,

generous gift from

since she could see the things she was learning there being applied in the real world, it also helped her land an enviable first job with the Fermi National Accelerator Lab, a leading physics research laboratory.

"It's so important for students to be able to have jobs where they can

gain experience in their field," says Bottorff. "Getting that experience made an enormous difference in my career, and I hope my gift will give students the same kind of career jump-start that I had."

Bottorff is now retired after a career that included stints at General Electric, McKinsey & Company, and 17 years with The Coca-Cola Company. During the latter half of her tenure at Coke, she worked in well-being with the title of VP

Living Well. "I mean, who could turn down that title?," says Bottorff.

In that role, Bottorff created partnerships and programs with leading health care, community, and environmental organizations to promote well-being. The professional organizations provided the science and technical information, and she leveraged Coca-Cola's communications experience and reach to get their messages to a broader audience.

At Coke, Bottorff reported to Rhona Applebaum, another member of the Rollins Dean's Council. Applebaum invited Bottorff to a few Dean's Council meetings, and Bottorff was hooked. "The more I learned about the work that was going on at the school, the more I wanted to be involved," she says.

So Bottorff joined the Dean's Council, and now she's made the first endowment gift for REAL. "I believe in paying things forward," she says. "I've been very fortunate in my career, and I'd like to help someone else." GARY ALBRECHT 69G and his late wife MICHÈLE FRANÇOIS have designated a planned gift to establish the Gary Albrecht and Michèle François Scholarship Fund to provide support for underserved minorities and international students.

Albrecht's ties to Emory go back to his graduate school days. He was working toward a PhD at Columbia University in the late 1960s when the school was shut down due to student activism. He transferred to Emory and went on to join the faculty in the psychiatry and sociology departments.

While he was at Emory, Albrecht saw the tiny seeds that would eventually grow into the Rollins School of Public Health. He became close friends with Dick Levinson, former executive associate dean for academic affairs, and the late Bill Marine, professor of medicine emeritus, both of whom were instrumental in starting the community health program that would become Rollins.

Albrecht also volunteered to work on the campaign when Jimmy Carter was running for governor of Georgia. "At that time, the state did not have a department of health and human services," says Albrecht. "We were able to convince Carter to establish one once he became governor."

Albrecht left Emory after four and a half years and went on



GARY ALBRECHT AND MICHÈLE FRANÇOIS

to form careers in both the United States and Europe following his marriage to his Belgian wife. In the US, he worked in the rehabilitative medicine and sociology departments at Northwestern University, the Kellogg School of Management, and the school of public health at the University of Illinois at Chicago. In Europe, Albrecht was

a fellow of the Royal Belgian Academy of Arts and Sciences, Extraordinary Guest Professor

of Social Sciences at the University of Leuven, Belgium, and more recently a scholar in residence at the Maison des Sciences de l'Homme in Paris, a visiting fellow at Nuffield College at the University of Oxford, and a fellow in residence at the Royal Flemish Academy of Science and Art in Brussels.

Here and abroad, Albrecht's research has focused on how adults respond to unanticipated life events such as disability onset. He has studied adjustment to paraplegia, stigmas associated with disability, HIV/AIDS as a disabling condition, and the political economy of disability and rehabilitation.

Throughout his career, Albrecht has maintained a soft spot for Emory. "I had a very good experience at Emory, and I have always been committed to public health," he says. "I see this bequest as a way to pay it forward. The money will go to really smart people who will use it as a lever to do influential things for the greater good."

# CLASS NOTES

### 2000s HARRIS SOL

HARRIS SOLOMON 02MPH recently published a new book, *Lifelines: The Traffic* of *Trauma*. The book takes readers into the trauma ward of one of Mumbai's busiest public hospitals, narrating the stories of the patients, providers, families, and frontline workers who experience and treat traumatic

injury from traffic. Solomon is Fred W. Shaffer Associate Professor of Cultural Anthropology and Global Health at Duke University.



RACHEL A. TYREE 06MPH and Darren Humphrey of Camarillo, Calif., were married in Ojai, Calif., on Jan. 31, 2022. They welcomed their daughter, EdenAnn Rose, on Feb. 22, 2022, in Los Angeles. Tyree is director of communications for the Los Angeles Department of Public Health's Division of Chronic Diseases.

### **2010**s

SUSAN C. SCHAYES 10MPH of Woodstock, Ga., is chief transformation officer for ChenMed, a privately owned medical management and technology company. In June, she was the only physician named by Women We Admire in the list of "Top 50 Women Leaders of Georgia for 2022." Schayes was a faculty member for 16 years at Emory University School of Medicine where



she served as the division chief of Family Medicine and director of the Emory Family Medicine Residency program.

# ALUMNI CONNECTIONS —

# IN MEMORIAM



**DR. STEPHEN BLOUNT,** SECOND FROM RIGHT, WORKS WITH CARTER CENTER CONSULTANTS IN THE DOMINICAN REPUBLIC IN 2016. (*THE CARTER CENTER/G. NOLAND*)

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**TEPHEN B. BLOUNT** passed away suddenly at home on Saturday, April 30, 2022. Blount worked for 25 years at the Centers for Disease Control and Prevention (CDC), directing the Office of Global Health and then the Coordinating Office of Global Health. He provided oversight for



the Global AIDS program, global immunization, diseaseeradication activities, as well as malaria, TB, and tobacco control efforts. Blount finished his CDC career as associate director for Global Health Development in 2013. He then joined The Carter Center. He served for many years as the center's representative on the selection committee for the William H. Foege Fellowship in Global Health. Upon his retirement, Blount was the chair of the center's International Task Force for Disease Eradication and advisor to the Hispaniola Initiative, which he formerly led, along with the Public Health Training Initiative, as director of Special Health Projects. Blount is survived by his wife Linda Goler Blount; children Stephanie (Joseph Kenol) and Joseph Blount (Laura); siblings Matthew and Sharon Blount; and grandchildren Barry, Davis, and Isabella.

# CONTRIBUTIONS

# More than one way to serve

ICHAEL UGWUEKE 86MPH came to the United States with a straightforward plan. He wanted to get an MD and return home to Nigeria to practice. He did neither-and he's fine with that. Ugwueke never became a physician, but he presides over many of them as president and CEO of Methodist Le Bonheur Healthcare, a six-hospital. 13,000-employee system. He never went back to Nigeria, but he still serves underserved populations in and around his home base of Memphis, Tenn.

"When I was growing up and thinking about being a doctor, I envisioned addressing health inequities and improving access to care in underserved populations," says Ugwueke. "Today I am doing that, just in a different location than I imagined. It's been a blessing and a privilege to be part of a team that is making an impact."

And if awards are any indication, Ugwueke has made guite an impact. He was recently named one of the 2022 Most Influential Black Executives in Corporate America by Savoy Magazine. He was also honored in 2021 with the Baldrige Foundation's Harry S. Hertz Leadership Award, the Tennessee Hospital Association's CEO of Distinction award, and recognized by *Modern Healthcare*'s 2020 honor roll of Top 25 Minority Executives in the Nation.

Ugwueke's journey toward a career in health care began in childhood. Born in Nigeria, he lived in a oneroom home with his parents and five younger brothers. In 1967, their lives were turned upside down with the outbreak of a violent civil war. The family moved from one refugee camp to another, and along the way one of his brothers got sick. "There were no doctors or hospitals available to us in the refugee camps," says Ugwueke. "I literally watched my one-year-old brother die before my eyes. I decided that morning that I was going to be a medical doctor."

He scraped together enough money to come to the US to attend Shaw University in Raleigh, NC, where he earned a degree in biology in three years while working three jobs. However, he wasn't able to raise enough money to enroll in a medical school. A professor encouraged him to consider a master's degree in public health instead. "I had never heard of public health, didn't know what it was," says Ugwueke. "But I enrolled in the Emory public health program when it was still part of the medical school." That decision changed his career path. He had

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assumed that the US was the land of plenty, with no one going without. A class in community health showed him the reality. "Through this course I was exposed to parts of Atlanta I had no idea existed," he says. "There was abject poverty, lack of access to quality health care. It dawned on me that if in a city like Atlanta, which has a banner supply of doctors and hospitals, poor people are still dying needlessly and hopelessly, maybe I didn't have to return to Nigeria to pursue my passion. The need was literally staring me in the face right here. At the same time, there was a miliary coup in Nigeria, so I couldn't have returned at that time even if I wanted to."

> With an MPH degree in hand, Ugwueke now set his sights on working at the CDC or a department of public health. But his career took another turn when a friend told him about an opening to do a project at what was then Georgia Baptist Medical Center. He turned that project into a full-time position and, during the next three years, worked his way up until he was being considered for the post of director of marketing and planning. He didn't get it. "It was made known to me that it wasn't my performance or experience that kept me from getting that job," says Ugwueke. "It was because the organization was not ready for a Black director at that time."

So Ugwueke left his post and went on to serve in planning and operational leadership roles in health care organizations in Sarasota, Fla., Washington, D.C., and the Chicago area. Along the way, he got his doctorate in health administration and leadership from the Medical University of South Carolina.

In 2007, Ugwueke was recruited to Memphis as the CEO of one of the small hospitals within the Methodist Le Bonheur Healthcare system. "This hospital was troubled and required a turnaround," he says. "We were able to turn it around within two and a half years."

Once again, he steadily worked his way up, and in 2017 he was named president and CEO of the entire system. "When I came, some of these hospitals were being considered for closure," says Ugwueke. "But now they are flourishing."

Ugwueke looks back on his time at Emory as the opportunity of a lifetime. He has shown his gratitude by establishing, with his wife Rebecca, the Ugwueke Family Scholarship Endowment. The fund provides support to Rollins MPH and EMPH students in health policy and management, with a preference for students with a demonstrated commitment to improving health in West African countries.

"When I graduated from Emory, I owed the school a lot of money," says Ugwueke. "That I now have the opportunity and privilege to establish a scholarship at the school is a large point of pride for me."—Martha Nolan

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