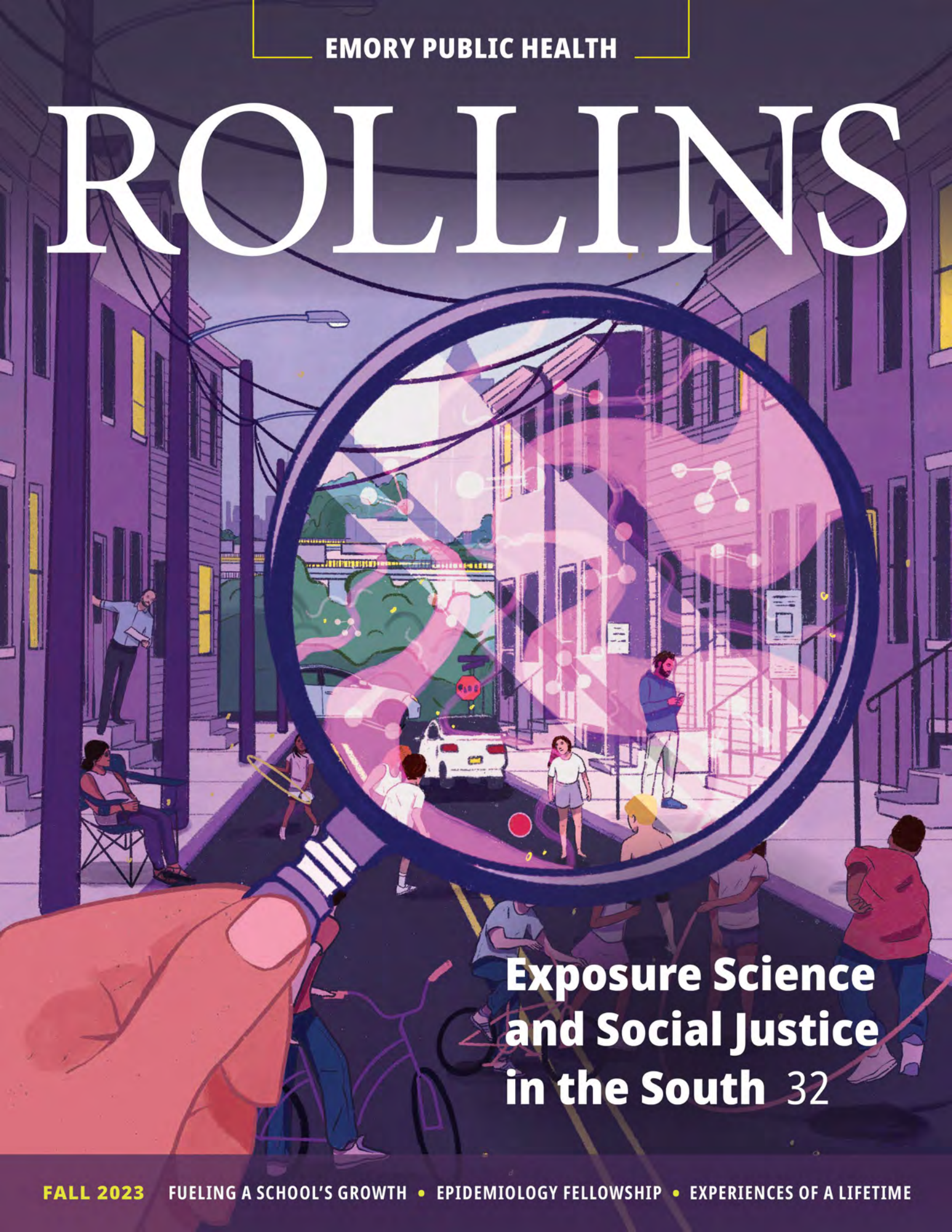


# ROLLINS



**Exposure Science  
and Social Justice  
in the South 32**



## Community Service and Camaraderie at Rollins-teer Day

**M**ore than 240 faculty, staff, and students volunteered with 16 organizations across Atlanta during this year's Rollins-teer day—the school's annual day of service held during orientation week. Thirty-five students and Humphrey Fellows served at the Atlanta Community Food Bank to inspect, sort, and pack quality grocery donations in preparation for their distribution to nearly 700 partner agencies across Georgia.

Photo by Erik Meadows





# ATLANTA COMMUNITY FOOD BANK







EMORY

ROLLINS  
SCHOOL OF  
PUBLIC  
HEALTH

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# EMORY PUBLIC HEALTH ROLLINS

## EDITORIAL

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CHECK OUT OUR  
ONLINE VERSION



# TOWARD THE FUTURE

**T**he public health challenges we face are evolving more rapidly than ever. And they are more complex than ever.

That's why we officially launched our new five-year strategic plan on September 12. It provides a roadmap for us as a school as we work to increase our impact on public health and do the most good—both here at Rollins and around the world.

Our cover story for this issue of *Rollins* magazine takes a deep dive into exposure science and the disproportionate

prevalence of environmental exposures on communities of color in the South, as well as the work our researchers are doing to partner with communities to improve public health. The Latino Community Engagement Project and the Gilead COMPASS Initiative's Emory University Rollins School of Public Health Coordinating Center, both highlighted in this issue, effectively fold community collaborations into their missions as they work to address breast cancer and HIV/AIDS in the South, respectively.

This issue also looks at the community engagement projects that recent Rollins alumni are leading through the Rollins Epidemiology Fellowship Program. These epidemiologists are doing critical work in counties across the state and are building important relationships between Rollins and county health departments that will last for years to come.

The Rollins student experience has always been a differentiator for us at Rollins. In this issue, we spotlight three unique student experiences that have proved life-altering: authoring a book with public health legend Dr. Bill Foege, working in the industrial hygiene space at Delta during the pandemic, and attending—and presenting at—United Nations climate change conferences.

My optimism for the future comes back to the people. I am surrounded by people who are doing good things. A glowing example is Dr. Chandra Ford, who joined Emory in early 2023 and whose prominence as a scholar in racism, social justice, and public health will provide critical insight and leadership for years to come. I invite you to learn about Dr. Ford in this issue, as well as many other projects and people making their mark on the world. As always, this is just a small sampling of what is happening at Rollins right now.

Every day we are making new plans. We are trying new things. We are helping. We are hoping. We are working toward the future.

Thank you for joining us on this journey.



**M. Daniele Fallin, PhD**

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



# BREAKING BARRIERS

Chandra Ford fights against racism  
in public health

By Deanna Altomara • Illustration by Jon Krause • Photography by Theo Gayle



In 2021, the Centers for Disease Control and Prevention acknowledged racism as a serious threat to public health. Since then, over 250 U.S. agencies and institutions have declared it a public health crisis. Today, racism is one of the most talked about topics in public health, and for good reason. But that wasn't always the case, as **Chandra L. Ford, PhD**, knows from experience.

Ford wrote about racism for her public health doctoral program in the early 2000s. "Some faculty would grade me and say, 'Well, that's not public health, you know. Glad you're interested in racism, but in terms of your life's work...that's not it.'"

Now she is an eminent scholar on racism, social justice, and public health. Earlier this year, Emory University welcomed Ford to its faculty as a professor with joint appointments in the Department of African American Studies at Emory College of Arts and Sciences and in the Department of Behavioral, Social, and Health Education Sciences at Rollins. She moved cross country from the Fielding School of Public Health at the University of California, Los Angeles, where she was a professor of community health sciences and founding director of the Center for the Study of Racism, Social Justice, and Health.



“Well-meaning people have said things to me like, ‘Well, you see racism everywhere,’” Ford recounts, as if awareness was a bad thing, or injustices were self-imagined. But, Ford points out, no one questions physicists who think about the laws of matter involved in everyday activities. Just like physics, racism is baked into modern society, and fighting it is her passion.

Her work is anchored in critical race theory, an academic discipline that analyzes how systemic racism has shaped

and often seen as a nebulous and overwhelming challenge, a shapeless specter hovering over society. Many people might not know what it looks like, especially in its more subtle forms, or how to combat it.

Ford wants to change that. She uses critical race theory to identify specific ways that racism operates in public health research: how it affects the topics being studied, the questions being asked, and the methods researchers use to answer those questions. By breaking

racism down into smaller, recognizable patterns, she hopes that researchers can spot it more easily and address it—or at least acknowledge how it affects their work—throughout the research process.

“We are not just going to arrive in communities and solve their problems. We need to start with the ways in which we could be part of the problem,” she says. For example, unspoken assumptions about people’s motivations or abilities could lead to simplistic and unfair conclusions. In some cases, researchers may inadvertently take on the role of “the white savior,” which potentially could lead to devaluing a community’s perceptions or overlooking strengths that could form the

backbone of effective interventions. Instead, well-meaning public health professionals could implement programs that do more harm than good.

“Focusing on the way that racism operates within the field is not just about identifying the problems but also identifying potential solutions.”

—Chandra L. Ford, PhD



society—and continues to do so—often in ways we might not immediately recognize.

### THE ROLE OF RACISM IN PUBLIC HEALTH

Racism is now widely acknowledged to be a major determinant of health. Discrimination exposes people to myriad stressors, including socioeconomic and psychological pressures, and also affects their access to resources to cope with those stressors. As a result, people of color are at higher risk of developing, and dying from, preventable diseases like diabetes, asthma, and COVID-19.

But racism can’t just be boiled down to a risk factor, Ford stresses. It’s ingrained in the world in which we live

### TOOLS FOR THE PUBLIC HEALTH PROFESSIONAL

“Focusing on the way that racism operates within the field is not just about identifying the problems but also identifying potential solutions,” Ford explains. These solutions could be as simple as implementing moments of reflection at standard checkpoints during the research process. For instance, when choosing questionnaires and scales to use in their projects, researchers should consider what populations were used to validate those tools. The answer could help



determine whether that tool is appropriate for the new project, or if any adjustments need to be made.

As acknowledgement of systemic racism and its impact has spread, interest in Ford's research has grown. She's astonished by the number of public health professionals who have stepped forward to learn more about racism and how they can address it in their own practices. Their interest led Ford to edit the book, *Racism: Science & Tools for the Public Health Professional*. A second edition is under way.

"Her text is an incredible resource for the entire field," says Don Operario, PhD, chair of the Department of Behavioral, Social, and Health Education Sciences. "It raised our standards for the rigorous analysis of how racism affects health, and it helps us imagine and construct antiracist approaches to improve health and wellness in ways that are relevant to multiple settings and populations."

### **BUILDING INTERDISCIPLINARY SOLUTIONS**

But Ford's work doesn't stop there. Other fields also could offer valuable tools to address racism. "In public health, we're trained to be the solution finders, so we feel like we can fix it all," she says. "But if we look at the literature, other disciplines provide so many different and fruitful ways of thinking about possible solutions."

For example, public health researchers might not consider the ways that everyday people define or think about race. But librarians, on the other hand, regularly tackle questions about how different concepts are defined or categorized. Ford, who holds dual degrees in public health and library and information sciences, integrates this perspective into her research. Her interdisciplinary background enables her to examine how different ways of thinking about race, including critical race theory, could impact the results of public health studies.

It also helps her think about how readability, internet

access, and other barriers impact access to health information and further fuel disparities. For over two decades, librarians have been working to make scientific data, and the knowledge

it produces, available to a range of communities. "Having these different disciplines to turn to really gives us new lenses and frameworks through which we can see the problem, interpret it, and think about how to solve it," Ford says.

Quite often, solutions aren't so simple. Different ways of thinking about racism and society can lead to different approaches to addressing it; sometimes, those approaches may contradict each other, making interdisciplinary partnerships even more important. Ford's dual appointment in Emory College will allow her to start building them. "There is palpable interest in public health in African American Studies," she says, "I see it

as an excellent opportunity to build the pipeline of diverse burgeoning health equity leaders at Rollins."

Ford is eager to continue pushing the limits of academic research and preparing a new generation of public health professionals who aren't afraid to shake things up. Students shouldn't let traditional disciplinary boundaries stifle their passions. "If I had," she notes, "I wouldn't be doing the work that I'm doing now at all."

At Emory, Ford has found a place that welcomes her fierce commitment to social justice, even when it means asking tough questions. Rollins is committed to thoughtful reflection as it works to promote equity on campus and beyond. Rollins, and the Department of Behavioral, Social, and Health Education Sciences in particular, appealed to Ford because everyone was excited to talk about health inequities.

"There are so many like-minded scholars at Rollins who have a genuine interest in and expertise doing social justice research," says Tené T. Lewis, PhD, professor of epidemiology. "Having someone like Chandra at Rollins is only going to take what we do here at Emory to the next level." ■







# Unlocking PUBLIC HEALTH

Quick summaries of  
impactful Rollins research

By Shelby Crosier



**TITLE |** Longitudinal Study of COVID-19 Stay-At-Home Orders' Impact on Deaths of Despair in the United States, January 2019 to December 2020

**JOURNAL |** *Journal of Public Health*

**THE BIG MESSAGE |** Drug overdose death rates increased after states implemented stay-at-home orders in 2020, and longer durations of these orders were associated with higher rates. The findings point to a need to design comprehensive strategies to prevent deaths of despair during future public health crises.

**ROLLINS AUTHOR(S) |** Kathryn Yount, PhD

**TITLE |** Cerebrospinal Fluid Proteomics Define the Natural History of Autosomal Dominant Alzheimer's Disease

**JOURNAL |** *Nature Medicine*

**THE BIG MESSAGE |** Alzheimer's disease develops and leaves signs in the brain years before cognitive symptoms show. This study reveals changes that occur up to 30 years prior to the onset of symptoms and highlights three potential critical times for early interventions. Knowledge of Alzheimer's evolution in the brain over time is essential for developing new diagnostic tools and precision therapies for the disease.

**Rollins Author(s) |**

Shijia Bian







**TITLE | Extreme Heat and Suicide Watch Incidents Among Incarcerated Men**

**JOURNAL | JAMA Network Open**

**THE BIG MESSAGE |** This article examined the relationship between extreme heat days and suicide watch incidents in prisons without air conditioning. Findings suggest that the two are associated, as suicide incidents increased as temperatures rose. This correlation contributes to growing research about the effects of climate change on prison populations and has implications for advocacy for incarcerated people in the face of increasing extreme heat days.

**ROLLINS AUTHOR(S) |** Regine Haardorfer, PhD; Hannah Cooper, ScD



**TITLE | Examination of HIV Pre-exposure Prophylaxis Need, Availability, and Potential Pharmacy Integration in the Southeastern U.S.**

**JOURNAL | JAMA Network Open**

**THE BIG MESSAGE |** Researchers mapped pre-exposure prophylaxis (PrEP)-prescribing locations and pharmacies in areas across six Southeastern states with high HIV risk. They found that PrEP-prescribing locations were unequally distributed, with fewer in areas of highest risk, but pharmacies were evenly distributed. This finding suggests that expanding HIV prevention services into pharmacies in high-priority areas could significantly increase high-risk populations' access to PrEP.

**ROLLINS AUTHOR(S) |** Kristin R.V. Harrington, PhD; Christina Chandra; Daniel I. Alohan; Diego Cruz; Aaron Siegler, PhD; Natalie D. Crawford, PhD

**TITLE | A Collaborative Approach to Address Racism in a Community-Academic Partnership**

**JOURNAL | Preventing Chronic Disease**

**THE BIG MESSAGE |** In this report, researchers associated with the HERCULES Exposome Research Center described the collaborative process used by HERCULES and its community partners to address racism and power dynamics impacting their research. Other academic research centers can use this approach to address institutional racism, embed equity into their work in communities of color, and improve the relevance and impact of their research.



**ROLLINS AUTHOR(S) |** Erin Lebow-Skelley; Martha Scott Tomlinson, PhD; Melanie A. Pearson, PhD

**TITLE | Disparities in Time to Prostate Cancer Treatment Initiation Before and After the Affordable Care Act**

**JOURNAL | Cancer Medicine**

**THE BIG MESSAGE |** Disparities in access to health care may drive longer wait times between diagnosis and treatment of prostate cancer, contributing to disparities in prostate cancer mortality. This study revealed large differences in wait time based on race and insurance status, which continued to grow even after implementation of the Affordable Care Act (ACA). This finding reveals that while the ACA increased access to insurance, it did not necessarily increase access to timely care.



**ROLLINS AUTHOR(S) |** Jeffrey Switchenko, PhD





**TITLE |** Participation in the Georgia Food for Health Program and Cardiovascular Disease Risk Factors: A Longitudinal Observational Study

**JOURNAL |** *Public Health Nutrition*

**THE BIG MESSAGE |** The Georgia Food for Health (GF4H) program offered cooking classes, education sessions, and produce vouchers to Grady Health Systems patients facing food insecurity in Atlanta. This study examined whether participation in the program led to changes in health. Attending more program sessions was associated with lower BMI, waist circumference, and blood pressure, all of which are risk factors for heart disease. These findings strengthen evidence about the benefits of produce prescription programs and can help shape GF4H moving forward.

**ROLLINS AUTHOR(S) |** Aryeh Stein, PhD; Amy Webb Girard, PhD

**TITLE |** A Qualitative Analysis Examining Intersectional Stigma Among Young Adults Living with HIV in Atlanta, Georgia

**Journal:** *PLOS ONE*

**THE BIG MESSAGE:** Between fear of disclosing HIV status, and delays and decreased engagement in care, stigma is a significant barrier to health care received by HIV-positive young adults. Future interventions should aim to address these sources of stigma while strengthening coping mechanisms used to face them.



**ROLLINS AUTHOR(S):** Michael G. Curtis, PhD; Whitney S. Rice, DrPH; Sophia Hussien, MD



**TITLE |** Community Coalitions for Smoke-Free Environments in Armenia and Georgia: A Mixed Methods Analysis of Coalition Formation, Implementation, and Perceived Effectiveness

**JOURNAL |** *PLOS ONE*

**THE BIG MESSAGE |** Georgia and Armenia Teams for Healthy Environments and Research (GATHER) is a collaboration between Armenia, the country of Georgia, and U.S. researchers. They recently tested the impact of community coalitions to promote smoke-free policies in various settings across Armenia and Georgia. These community coalitions created policies, promoted existing policies, and conducted awareness events and remained active despite extreme challenges posed by war and the COVID-19 pandemic. These efforts show that community coalitions can drive local change in a global context.

**ROLLINS AUTHOR(S) |** Michelle C. Kegler, DrPH





# ROLLINS ASK AN EXPERT

Rollins thought leaders weigh in on major public health issues.

Compiled By Shelby Crosier



## QUESTION

The U.S. Surgeon General recently issued an advisory that, “calls attention to the growing concerns about the effects of social media on youth mental health.” What does this advisory mean for parents, youth, and researchers?

## ANSWER

What we can do today as parents is pay attention to the behaviors of our own youth, to what strategies and limits we use in our own families, and to keep paying attention to new evidence and government advice. From the youth perspective, a lot of them are saying that social media is too much for them, but often this realization is coming after significant negative experiences. They can’t see the challenges when they start and are programmed developmentally to not follow all the advice parents may be giving. We need to figure out ways to increase dialogue with youth about this, particularly peer-to-peer, that helps with self-regulation while at the same time building structural limits and protections.



**EXPERT: DANI FALLIN,**  
PHD, JAMES W. CURRAN  
DEAN OF PUBLIC HEALTH

There is also the need for more data and research. The advisory highlighted that some of the major social media companies have not been cooperative in sharing data with researchers, so it is very hard to do this research when you are limited by access. While we can work on that front to push for data access, we also need to think of other ways to get this kind of research done because unfortunately neither parents nor the government have great guidance about what to do.

## QUESTION

How can we all do better [to support youth affected by racial trauma]?

## ANSWER

Something we can do ourselves is critically self-reflect on our own biases and put in the work to address those so that when we are working with youth, they know we are authentically trying to understand, validate, and support them. It opens up so many opportunities. I can’t tell you how many times we’ve heard from our youth partners and research participants that they just want to be recognized and acknowledged, both for the painful experiences they have and also for their strengths and what they can contribute to society. That is something all of us can do.



**EXPERT: BRIANA WOODS-JAEGER,**  
PHD, ASSOCIATE PROFESSOR  
OF BEHAVIORAL, SOCIAL, AND  
HEALTH EDUCATION SCIENCES

## QUESTION

How does Georgia compare to other states when it comes to mental health issues surrounding pregnancy?

## ANSWER

The Georgia Department of Public Health released the most recent maternal mortality data, and for the very first time, mental health conditions was the second cause of pregnancy-related deaths in the state. I don’t know of any other state where mental health





**EXPERT: SARAH BLAKE,**  
PHD, ASSOCIATE PROFESSOR  
OF HEALTH POLICY AND  
MANAGEMENT

is a leading cause of death for pregnant and postpartum women. Women in our state are suffering and need greater support during and after pregnancy.

Medicaid is a great expansion of access, but we have to not only look at it through the lens of “let’s expand health insurance,” we also have to build the perinatal health workforce. We have to make sure women know that they can access these services

and that they’re not just tailored to women who have a mental health diagnosis. These are resources that should be available to them during and after pregnancy for anything that is causing them stress or anxiety. If we can’t keep mothers healthy, we won’t have healthy babies. We have to have a multi-factored approach to addressing mental health for pregnant and postpartum women.

**QUESTION**

*Are there any health equity related factors that may affect risk or survival [of ovarian cancer]?*

**ANSWER**

Health equity factors may play into survival of ovarian cancer. In our African American Cancer Epidemiology Study, we are



**EXPERT: JOELLEN  
SCHILDKRAUT, PHD,**  
PROFESSOR OF EPIDEMIOLOGY

examining risk factors in Black vs. white women. Black women develop ovarian cancer at an earlier age but less frequently than white women, and their survival rate is worse. We are trying to determine why by collecting data and taking a “society to cell” approach. This means factoring in everything from the social determinants of health—such as housing and access to health care— in their neighborhoods

across the U.S. to individual factors, such as inflammatory-related lifestyle exposures like cigarette smoking, diet, and even body powder use that can lead to a poorer prognosis.

**QUESTION**

*What are the biggest threats to mental health treatment?*

**ANSWER**

Mental health workforce shortages and costs of care are major issues for families who are trying to help their child receive mental health treatment. Because of the shortage, there is enough demand

for mental health providers to set up practices where they don’t have to take any insurance and can operate on a cash-only basis. So, if a family can afford to pay \$100 to \$150 per therapy session, they have a chance at finding good care for their child. But for families that rely on health insurance, their options are going to be more limited.

It’s also important to remember that nearly half of kids are insured through Medicaid, and these families are typically limited to seeking care at a mental health clinic that participates in the Medicaid program. Yet, because Medicaid reimbursement rates are so low, it affects the salaries these clinics can offer to providers, and they have a difficult time recruiting and retaining qualified providers.



**EXPERT: JANET CUMMINGS,**  
PHD, PROFESSOR OF HEALTH  
POLICY AND MANAGEMENT

**QUESTION**

*What should policymakers be doing to protect the environment and human health?*

**ANSWER**

They should be proactive about understanding the likely impacts of climate change locally and how to protect their people from those impacts. Also, they need to be thinking specifically about the intersection between climate change and equity because the effects are likely to fall disproportionately on underserved populations. If you’re not thoughtful or careful on how you design your interventions, you may actually worsen health disparities rather than close them. ■



**EXPERT: NOAH  
SCOVRONICK, PHD,**  
ASSISTANT PROFESSOR OF  
ENVIRONMENTAL HEALTH

**ROLLINS ASK AN EXPERT** is an ongoing series from the Rollins School of Public Health that aligns research experts with pressing public health topics. The questions and answers featured here are excerpts from longer articles published on the Rollins News Center. View articles from this series and more at: [sph.emory.edu/news](http://sph.emory.edu/news).



# FORGING THE FUTURE

## Rollins launches its five-year strategic plan

By Kelly Jordan

**R**ollins launched an ambitious new five-year strategic plan September 12, 2023, in response to the school's changing leadership, growing needs, and evolving challenges in public health.

"I'm excited about the possibilities ahead, and see this plan as a roadmap to achieving maximum impact in a way that is thoughtful, measurable, and community informed," says M. Daniele Fallin, PhD, James W. Curran Dean of Public Health. "This plan is bold and ambitious, but it is also attainable. In the months and years ahead, this plan will help inform our efforts, but it will also serve as a living document that will adjust to address changing public health challenges as well as unique needs posed by our community."

Articulated within the plan are six core goals with affiliated objectives and tactics associated with each. Multiple objectives are cross-cutting across goal areas, which lends the plan a sense of connectivity in aim, purpose, and function. Diversity, equity, and inclusion, in particular, serves as a throughline in the report and a significant



area of emphasis across all goal areas.

The strategic plan's steering committee was chaired by Timothy L. Lash, DSc, and included representation across the school with faculty, staff, and student members.

"It was a huge team effort, and literally everyone we asked to help, agreed," says Lash. "The ambitious and values-oriented

product is a testament to the outstanding efforts of the steering committee members, working group members, and the entire Rollins community."

The plan was developed in partnership with members of the internal and external Rollins community and incorporated feedback from more than 300 faculty, staff, and students, gathered through listening sessions, surveys, and in-depth conversations as led by the plan's steering committee, working groups, and colleagues from Woodruff Health Sciences Center's Strategic Planning Office.



## GOALS

### RESEARCH:

#### Make discoveries that make a difference

We will advance public health science that improves health and health equity through rigorous, collaborative, and interdisciplinary research.

### EDUCATION:

#### Transform Our Offerings

We will broaden who we teach, diversify how we teach, and enrich what we teach in response to evolving public health priorities and emerging challenges.

### PRACTICE AND PARTNERSHIPS:

#### Put Research to Work

We will build ethical and equitable collaborations with local, regional, and global partners to engage communities and translate our research into mutually beneficial public health practices, policies, and programs.

### OUR PEOPLE:

#### Build a Thriving Workplace

We will cultivate a school where all members of our community have opportunities for professional growth and feel included, respected, and valued.

### DIVERSITY, EQUITY, AND INCLUSION:

#### Integrate Diversity, Equity, and Inclusion

We will center diversity, equity, and inclusion in our identity through our research, practice, operations, and educational activities.

### COMMUNICATIONS:

#### Champion Public Health

We will promote and strengthen trust in public health information.

### CURIOUS ABOUT OUR PLANS FOR THE FUTURE?

Use the QR code or visit our strategic plan website at [strategicplan.sph.emory.edu](http://strategicplan.sph.emory.edu).





# HOW OUR OBJECTIVES WORK TOGETHER

A careful read of these goals, objectives, and related tactics will reveal overlapping themes that do not fit solely in one place. This overlap is intentional. **So much of what we plan to do—much like public health itself—is interconnected.**

We've developed a multi-pronged strategy with intentional cross-fertilization. For example, tactics related to engagement with communities to provide quick and relevant public health information will ultimately apply to both our Practice and Partnerships goal and our Communications goal. Similarly, training on inclusive and equitable teaching will apply to both our Education and DEI goals.



## RESEARCH

- SPUR SCIENTIFIC INNOVATION
- LEAD HEALTH EQUITY RESEARCH
- BOLSTER RESEARCH INFRASTRUCTURE

## EDUCATION

- INCREASE ACCESS TO EDUCATION
- INNOVATE HOW WE TEACH
- ENHANCE EDUCATIONAL CONTENT

## PRACTICE AND PARTNERSHIPS

- GROW PUBLIC HEALTH PRACTICE SUPPORT
- CULTIVATE PARTNERSHIPS
- EXPAND PRACTITIONER PIPELINE

## OUR PEOPLE

- PROVIDE PROFESSIONAL GROWTH
- FOSTER COMMUNITY COLLABORATION
- STRENGTHEN OPERATIONAL EXCELLENCE

## DIVERSITY, EQUITY, AND INCLUSION

- ESTABLISH DEI ACCOUNTABILITY
- INTEGRATE DEI VALUES

## COMMUNICATIONS

- EXPAND THOUGHT LEADERSHIP
- REIMAGINE RESEARCH DISSEMINATION
- LAUNCH SCIENCE COMMUNICATIONS TRAINING
- DEEPEN COMMUNITY CONNECTIONS



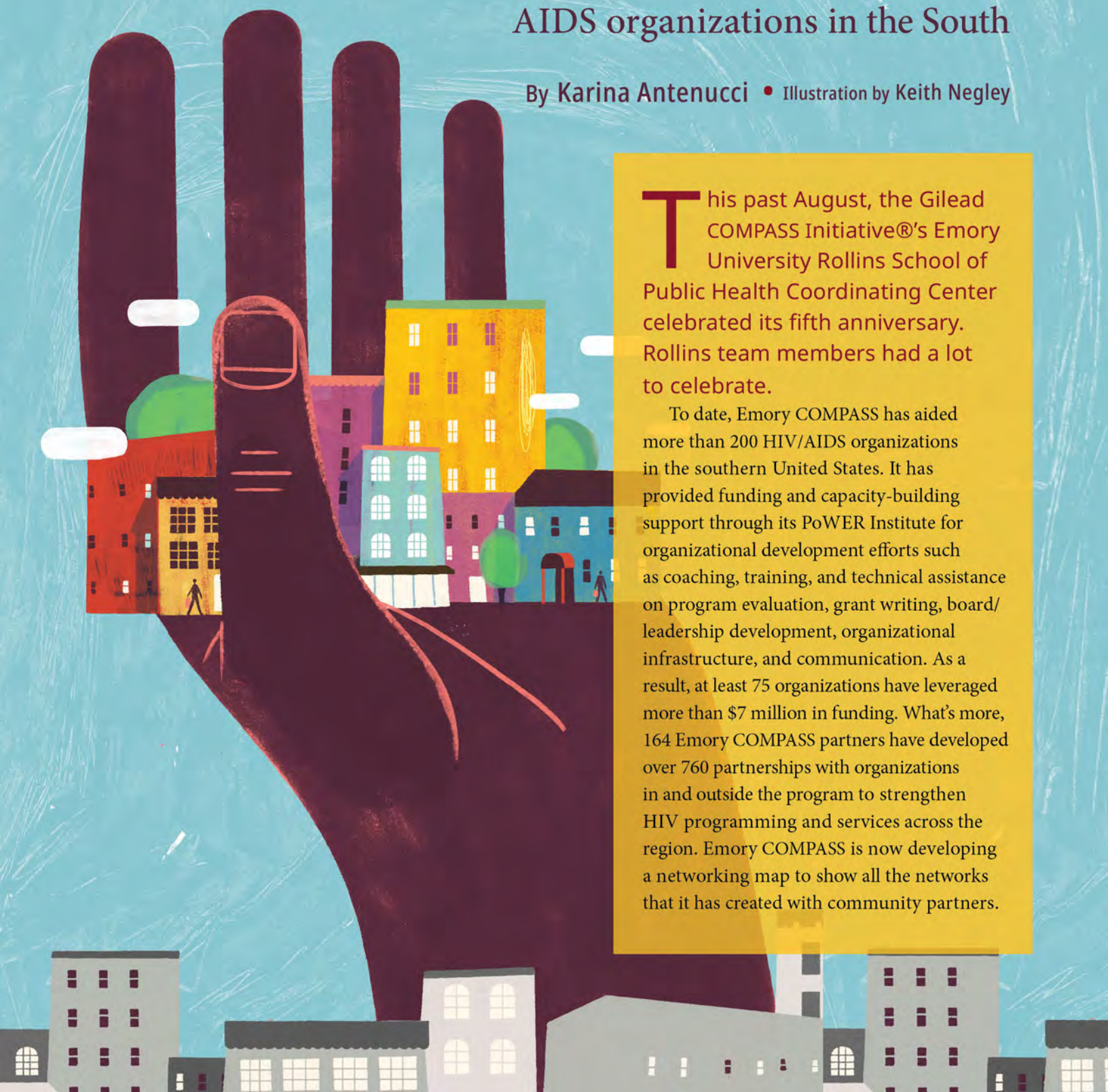
# A HIGH FIVE

The Gilead COMPASS Initiative® celebrates five years supporting HIV/AIDS organizations in the South

By Karina Antenucci • Illustration by Keith Negley

This past August, the Gilead COMPASS Initiative®'s Emory University Rollins School of Public Health Coordinating Center celebrated its fifth anniversary. Rollins team members had a lot to celebrate.

To date, Emory COMPASS has aided more than 200 HIV/AIDS organizations in the southern United States. It has provided funding and capacity-building support through its PoWER Institute for organizational development efforts such as coaching, training, and technical assistance on program evaluation, grant writing, board/leadership development, organizational infrastructure, and communication. As a result, at least 75 organizations have leveraged more than \$7 million in funding. What's more, 164 Emory COMPASS partners have developed over 760 partnerships with organizations in and outside the program to strengthen HIV programming and services across the region. Emory COMPASS is now developing a networking map to show all the networks that it has created with community partners.





Lil Nas X visits with Grady Infectious Disease Program and COMPASS partners.



## A PURPOSEFUL INITIATIVE

COMPASS stands for COMmitment to Partnership in Addressing HIV/AIDS in Southern States. An initiative of Gilead Sciences Inc., it has committed more than \$100 million to support organizations working to address the HIV/AIDS epidemic in the South.

“The initiative is about sustainable change and lasting impact on HIV in the southern U.S. by improving



**LINELLE BLAIS, PHD, PRINCIPAL INVESTIGATOR, EMORY COMPASS**

access to stigma-free care, increasing local leadership and advocacy, and changing public perception of HIV/AIDS,” says Linelle Blais, PhD, principal investigator for Emory COMPASS. “We believe that all people should have equitable access to quality health care. Yet, the southern U.S. experiences the greatest burden of HIV diagnoses, illness, and deaths in the country and lags in providing quality HIV prevention and care to its residents.”

COMPASS serves 12 states and has four coordinating centers that focus on different aspects of HIV/AIDS. The Rollins Coordinating Center supports capacity building through infrastructure development and shared knowledge. In addition, the Southern AIDS Coalition,

located in Birmingham, Alabama, focuses on stigma reduction; Wake Forest University School of Divinity in Winston-Salem, N.C., leads faith-based advocacy; and the University of Houston Graduate College of Social Work concentrates on trauma-informed care, harm reduction, and mental wellness. The Rollins team serves as the lead center, overseeing all the coordinating centers’ cross-collaborative projects.

## STRENGTHENING COMMUNITY PARTNERS’ IMPACT

“The unique thing about what we do is that we do not tell folks what to do. We work alongside them to help stand up their organizations so they can continue to do amazing



**KIA COLBERT, CENTER DIRECTOR, EMORY COMPASS**

work,” says Kia Colbert, center director for Emory COMPASS. “When this initiative is eventually over, there will still be organizations addressing HIV, but they will be stronger and able to weather through until the epidemic is over.”

Shakita B. Jones, founder and executive director of Central Alabama Alliance, Resource & Advocacy Center and an Emory COMPASS advisory board member, echoes that sentiment. “Emory COMPASS invested in us,”





Conference attendees at the COMPASS Initiative® booth at the United States Conference on HIV/AIDS in Puerto Rico in October 2022.

she says. “They believed in us. They supported us. Other funders wanted us to fold into other organizations as a program and give up on being a standalone organization because there were so many other larger organizations in the [geographic] area.”

The community partner application process is purposely kept simple and accessible with short questions. Priority is given to rural organizations with fewer available resources, those whose boards represent the population they’re serving well, and those that are led by or serve the Black MSM (men who have sex with men) community, Black women, and Latinx people—populations with the highest rates of HIV in the South.

“Emory COMPASS has invested in small organizations like Eagle Pass SAFE and has given legitimacy to the work that is being done by community members in rural areas,” says Elias Diaz, founder and executive director

of an agency serving the LGBTQ+ community in Eagle Pass, Texas. “This goes beyond a monetary investment. It has been an investment in the development of our people, and that is invaluable.”

Ian L. Haddock, founder and executive director of The Normal Anomaly Initiative in Houston, concurs. “Emory COMPASS crafted us into a necessary entity that is dedicated to the forward mobility of Black queer people,” says Haddock. “Through their work, we have touched thousands of people through direct services, braver spaces, and advocacy efforts. It has not only been a space for our organization to flourish, but it also has cultivated me as a leader in this work.”

### LOOKING BACK AND MOVING FORWARD

To commemorate the past five years, COMPASS is featured as a supplement issue in *The Journal for the Health Care of the Poor and Underserved*. The Emory team authored or coauthored six articles in the issue, which was unveiled during an anniversary celebration with community partners in Nashville, Tennessee, in August.

With many successes under its belt, the Emory COMPASS team isn’t slowing down. It’s speeding up.

“Over the next three years, we’ll focus on expanding our impact by replicating and scaling up what we know works, telling impact stories through the creative arts and other avenues that change hearts and minds, and cultivating and elevating the next generation of leaders to carry on the HIV/AIDS movement through systems and policy change,” says Blais.

She and her colleagues plan to address these goals using a variety of tactics, including development of practical, community-based education and mapping tools to identify service



gaps and resources. For example, service desert maps that show the drive times to HIV services and service locators from communities COMPASS serves will be expanded



**CANDACE MEADOWS, DIRECTOR OF STRATEGIC PARTNERSHIPS, EMORY COMPASS**

upon. The Rollins team also has developed a learning module to help organizations gain a true picture of what the community around them looks like and needs. Additional mapping data is being gathered to inform local, state, federal, and business partners at the forefront of addressing the HIV/AIDS epidemic, particularly in the South.

The COMPASS team is also planning several events. The largest, a World AIDS Day event in Atlanta in early December, will involve the City of Atlanta, Gilead Sciences, and the Centers for Disease Control and Prevention. As part of the event, artist Sean Black will create an exhibit featuring photo journal stories and videos of community partners to showcase successful initiatives across the South.

“One of our key values is collaboration,” says Candace Meadows, director of strategic partnerships for Emory COMPASS. “Through our sustained engagement, we have seen individuals and organizations grow exponentially from where they were to where they are now. This collaboration is cyclical, as we are now seeing our more established community partners reach out and lend a hand to new ones coming into the program.”

### **GOING ABOVE AND BEYOND**

Emory COMPASS also plans to broaden its scope through development of a coordinating center learning model. This educational tool will serve community-based organizations and governmental and nongovernmental agencies, both domestically and internationally. The model will be used to address HIV/AIDS and many other diseases.

Clearly, Emory COMPASS has legs, which is very much in line with Rollins’ core mission and values.

“Rollins is well known as a leader in public health research and as a premier educator of public health professionals,” says Blais. “One of our key differentiators is our role in implementation practice—that is, ensuring that what works through research is actually adapted and put into practice in the real world and across all populations where there is a need.” ■



**A PoWER Up Training Session at Emory COMPASS Coordinating Center in November 2022.**





A community outreach program partners with Georgia Latinos to increase genetic cancer screening

# LOST IN TRANSLATION

By Muriel Vega • Illustration by Jon Krause



The study team and facilitators pose before the community discussion in June 2023.

(Left to Right: Yue Guan, Dayanna Ramirez, Jackie Bonilla, Estefany Rivera Sanchez, Jazmin Huerta, and Denise Martinez)



**A**s of the 2020 U.S. Census, more than 1 million Latinos live in Georgia, making them one of the fastest-growing groups in the nation. But nearly half of this population lives in poverty or low-income conditions and they have one of the highest rates (33%) of uninsured individuals, reducing their access to health services and preventive care in the state.

Yue Guan, PhD, research assistant professor of behavioral, social, and health education sciences, focuses her research on promoting population health and eliminating health inequity by translating evidence-based genomic-informed programs and policies into practice.



**YUE GUAN, PHD, RESEARCH ASSISTANT PROFESSOR OF BEHAVIORAL, SOCIAL, AND HEALTH EDUCATION SCIENCES**

"It is well known among ethnic racial minorities such as Latinos that consistent and significant disparities occur in service access, both in specialty clinical areas and public health settings," says Guan.

Through her research, she has deduced that Latinos are under-represented in cancer genomic

databases and are more likely to receive generic genetic test results with no clear course of action.

## EXPANDING HEREDITARY CANCER SCREENINGS IN GEORGIA

Cancer genetic risk screening is particularly beneficial for Latinas at higher risk for hereditary breast cancer. They are often diagnosed with breast cancer at a younger age than non-Hispanic whites and with tumor types (such as triple-negative) linked to hereditary genetic mutations. However, Spanish-speaking Latinas are half as likely as white individuals to discuss genetic counseling or testing with a health care provider.

Georgia is one of the few states that has a population-based screening program for hereditary breast and ovarian cancer. The Georgia Department of Public Health runs the Georgia Center for Oncology Research and Education (Georgia CORE)'s family history screening program, which offers cancer genetic screening in public health clinics statewide. The program, the Georgia Genetics Program, focuses on family history screenings for BRCA-associated cancers (like breast and ovarian cancer) among largely uninsured and low-income individuals. Since 2012, over 30,000 women in Georgia have completed family history assessments for BRCA-associated cancers through Georgia CORE.

"All the infrastructure is there for a potential population reach, but we found that the reach of this screening program remains very low in general, and particularly low among Latino communities," says Guan.

Her program evaluation showed that 9,412 adult Latinas in Georgia completed cancer genetic family history screening from 2013-2022 through Georgia CORE and reached Latinas in 14 of 18 public health districts across the state. Recently, the department added a Spanish-language line and a contract with a genetic testing company that offers genetic counseling services in Spanish to help its reach.



Jackie Bonilla 23PH, Dayanna Ramirez 23PH, and Denise Martinez prepare to register participants for the community discussion in June 2023.



### ENGAGING WITH THE LATINO COMMUNITY BEYOND SURVEYS

Last year, Guan launched the Latino Community Engagement Project to promote genetic screening for hereditary cancers, specifically breast and ovarian, among Latino communities in Georgia. The research team piloted the initiative in Gwinnett County, where, according to the 2020 U.S. Census, 23% of nearly a million residents identify as Hispanic or Latino.

The Latino Community Engagement Project, funded by a 2022 Rollins Dean's Pilot Innovation Award, aims to improve community engagement through deliberative democracy—smaller, more personal group discussions to address the complex nuances involved in genetic testing and hereditary cancer.

In collaboration with Georgia CORE, the Gwinnett County Public Health Department, the Nett (Nations Experiencing Transformation Together) Church, Guan, and student researchers Denise Martinez and Dayanna Ramirez 23PH, organized a Spanish community deliberation on hereditary breast and ovarian cancer. The research team

recruited 33 Latino community members from diverse backgrounds to discuss potential initiatives and hear their opinions on how they may affect their community for a one-day event.

"When we think about public health promotion, we tend to only focus on the positives," says Guan. "From the beginning, we want to make sure the health officials can understand the potential pros and cons of targeting Latino communities for hereditary breast cancer and ovarian cancer screening. We want to know both sides of the issue."

Guan and her team considered basic demographic points such as sex, age, education level, and employment status. It was important to find subjects who had previously participated in civic engagement or volunteering to demonstrate their involvement in the community. "We want to encourage them to think about what would be a pro for their community and what would be a potential con," says Guan.

During the Spanish-speaking one-day June 2023 event, the 33 participants reviewed information on hereditary cancer screenings, deliberated with



their peers, and voted on the question related to targeted screening among their community.

The participants, 31 women and two men, heard more about the risks of hereditary cancer, the importance of understanding their ancestry better than what databases currently show, and whether Georgia should focus on the Latino population when rolling out its hereditary breast and ovarian genetic counseling program. A workbook guided participants through their discussion with facilitators, including what factors to consider before pursuing available genetic screenings and further discussing the pros and cons.

"It's important to look at genetics through a public health lens because it is unfortunately one of the things that can also contribute to health disparities and especially in cancer outcomes," says Ramirez, who served as a researcher and bilingual facilitator on the project. "It's vital to help people understand the pros and cons and give them informed consent."

For example, a pro would include individuals who have a mutation benefiting from more advanced prevention treatment options. However, those without insurance may struggle to access necessary follow-up care despite evidence-based recommendations, a con.

"We were willing to hear whatever they were able and willing to share," says Martinez, who also worked as one of the bilingual facilitators. "The participants went above and beyond in sharing their true sentiments and sharing what their opinions were."

### REMOVING LANGUAGE AS A BARRIER

Conducting the June event and whole discussion in Spanish created a more collaborative learning experience for the

researchers and the participants. The team went through several revisions of the event materials to have the proper translations so that they would connect with the community. "We made it more like through the lens of a community discussion, and I think that's part of the reason why people also felt very welcomed and excited to come back," said Ramirez.

During the event discussion in June, the researchers and bilingual interpreters facilitated a discussion with the participants about using more effective and nuanced Spanish words to describe the problem, genetic screenings, and relevant information for a future public health initiative. The discussion created a safe space to discuss preferred identification terms, like Latino, Latinx, or Hispanic, and build trust.

Another example, the terms, "pecho" and "mama" are both used to describe breasts in Spanish. Many of the participants picked "mama" to prioritize modesty and because it's used more widely. But, Guan decided to use the more gender-inclusive "pecho" moving forward in her research to spread the message that breast cancer can also affect men.

The Nett Church, a community partner in Gwinnett County, hosted the one-day June event. Executive Pastor Nora Colmenares took the lead in promoting the event through social media to reach more potential participants in the community as she saw the benefit of Guan's research project. As a Latina woman, she understands the challenges the Latino community faces because scarce health resources and services are often tied to immigration status.

The church has hosted health fairs, health screenings, and birth control workshops and soon plans to book a mobile mammogram truck. Colmenares was impressed with



“From the beginning, we want to make sure the health officials can understand the potential pros and cons of targeting Latino communities for hereditary breast cancer and ovarian cancer screening. We want to know both sides of the issue.” —Yue Guan, PhD



Participants sharing the conclusions of their small groups with the larger group for discussion during the June community event.

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attendance and engagement at the event since local community members can be apprehensive. "Everyone was sharing their thoughts, and some had me in stitches laughing," she says.

But in one sobering instance, Colmenares heard a participant comment: "Not to get out of learning, but why would I want to learn if I have the gene? If I do, there's nothing I can do about it since I'm uninsured."

"It broke my heart but also raised a very important issue many Latino women face, whether documented or not," says Colmenares. "Many don't have insurance, or if they do, it's not good enough."

Guan experienced another memorable moment, this one more upbeat. "During an event break, a participant approached me and said, 'Dr. Guan, I've lived in this community for 20 years, and this is the first time a health event was done completely in Spanish. If you want to do any project in the future, you have our support.' I still remember that sentence. That's so powerful."

Recently, Guan received National Cancer Institute funding that, "promises to have a transformative impact on public health capacities to improve cancer screening and linkage to follow-up services,"

says Don Operario, PhD, chair of the Department of Behavioral, Social, and Health Education Sciences.

"Dr. Guan's research is guided by a fundamental vision to reduce long-standing inequities in cancer prevention, diagnosis, and treatment," adds Operario. "At a scientific level, this new grant is enormously complex. It addresses multiple intersectional levels of analyses—policy, community, individual, biological—that determine population-level cancer inequities."

Guan's team is currently analyzing data to identify qualitative insights into the pros and cons of a potential public health initiative for genetic screening in the Latino community, following the June event discussion. They must better understand these factors before moving forward with a larger Latino community engagement initiative statewide. Developing improved strategies is critical to building community engagement in order to address issues ranging from stigma to health care costs.

"Our one-year pilot project is just one small step, but I believe it's a seed we've planted," says Guan. "We feel motivated to continue this research and make a positive impact." ■



## The transformative impact of the Rollins family's support



# FUELING A SCHOOL'S GROWTH

By **Martha Nolan** • Illustration by **Charlie Layton**

**W**hen the Emory Master of Public Health program became a school in 1990, no one could have predicted its phenomenal growth over the next 35 years, with three spectacular buildings, nearly \$128 million in research funding, and an endowment of almost \$200 million. But grow it did. That unprecedented trajectory would not have been possible without the generous and unwavering support of the Rollins family. Beginning with Wayne Rollins, a successful local businessman and philanthropist, and continuing with his children and grandchildren through the O. Wayne Rollins Foundation, the family has provided transformative philanthropic support that allowed the school that bears its name to flourish.







“Over the years, the Rollins family has built for us the most impressive physical footprint of any school of public health in the country,” says Kathryn Graves, MEd, MPH, senior associate dean of advancement and alumni engagement. “At the same time, they have been instrumental in helping us build an endowment to sustain the school in perpetuity. It would be impossible to overstate the impact the Rollins family has had on our school. We simply would not be where we are today without them.”

While the Rollins family’s latest largesse comes in the form of the newly opened R. Randall Rollins Building, its support dates to the school’s very first days, when what would become the Rollins School of Public Health became the first new school at Emory in more than 70 years. Wayne

Twelve years later, in the fall of 2022, the school opened the doors of its third building, made possible by a \$65 million gift from the Rollins family. “The R. Randall Rollins Building, along with the Grace Crum Rollins and Claudia Nance Rollins Buildings, creates a unified public health campus unlike any other,” says M. Daniele Fallin, PhD, James W. Curran Dean of Public Health. “These magnificent buildings, and the people and activities that occur within them, make clear the extraordinary impact and legacy of the Rollins family.”

### A CROWNING JEWEL

The R. Randall Rollins Building increases the school’s footprint to more than 500,000 square feet. The elegant 10-story building, which is filled with natural light, houses



When the Grace Crum Rollins Building was built, Associate Dean Fred Kennedy made sure the address was that of the program’s former home—the little white clapboard house located at 1518 Clifton Road, NE.



Gathered in front of a 1990 photo of O. Wayne and Grace Crum Rollins are (l-r) Henry Tippie, O. Wayne Rollins Foundation trustee, Gary Rollins, Amy Rollins Kreisler, Randall Rollins, and Pamela Rollins.

Rollins, whose philanthropic support of Emory began in the mid-1970s, heard that the new school needed a place to call home and said he wanted to help make that happen. Unfortunately, he died unexpectedly in 1991, before building plans had been finalized.

Determined to carry out his vision, Wayne’s wife, Grace, and sons, Randall and Gary, provided funding for a building named for their mother, Grace Crum Rollins. Shortly before the new facility opened in late 1994, the university named the school for the Rollins family in honor of their generosity to Emory.

When the rapidly growing school found itself in need of more space, the Rollins family once again stepped up, helping to fund the Claudia Nance Rollins Building, named after the mother of Wayne Rollins. The building opened in 2010, more than doubling the physical size of the school.

10 new classrooms, faculty offices for the Hubert Department of Global Health, a training room, multifunctional collaboration and event space, and three outdoor terraces.

Every aspect of the building’s design was intentional, building off lessons learned from the previous two facilities. “All of the classrooms and spaces were designed for ultimate flexibility,” says Vanda Hudson, senior director of fulfillment services. “The furniture is flexible and easily moveable so the spaces can be configured for a variety of work—open or closed, quiet or collaborative. Additionally, there is no shortage of conference rooms and group study rooms in the new space, providing our community with plenty of options when it comes to meeting or studying.”

The latest technology has been embedded throughout the building to foster that flexibility, perhaps most noticeably in the lobby. That is where the Pulse digital signage



system resides—a series of multiple interactive monitors used for floor-to-ceiling digital storytelling. “The Pulse is very stylish and is the centerpiece of the audio-visual technology we’ve implemented in the building,” says James Leonard, chief information officer.

Classrooms and other spaces are equipped with technology to support maximum flexibility so they can accommodate in-person classes, remote learning, or a hybrid option. Students and faculty can wirelessly share screens from their laptops on large room monitors, and equipment captures audio and, if desired, video so lectures can be referenced later or archived.

The new building includes a dedicated training room, long on the school’s wish list. The Deborah A. McFarland Global Training Room is outfitted with multiple screens and flexible furniture, giving it the ability to be easily transformed for multiple learning situations. Named for a longtime faculty member, this room is meant to accommodate single- or multiple-day trainings hosted by Emory groups or other community organizations.

Also, the R. Randall Rollins Building was designed with



Vanda Hudson, Dean Surbey, and Erin Cahill posing during a tour of the R. Randall Rollins Building.

hospitality in mind. “One of the guiding principles in the design phase was to make the building welcoming to the broad community of students, staff, faculty, and external partners,” says Hudson. “And we see it happen daily. I’ve seen nursing students gathered in a student lounge area. A research team from the O. Wayne Rollins Research Building came over to find a spot to meet

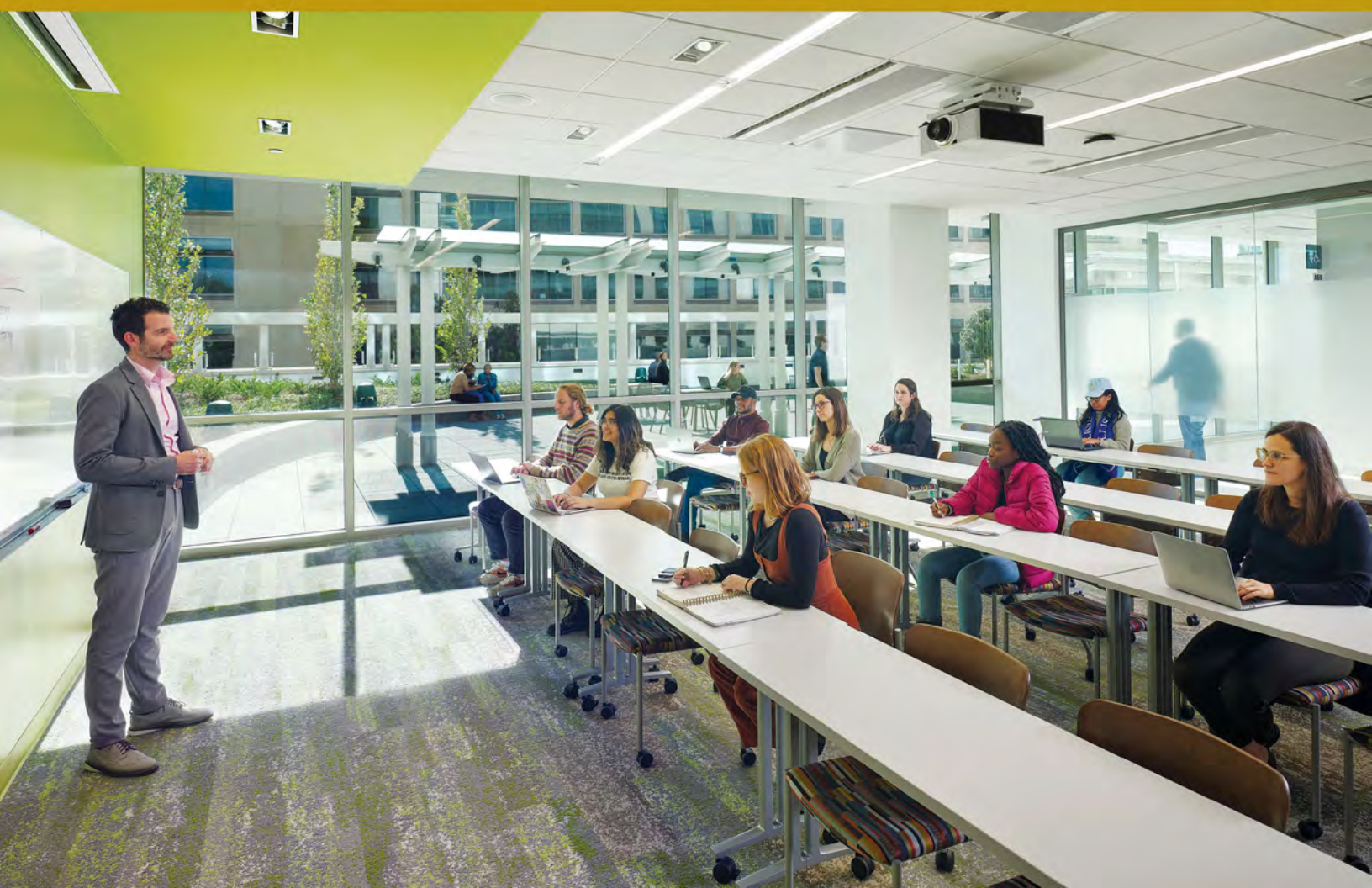
and work. You can find people from all over the university gathering in small groups all around the building.”

Another guiding design principle was integrating all three buildings to form one Rollins community. Buildings are connected by bridges and tunnels on the first floor, plaza level, and lower level. Facilities are deliberately distributed among the three buildings.

“The design creates ‘strategic inconvenience,’” says Hudson. “For example, the labs are in the Claudia Nance Rollins Building. The Rollins Café is in the Grace Crum Rollins Building. Dancing Goats Coffee and the student center are in the R. Randall Rollins Building. So, everyone ends up moving through all three buildings rather than remaining isolated in one small area, which builds a sense of community.”













## INVESTMENTS IN PERPETUITY

While buildings are the most visible and concrete manifestations of the Rollins family's generosity, support for the educational and research mission of the school through endowments has been equally transformative. In early 2022, the O. Wayne Rollins Foundation pledged its most generous financial commitment to the school to date—\$100 million to establish two endowment funds.

The Rollins Fund for Faculty Excellence is dedicated to recruiting and retaining exceptional senior faculty by nearly doubling the number of the school's endowed faculty positions and by providing early career support for Rollins assistant professors. The Rollins Fund for Student Success will increase the number of merit scholarships given to public health students. This fund may also provide students with career-enhancing experiences through the Rollins Earn and Learn work-study program and global field experiences.



An oil painting of R. Randall Rollins.

Last year's landmark gift is but the latest in endowment support. The family funded the O. Wayne and Grace Crum Rollins Endowment, which provides the dean flexibility in responding to the school's highest priorities and has enabled the endowment of three department chairs

and six assistant professors. These positions allow seasoned faculty the freedom to grow their research and junior faculty the opportunity to launch their research careers.

In addition, the family has honored friends by naming the following positions: the Michael M.E. Johns Distinguished Professor in Health Policy, the Wilton Looney Distinguished Professor in Cardiovascular Research, and the Stephen D. Clements Jr. Distinguished Professor in Cardiovascular Disease Prevention.

After 9/11, the family established the Center for Public Health Preparedness and Research, which has been active in responding to the COVID-19 pandemic and other man-made and natural disasters. In 2018, the Rollins family established the Rollins Distinguished Professorship in Substance Use Disorders.

These endowments have been transformative for faculty recipients. Tim Lash, DSc, the O. Wayne Rollins

Distinguished Professor of Epidemiology and chair of the Department of Epidemiology, has used the funds to support doctoral students in research that is creative but not funded



Tim Lash, DSc

by grants. For example, one of his doctoral students is looking at whether the onset of the pandemic reduced adherence to endocrine therapy in breast cancer patients in Georgia. "A gap in endocrine therapy can increase the risk of recurrence, and with everyone staying home during the pandemic, we wanted to see if that impacted treatment adherence," says Lash. "The study is too specific and small to be funded, but it's very important."

Lash also uses his endowment to support faculty in career development and leadership courses. "Having the ability to use these funds to make differences in things that would otherwise be hard to support elevates the whole department," he says.

Alvaro Alonso, MD, is the Stephen D. Clements Jr. Distinguished Professor of Cardiovascular Disease Prevention. The position was named to honor the eminent cardiologist who has long cared for the Rollins family. Alonso uses the funding to support doctoral students in their studies to advance cardiovascular disease prevention.



Alvaro Alonso, MD

"These funds allow students to attend conferences where they can present their work and network with colleagues," he says. "The funds support research for which they would otherwise not be able to get funding. These things really contribute to their development and their ability to be successful down the road."

Alonso also uses the endowment funds to obtain research data. For example, he is currently studying the link between gestational diabetes and the future risk of cardiovascular disease.

"With just the data we have available at Emory, I would



not be able to do this study,” he says. “But funds from the Rollins family allow me to obtain data from a vast database—in this case, we looked at 200,000 people who have been pregnant. Having access to this kind of data allows us to answer questions we otherwise would not be able to.”

As the Rollins Distinguished Professor of Substance Use Disorders, Hannah Cooper, ScD, believes having such a role at a school of public health is a landmark. “For so long, substance use disorders have been treated as criminal and legal



**Hannah Cooper, ScD**

issues, not public health issues,” says Cooper.

“But Rollins has always been an outlier, with Jim Curran, who focused on HIV, including those who acquire it through drug use, as a public health issue, and Claire Sterk, who put the health of the people who use drugs at

the center of her academic career. The Rollins investment in this issue built on the strengths Jim and Claire established and propelled us to become a leader in this critical area.”

More concretely, the endowment has allowed Cooper and the school to become leaders in the field of substance use disorders in several ways. Cooper has a leadership role in Georgia’s Multi-Stakeholder Opioid and Substance Use Response Plan. She is currently working to build awareness and research around the role of drug use in driving maternal mortality. Georgia has one of the highest maternal mortality rates in the U.S., and the nation has one of the highest rates among high-income countries. What is often unnoticed, says Cooper, is the role drug use plays in these rates.

“In Georgia, the second leading cause of maternal deaths is overdoses,” says Cooper. “In some states, it’s the leading cause. I’ve been using some of that important Rollins endowment to build up research programs to elevate evidence around drug-related harms during pregnancy and the postpartum period.”

The endowment has also allowed the school to establish a predoctoral training program for students in substance use disorders, which currently supports five students.

“We would not be where we are today without the Rollins family,” says Fallin. “Their support of our facilities and our endowment has allowed us to attract and retain the brightest and most dedicated faculty, students, and staff. People around the world will live longer, healthier lives because of the investments the Rollins family has made in public health.” ■

## NAMED SPACES IN THE R. RANDALL ROLLINS BUILDING

A number of named spaces mark the legacies of other influential donors, partners, alumni, faculty and staff. They include:

**THE APPLEBAUM-PEABODY GLOBAL HEALTH IDEATION ROOM**, given by Rollins Dean’s Council member Dr. Rhona S. Applebaum and her husband, Mark Peabody, whose funding addresses the global diabetes pandemic and the health benefits of physical activity.

**THE ‘OHANA ROOM**, established by Rollins Dean’s Council member Dr. Joan Penrose Cioffi to honor the memory of her late husband, Charles P. Freitas Jr., in recognition of his Hawaiian heritage and the special meaning of family that ‘Ohana evokes for the Rollins School of Public Health.

**THE DEAN JAMES W. CURRAN CONFERENCE ROOM**, named by alumni, faculty, and friends in honor of James W. Curran, Emory’s longest-serving dean and the longest-serving dean at a school of public health.

**THE DEBORAH A. MCFARLAND GLOBAL TRAINING ROOM**, given by Dr. Deborah McFarland, jointly appointed associate professor of global health and health policy and management. McFarland has long managed the Rollins Global Field Experience program and the William H. Foege Fellowships in Global Health.

**THE ROGER W. ROCHAT, MD, AND SUSAN ROCHAT ROOM**, named in honor of Dr. Roger W. Rochat (one of the school’s earliest faculty members) and his wife, Susan Rochat, who together in 2002 founded Emory’s Global Elimination of Maternal Mortality from Abortion Fund at Rollins. The room is a gift from their daughter, Suzette Rochat Harris, and son-in-law Michael Harris.

**THE MARGARET H. ROLLINS ROOM**, named in honor of Margaret (“Peggy”) Rollins and her extraordinary loving partnership with her late husband of 67 years, R. Randall Rollins, who passed away on August 17, 2020, at the age of 88.

**THE NIGERIAN ROOM** honors students from the African Diaspora. Rollins alumnus and Dean’s Council member Dr. Michael Ugwueke, 86MPH, and his wife, Rebecca Ugwueke, named The Nigerian Room to provide students with a gathering place and a place of pride.












# EXPOSING THE EXPOSOME

By Russell McLendon

Illustration by Kailey Whitman

Photography by Theo Gayle & Erik Meadows



**R**ollins researchers use exposure science to learn how our environments influence our health — and why the effects can vary so widely among different people and places

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## On weekday afternoons, Atlanta's Downtown Connector is an incredibly unpleasant place.

Throngs of vehicles congregate to grumble together in the sun, spewing noxious fumes as they inch along. Drivers and passengers gaze helplessly through the hydrocarbon haze.

They are stuck only temporarily, of course, and many will soon return home to cleaner air. Back on the highway, however, the stench of traffic lingers — and wafts into a nearby neighborhood. Unlike the commuters who escaped, people here may breathe polluted air well into the night.

"In areas near metro Atlanta's I-75 or I-85, traffic-related pollutants like nitrogen dioxide and particulate matter can surge during rush hours," explains Yun Hang, PhD, a postdoctoral fellow in environmental health at Rollins. Hang's research includes testing the use of satellites to monitor air pollution and extreme heat in underserved communities in metro Atlanta, a project funded by a grant from NASA's Applied Sciences program.

"Low-income neighborhoods often find themselves adjacent to highways, and consequently residents bear heightened exposure to traffic-related pollutants," she says.

Hang is one of many researchers at Rollins helping address a major public health challenge for the 21st century: the quest to complement our relatively wide knowledge of the human genome with a more holistic understanding of the human "exposome."



## GOING HOLISTIC

Genomics in recent decades has yielded revolutionary insights about the relationship between genes and health, yet despite the many benefits of mapping the human genome, research also suggests genetic factors are not major causes of chronic disease overall.

That finding points to environmental exposures, influences from outside the genome. It includes a dizzying range of substances and forces that might affect our health, from pathogens, chemicals, and radiation to socioeconomic factors like poverty or racism.

There is already abundant research on the health risks of some specific toxicants and other hazards. But given the scale and scope of different exposures across a human lifetime, and the potential for cumulative or compounding effects, experts say we still have a lot to learn.

"One piece that has been missing, as we move more toward this idea of the exposome, is that it isn't any one specific chemical, exposure or social factor that leads to disease in individuals. It's really a combination of them," says Carmen Marsit, PhD, executive associate dean for faculty affairs and research strategy.

Marsit is also director of the HERCULES Exposome Research Center, a collaboration between Rollins and Georgia Institute of Technology focused on high-impact environmental health research. Now in its 10th year, HERCULES is one of about 20 such centers across the country, part of a broad shift in exposure science to a more holistic approach.

This shift evokes the evolution of genetics research in the last century, when the focus on individual genes gave way to a more comprehensive view of the genome, says Douglas Walker, PhD, associate professor of environmental health.



"The exposomics field is kind of where genomics was 30 or 40 years ago," Walker notes. "A lot of the original genetic studies were focused on candidate gene studies." In those earlier studies, researchers would often hypothesize that a certain gene predisposes people for a certain disease, then find people with the disease and test for that gene only.

"Most of the candidate gene findings have not been replicated in larger, genome-wide studies," Walker adds. "Now we're measuring all mutations within the genome. Similarly, with exposures, rather than just focusing on known pollutants, we're focusing on as many as possible."

Hence the "exposome" — like the genome, but for exposures.

## MEET THE EXPOSOME

Coined in a 2005 paper by molecular epidemiologist Christopher P. Wild, the word "exposome" refers to a person's complete history of exposures "from the prenatal period onwards."



**Carmen Marsit, PhD,** executive associate dean for faculty affairs and research strategy, and **Douglas Walker, PhD,** associate professor of environmental health





**Air pollution is a pervasive threat to public health, with 99% of all humans exposed to levels exceeding World Health Organization (WHO) standards.**

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If that sounds like too much to measure, you're not alone.

Wild acknowledged this conundrum in his paper. "Developing reliable measurement tools for such a complete exposure history is extremely challenging," he wrote. "Unlike the genome, the exposome is a highly variable and dynamic entity that evolves throughout the lifetime of the individual. It is not without good cause that progress has been limited in meeting this goal."

The exposome still poses an extreme challenge nearly 20 years later, but the concept and its importance have caught on, while new technology offers potentially game-changing ways to measure previous exposures and anticipate new ones.

"We can measure things to smaller concentrations, and we can measure a lot of different types of chemicals, which allows us to try to capture that piece of it," Marsit says. "Similarly, on the more geographic-based exposures, we're getting better at modeling what air pollution or other types of climate effects might be. We can bring all that data in as well as capture a lot of the social factors that might exist because of where a person lives."

#### **BY ALL MEASURES**

Air pollution is a pervasive threat to public health, with 99% of all humans exposed to levels exceeding World Health Organization (WHO) standards. The combined effects of indoor and outdoor air pollution are associated with 6.7 million premature deaths globally per year, according to the WHO, which estimates outdoor air pollution alone causes 4.2 million. Traffic exhaust is a major factor, as are sources ranging from wildfires to power plants.

Exposomics would be daunting under any circumstances, but it's especially difficult given the volume

and diversity of ongoing human-caused environmental problems. Along with timeless, relentless hazards like soot or heavy metals, there are newer plastics, pesticides, and "forever chemicals," plus thousands of emerging industrial chemicals with unknown effects on human health.

Still, while the exposome may be expanding, so is our capacity to explore it, thanks to researchers like Walker. Using high-resolution mass spectrometry, Walker has found a high-throughput and cost-effective method for measuring up to 100,000 chemical signals from a biological sample, hinting at the potential exposomics may hold for precision medicine.

"It's a powerful approach because it not only lets us detect very low levels of chemicals in a biological sample, but it also gives us information that lets us predict the identity of the chemicals we're measuring," he says. "We can detect tens of thousands of chemical signals without necessarily knowing what they are ahead of time."

Data science can then help suss out the most important signals linked to health outcomes. Walker's lab focuses on developing analytical methods that are both powerful and practical for large-scale population screening. "We can use these methods to measure about 20,000 blood samples per year," he says. "We can do very large exposome screening."

Truly capturing every exposure across a person's lifespan is unrealistic, but if tools like these can reveal enough about the most relevant exposures, it may also be unnecessary.

"The traditional definition was focused on all exposures across the lifespan, but that's sort of a pie-in-the-sky definition," Walker says. "It will never be possible to measure every exposure from birth to when we die. What we really focus on are the key measurements we can use to better





**Donghai Liang, PhD,**  
assistant professor of  
environmental health

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understand and evaluate the history of exposure and how the biochemical changes that occur might predispose us to illnesses like cancer and heart disease.”

### **EXPOSURE HISTORY MYSTERY**

The exposome begins before birth and grows rapidly with each day’s exposures. If unexplained health problems emerge later in life, clues about their origins may be hidden somewhere in that massive, murky history.

Research has found clear health risks from traffic-related air pollution, especially components like fine particulate matter (PM 2.5) and nitrogen dioxide (NO<sub>2</sub>). Similarly, there’s ample evidence of the dangers of radiation, or metals like lead and mercury. We also have a decent understanding of how some pesticides and industrial compounds might affect us. But that knowledge is still dwarfed by how much we don’t know about countless other chemicals.

“When we think about all the exposures that you could be exposed to, it’s kind of scary,” says Donghai Liang, PhD, assistant professor of environmental health. “Just think about air pollutants. It’s not just PM 2.5. In fact, there are hundreds to thousands of different air pollutants out there. But the

EPA (Environmental Protection Agency) only monitors six of them.”

Most people are exposed to a diverse blend of pollutants during their lives, including some known and suspected carcinogens. There is clear evidence of cancer risk for certain exposures like cigarette smoke, Marsit notes, but despite compelling hints that air pollution and other contaminants may also lead to cancer, certainty remains elusive overall.

“There’s actually an increase in lung cancers among people who are nonsmokers,” Marsit says. “So what role are other air constituents playing in that? There’s a thought it could be related to some of these exposures, but we lack clear evidence like we have with cigarette smoking. And the same is true for chemicals related to other types of cancers.”

Since many cancers develop slowly, any precipitating exposures could have occurred decades earlier. “It’s really hard to understand what those exposures were at the time when those initial cancer cells developed, that then had to grow for 20, 30, 40 years to be diagnosed as a cancer,” Marsit says. “So that’s the real challenge with cancer — that you have these long latencies and it’s hard



to make some of those connections because of that time period.”

In addition to the possible cancer risk from some pollutants, an array of other health concerns is also associated with chemicals we frequently encounter. They include endocrine disruptors — chemicals that can mimic or interfere with hormones.

“We can see that exposure to these endocrine disruptors during pregnancy may lead to developmental impacts in children,” Marsit says. “Attention deficit disorder or autism spectrum disorders can be linked to a lot of endocrine-disrupting exposures during pregnancy because they are relatively common outcomes. And it’s a pretty short window. You can go from pregnancy to kids who by age 5 or 6 start showing these outcomes. There are a lot of studies following children like that, so you’re able to make those connections.”

Such studies are a focus at Rollins, where environmental health research often concentrates on prenatal exposures, healthy pregnancies, and children’s health outcomes.

Liang, for one, studies how prenatal exposure to some chemicals affects child and maternal health. His research covers air pollution and persistent organic pollutants, including a notorious group of chemicals called per- and polyfluoroalkyl substances (PFAS).

“The problem with PFAS is that, unlike many other organic or nonorganic pollutants like pesticides or insecticides, PFAS persist in the environment because they break down very slowly, both in the environment and the human body,” Liang says.

That fact earned them the nickname “forever chemicals,” and while their persistence is useful for some industrial purposes, it’s bad news in a biological context. Extreme durability and bioaccumulation are two red flags for PFAS, according to the National



Institute of Environmental Health Sciences. Their prevalence in common products — from food takeout containers to flame-retardant materials — offer more exposure opportunities. Animal studies have linked PFAS to health risks including liver damage, but effects in humans remain unclear.

Liang is trying to identify health effects from exposure to PFAS and other chemicals as well as unmask the molecular pathways enabling those effects. “For example, how can we explain why, when you are exposed to a high level of PFAS, you have a higher

risk of preterm birth or restrictive fetal growth?” he says.

Micro- and nanoplastics are another ubiquitous form of pollution, commonly appearing in human blood, lungs, and other organs. Research suggests they might harm us, maybe acting as endocrine disruptors, but their health effects remain largely unknown, Walker says.

#### **CHEMICAL WHACK-A-MOLE**

That’s true for many industrial chemicals, which Marsit attributes to a U.S. regulatory approach that allows





**Lauren McCullough,**  
PhD, associate professor  
of epidemiology

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new compounds to be approved without evidence of their safety. “All of our bans or controls of any kind on chemical exposures only occur after toxicity is demonstrated,” he says. “Companies are not upfront having to demonstrate that a product is safe.”

If a chemical is proven harmful and eventually banned, industries are free to turn to other chemicals with similar properties to take its place, adds Amina Salamova, PhD, assistant professor of environmental health. Another pesticide that kills a specific pest or another nonstick or flame-retardant material are easy possibilities.

“Often, if one chemical is banned, industry will replace it with a different one, which is usually not very different in terms of chemical structure,” she says. Thus, the new chemical poses similar risks to those of its predecessor. Even if the replacement hails from a different class of chemicals, its effects on human health may simply be unknown.

Amid this chaos, there are few clear links from specific pollutants to specific effects, Liang points out. “It’s very challenging to isolate an individual pollutant effect, especially in a population health study,” he says. “On the epidemiological side, you always assume people are only exposed to

one pollutant, but in the real world, they’re exposed to multiple ones.”

None of these exposures occur in a vacuum, points out Lauren McCullough, PhD, associate professor of epidemiology. While obesity alone is a risk factor for cancer, the danger varies significantly depending on other exposures, beyond those contributing to the obesity itself.

“If you pair obesity with living in a high-pollutant area with endocrine-disruptive chemicals, that combination can be synergistic for the initiation of cancer,” she says. “So we try to think about how these multiple exposures interact in a way that puts someone at heightened or reduced risk.”

#### **MORE THAN JUST POLLUTION**

People in the real world also face social and economic forces that influence health, potentially boosting exposure to hazards like stress, sleep deprivation, or substance misuse. And, as in the example of Atlanta’s Downtown Connector, socioeconomic status may even help determine a person’s level of exposure to dangerous pollutants.

“We know the majority of air pollution we see today is coming from car exhaust or diesel exhaust from trucks,” Marsit says.





**Yun Hang, PhD,**  
a postdoctoral fellow  
in environmental health

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“So the majority of exposures are going to affect people around highways. If you think about where highways are built, they often run through poorer neighborhoods. In the South, you’re talking about Black neighborhoods. You have this set-up environment built upon structural racism that has placed people at risk for exposures because of the way our infrastructure was built.”

This scenario can also happen with industrial sources of pollution like factories, refineries, incinerators, or power plants, which have a similar history of being built in or near disadvantaged communities.

“The disproportionate burden of air pollution on low-income communities stems from a combination of socioeconomic factors, environmental policies, and system inequities,” Hang explains. “For instance, industries and other pollution sources tend to be within or near low-income communities due to their lower property values and diminished political influence. And the clustering of pollution sources exposes residents to elevated pollution levels.”

At the same time, Hang adds, these communities often lack resources that might help offset their elevated exposure to toxicants. For example, they tend to have fewer parks and other green spaces, denying them vegetation that could mitigate air pollution and help fortify mental and physical health. Lower-income neighborhoods also tend to be food deserts, lacking access to nutritious food due to a conspicuous absence of grocery stores.

All these disadvantages are not coincidental, McCullough notes. Many lower-income communities are still plagued by various effects of redlining, dating back to 20th-century maps created by the Home Owners’ Loan Corporation that identified supposedly hazardous neighborhoods for investment.

The maps ostensibly were meant to help banks assess lending risk, McCullough says, but in Atlanta and many other cities, their discriminatory influence went further.

“The uptake of the maps was not just in terms of real estate and home loans,” she says. “They were used to determine business investment. If you look at these maps, particularly for the city of Atlanta, you see a dearth of supermarkets in these redlined areas and a flux of convenience stores.”

Generations later, the legacy of those maps can still affect the availability of fresh fruits and vegetables in certain neighborhoods, McCullough says. “Conversely, you have a critical mass of convenience stores selling high-sugar, energy-dense goods and alcohol. All the things we consider to be predatory now are based on these initial maps, and where folks thought investing their money would result in the highest return.”

These factors show the importance of understanding behavioral factors, including links to socioeconomic status and the built environment. Obesity, for example, is largely driven by a



person's diet and exercise, but it's easy to overlook how much our diet and exercise habits in turn depend on the environment around us. "If you're living in an environment that does not facilitate those healthy habits, then we have to think, 'Well, what policies and practices led to 80 percent of Black women being overweight or obese?'" McCullough says.

"You can look at individual behavior and individual decision-making, but that individual behavior is nested in a neighborhood that has its own effects," she adds. "Neighborhoods are nested within communities, counties, and states that have policies that impact all of these things."

#### EYES IN THE SKY

In general, the best protection from dangerous exposures is policymaking, Marsit says. Enacting new policies could phase out fossil fuels to curb greenhouse gas emissions and traffic-related pollutants or require more safety testing before new chemicals can be approved.

Green spaces in urban areas could also help by limiting exposure to air pollution and generally improving people's mental and physical health.

Mitigation otherwise mostly boils down to personal protection, Marsit says. For air pollution, that might involve wearing a mask or limiting outdoor time on bad air quality days. For pesticide residues, it could entail buying organic produce and washing it thoroughly. For PFAS, it might require avoiding certain products like takeout containers and stain-resistant fabrics.

While forever chemicals may linger long after people stop using them, many pollutants fade more quickly. As Salamova has found, flame retardants and household disinfectants dwindle substantially in built environments once they are no longer used.

Managing such exposure risks might also become easier as we learn more what to expect from various hazards — such as through improved modeling of air pollution and climate change effects — and as we learn more about how different exposures happen and how they interact with the body and other exposures.

As researchers shed more light on the exposome, it's important that new knowledge be shared with the public to inform their decisions about their own exposures.

In Hang's research, she and her colleagues wanted to evaluate air pollution levels in metro Atlanta but discovered most ground-based air quality monitors are in northern parts of the city, leaving a coverage gap farther south. "But the south part is where we have the most environmental justice issues, and we cannot get data from there," Hang says.

In their NASA-funded project, researchers are investigating whether satellites can be useful tools for filling that gap. Local residents are codesigning the project via community-engagement workshops that address their needs and concerns. Researchers are seeking their input on exposure assessments and project next steps.

Thus far, community feedback has been "very, very positive," Hang says. "It's even better than I thought. They are very excited or even shocked, like, 'NASA satellites can monitor air pollution from space?'"

Hang hopes her research will eventually inform policy decisions that can help mitigate pollution exposures. In the meantime, her team is trying to help disadvantaged communities better understand the exposure risks they face — and empower them to help influence the search for solutions. "We want to learn their thoughts first," says Hang. "That's very important to ensuring our research fits their needs." ■



**These communities often lack resources that might help offset their elevated exposure to toxicants. For example, they tend to have fewer parks and other green spaces, denying them vegetation that could mitigate air pollution and help fortify mental and physical health.**

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# EPIDEMIOLOGY EPICENTER

Rollins fellowship unites  
academic and local public  
health across Georgia

By Martha Nolan • Illustration by Neil Webb



# WHEN KATHLEEN TOOMEY, MD, LOOKS OUT OVER THE STATE'S EPIDEMIOLOGY WORKFORCE, SHE'S ENCOURAGED BY WHAT SHE SEES. THE SITUATION, HOWEVER, WAS QUITE DIFFERENT WHEN THE COMMISSIONER OF THE GEORGIA PUBLIC HEALTH DEPARTMENT [GDPH] JOINED THE OFFICE IN 2019.

"When I came, the epi staff in the state office was in fair shape, I'd say, but we had very little epi capacity within the districts," says Toomey. "I'd describe it as spotty and

variable, and that was before the pandemic."

Today, epidemiologic capacity across the state is approaching robust levels thanks to the Rollins Epidemiology Fellowship. Now in its fourth cohort, the program was launched in the early days of the pandemic as a cornerstone of the Emory COVID-19 Response Collaborative, a partnership between Rollins and the GDPH. The intent was



**KATHLEEN TOOMEY, MD,  
COMMISSIONER OF GDPH**

to bolster a meager epidemiology workforce in the 18 health districts across the state during a critical time.

The result, by any measure, has been a resounding success. Not only have the fellows provided invaluable personpower and expertise in helping local districts navigate the crisis, but they also continue to contribute as the pandemic wanes, allowing the districts to tackle local needs long relegated to the back burner. Perhaps most importantly, over half of the fellows to date have accepted post-fellowship jobs in state and local public health, the majority of them in Georgia.

"The fellowship has been successful beyond my wildest dreams," says Toomey. "It certainly enabled us to respond much more effectively during the pandemic, but it did so much more. It allowed us to build a larger, more capable staff since many of the fellows have stayed on. It enabled us to engage faculty and focus meaningful research of value on public health practice. And it has raised the interest and enthusiasm of young, bright, future public health leaders. The fellowship has been a true game changer for us."

## CREATION IN A CRISIS

Declines in the public health workforce were alarming even before the pandemic. Between 2008 and 2019, employment in departments of health and public health across the U.S. fell by 16%, according to a report by the National Association of County and City Health Officials. A study published in a recent *Health Affairs* found that if separation trends continue, by 2025 as much as half of the governmental public health workforce will have left their positions.

Georgia, like the rest of the country, has struggled to maintain a strong public health workforce. "Funding has been the primary problem," says Cherie Drenzek, DVM, state epidemiologist with the GDPH. "The health districts are state funded, and that funding has continually diminished through the years, so our epidemiologic capacity has been limited. The districts always did a fantastic job of meeting the priorities, getting done what had to be done, but other things fell to the wayside."

At the outset of the pandemic, each of Georgia's health districts had at least one epidemiologist, but many of them

had only one. It was clear this modest workforce would be drowned by the deluge of COVID-19 cases and their repercussions. "We were seeing numbers of cases reported for COVID alone that exceeded what we would normally see in a year for all diseases put together," says Toomey. "The volume was beyond anything we could have imagined."



**CHERIE DRENZEK, DVM, STATE  
EPIDEMIOLOGIST, GDPH**

That's when Rollins faculty and GDPH executives put their heads together. Allison Chamberlain, 15PhD, research associate professor of epidemiology and founding director of the Rollins Epidemiology



Fellows Program, had been working as a consultant with the Fulton County Board of Health since 2017, so she had an intimate view of the capacity and needs within a local health department. “When the pandemic hit, it was clear to me where the health departments were going to need the most help,” says Chamberlain. “At the same time, institutions like Emory were ramping down services as labs closed and classes shifted [to



**ALLISON CHAMBERLAIN, PHD,  
RESEARCH ASSOCIATE PROFESSOR  
OF EPIDEMIOLOGY**

online]. I thought this could be a great opportunity to shift our focus to help the health departments find new talent.”

Toomey had been thinking along the same lines. “Even before the pandemic, I thought there must be some way we can develop an academic, local public health partnership that would allow us to really strengthen our local capacity as well as give

students an opportunity to see what local public health is like.”

Their vision became a reality thanks to generous funding by the Robert W. Woodruff Foundation. That support was subsequently supplemented by gifts from foundations throughout the state.

The Rollins COVID-19 Epidemiology Fellows program (“COVID-19” was dropped from the name after the second cohort) was created as a two-year service and training fellowship. It was patterned, to a degree, after the Centers for Disease Control and Prevention’s Epidemic Intelligence Service (EIS), but instead of recruiting terminal degree candidates (MDs and PhDs), it sought recent MPH graduates to be placed as entry-level epidemiologists within one of the state’s health districts or at the GDPH.

Fellowships kick off with an orientation week, providing each new cohort with an overview of the program and training, including strength-based leadership, public speaking, data presentation, and case interview techniques. Throughout their two-year stint, the fellows receive additional professional development and continuing education as well as regular sessions with faculty mentors.

The lion’s share of their time, however, is spent as frontline epidemiologists in their districts. For the health districts, the fellows have been a godsend. “There has been a lot of bad news nationally with respect to the state and local public health workforce,” says Chamberlain. “Our program is bucking the trend. The fellowship is really making a dent in the Georgia public health workforce.”

## **CAPACITY FOR HEALTH DISTRICTS**

Seventeen fellows from the first cohort were placed with local health districts in the fall of 2020, and a second cohort of 13 fellows followed in the summer and fall of 2021. The timing could not have been better for Sandra Valenciano, MD, district health director at the DeKalb County Board of Health (DCBOH). She had just been promoted to her position from the post of medical director when three of the four epidemiologists in her office left.

“It was a really challenging time,” Valenciano recalls. “We were flooded with cases and our epidemiologists were getting burned out. At the same time, everyone suddenly needed an epidemiologist, and places like the CDC could pay a good bit more than we could. We lost most of our epi staff within a two-week period. I’m not sure what we would have done without the two Rollins fellows who joined our team about that time,

and the two who have come afterwards.”

The original fellows—Sadaf Bhai 20PH in the first cohort and Zoe Schneider 21PH in the second cohort—hit the ground running, doing contact tracing, case investigations, developing staff protocols, updating documents, and messaging. “They were an essential part of our workforce almost from day one,” says Valenciano.



**SANDRA VALENCIANO, MD,  
DISTRICT HEALTH DIRECTOR, DCBOH**

The experience was similar in the North Georgia Health District, which is headquartered in Dalton. “We were a very small department with just five people including one epidemiologist before the pandemic,” says Ashley Deverell, infectious disease director of the district. “So when the pandemic hit, we were just drowning.”

Like DeKalb, Deverell’s office got fellows from the first two cohorts—Victoria Roy, who earned her MPH from Benedictine University, from the first and Bridget Walsh 21PH from the second. And like DeKalb, the addition of the fellows greatly enhanced the district’s ability to respond to the pandemic.

Experiences like these were playing out all over the state. “The fellows provided not only boots on the ground to do the kind of work we needed to do very quickly and effectively, but they also came in with so much energy and enthusiasm,” says Toomey. “The staff in the districts and in the state office was just burned out, bordering on PTSD. These fellows were eager to learn and upbeat. They really helped create a positive team environment during a very difficult time.”





New and current fellows gathered for orientation sessions, training, and networking during the 2023 Fellows Retreat this past August.

Photography by Jack Kearsse

As the pandemic shifted from an acute to a chronic phase, the fellowship shifted as well, providing the manpower for districts to finally address projects they previously lacked the capacity to tackle. In DeKalb, Miranda Montoya 23PH, the

district's newest fellow, is leading a project to compile data and write a dashboard focusing on the health status of the county's Hispanic/Latino population. Lucas O'Reilly, who received his MPH from Georgia State University and joined the district in the third cohort of fellows, has been preparing a health snapshot report for the county over a five-year period, writing



**BRIDGET WALSH 21PH, MEMBER OF THE SECOND FELLOWSHIP COHORT**

a youth risk behavioral survey, and analyzing data around the county's refugee clinic.

"We are unique in that we have a huge immigrant and refugee population in DeKalb County," says Valenciano. "We have a clinic to serve that community, but no one had actually looked at the data involving the clinic. How many refugees have we seen? What are the most common diagnoses at the clinic? Lucas is looking at data collection tools and methods so we can do a descriptive analysis of the clinic."

Andrew Lewis, who earned his MPH at the University of

North Carolina at Chapel Hill in 2022, joined Health District 3-4 last year as part of the third cohort. The district, which covers Gwinnett, Newton, and Rockdale counties, had fallen far behind in filing its annual reports, so Lewis laboriously went through historical data to complete several reports for preceding years. He is also in charge of animal bites and rabies transmission, investigating cases and providing education.

In Dalton, Walsh worked on improving the district's

sexually transmitted infection (STI) services program, including placing posters with QR codes in schools and community gathering spots so people could discreetly scan the code and access information about sensitive, often taboo topics. The district is also looking into holding a health fair, an event it lacked the resources to pull off before the fellowship.



**ANDREW LEWIS, MEMBER OF THE THIRD FELLOWSHIP COHORT**

"Since the pandemic, the fellows have enabled us to get more involved in community projects and devote more time to prevention instead of just being reactionary," says Deverell. "As every class of fellows has come through, we feel like we've been able to make strides in both areas."

The fellows also brought freshly learned skills in data



analysis and presentation. “The fellows have really improved our data reporting,” says Deverell. “We used to do most of our reports in Excel. Now we are getting into mapping, SAS (statistical analytics software), and other programs that allow us to create more visual, understandable reports to share with our stakeholders. It’s been a huge benefit to us.”

Today, Deverell’s office employs four epidemiologists, three of whom are current or former fellows.

Many of the fellows have submitted poster and oral presentations at local and national conferences—something normally outside the realm of local health districts. “From my perspective, that is the most unique part of the Rollins Epidemiology Fellowship,” says Drenzek. “It is the perfect marriage of the on-the-ground epidemiology that takes place every day in a local health department and the capacity, mentorship, and support of an academic partner like Rollins. That union allows that day-to-day epidemiology to be translated into science. Using what you learn on the ground to contribute to the body of scientific knowledge is what epidemiology is all about.”

### CAREER BOOST FOR FELLOWS

Like the EIS program after which it was patterned, the Rollins Epidemiology Fellowship offers participants a potentially significant boost along their career path. That word seems to have gotten out. For the last cohort of 12 fellows, the program received 172 applications.

“People clearly recognize the value of the program,” says its director, Shelby Rentmeester 16PH. “Not only does it give them valuable experience working at the local level, it also offers them the support and resources of a top-tier school of public health.”

Those opportunities were attractive to Walsh, who didn’t



**SHELBY RENTMEESTER 16PH,  
DIRECTOR OF THE ROLLINS  
EPIDEMIOLOGY FELLOWSHIP**

know the career path she wanted to pursue when she joined the North Georgia Health District. She originally thought she wanted to work at the CDC, which she did as an intern while earning her MPH. But when she joined the Dalton office, she felt like she had found her home.

“Working at the CDC was a really positive experience, but I felt removed from the communities I was serving,” says Walsh. “Here, I live and work in the community I serve, and I get to see firsthand the

impact we are making. That’s really all you could want is to know that at the end of the day you’re helping someone.”

Though she had no previous experience in the area, Walsh early on transitioned from COVID-19 work to projects involving HIV and STI surveillance and prevention. Within just five months of joining the district as a fellow, Walsh became a full-time employee in charge of the district’s HIV and STI program. “It happened so fast, but the opportunity presented itself, so I took it,” she says. “I had never worked in HIV and STIs before, but I have found it to be some of my most meaningful work.”

For Donovan Stephens, who earned his MPH in 2020 from the University of Memphis, the fellowship has been a rocket launcher for his career. Stephens joined Health District 4 in LaGrange in the first cohort. Today he is deputy director of the Opioid and Substance Misuse Response Program for the GDPH.



**DONOVAN STEPHENS, MEMBER OF  
THE FIRST FELLOWSHIP COHORT**

Stephens credits the opportunities afforded by the fellowship for his quick rise. When he started his stint in LaGrange, the district office, like those all

over the state, was overwhelmed by the pandemic. With so few hands on deck, Stephens was quickly put in charge of COVID-19 outbreak response in long-term care facilities, schools, day cares, and jails. He performed so well that when monkeypox erupted in 2022, he took charge, sitting in on state meetings, developing training sessions for the district nursing staff and case investigators, and coordinating vaccination clinics.

With six months left in his fellowship, Stephens took advantage of the opportunity to enroll in the Region IV Public Health & Primary Care Leadership Institute, headed by Melissa (Moose) Alperin, EdD, 91PH, a mentor for the fellowship program. “It wasn’t just the invaluable information that was presented, it was also the connections you were able to make and the independent conversations you were able to have that made it such a special experience,” he says. “The institute and the fellowship really set me up for success.”

Stephens has now started a doctoral program in public health at the University of Georgia while he retains his position at the GDPH.



## THE FUTURE OF THE FELLOWSHIP

The fellowship was created in response to the COVID-19 pandemic. Is it still needed and useful?

“Last summer, we did a comprehensive evaluation involving the state office and the local districts to determine if our program still has relevance in a post-COVID world,” says Rentmeester. “The answer from everyone was a resounding yes.”

Toomey corroborates that assessment. “I see the fellowship as even more important now,” she says. “Having this capacity allows the local health districts to get the same kind of picture of the community through an epidemiologic lens that we were able to get for COVID, and we never had been able to do that before in a consistent, effective way. I really see this program as the key to the future of our work as we move beyond COVID and address other issues.”

In fact, two new fellows who recently joined the GDPH will report not to communicable disease epidemiologists like they have in the past, but instead to the head of the department’s maternal and child health unit. They will focus on addressing health disparities around maternal mortality, including helping spearhead two new home visiting programs and other newly funded initiatives.

“Maternal mortality is a critical issue facing health departments across the country,” says Drenzek. “We haven’t had the capacity to truly tackle it before, but we decided to leverage our partnership with Rollins, which has vast expertise in this area, and use the fellows to develop epidemiologic capacity to study and respond to maternal mortality disparities.”

Additional fellows will be supported by a new grant from the CDC to establish a Center for Outbreak Analytics and Infectious Disease Modeling at Rollins. The center will be headed by Ben Lopman, PhD, professor of epidemiology and environmental health, and will fund six new fellows. These new fellows will form a bridge between cutting-edge epidemiology and public health practice.

“Academic public health and state and local public health are two different animals, with their own strengths and characteristics,” says Toomey. “This fellowship program brings the two together, and the result is a whole that is greater than either of its parts.” ■

### THE ROLLINS EPIDEMIOLOGY FELLOWSHIP

was made possible by generous support from the Robert W. Woodruff Foundation in addition to foundations throughout the state that supported fellows in their hometowns. Continued support is crucial to this vital program. For more information, contact Kathryn Graves at 404-727-3352 or kgraves@emory.edu

## BY THE NUMBERS

**COHORT 1: 17 fellows** started fall 2020, **13 graduated** 2022  
**7 stayed** on in state or local public health



**COHORT 2: 13 fellows** started June and October 2021, all graduated 2023  
**7 stayed** on in state or local public health

**COHORT 3: 8 fellows** started August 2022

**COHORT 4: 12 fellows** started August 2023

**THE PROGRAM** has placed **50 fellows** across all cohorts; **26 have graduated** and **14 of those graduates have stayed** on in the state or local public health workforce.



**TODAY:** Fellowships account for **33 epidemiologists** in state and local health departments—**14** who stayed on in cohorts 1 and 2 after their fellowship ended and **19** current fellows.

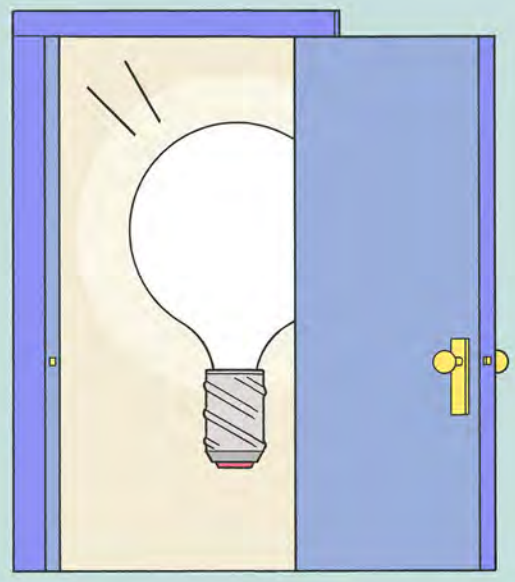


### WHERE SOME OF THE OTHER FELLOWS HAVE GONE:

- 4** to work at CDC
- 1** in medical school
- 1** working toward a PhD
- 2** working in academic public health
- 1** working in a hospital system
- 1** working in a national nonprofit organization
- 1** – job searching / unknown









# EXPERIENCES OF A LIFETIME

At Rollins, some student experiences shape professional and personal lives forever

By Kelly Jordan • Illustration by Kyle Ellingson

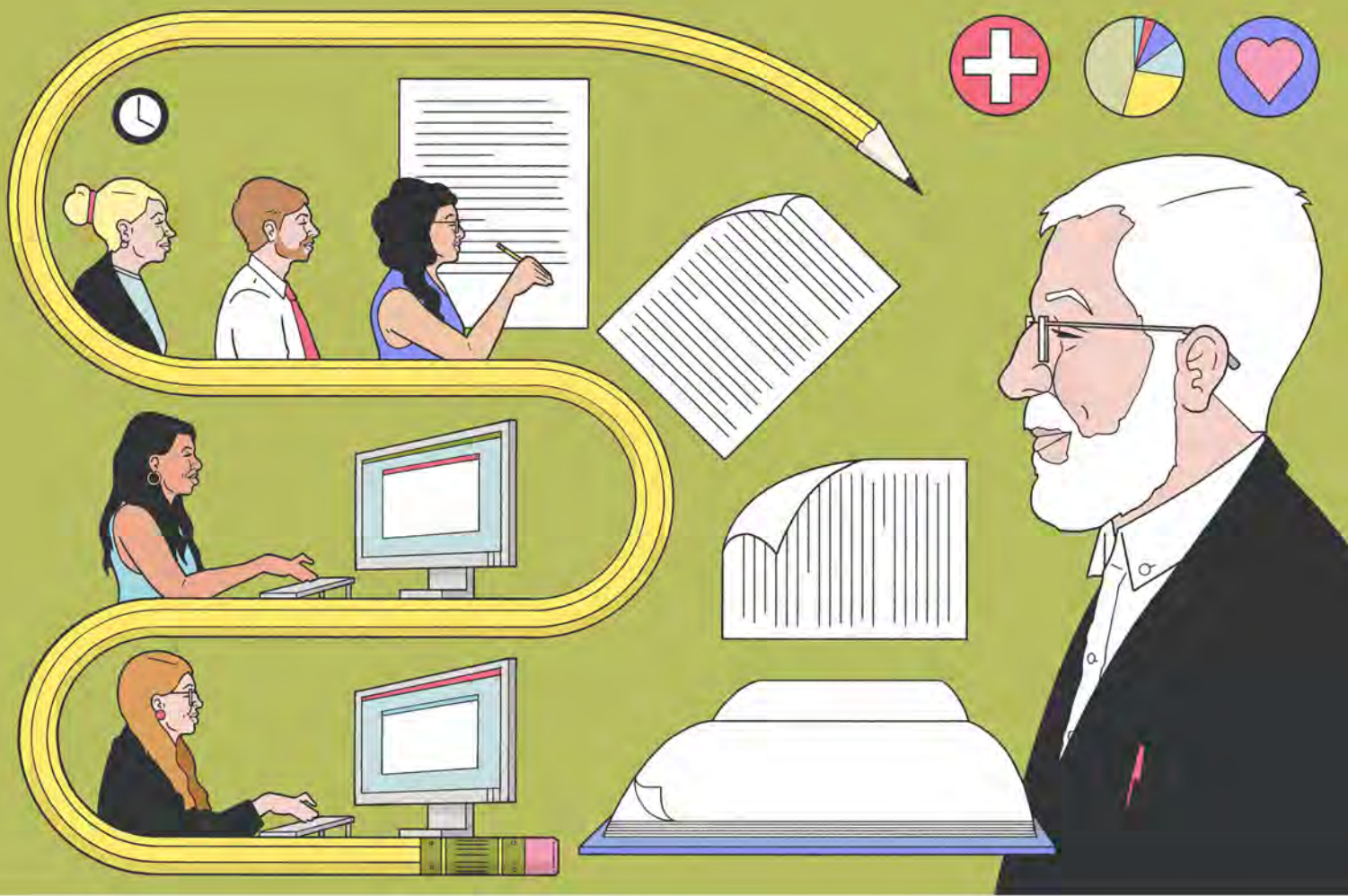
**S**o much of life, if we are lucky, adheres to the rituals of routine.

Occasionally, life-altering moments occur. Such events are often expected: the birth of a child, the loss of a loved one, a marriage, a major vacation, receiving a major promotion or award.

But then sometimes something good comes along that you never anticipated, and it changes everything. The student experiences highlighted here find students in unexpected and exciting situations that have made a definitive professional and personal difference in their lives. Whether co-authoring a book with a public health legend, measuring environmental exposures and traveling the globe with a major airline, or rubbing shoulders with climate activists at a United Nations conference, these students' routes at Rollins took impressionable turns.

These stories of influence and impact epitomize the experience of Rollins students. Their experiences shape, inspire, and define. They are experiences of a lifetime.





### ONE FOR THE BOOKS

It started with an exciting but straightforward request. Public health luminary William Foege, MD, was preparing to write his latest book on the history of global health and wanted a few Rollins students to help with the research. Did Kara Robinson, EdD, senior associate dean of enrollment management and student affairs, or her staff have any recommendations?

It was a unique opportunity for sure. But the work description itself was not outside the ordinary. Students tend to be great at assisting with research and taking on a supporting role for major projects — though usually not for someone who has served as director of the Centers for Disease Control and Prevention, received a Presidential Medal of Freedom, or led global efforts to eradicate smallpox.

Joanne Williams 18PH, director of student engagement, provided a handful of suggestions based on students' application essays.

"We received this email that was kind of vague that was along the lines of, 'We have this opportunity for you. Come to this meeting to learn more.' And then we learned it was to work with Dr. Foege to conduct research for a book he wanted to write," recalls Alison Hoover 21PH.

Ultimately, five students were selected: Kiera Chan 23PH, Deborah Chen 21PH, Paul Elish 21PH, Hoover, and

Madison Lee 21PH. The students, along with Williams, met with Foege in person to kick off the project. Foege asked thoughtful questions about the students and their interests and kept notes on his yellow legal pad.

"He asked us about ourselves for at least half the meeting," says Hoover. "Finally, we started talking about his vision and what he wanted to do with the book."

Foege had printed out a list of chapters to be written, and by end of the meeting, the students had all selected at least a starting chapter to research. That meeting was in February 2020. By March, the world had gone dark and very quickly, the project meetings took on a different tone and importance in the collaborators' lives.

As anxiety, depression, dread, and doom fell over much of the world, the five students, Foege, and Williams found connection over Zoom as they shared their research notes and experiences as COVID-19 unfolded.

"In some respects, it was comforting to interact with Dr. Foege during the pandemic because he's a public health hero, but he's also a really great person who is down to earth, wise, and funny," says Elish. "He has a great sense of humor and that was often evident in certain meetings we had with him."

As students watched public health officials manage the pandemic, Foege encouraged the students to keep journals





to record what was happening globally and in their own lives — something he has done for much of his life. He also kept their meetings as settings for connection, where they could discuss the book as well as their worries and concerns about the pandemic and how it was being handled.

“We had lengthy discussions as decisions were made during the pandemic,” says Chan. “It was important that we looked back at history while in the midst of this public health crisis so that we wouldn’t make the same mistakes again. That’s why this book was so crucial. It was also crucial because Dr. Foege wanted it to be one of his last marks on the literary/academic/global health world. That’s why he chose us, so that young minds would carry on his vision and his legacy.”

Foege’s intention for writing the book was to pull together an approachable history of global public health — what it was, what it is, and where it’s going — with personal anecdotes and reflections woven throughout. “He had big dreams for a book like this, something that anyone could read,” says Chan.

Students researched various topics associated with the history of global public health, including the stories behind a few of the nation’s public health schools, the role of pharmacology in global health, colonialism, the military, and more. In time, as the students combed through Emory’s libraries and followed research leads from Foege and each other, they became subject matter experts in their own right. Even if they

personally didn’t recognize it yet, Foege did.

About a year into the project, Foege made an unexpected announcement during one of their Zoom meetings. “He told us, ‘At this point, you guys are really the experts on the area. Why don’t you just write the chapter?’” recalls Hoover. “There were proverbial crickets in the room!”

The students thus became co-authors with Foege, taking on the role of lead author for one or more chapters.

“He was always very welcoming, very engaging, and honestly a great leader,” says Chen. “Working with him was such a delight. I always looked forward to our meetings.”

Those feelings turned out to be mutual. “It was a positive, but humbling experience,” says Foege. “After more than 60 years working in global health, I knew I still had much to learn, but five Rollins students taught me that I knew even less than I thought I did. Guided and supported by Joanne Williams, they would unearth things that should have been so obvious to me earlier. The opportunity to keep learning was clearly a benefit to an aging author.”

Time passed and the students shared drafts back and forth with each other, Williams, their editors, Anne D. Mather and Tom Paulson, and Foege. In the meantime, the COVID media/Twitter circus unfolded daily, vaccines were released, and the students graduated. They moved to different cities, got jobs, and lived their lives. All the while, they kept working on the book.

**Bill and Paula Foege, August 9, 2023, on the occasion of finishing the global health book.**

Photo by Anne Mather.

**Alison Hoover, Madison Lee, Deborah Chen, and Paul Elish reconnect in person during the 2021 commencement ceremony.**





The book was submitted to Johns Hopkins University Press by Mather after extensive honing, tweaking, reworking, and rewriting. Now, it's a waiting game to see whether they are officially done, or if additional edits remain.

For now, the alumni authors are doing what they have done throughout: working, waiting, and reflecting on what a surreal time the past few years have been.

"For many of us, the idea of writing a book at some point is something you entertain," says Hoover. "I thought it would come about when I had something to say. To start as a master's student when you're still learning about public health was jarring at first. But one of the amazing things about working with Dr. Foege is the incredible trust and belief he has in you. He is a giant in the global health world and will be remembered that way forever. To have someone like him look at students and say, 'You are the experts, go ahead and write it,' is a terrifying and incredible gift."

### TALKING CLIMATE ON A WORLD STAGE

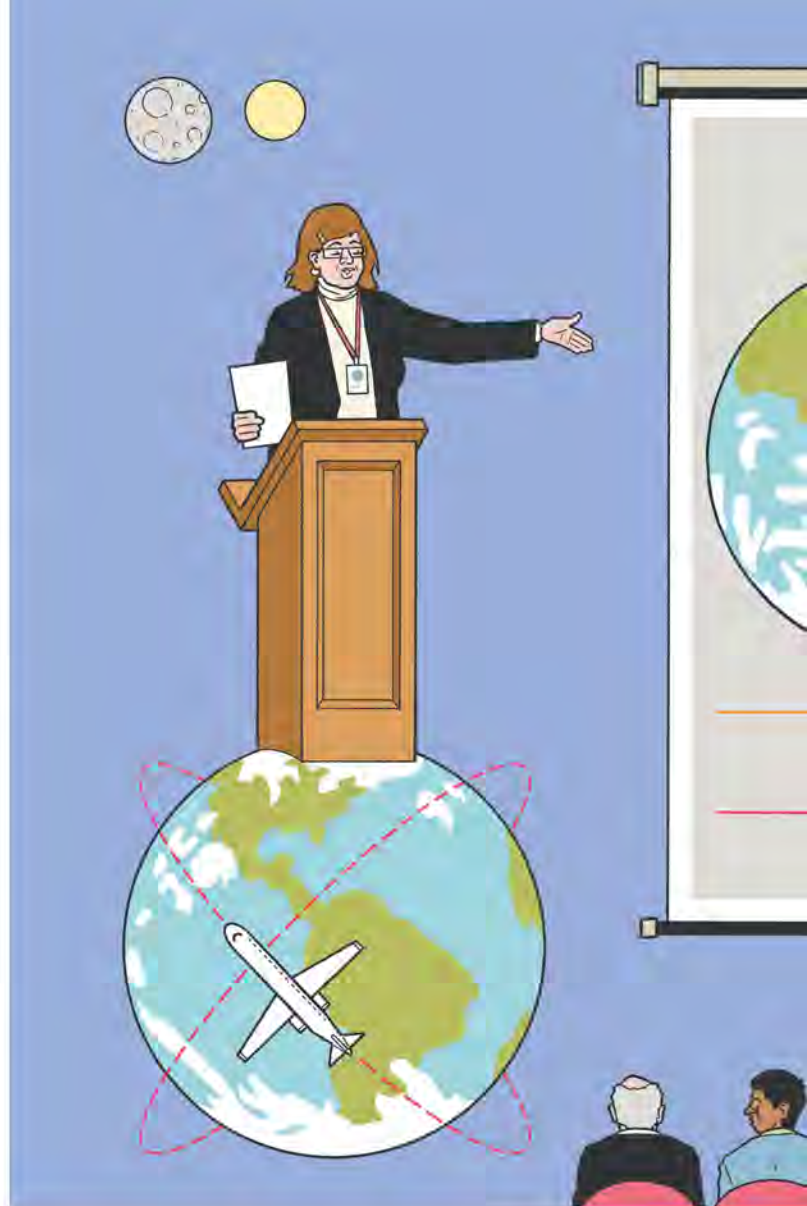
Every year, the United Nations Framework Convention on Climate Change (UNFCCC) brings dignitaries, ambassadors, policymakers, researchers, and journalists together on a global stage. Emory students, including a handful from Rollins, also take part in the Subsidiary Bodies (SB) sessions — the summer meeting that sets the agenda for that year's climate talks — and the larger late fall event, the Conference of the Parties (COP). These students attend not just as observers but also as active participants in major conferences that set the world agenda for tackling climate change.

"Seeing is believing, I think," says Eri Saikawa, PhD, director of Emory Climate Talks. "To be able to meet with people who are passionate about solving climate issues is important along with realizing their task is very hard and very global. That's the main reason I want to take the students: so they can understand the reality of what it involves to work on climate together."

Saikawa has helped send student delegations to COP since 2015, the year Emory first sent student observers, and played an active role in growing the opportunity for them. Now the experience is part of Emory Climate Talks, a university-wide initiative that sends students to COP and SB each year. Students are selected after submitting their applications, interviewing with members of Emory Climate Talks' faculty advisory board, and completing Saikawa's Emory College class on Climate Change and Society

"This program was on my radar before I even applied to Rollins," admits Margaret Olawoyin '23PH. "I was very intentional about applying to be a delegate when I started as a student."

Olawoyin ended up attending COP 27 in Sharm

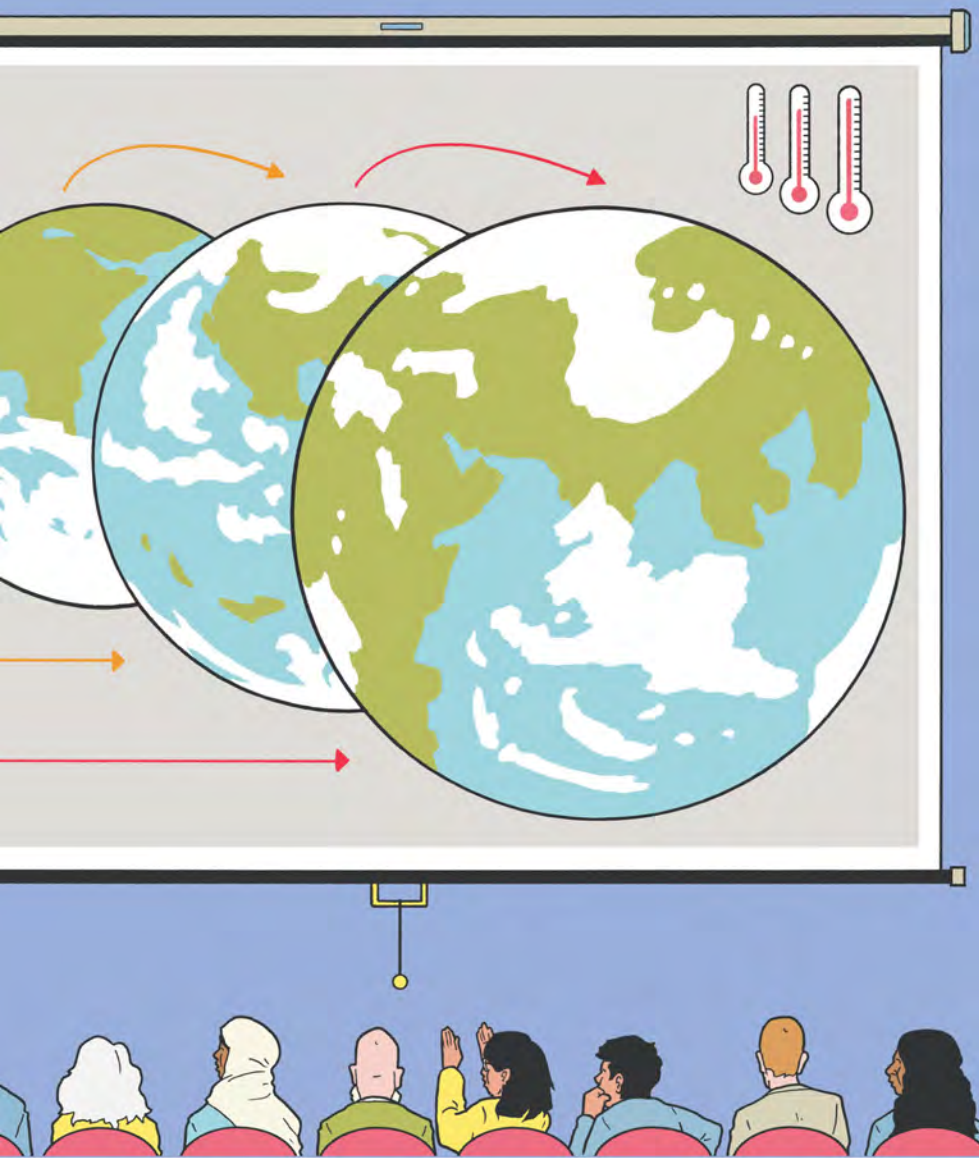


el Sheikh, Egypt, in November 2022. Not only was it her introduction to COP, it also was her first international travel experience. Though the travel time was lengthy and exhausting, it did afford her the opportunity to visit the Great Pyramids and ride camels in Cairo.

"I would definitely say it was one for the books, and it was really a once-in-a-lifetime opportunity," says Olawoyin. "I know Emory is one of the few schools in the nation that gives students the opportunity to travel to the UNFCCC conference. Just being a student who was selected among many applicants and one of nine students able to go that year was amazing."

Olawoyin's COP experience proved eventful from day one at the conference. A member of the Youth Sustainable Development Network, Olawoyin was eager to connect with the organization's CEO, Damilola Balogun, who was in attendance from Lagos, Nigeria. He invited her to attend a dinner where she met Netherlands Prime Minister Mark Rutte, along with climate envoy of the Netherlands Prince Jaime de Bourbon de Parme. Later, she met Robert Bullard, PhD, credited as the father of environmental justice, and Michael Regan, administrator of the





Joe Owens 23C and Sophia Lamb 23PH outside the World Conference Center Bonn opening ceremony.





Among the highlights of attending COP 27 was the opportunity to ride camels and see the Great Pyramids.

U.S. Environmental Protection Agency.

Olawoyin also had a front-row seat to demonstrations and protests during the conference, one of which occurred during a speech by U.S. President Joe Biden.

“To see the news on CNN after I got home about an event that occurred where I was in the room was unreal,” she says.

The peaceful protests tended to repeat the same messages: things are moving too slowly, rich countries should be contributing more, poorer countries need more help to clean up problems they didn’t create.

“The politics of getting information through and getting goals and agreements to be settled is very complex,” recalls Sophia Lamb 23PH, who attended SB 58 in Bonn, Germany, in July 2023.

“Within the U.N. framework, every single country has to agree for something to go through,” she adds. “It’s hard to get things done on a grand scale. It pushed me away from wanting to work in politics. I appreciate the global perspective, but I realized I want to work more at a local level. I feel I can have more of an impact at a local or state level than globally.”

Whether attending the massive COP or the smaller SB meeting, either conference can feel overwhelming. The agenda includes

main events and meetings, side events, press conferences, and networking opportunities attended by representatives from all over the world. Through it all, students have official “observer” status which puts them in the room when major discussions convene, and decisions are made.

At COP 27, Olawoyin was part of the Emory student delegation that gave a talk during a side event on youth climate engagement around the world. Near the end of the talk, she plugged an event she had helped organize at Emory — the 2023 Youth Sustainable Development Conference to promote international youth collaborations.

While at SB 58, Lamb connected with student delegates from around the world through her seat on two different research and nongovernmental organization constituencies.

“There were a number of key discussions happening throughout the conference, like the Global Stocktake, which refers to taking stock of how well countries have done in meeting their Paris Agreement goals, and loss and damages,” says Lamb. “Country delegates discuss their viewpoints — it’s really a back-and-forth between countries. As an observer, I could sit in the room and hear what the different countries and constituencies had to say.”

Lamb hopped among side events and press



conferences and ultimately spent most of her time at meetings related to activism, loss and damages, and indigenous populations.

Both Lamb and Olawoyin carried their experiences back with them to the United States. Olawoyin integrated her time at COP into her capstone project and captured her experiences on Emory Climate Talks' "Amplifire" podcast. Lamb, who attended SB two months after graduating from Rollins, traveled globally after leaving Bonn. She trekked to Argentina, Alaska, and other places before beginning her job search.

Attending the conferences definitely altered both students' career paths. While both still aspire to address climate change, they are narrowing their focus on specific areas of environmental health in locations where they can make the greatest impact. Lamb hopes to work at the local or state level; Olawoyin is looking at jobs in clean energy.

"COP changed my perspective so much on the environment, on the planet, and how I could make actionable change," says Olawoyin. "I realized the best area for me is clean energy because it's a growing field. If I want to make an impact on low-income, disproportionately affected, and under-represented populations, it's in clean energy."

### NAVIGATING EMPLOYEE AND PASSENGER SAFETY IN A GLOBAL PANDEMIC

Samantha Hilsee 21C 22PH, an environmental health and safety engineer with Delta Flight Products, began her industrial hygiene internship with Delta in February 2020. Like many Rollins interns before her, she saw an opportunity to learn how industrial hygiene is integrated into Delta operations and partake in free flight privileges anywhere in the world — a Delta employee benefit that interns also enjoy. A month later, as global travel waned because of the pandemic, Hilsee's role shifted toward COVID-19 response.

"It was such a fascinating time to not only be a student studying public health, but to also be interning in the airline industry when travel and connection came to a halt," says Hilsee. "My manager was also a Rollins graduate, so he knew the skills I was able to bring to the table as a student. I was called on early during my internship to help by using what I was learning in the classroom and being a connector to other researchers at Emory during the pandemic."

During the early days of COVID, much of Hilsee's work involved evaluating air ventilation in Delta's workspaces and planes and the brand's international disinfection procedures.

"At the time, the Environmental Protection



Emory students pose with professor Eri Saikawa, PhD, director of Emory Climate Talks at COP 27 in Sharm El-Sheikh, Egypt.



United Nations  
Climate Change

COP27  
SHARM EL-SHEIKH  
EGYPT 2022





Agency was identifying and approving chemicals that were effective against COVID-19 for disinfection, but there wasn't a global standard for what that looked like," says Josh Smith 07PH, manager of environmental health and industrial hygiene for Delta and Hilsee's supervisor during her two-year internship. "Other countries couldn't get the chemicals that the EPA had approved for use, so we had to evaluate what they had and decide, 'Is this sufficient, is this going to work, will this be good for cleaning our airplanes?'"

For instance, Hilsee evaluated cleaning chemicals that Tel Aviv experts reported as effective for disinfecting planes to determine if the EPA would agree and to confirm Delta's comfort level in using them as a disinfectant.

As scientific advances made it possible for travel to safely continue, the remainder of Hilsee's internship in 2021-2022 evolved to incorporate more traditional industrial hygiene work, such as measuring heat, sound, and chemical exposures for Delta employees across various departments. Hilsee worked closely with the aircraft maintenance group to conduct different tests to ensure adherence to recommended exposure evaluations to make sure they didn't exceed any of the recommended exposures set by the American Conference of Governmental Industrial Hygienists or the Occupational Safety and Health Administration, gather data in the field, meet with

employees to listen to their concerns, choose the best sampling strategies, and craft messages on findings and mitigation plans.

"Time and time again, I worked with employees in the flight division, cargo division, and facilities division," says Hilsee. "Delta always stressed employee safety regardless of the group or the cost. It was definitely cool to have such a front-facing role in helping a company."

Hilsee's work had a direct impact on the global brand, which wasn't surprising for Smith, who got his own start at Delta 17 years ago when he was a Rollins student intern.

"Working with these student interns is mutually beneficial," says Smith. "It's great for Delta because we get fresh perspectives constantly coming through. I see it as a long-term interview, where I'm having someone come in, they're learning the job, they're really excited about it, and they're getting all the perks of working with Delta. At the end of their internships, many have proven themselves and end up rolling into either a contractor or full-time position. Right now, five of my former interns are still working for Delta in various roles, including two fellow managers."

Interns aren't relegated to grunt duties or coffee runs. They are out doing the work. They're wearing safety vests and safety glasses, conducting real-time monitoring. They're collecting air and water samples, boarding aircraft and doing







Delta interns get out in the field to conduct real-time monitoring in such settings as on board aircraft, in maintenance facilities, and even on the tarmac!

air-quality monitoring and collecting real-time exposure data. They're on the tarmac, doing wet bulb globe temperature evaluations or noise studies or in Delta's maintenance facilities evaluating chemical exposures. They also cross-train with other divisions, attend stand-up briefings, and work on projects involving travel around the country.

During the first month or two, Smith exposes new interns to all aspects of industrial hygiene at Delta so they can find an area of interest. From there, he encourages them to do projects that pique their interest as the focus of their internship, in addition to other industrial hygiene work that needs to get done. The focal project tends to fulfill graduate academic requirements too — like those needed for an applied practice experience or capstone — and often leads to long-term changes in company policy.

During Smith's internship, he developed the company's hexavalent chromium (the chemical that Erin Brockovich made famous) compliance program — which also served as the subject of his capstone and is still in place at Delta today.

Smith's internship quickly evolved into a deep passion. After nearly two decades working for the airline carrier, he is still grateful for the once-in-a-lifetime opportunity that has allowed him to impact people's lives and travel the world.

"I want the people who are working at Delta to have healthy and fulfilling careers," he says "But, more importantly, I don't want someone to retire from Delta and not be able to retire comfortably because of something they were exposed to at work."

That concern surfaced recently when a chance encounter reminded him of an incident that occurred 17 years ago when he was a Rollins student.

"One day, early in my internship, I was walking through a maintenance facility and there was this X-ray room and I said, 'What is this?' The mechanic in the area explained it was where they X-ray aircraft parts to look for any cracks or anything weakening the part."

Smith was concerned by a large lead door in the room and dust on the floor outside. Concerned that the mechanic was being exposed to lead dust and tracking it around with him — potentially to his car or his home. Smith sampled the dust outside the door and on the worker's shoes and confirmed it was lead. Delta proceeded to invest the money to fix the door, solve the problem, and create what is now a state-of-the-art space.

Recently, Smith was dropping his daughter off at a Delta-sponsored aviation camp in Florida—she dreams of becoming a pilot—and he saw the mechanic from years ago dropping off his own daughter.

"As we left, I couldn't stop thinking, 'There was the girl I was worried about 17 years ago when she would have been an infant.' To see her grown up and dropped off at the same camp as our daughter and she's smart and healthy and I know she wasn't exposed to something her dad unknowingly could have brought home from work, that feels like a win. I've thought about that a lot since then. This was the kid I was worried about. We corrected that issue and I know what we're doing makes a difference." ■



SAMANTHA HILSEE 21C 22PH



## Two New Scholarships Emerge, Inspired by Global Diabetes Research Leader

**T**wo philanthropic couples recently established endowed scholarships as a tribute to the research and leadership of K.M. Venkat Narayan, MD, founder and co-director of the Emory Global Diabetes Research Center (EGDRC). Both couples are members of the EGDRC Trusted Advisor group established this year.



### HUBERT FAMILY SCHOLARSHIP

Rollins Dean's Council members Richard (Dick) Hubert, his wife Linda Lentz Hubert, and The Hubert Foundation are longtime transformational partners of the Rollins School of Public Health. They share a mission of improving the quality of life for people worldwide through innovative approaches to solving the world's health challenges. In 2006, in recognition of the family's generosity and commitment to supporting the school's global health initiatives, Rollins dedicated the Hubert Department of Global Health in the family's honor. It was the first solely Emory named department and the first named global health department among the nation's schools of public health.

Although retired as a partner in the law firm of Chamberlain Hrdlicka after a long career as a successful trial attorney, Dick Hubert continues to be an advocate for one of his strongest cases—investment in global health excellence at Rollins. Linda Hubert, professor emerita of English at Agnes Scott College, is an equally passionate advocate for public health.

“Dr. Venkat Narayan has impressed us for years with his

brilliance, dedication, and resourceful initiatives in the struggle against the ubiquitous plague of diabetes,” the Huberts shared. “The Hubert family is pleased to help honor his successful efforts to establish the Emory Global Diabetes Research Center by contributing to scholarship support for fortunate students who will benefit from his teaching and research.”



### SUBRA, ANU, & KIRAN FOUNDATION SCHOLARSHIP

Since 2019, Drs. Subrahmanya and Anapurna Bhat and their son, Kiran Bhat, have been advancing education, improving the health of low-income and underserved populations, and fostering community engagement through the philanthropic efforts of their nonprofit organization, the Subra, Anu, & Kiran Foundation.

Anu Bhat is an internal medicine physician and rheumatology specialist. She completed her fellowship in rheumatology at Emory University and practices in Stockbridge, Georgia, at the Bhat and Bhat Medical Center with her husband. Subra Bhat has more than 30 years of experience as a pulmonologist, critical care physician, and internal medicine specialist. The couple's son, Kiran, is pursuing a literary career.

The Bhat's commitment to education and nurturing the next generation of public health leaders, their deep concern about the worldwide diabetes crisis, and their appreciation of the groundbreaking global work of the EGDRC inspired them to create a scholarship in Dr. Narayan's honor.

“We are extremely happy to support diabetes research, prevention, and treatment through this new scholarship at Rollins,” says Subra Bhat. The family announced their generous gift to the EGDRC during their foundation's annual gala in July. —*Suzy Blough*



# Dynamic Duo

*Two Rollins friends join forces in the service of humanity*

**R**ollins alumni Sheryl Golub 22PH and Brian Tolleson 95C 23PH met in a study group for a particularly challenging biostatistics class in 2021 while enrolled in the Executive MPH (EMPH) program at Rollins. Both second-career professionals in the prevention science track, they bonded over making it through the class (with A's, no less), their shared calling to contribute to the greater good, and their seasoned stature among mostly younger fellow students.

“The EMPH program specifically involves a lot of collaboration and teamwork. It’s intended that you’re working full time as you’re studying and pulls in the experiences of so many different people, which is what public health is all about,” says Golub, who for more than 15 years ran a boutique consulting firm specializing in developing learning and training programs for clients such as the Food and Drug Administration and various biotech and pharmaceutical companies. “Brian and I had most of the same classes and really worked well together.”

During his time at Rollins, Tolleson—co-founder and managing partner of Lexicon Strategies, a community and social impact consulting firm—was recruited for the Becoming Better Ancestors (BBA) project 9lessons.org. This impact project, founded by famed public health leaders William Foege, MD, and Mark Rosenberg, MD, captures the nine key lessons learned while eradicating smallpox—one of the greatest public health successes in history—to help changemakers address critical problems across the globe. Tolleson turned his work with 9lessons.org into his Rollins Applied Practice Experience. He holds the role of senior advisor, content creator, and communications lead, which is the perfect marriage of his film and TV background and aspiration to pivot his work toward supporting the idea of preventing human extinction.

“Preventing human extinction is a job now! We need people whose full-time jobs are to keep humans living on the planet,” says Tolleson, who won the 2023 Eugene J. Gangarosa, M.D., Student Award for Excellence in International Health.

After his first year working on BBA, he recruited Golub to join the team at Lexicon to create the curriculum and learning component around the nine lessons.

“Sheryl mentioned she was looking for a job, and I said,



‘Just come work with me!’” says Tolleson. “She fit the profile of the kind of people we want to have working with us—a consummate professional and leader in her field with a wealth of experience and deep desire to improve the world around them.”

Golub and Tolleson now collaborate on several projects together, in addition to managing clients and projects individually. An ongoing assignment is Georgia’s rollout of the federal three-digit dialing code 9-8-8, or 988 Suicide & Crisis Lifeline, which helps connect people experiencing suicidal, substance use, or mental health crises with trained counselors and resources. The Lexicon duo is working to support every aspect of the crisis system that goes into 988, focusing on communications and how to align stakeholders to embrace common goals throughout the state of Georgia.

“SAMHSA, the Substance Abuse and Mental Health Services Administration, recently came to Georgia to highlight the work that is happening across the state, and we’re very proud of how Georgia is becoming a leader in the 988 response work,” Tolleson says.

The colleagues also are consulting on Change the Pattern, a project of the National AIDS Memorial, the Southern AIDS Coalition, and Gilead Sciences. The project is an HIV prevention program focusing on the South, predominantly in communities of color.

“This project is bringing attention to the social determinants of health that are intimately linked to the HIV epidemic still happening in our country,” Tolleson says.

Tolleson and Golub both credit the education they received at Rollins with helping them fine-tune and grow their professional expertise in different ways. They gained more in-depth knowledge in using software and other practical tools daily and the intricacies of public health agencies and organizations. They also built strong relationships with esteemed faculty, some of whom have since become collaborators.

But perhaps Rollins’ greatest gift of all is the lasting friendship they formed as students.—*Karina Antenucci*





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