

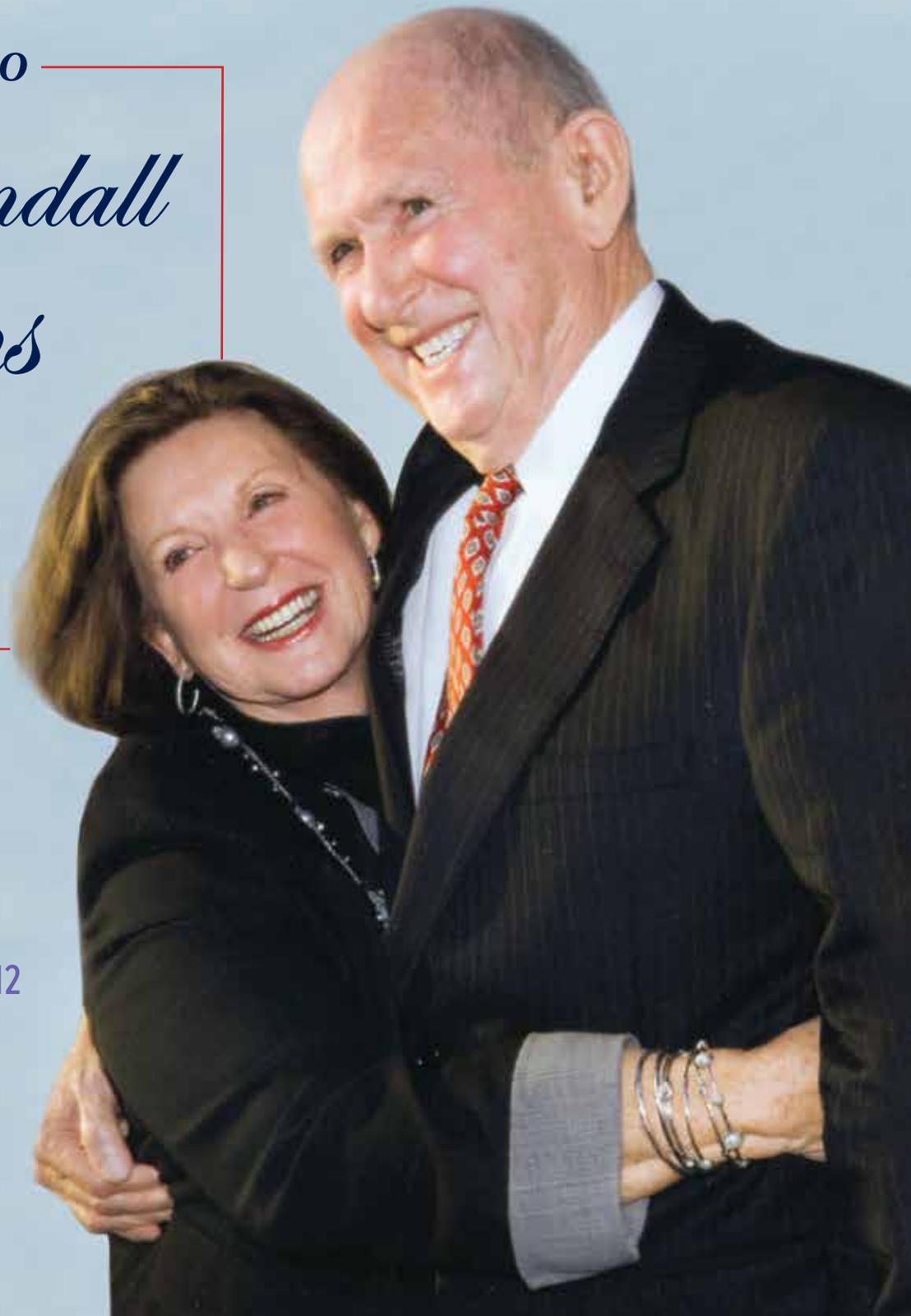
ROLLINS

EMORY | Public Health

A TRIBUTE TO

*R. Randall
Rollins*

Businessman,
philanthropist,
friend



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[FALL 2020]

In memory of R.

R. Randall Rollins, a highly respected leader in Atlanta's business and philanthropic communities and a longtime champion of the Rollins School of Public Health (RSPH), passed away on Monday, August 17, 2020. He was 88 years old and had suffered a short illness.

Rollins was chairman of the board of Rollins Inc., RPC Inc., and Marine Products Corporation, and a trustee of the O. Wayne Rollins Foundation. In 2015, Emory awarded Rollins an honorary degree in recognition of his extraordinary commitment to advancing global health.

Rollins, alongside his father, Wayne, and brother, Gary, created an enduring American success story that spanned several generations. While achieving immense business and financial success, Rollins and his family remained true to the values instilled in them through the generations.

Those values included giving back, and the RSPH has been a grateful beneficiary of that generosity. Through gifts of infrastructure and endowment, as well as providing expert guidance, Rollins played a critical role in propelling the RSPH from a fledgling school with a handful of students and faculty and no facility of its own to one of the top five schools of public health in the United States.

Today, the RSPH has more than 1,450 students and 200 faculty housed in two dedicated buildings. A third space, the R. Randall Rollins Building, is under construction and slated to open in 2022. The school is ranked 5th among all public health schools in NIH research funding. And more than 11,000 alumni in more than 110 countries are working to improve the health of global populations.

"We simply would not be where we are today without the Rollins family," says Dean James Curran. "We have been able to attract and retain the highest caliber of faculty, students, and staff in large part because of the Rollinses' support of our facilities and endowment. The resulting cadre of professionals we have trained and the significant research we have produced have changed lives for the better. Countless

thousands throughout the world will lead longer, more productive lives because of the investments Randall Rollins made in public health."

The Rollins family's support dates back to 1990, when the Emory University Board of Trustees made the RSPH the first new school at Emory in more than 70 years. Upon hearing that a building was needed to house the faculty, staff, and students, Wayne Rollins expressed his desire to help. However, he died unexpectedly in 1991 before the project had left the drawing board. Determined to carry out his vision, Wayne's wife, Grace, and two sons 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.

The faculty and staff could not imagine how they would fill their expansive new home. But they did, and the school kept growing until it needed more room. And once again, the Rollins family answered the call, funding 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, and including the 250-seat Rollins Auditorium, three floors of laboratory space, and an elegant meeting space, the Lawrence P. and Ann Estes Klamon Room.

The story has repeated itself. With back-to-back years of record enrollment, the school once more finds itself bursting at the seams. In 2019, the Rollins family pledged \$65 million to construct the R. Randall Rollins Building, which will be adjacent to the first two.

The Rollins family has invested in the people of the RSPH as well as its bricks and mortar. The family funded the O.



Randall Rollins

Wayne and Grace Crum Rollins Endowment, which provides the dean flexibility to respond to the school's highest priorities and has enabled him to endow 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.

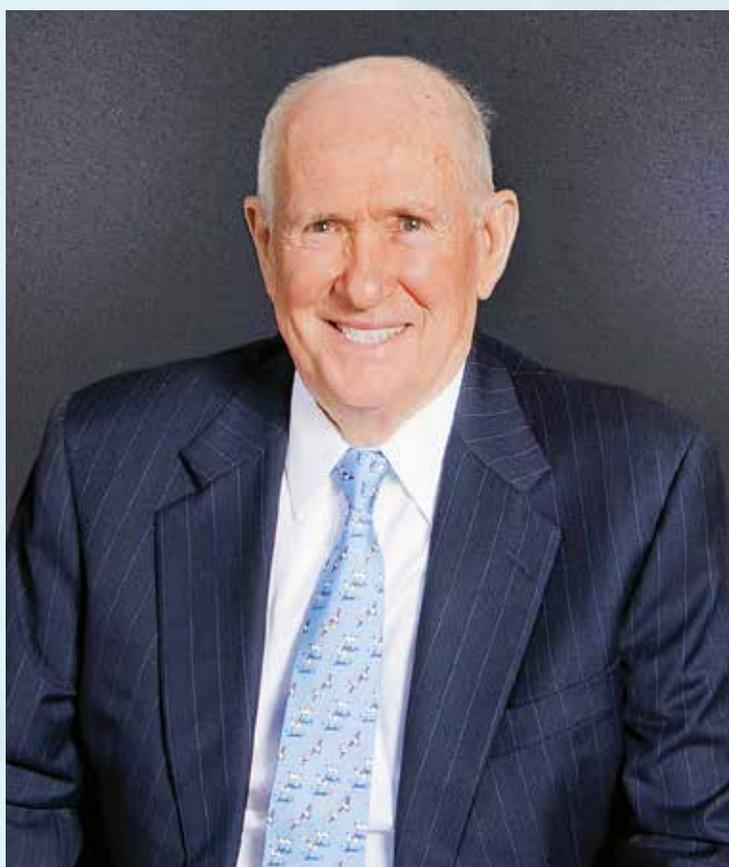
In addition, the family has honored friends by naming the following positions: the Michael M. E. Johns Distinguished Professor in Health Policy, the Wilton Looney Distinguished Professor in Cardiovascular Research, and the Stephen D. Clements Jr. Distinguished Professor in Cardiovascular Disease Prevention.

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. In 2018, the Rollins family established the Rollins Distinguished Professorship in Substance Use Disorders in response to the opioid epidemic.

The Rollins family has been instrumental in attracting top-flight students as well as faculty. The foundation was a major donor to the James W. Curran Scholarship Fund, established in honor of his 20th anniversary as dean. The scholarship—among the most generous given at Emory—provides support for some of the most outstanding RSPH students.

Beyond the RSPH, Emory has benefitted from the largesse of the Rollins family. They have made transformative gifts in

support of the Robert W. Woodruff Health Sciences Center, Emory School of Medicine, Winship Cancer Institute, Yerkes National Primate Research Center, and Candler School of Theology. The foundation was instrumental in the construction



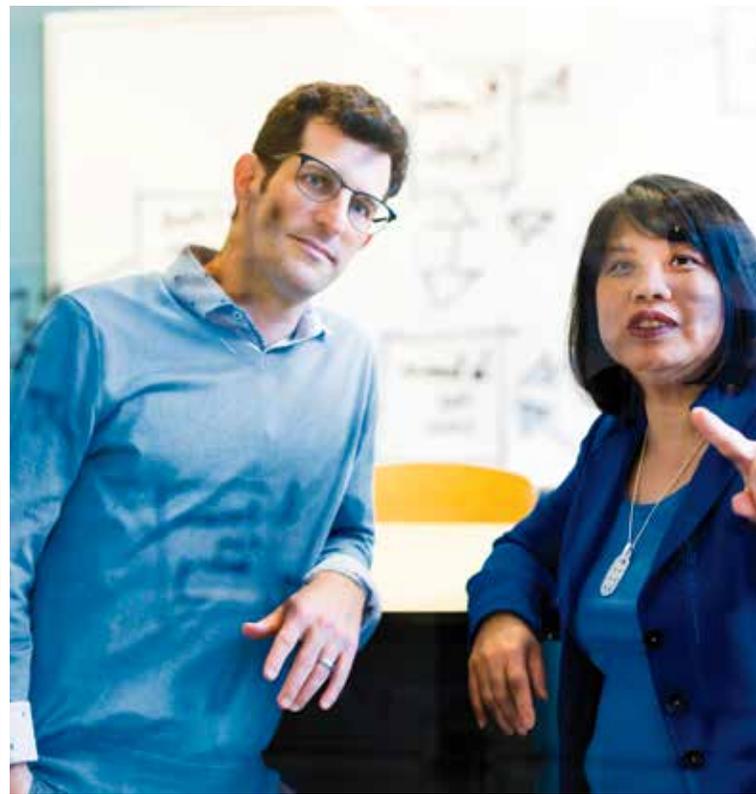
of the O. Wayne Rollins Research Center, which opened in 1990 and houses laboratories that have fueled discovery in fields including neuroscience, cellular biology, genetics, and immunology.

Beyond his vast business success and expansive philanthropy, the trait that truly defined Rollins was his love of family. Raised on a farm near Ringgold, Georgia, he grew up among parents and grandparents who instilled in him the value of hard work, integrity, and loyalty.

Rollins was happiest when he was with his

wife of 67 years, Margaret (“Peggy”), and their children, grandchildren, and great-grandchildren. The couple has six children: Rita Anne Rollins, who passed away in 1970; Richard Randall Rollins Jr.; Pamela Rollins; Robert Rollins; Timothy (Andrea) Rollins; and Amy (Nevin) Rollins Kreisler. They also have 18 grandchildren and four great-grandchildren.

“Randall Rollins was an extraordinary benefactor, friend, and family man,” says Curran. “He will be greatly missed.” ■



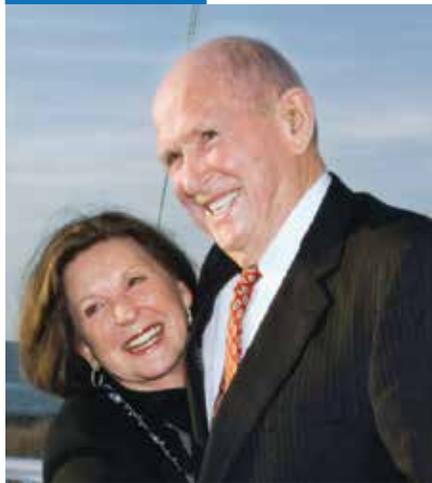
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Rollins aids the Georgia Department of Public Health in its pandemic response.

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Implementaion science—the discipline that focuses on getting discoveries into the field—grows within Rollins.

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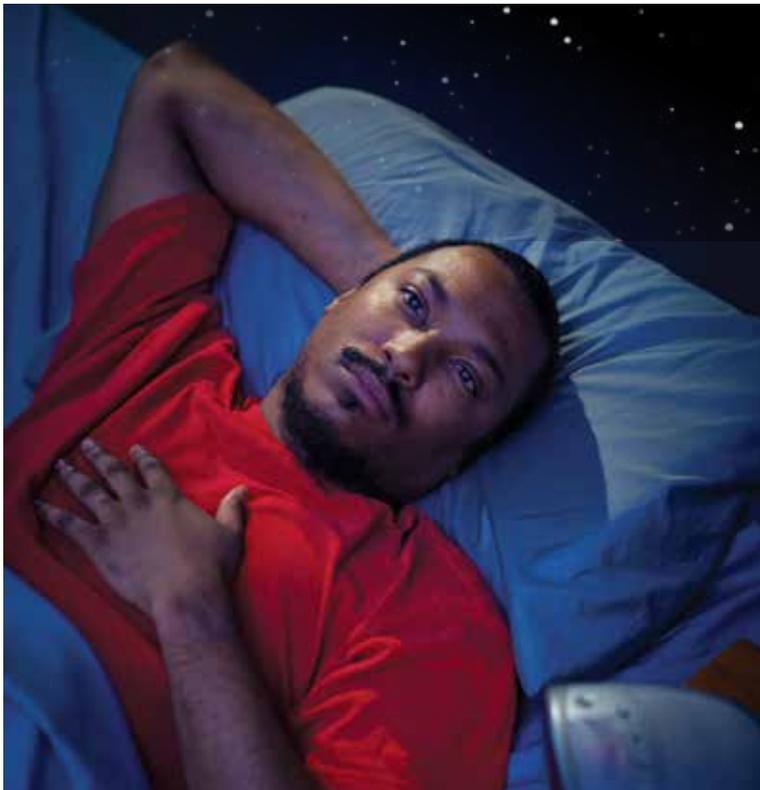
Randall and Peggy Rollins
Since its inception, Randall Rollins has played a vital role in the success of the Rollins School of Public Health.

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Sleep inequalities 22

Research delves into why African Americans suffer from greater sleep deficits than their white counterparts.



The scholarship difference 26

Funding helps attract the brightest, most committed students.

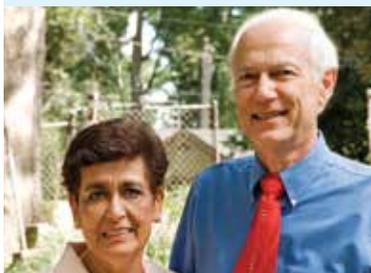
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SHEELA BOWLER 13MPH

Bowler sees a need for the child welfare system to seriously reckon with racism within the field. While one out of every 17 American children enters foster care, for black children that number is one in nine.



Leading during the pandemic

We are beginning this school year against an unprecedented landscape. COVID-19 continues to rage in the U.S., and Rollins faculty, staff, students, and alumni continue to commit their time, expertise, and passion to the pandemic response. Most notably, Rollins and the Georgia Department of Public Health have entered a partnership with the formation of the Emory COVID-19 Response Collaboration (ECRC). Through the ECRC, we are supporting the state's efforts in several key areas, including helping plan overall response efforts, bolstering surveillance, responding to outbreaks, and training a new cadre of epidemiologists. I am proud of all the ways in which we have been able to serve the state's response efforts.

An epidemic of police violence against African Americans is also playing out as we re-open our doors. Hannah Cooper, Rollins Distinguished Professor in Substance Use Disorders Research, had co-authored a timely book, *From Enforcers to Guardians: A Public Health Primer on Ending Police Violence*, which frames excessive police violence as a critical public health issue. As a school, we are taking a hard look at our practices and policies to increase the diversity and equity of faculty, staff, and students. Toward that end, we are in the process of hiring Assistant Dean for Diversity, Equity, and Inclusion, who will lead Rollins in building its culture of inclusivity. We will detail more of our efforts in a future issue of the magazine.

We start this academic year under new leadership. Gregory L. Fennes became the twenty-first president of Emory University on August 1, 2020. He succeeds Claire E. Sterk, who—fortunately for us—has rejoined the Rollins faculty. Read more about our new president on page the adjoining page.

Finally, it is with the deepest sadness that I announce the death of R. Randall Rollins. Like his father and mother before him, Randall was a true friend to our school. Though he was an extremely astute, successful man of business, Randall was, at his core, humble and generous of spirit. Our school benefitted greatly from that generosity. The two buildings that house our school were funded by the Rollins family, and a third is rising as you read this. I grieve that he will not be able to see the opening of the building that bears his name, but I have no doubt his spirit will infuse its halls. Please read more about the life and contributions of R. Randall Rollins on the preceding pages.

Thank you for your interest in this issue of *Rollins* magazine, and stay safe.

James W. Curran, MD, MPH

James W. Curran Dean of Public Health

WELCOME, PRESIDENT FENVES

Gregory L. Fenves began his tenure as Emory University's 21st president on August 1 with a communication campaign to reach every corner of the Emory community.

"I am profoundly aware that my arrival in Atlanta comes amid one of the most severe global crises in modern history," Fenves said in a message to the Emory community on August 3. "COVID-19 has reconfigured everything—from our daily work to the world we live in. The pandemic has changed what we can do and how we educate students at a top research university. It's also had economic repercussions, requiring our community to make very difficult decisions. But it hasn't changed us. It hasn't changed Emory's mission nor our values. It hasn't altered our ability to achieve, transcend, and lead."

Indeed, Fenves contends Emory is uniquely well-suited to deal with the current crisis. "I believe this university is as well prepared as any university in the country because of the dedication of the staff and the leadership to safety, but also and especially because of the expertise of Emory Healthcare and the Woodruff Health Sciences Center, including

faculty who are experts in public health in one of the top schools of public health. Across the Woodruff Health Sciences Center, Emory experts are leading the way in the local, statewide—and national—pandemic response, integrating your research, teaching, and clinical missions in ways that save lives."

A civil engineer by training, Fenves earned a bachelor's degree from Cornell University and a master's degree and PhD from the University of California (UC), Berkeley. He began his academic career as an assistant professor in UT Austin's civil engineering department in 1984. In 1988, Fenves returned to UC Berkeley, where he was on the faculty for 20 years and became an international expert on structural engineering for earthquake preparedness. He returned to UT Austin in 2008 to become dean of the Cockrell School of Engineering, was recruited to the position of provost at UT Austin in 2013, and in 2015 was appointed president. Fenves was elected in 2014 to the National Academy of Engineering, the highest recognition for an engineer in the United States.

Fenves is married to Carmel Martinez Fenves, a textile artist and former small business owner. They have two adult daughters, a son-in-law, and one granddaughter, all of whom live in Austin. ■





Rollins School of Public Health

Congratulations on three decades of promoting health, preventing disease—locally, nationally, globally



Rosalynn joins me in congratulating Emory University’s Rollins School of Public Health on its 30th anniversary. In a relatively short time, Rollins has become one of the leading and most respected schools of public health in the nation and the world.

The Carter Center’s Health Programs have enjoyed mutually beneficial and productive relationships with the Rollins School of Public Health from the very beginning. I have enjoyed the occasions when I have spoken to and held discussions with audiences at the school. Additionally, our Carter Center staff have lectured at the school, provided internships, and supervised theses. A few of our overseas staff have earned MPH degrees at Emory as recipients of Foege Fellowships, while four of our five current Health Program directors, several Carter Center country directors in Africa, and many others we work with in Africa are also proud alumni of the Rollins School of Public Health.

The pandemic caused by COVID-19 is making the world more aware of public health’s importance than ever. I have no doubt that Rollins will continue to be a major contributor in facing the challenges that lie ahead.

Sincerely,

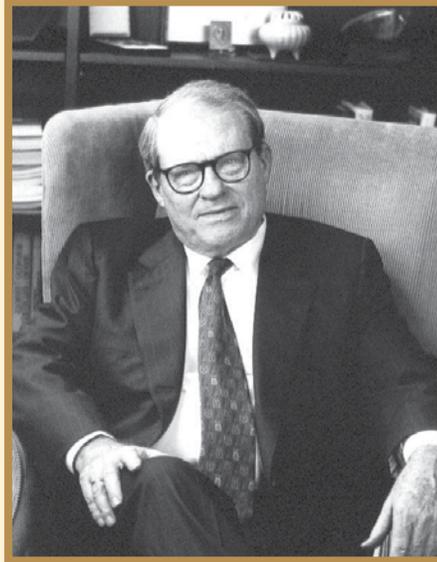
Jimmy Carter

39th president of the United States

University Distinguished Professor at Emory

The Rollins School of Public Health can justly be proud of its remarkable success in being ranked in the top tier of public health schools in the nation. This achievement is all the more impressive since it has been accomplished in just three decades. The Rollins School's meteoric rise is virtually without precedent in higher education. I congratulate Dean Curran and the distinguished faculty on their splendid work.

Its establishment has paralleled and fueled Atlanta's development as a world center for public health. Of course, the CDC's presence from the 1950s provided unequalled collateral resources as a neighbor and has been the catalyst for a unique constellation of institutions in Atlanta, such as the American Cancer Society, CARE, the Task Force



James Laney

*President of Emory University, 1977-1993
Ambassador South Korea, 1993-1996*

for Global Health, and The Carter Center's health programs.

From the very start, it was the Rollins' vision and resources that brought this into being thirty years ago and made the dream a reality, and it is their continued generosity that makes the Rollins School's future bright indeed. Emory can be very proud.

Congratulations and heartfelt gratitude are in order to all who have made this anniversary celebration possible. I feel blessed to have been present at the beginning and it is with excited anticipation that Emory looks forward to the years ahead.

Extend my warmest congratulations on the 30th anniversary of the Rollins School of Public Health. Opening a public health school was probably the most exciting thing one could hope to do as a vice president for health affairs in the 1980s. Public health was then and is now at the forefront, a field where important research has been done and will continue to be done throughout the 21st century. Even as the COVID-19 pandemic has captured the world's attention, AIDS continues to ravage populations across the globe. Heart disease and cancer claim more lives than any other causes; bioterrorism remains a threat. The faculty and students of the Rollins School fight these crucial battles every day.

I am very proud of our effort to open the Rollins School. A school of public health was exactly the type of program to kick-start our relationship with the CDC. In the early years,



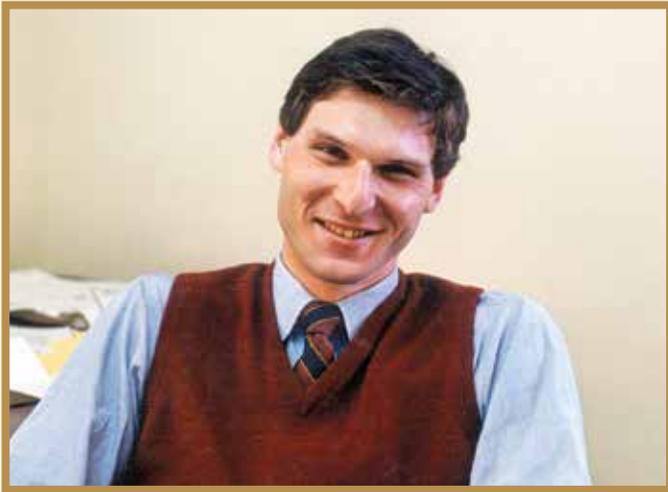
Charles Hatcher

*Vice President for Health Affairs,
Woodruff Health Sciences Center, 1984-1996*

the CDC furnished numerous faculty members at no charge. Today, more of our graduates have gone on to work at the CDC than anywhere else.

Ray Greenberg did an outstanding job—he helped us launch a new American school of public health and the first new school at Emory in over 70 years. Jim Curran has excelled since taking over in 1995. Under his leadership, the school expanded rapidly, building one of the largest faculties on campus, growing into the university's second greatest winner of grant dollars, and moving into the nation's top five schools of public health.

I look forward to seeing what the coming years will bring.



I am told that the traditional symbol of the 30th anniversary is the pearl. In that spirit, I offer the following pearly memories.

Rollins was launched in 1990 on a hope and a prayer. The hope of its starry-eyed faculty was given life by President Laney, Vice President Hatcher, and the Board of Trustees. Although it may not seem so today, at the time, this was a bold move. Only three years earlier, the university had gone through the painful closing of the dental school, and it could ill afford to have another school struggle. The prayer was answered by O. Wayne Rollins, and then sons Randall and Gary, whose generosity supported the new school and helped to shape its vision.

The school's founders and benefactors were deeply committed to social justice and that resonated within a university long dedicated to advancing humanistic principles. From the earliest days of the school, it also stood as an academic bridge between the Woodruff Health Sciences Center and Emory College, with a deep commitment to interdisciplinary collaboration.

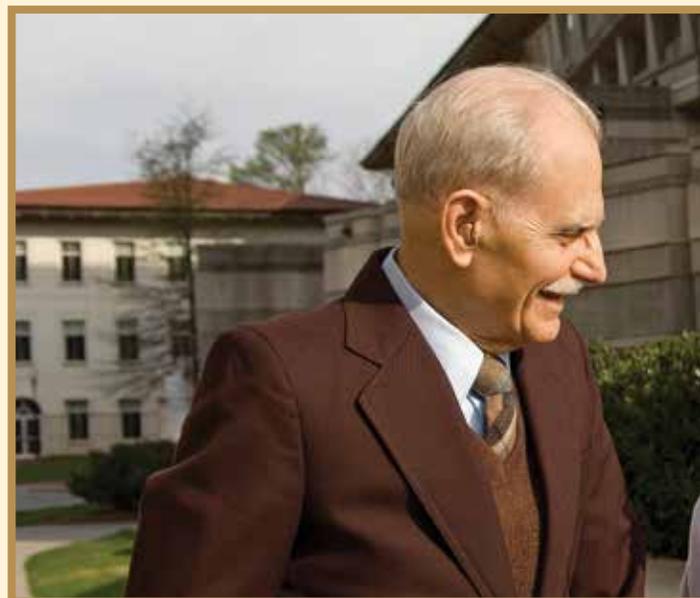
Although we had great aspirations in 1990, even in our wildest imaginations we could not have foreseen that the school would rise to the elite ranking that it enjoys today. As we celebrate all that the school has accomplished, may we remain true to the ideals that gave birth to the Rollins School of Public Health three decades ago.

Ray Greenberg

*Executive Vice Chancellor for Health Affairs,
University of Texas System, 2013–2018
Founding Dean of the Rollins School of Public Health, 1990–1995*

It is with great pride that I write to celebrate the 30th anniversary of the Rollins School of Public Health. Rose and I could never have imagined the extraordinary trajectory of public health at Emory. We were still a master's of community health when Dr. Tom Sellers agreed to let me take on the challenge of building the public health program.

Becoming a separate division within the Woodruff Health Sciences Center in 1989 was a major milestone and the precursor to the program's elevation to school status in 1990. The preceding years were quite challenging. The support and commitment of public health giants, including Drs. David Sencer, Bill Foege, and James Mason from the CDC, coupled with the determination of Emory leaders, including President James T. Laney and Vice President of Health Affairs Charles R. Hatcher Jr., came together to make the dream of a school of public health at Emory a reality. Others who played major roles in our early development are too numerous to name, but I do want to thank my predecessors Bill Marine and Connie Conrad, and key faculty including Roger RoCHAT, Mike Lane, Phil Brachman, Clark Heath, John Richardson, and John Boring. I want to extend my gratitude to my successor and founding dean, Ray Greenberg, whose youth, energy, and intellect were crucial to rapid growth during the school's first five years,



and to Jim Curran, our current dean, who exponentially propelled the school's successes and reputation and whose innumerable accomplishments are the envy of all US schools of public health.

I am proud of my role as the ship's captain during the early years when my focus was, out of necessity, on management and administrative issues, but there were other facets much more exciting, challenging, and gratifying. I refer to my teaching role, which continues to this day and which has driven and sustained me. Our students are my "adopted" children and I watch the successes of our alumni with an almost grandfatherly pride.

The Rollins School of Public Health, now ranked fifth in the nation, has achieved global prominence, but the most exciting years lie ahead. The future of our school is very bright indeed.

Rose joins me in sending best wishes to the Rollins School of Public Health.

Eugene J. Gangarosa

*Director Emeritus,
Master of Public Health program
Founder, the Center for Global Safe WASH*



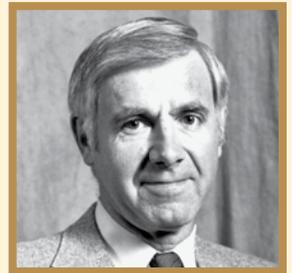
My family and I have long been honored to support the important work of the Rollins School of Public Health, but perhaps at no time more than now. As the COVID-19 pandemic continues to rage across the country, the need for public health expertise has never been greater.

Rollins faculty, staff, students, and alumni are rising to meet that challenge even as they address other threats to health including cancer and cardiovascular disease, mental illness and climate change, diabetes and HIV with their trademark passion and fervor. We could not be more proud of what the school has accomplished in 30 years and look forward to the next 30 years of success. Congratulations to all.

Amy Rollins Kreisler

Executive Director of the O. Wayne Rollins Foundation

It seems inevitable now. A first-class school of public health should be developed next to CDC. But it was not that smooth at first. The surgeon general, Julius Richmond, in the late 1970s, made several trips to Emory encouraging the university to start such a school. But it took another decade to evolve. Great deans, a supportive university, and help from CDC led to a world-class teaching institution. The selection of Dr. Jim Curran as dean helped to provide a seamless enterprise between CDC and Emory.



In 30 years, the Rollins School became one of the top schools of public health in the world. It not only attracts quality students, but it also attracts great faculty members, including people with enormous experience in the delivery of public health programs in this country and the world. The school will continue to change the future health in the entire world as it develops great ancestors! I am grateful to Emory for their role in making global health an exciting career opportunity for so many students.

William Foege

*Emory Presidential Distinguished Professor of Global Health Emeritus
Director of the Centers for Disease Control and Prevention, 1977–1983
Director of The Carter Center, 1986–1992
Founder of the Task Force for Global Health*

Krafty chairs biostatistics and bioinformatics

Dr. Robert T. Krafty has joined Rollins as the chair and Rollins Professor of the Department of Biostatistics and Bioinformatics. Previously he was a tenured faculty member and chair of the biostatistics curriculum at the University of Pittsburgh's Graduate School of Public Health.

Though he assumed his new post on September 1, he was no stranger to Rollins or the department. "I've known about a half of the department's faculty for at least 10 years, primarily because of their outstanding research," says Krafty. "I've also had several coauthors within the school and the university, so I know what a great collaborative environment it is."

At the University of Pittsburgh, Krafty led a federally funded transdisciplinary research group. The group's work included the development of methods and software for using data from wearable and mobile devices for monitoring and treating depression in older adults and the use of EEG and ECG data collected during sleep to



understand how treatments of poor sleep can be used to improve women's health.

Previously, he was an assistant professor of statistics at Temple University. He holds a master's in mathematics and a PhD in biostatistics from the University of Pennsylvania.

His teaching and research have earned him multiple honors and recognitions, including the 2016 Philips Grand Challenge Award (University of Pittsburgh), the award for High Achievement in Sponsored Projects (Temple University), and University of Pennsylvania's Award for Outstanding Teaching. He is actively engaged with a number of

scientific and research organizations, and he currently serves as the associate editor of both the *American Statistician* and *Statistics and Its Interface* and is on the editorial board of *Sleep*.

Krafty replaces Dr. John Hanfelt, who has served as interim chair of the department since 2017. ■

Curbing police violence

Though police violence has disproportionately targeted structurally marginalized communities as long as the US has had a police force, it's only recently that this phenomenon has dominated headlines, captured mainstream attention, and spurred a movement. **Dr. Hannah Cooper** frames excessive police violence as a critical public health issue in her new book, *From Enforcers to Guardians: A Public Health Primer on Ending Police Violence*, cowritten with Dr. Mindy Thompson Fullilove.

Cooper, Rollins Distinguished Professor in Substance Use Disorders Research, and Fullilove, professor of urban policy and health at the New School, say investigation into the topic is long overdue. "Public health has done quite a good job engaging with violence as a major health crisis," says Cooper. "We have worked to study community violence, identify its determinants, and develop interventions. We've done the same with intimate partner violence and child abuse. We did not, however, engage with police violence until very recently."

The book covers the history, distribution, and health impacts of police violence, from slave patrols in colonial times to war-on-drugs policing in the present day. Their research got a boost from "pattern or practice investigations," Department of Justice-led probes into police departments for violating people's rights under the Constitution.

The authors conclude with recommendations for curbing police violence, including an intentional refocusing of policing. "We are turning to police to address every social ill, from homelessness to mental



illness," says Cooper. "They are not trained to provide social services. We need to identify what the appropriate role is for the police."

In our federalist system, she hopes states and municipalities take advantage of their freedom to experiment with policing. One municipality might abolish police altogether and shift the money to social services, preventive services, and education. Another might decide to roll back funding in police and invest it in social services but keep their police in a very defined role. Others might continue as they are. "My hope is that we are on the cusp of some important discoveries," says Cooper. ■

MEDIA SAVVY

“RACISM IS DIFFICULT TO TACKLE, BECAUSE IT FUNDAMENTALLY REQUIRES A REDISTRIBUTION OF POWER, WEALTH, AND RESOURCES. . . . IT’S A MARATHON, NOT A SPRINT.”

KIMBERLY JACOB ARRIOLA,

EXECUTIVE ASSOCIATE DEAN FOR ACADEMIC AFFAIRS, TOLD *US NEWS & WORLD REPORT*.

“IF WE’RE MAKING A PLANE, RIGHT NOW WE’RE AT THE PRODUCTION LEVEL. WE CAN SAY IT . . . CAN AT LEAST GET OFF THE GROUND. BUT CAN IT GET ME FROM HERE TO PARIS?”

CARLOS DEL RIO,

PROFESSOR OF GLOBAL HEALTH, TOLD *NBC NEWS* IN A DISCUSSION ABOUT A COVID-19 VACCINE.

“THE USE OF A CHEMICAL THAT CAUSES PEOPLE TO COUGH VIOLENTLY CAN LEAD TO MORE SPREAD OF DISEASE.”

BOB BEDNARCZYK,

ASSISTANT PROFESSOR OF GLOBAL HEALTH, TOLD *CNBC* DISCUSSING THE USE OF TEAR GAS DURING A PANDEMIC TO BREAK UP PROTESTS IN PORTLAND.



Photo by Neto Villalobos

Bat ecology in the era of pandemics

Viruses carried by bats have been linked to disease outbreaks from SARS to MERS to Ebola. Evidence points to horseshoe bats as the most likely reservoir of the novel coronavirus that causes COVID-19. One theory is that the coronavirus jumped to another species—a scaly mammal called a pangolin—at a live animal market in Wuhan, China, before spilling over into humans.

But don’t blame the bats, says **Amanda Vicente**, who studies the disease ecology of bats as an Emory doctoral candidate in the lab of **Thomas Gillespie**. “It’s important for people to know that our enemies are not the bats, but the pathogens,” Vicente says. “And in order to better fight these pathogens, we need to understand their evolutionary relationship with bats and how that relationship is being altered by human behaviors.”

Vicente is working toward just that, aided by fellow students from Rollins and the college’s environmental sciences department. Vicente is exploring cave-dwelling bats in Costa Rica to determine how human changes to bat habitats—mostly through agriculture and livestock—may stress bats, alter their behaviors and population densities, and change the dynamics for how three different

pathogens they carry may spread.

“Human pressures are having a huge impact on the natural world,” Vicente says. “Our population is rapidly growing. People are cutting down more natural habitats, eating more wildlife, and coming into contact with wild animals more often.”

All these factors boost the risks of a disease jumping from wildlife to people. In fact, most emerging infectious diseases are zoonotic—animal infections that spread to humans.

“The COVID-19 pandemic is just the latest warning shot from nature,” says Gillespie, associate professor in the Department of Environmental Sciences and in Rollins. His lab studies how germs jump between wild animals, domesticated animals, and people.

The prevalence of bats makes them an important part of the equation. There are more than 1,400 known species of bats, one quarter of mammal species overall. And each bat species carries a suite of different pathogens.

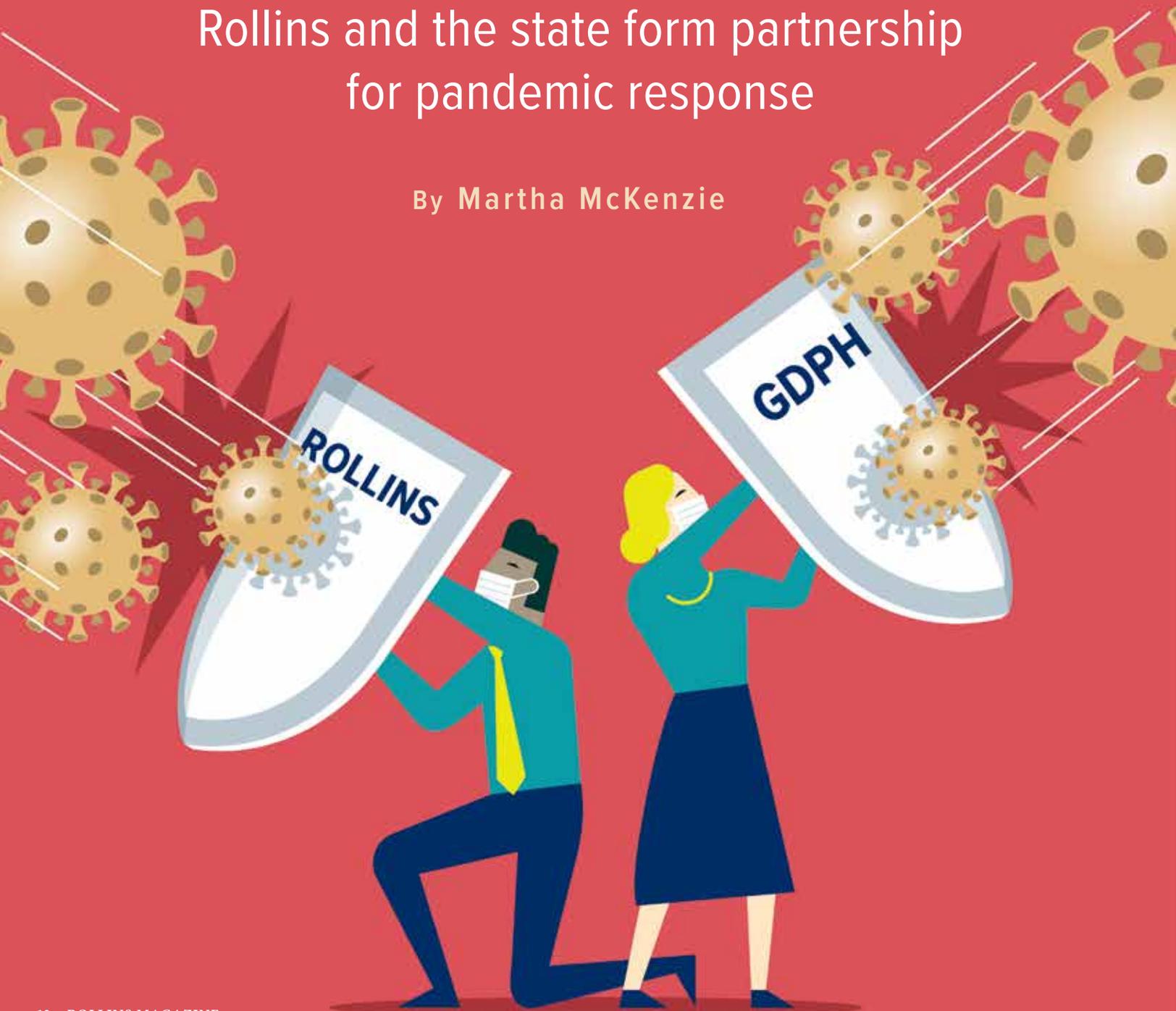
Ultimately, Vicente hopes to develop a mathematical model that can be applied more universally to help predict—and control—zoonotic disease risks linked to land-use changes.

Read more about Vicente’s work at [links.emory.edu/BatEcology](https://emory.edu/BatEcology).—*Carol Clark*

COVID-19 Collaboration

Rollins and the state form partnership
for pandemic response

By Martha McKenzie





Over the course of a week in July, Dr. Allison Chamberlain discussed how best to boost the state's testing capacity with Georgia Department of Public Health Commissioner Dr. Kathleen E. Toomey, brainstormed new COVID-19 collaborations with district health directors, and provided guidance to the Metro Atlanta Chamber of Commerce.

Chamberlain, assistant professor of epidemiology, is leading a partnership between Rollins and the Georgia Department of Public Health (GDPH). Called the Emory COVID-19

Response Collaborative (ECRC), the partnership was established in early June to assist the state in its response to the COVID-19 pandemic.

Through ECRC, Rollins faculty, staff, and students support the state's efforts in key areas of its response, including: helping plan and implement response efforts; mounting rapid-response teams to deal with outbreak hotspots; bolstering surveillance and research to better understand the epidemic in the state; and training a cadre of early-career epidemiologists to join the fight.



Allison Chamberlain leads the Emory COVID-19 Response Collaborative, through which Rollins faculty, staff, and students aid the Georgia Department of Public Health's pandemic response.

"We were extremely thoughtful in how we crafted the mission of ECRC to be maximally helpful to the state's health department," says Chamberlain. "The goal is to strengthen their ability to respond by putting our skills into their service."

The partnership is welcomed by state officials. "As Georgia continues to reopen commerce, travel, and social engagement, ensuring that the citizens of Georgia are kept safe from disease and death is a public/private responsibility," says Toomey. "To be successful, there must be ample and accessible COVID-19 testing, extraordinary community engagement, and an ability to trace contacts of new COVID-19 cases in order to forestall resurgent outbreaks. Expanding academic partnerships among Georgia's public health system, Rollins, and other Georgia-based schools of public health will benefit us now and in the future."

The ECRC is funded by a \$7.8 million gift from the Robert W. Woodruff Foundation.



Sarita Shah and Neel Gandhi have been working with the Fulton County Board of Health since the pandemic began, and they are now lending their expertise to the state.

who is getting tested by age, gender, race, and ethnicity, and give a more complete picture of how the epidemic is evolving.

“In the past, we worked closely with the Department of Health or national Ministry of Health overseas on a much longer timescale when it comes to tuberculosis,” says Gandhi. “But with this work, we are adapting week to week, and sometimes day to day. We’re brainstorming constantly with the health department to see where we might want to focus next to have the greatest impact. Our amazing team of students and staff have been quick to adapt and pivot to what’s next.”

Upon discovering staff were having trouble reaching people who had tested positive for

COVID-19 to conduct case interviews and elicit contacts, Gandhi and Shah took a closer look. “We knew anecdotally that we weren’t reaching everyone, but we needed to understand why,” says Shah. “One of the Rollins MPH students developed a simple log that the entire team filled in when making calls. That very simple analysis showed us we were only reaching about half of the people who tested positive, and we were not identifying many contacts from those we did reach. We found the main problem was we just were not reaching people by phone, either because they weren’t home or they weren’t answering their phones.”

GDPH has since developed a mass media campaign, “Answer the Call,” to explain the fundamentals of contact tracing and encourage people to answer their phones.

“We were told the campaign was further supported by some of the data we were able to provide,” says Shah. “Because we had evidence, not just anecdotes, the health department could better understand the scope of the challenge we were having with reaching people. That really encapsulates what we are trying to do—bringing together public health work with a quantitative component so that we can help improve the processes.”

RESPONDING TO OUTBREAKS

In mid-April, health care officials in Hall County contacted Rollins seeking assistance with a small, fledgling outbreak of COVID-19 among the area’s mostly Hispanic poultry plant workers. They feared, given the close working conditions of the plants, a spark could become a flame overnight.

Within days, Dr. Jodie Guest, vice chair of the Department of Epidemiology, had assembled a team of eight Rollins epidemiology students who trekked an hour north of Atlanta and set up testing sites in

DECIPHERING THE DATA

Chamberlain is leading ECRC’s planning and implementation efforts, coordinating where key Rollins faculty can best assist GDPH with its COVID-19 response, including case investigations and data analyses. In Fulton County, Drs. Neel Gandhi and Sarita Shah have been leading a team to do just this. Associate professors of epidemiology and global health, Gandhi and Shah are building off work they’ve been doing for more than a decade on the diagnosis, treatment, and prevention of tuberculosis to help support the Fulton County Board of Health (FCBOH) since the beginning of the pandemic.

“We are able to help county epidemiologists take the data a step further,” says Shah. “Our expertise is in combining applied epidemiology with epidemiologic methods to better understand what is going on in order to inform strategic decisions.”

That means being able to drill down beyond who has the virus to discover how they might have contracted it, what course their disease took, and what modifying factors might have influenced the severity of their response. For example, disparities in COVID-19 case rates and disease severity have been widely reported, with black Americans more likely to be hospitalized and die from COVID-19. Shah and Gandhi are helping the Fulton County epidemiology team look deeper, teasing out the impact of older age and chronic medical conditions to show that these differences persist even after factoring in other risk factors.

Their work evolves with the pandemic. They help FCBOH staff revise the data that is presented in the thrice-weekly epidemiologic reports shared with leadership and the public. Many of the questions asked when investigating cases that were relevant in February—such as, travel outside the United States—are not meaningful today. Other areas can be expanded. As case counts among younger adults increased throughout June and July, the Rollins team was able to look into more specifics of

REDEFINING THE UNACCEPTABLE

parking lots outside of poultry plants. Clad in gowns, masks, and gloves, plastic face shields, and hairnets, the team tested scores of workers and their families. These testing events confirmed the team's concerns.

"We had not been working in Hall County long before they started reporting the highest rates of COVID-19 in the state," says Guest. "The large outbreaks in Albany were making the national news, but the situation was rapidly accelerating in Hall County. We were finding that 20 percent and 30 percent of the Hispanic individuals coming in to be tested were positive, while the rates in the non-Hispanic population we tested were closer to 5 percent."

Reaching this population—rural, low-income, and largely Hispanic—with public health messages and services is a challenge, but one Guest knows well. She currently leads the Emory Farmworker Project in which health sciences students and faculty travel to South Georgia for several weeks each summer to provide free exams and treatment to the area's migrant farm workers. Not having worked in Hall County before, Guest made fast connections with the Chamber of Commerce, the health care system, school systems, and the Hispanic COVID-19 Task Force. Guest and her team received unprecedented access to the community

they were there to serve when they were invited to ride along in school buses delivering meals to students. "The team rode in the buses for two months, passing out masks and information pamphlets," says Guest. "It gave us an entrée into the local families that we don't normally get."

That first week riding these buses gave Guest and her team critical information to help guide their response. The workers' living conditions were just as crowded as their working conditions. "We were driving into neighborhoods of two- and three-bedroom homes and I was thinking, 'These are big homes,'" says Guest. "But then we saw that 15 or more people were living in each house. Living rooms had hammocks hanging from the ceiling."

It was apparent many didn't have the luxury to social-distance at home or at work. These observations helped Guest become part of the conversation to find alternative housing solutions, like recovery units inside neighborhoods staffed by local volunteers trained to provide care.

Guest's work in Hall County provided invaluable lessons on how her Rollins team can best support health districts. Thanks to the formation of the ECRC, Guest and her team are working closely with other district health officials and community leaders to stand up additional testing

Clockwise from top left: A COVID-19 testing site outside a poultry plant in Hall County; two Rollins students collect specimens; Jodie Guest oversees the testing site.



sites. In early August, her team worked with the Macon health district and the city of Milledgeville to host a one-day testing event. “The Milledgeville mayor came, the fire department came, and most importantly, the community members came,” says Guest. “We were able to test over 260 people and assist our health department partners in the process. We hope to continue to offer that type of collaborative assistance wherever it’s needed.”

social, and health education sciences, are leading the NIH-funded survey that will send at-home COVID-19 test kits to some 14,500 homes nationwide; the first kits were mailed in late June, and all kits were distributed by the end of August. They will send kits to the same households in December and early 2021.

“The first phase will allow us to get a snapshot of COVID-19 in the US during the third quarter of 2020,” says Sullivan. “Since our sam-

new cases concentrated? Are particular groups or areas acquiring enough antibodies to give them herd immunity?

In the national study, Sullivan and Siegler are oversampling communities with more racial and ethnic minority residents; this will allow them to get an accurate understanding of the impact of COVID among black and Hispanic people. In seven states, including Georgia, they are also sending kits to



Patrick Sullivan, left, and Aaron Siegler are conducting a nationally representative survey, using home-testing kits, to get a clear picture of the pandemic in the US. They are also mounting a Georgia-specific survey in conjunction with the GDPH.

PAINTING THE BIG PICTURE

Though the pandemic has raged on for more than six months, health experts still lack a firm grasp of its scope. That’s because scientists are relying largely on data from testing sites, which don’t often attract people who may be asymptomatic or are wary of coming to get tested at all. Rollins researchers are conducting a nationally representative household survey to get beyond these limitations.

Dr. Patrick Sullivan, Charles Howard Candler Professor of Epidemiology, and Dr. Aaron Siegler, associate professor of behavioral,

ple is representative, we can infer how many people across the country are infected during that period, how many are asymptomatic, and how many have antibodies to the virus.”

Sullivan and his team are publishing the results as they come in. Building off the experience they gained creating AIDSvu and HepVu, online tools showing state- and county-level prevalence of disease, they recently launched CovidVu.org to share their findings.

Following up in December and early 2021 will allow the team to track the progress of the virus. How many new cases cropped up during each period? Where are

thousands of additional households in order to gain a more detailed picture of the virus in those states. The Georgia survey is being funded by the Robert W. Woodruff Foundation.

The team’s ability to create at-home testing kits for COVID-19 grew out of its work in other areas. “We have been exploring home testing for HIV and other infectious disease for almost a decade,” says Siegler. “We’ve been able to develop systems that allow people to efficiently collect specimens at home to send back for testing. We just had to adapt those.”

The standard-of-care test for the virus that causes COVID-19 involves inserting a

six-inch swab far into the nasal cavity. The test must be performed by a clinician in personal protection equipment (PPE), which rules out self-testing at home. The research team tested an alternative method, something akin to “a sturdier, fancier Q-tip,” said Sullivan. Participants just swab the inside of each nostril for about 30 seconds. The results were comparable to the more invasive test.

The kits also include an antibody test. Participants prick their finger with a lancet similar to those used to check blood sugar and then place a drop of blood on a special sheet of paper. The kit is then mailed back to Sullivan’s lab for processing. The entire process should take the recipient of the test less than 10 minutes.

“This whole process has been a great example of how public health practice and public health research can play off each other to move the ball down the field,” says Sullivan.

BOLSTERING THE EPI WORKFORCE

Another seminal feature of the collaboration is the establishment of the Rollins COVID-19 Epidemiology Fellows program, a two-year service and training fellowship that aims to bolster Georgia’s epidemiologic capacity. The program will recruit recent MPH graduates to be placed as entry-level epidemiologists within one of the state’s 18 health districts or at the GDPH. The fellows will be immersed in hands-on applied epidemiology to aid their district’s COVID-19 response, but they’ll also be given additional support and training through the program.

“The training is geared to foster their creativity, confidence, and effectiveness as epidemiologists,” says Chamberlain. “My hope is that the program comes to be seen as a prestigious career booster, like the CDC’s EIS [Epidemic Intelligence Service]. Fellows who join know they will gain invaluable experience at the most fundamental level of public health, and at the same time they are boosting the capacity of the state’s public health districts.”

Foundations throughout the state have expressed interest and support in the fellowship, led by the R. Howard Dobbs Jr. Foundation, which has committed additional funding for the Coastal Georgia District. ■



VISUALIZING COVID-19 DISPARITIES

Although COVID-19 has swept across the entire country, its burden has not been spread equally. Some communities—particularly those with a large minority population—suffer high infection rates, hospitalizations, and deaths. To shine a light on the virus’s differential impact, Rollins researchers have developed the COVID-19 Health Equity Dashboard.

“Our goal was to go beyond describing COVID-19 incidence in communities. We wanted to fill in the gaps about the interplay between the health outcomes and the underlying social determinants,” says Dr. Shivani A. Patel, Rollins Assistant Professor of Global Health, who leads the team that developed the dashboard.

On the homepage, users can see a snapshot of COVID-19 deaths across the country. Selecting a state brings up a map displaying COVID-19 mortality by county. Drilling down, users can select a county to see how it compares to the rest of the state and to the country in average daily cases and deaths, and in social characteristics, such as percentage of residents who are African American, percentage who live in poverty, or percentage who are obese.

The dashboard also allows users to compare counties within the same state. For each state, dashboard users can select

a COVID-19 outcome measure—total, average, or per-100,000 COVID-19 cases or deaths—and a social determinants measure—household income, population density, percentage African American, among others. The result is side-by-side color-coded maps that allow users to visualize the relationship between the virus’s health impact and social determinants of health at a county level.

Going forward, Patel and her team plan to parse that data into a sub-county level to see how communities within the country are being impacted differentially.

“We see this as an evolving resource for a variety of audiences, including policymakers, public health practitioners, and even clinicians,” says Patel. “This dashboard could help officials assess whether local response to COVID-19 is equitable across communities. It will provide quick access to data to decide where it’s feasible to open business back up and where it’s not. Where should testing sites be located?”

“There is no one-size-fits-all approach to combat this pandemic,” Patel continues. “To predict how it will unfold and to prepare for the future, it’s critical to understand the underlying risk factors that lead to higher incidence and mortality.” ■



NOT LOST IN TRANSLATION

The science of getting discoveries
into the field





Matthew Freeman
and **Cam Escoffery**
are working to boost
implementation science
research at Rollins.

By **Martha McKenzie** | Illustration by **Stephanie Dalton Cowan**

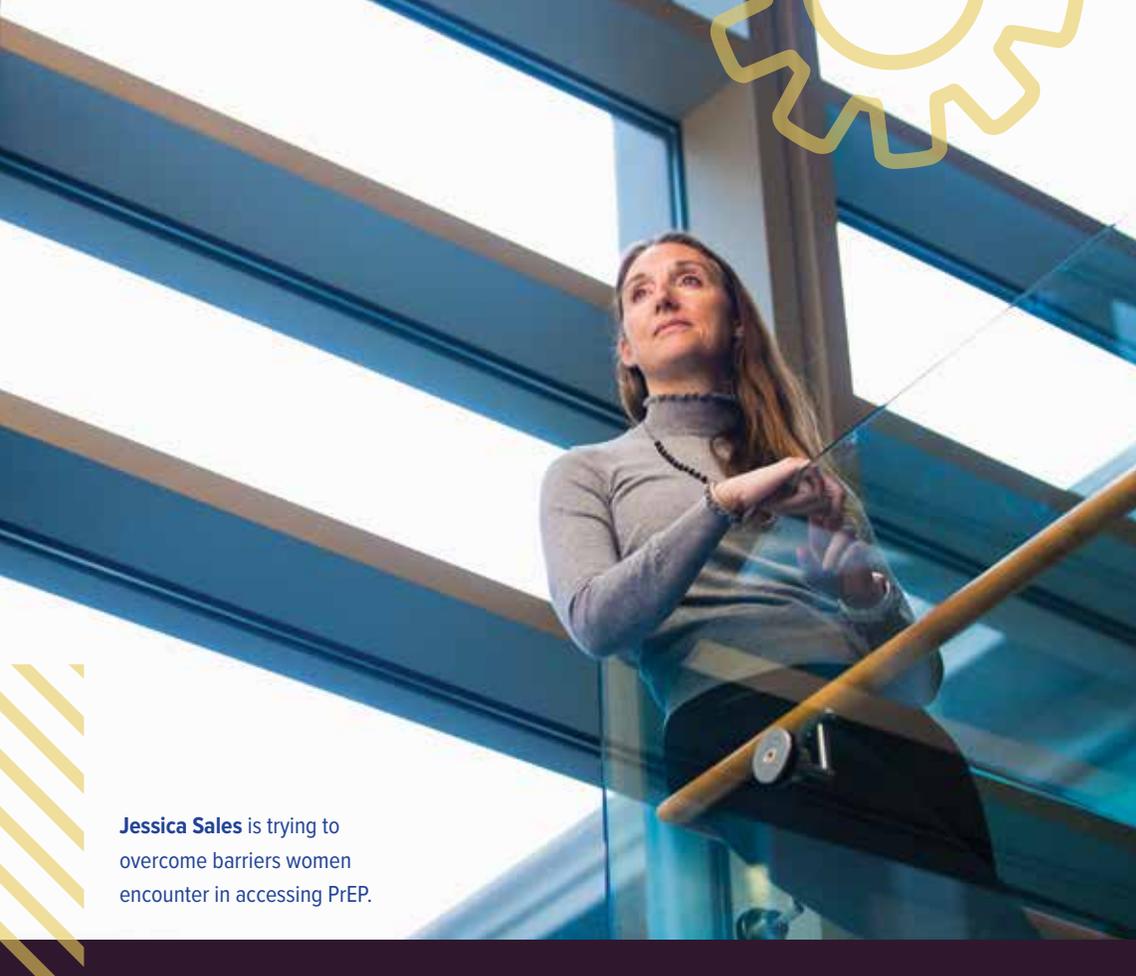
Scientists are great at making discoveries, but getting those discoveries put to use in the real world is another issue. It takes an average of 17 years for evidence-based practices to be incorporated into routine general practice in health care, and only about half of evidence-based practices ever reach widespread usage.

So how do you get what scientists know into the field? That is where the burgeoning field of implementation science comes in. It's the study of how to take, in the case of public health, evidence-based interventions and apply them across a wide range of settings, making sure they are effectively scaled and sustained within the local context.

"Implementation science addresses the gap between what we know we should do and what we can actually do on the ground," says Dr. Cam Escoffery, professor of behavioral, social, and health education sciences. "It takes a lot of different perspectives into account. We're not just looking for a health outcome. We're looking at that, along with how many people are

impacted, how acceptable is the intervention to providers and to users, what does it cost, and is it sustainable?"

Taking a discovery into the field is nothing new—it is the very backbone of public health. But the way in which this journey is made has become more evidence-based. "Implementation science can be seen as a repackaging of things we already do as public health professionals, but it applies structured methods to move knowledge to practice," says Dr. Matthew Freeman, associate professor of environmental health. "It applies the same scientific rigor that goes into making the original discoveries to implementing those discoveries in the field."



Jessica Sales is trying to overcome barriers women encounter in accessing PrEP.

they learn to develop a training and technical assistance package for use by Georgia Family Planning System, Georgia's Title X grantee, to support PrEP implementation in their network of Title X clinics.

To reach high-risk women, Sales is working with Sister Love, the oldest women-centered HIV and sexual and reproductive justice advocacy organization in the Southeastern US. They are developing a grassroots community awareness campaign to improve knowledge about PrEP among women across metro Atlanta. By involving and training community members about HIV and PrEP, they hope to tap into the power of informal networks of communication where women gather to start

WOMEN NEED PREP TOO

Pre-exposure prophylaxis (PrEP), the drug that prevents a person from getting HIV, is a good example of the issues surrounding implementation science. Taking the medication can virtually eliminate the risk of contracting HIV from having sex with an HIV-positive person, and as such, it has the potential of saving thousands of lives. Yet, only 35 percent of high-risk gay and bisexual men take PrEP, and that number falls to 26 percent in the black community, according to the Centers for Disease Control and Prevention. Usage is even lower in women, even though each year they account for about 20 percent of all new HIV diagnoses.

In researching ways to get this proven intervention into the hands of women at the epicenter of the current HIV epidemic, the Southern US, Drs. Jessica Sales and Anandi Sheth are looking at care providers and patients. Many underinsured or uninsured women rely on Title X family planning clinics for all their sexual health care needs, which would make these clinics ideal PrEP delivery sites. But they're not. In their research, Sales, associate professor of behavioral, social, and health education sciences, and Sheth, associate professor of medicine in the infectious disease program, found many Title X providers are either unfamiliar with PrEP or feel they don't have the training to safely, effectively prescribe and monitor it. They also found women at high risk for HIV who go to Title X clinics either don't know about PrEP or think it is only meant for men, so they don't ask for it.

To tackle the provider side, Sales and her team are doing focus groups with Title X clinics across metro Atlanta to identify the types of resources and training they would need to start prescribing PrEP and how they could fit it into their workflow. They then plan to take what

a dialogue around HIV testing and PrEP. "We are working to build a base of knowledge in spaces where women go and live their lives," says Sales. "When the message is being delivered by a neighbor, people tend to be more accepting and open."

IN LEAGUE WITH DIABETES PREVENTION

The Georgia Center for Diabetes Translation Research was established at Rollins for the express purpose of translating proven interventions into the field, particularly among at-risk populations in the state. The center is a collaboration among Emory (Rollins as well as the schools of medicine, nursing, and business), Georgia Institute of Technology, and Morehouse School of Medicine.

"We have tremendous evidence about diabetes prevention and management," says K.M. Venkat Narayan, the principal investigator of the center. "We know lifestyle interventions like diet and exercise work. The challenge is how to get people to adopt them."

Dr. Felipe Lobelo believes soccer can help, particularly with Latino men. There are specific population groups that are difficult to engage and, even if they are identified as high risk, often don't participate in diabetes prevention programs. Those groups are the young, minorities, and men. "Of the people who traditionally attend diabetes prevention programs, 80 percent are women and most participants are white and over age 50," says Lobelo, associate professor of global health. "We need to find a way to engage the other groups."

In a six-month pilot study, Lobelo recruited overweight or obese Hispanic men with prediabetes who were between 30 and 57 years old. For the first three months, the men met twice a week for

one-hour soccer sessions followed by half-hour facilitated diabetes prevention discussions around eating habits, stress reduction, and activity monitoring. The sessions dropped to once a week for the next three months. The results were promising. Participants lost an average of 13.5 pounds and lowered their blood pressure by an average of eight points. Even more impressively, a whopping 90 percent of participants stuck with the program for the entire six months.

“Soccer seems to hit all the buttons,” says Lobelo. “It’s fun, it’s social, and even though it’s more physically taxing than, say, running intervals, the men don’t perceive it that way. Beyond the broad improvements in physiologic risk factors, it also proved to be an effective way to get the men to open up to dietary and other lifestyle changes.”

Spurred by this success, Lobelo plans to conduct two new studies once the pandemic has passed and it’s safe to play sports again. For one, he is partnering with Kaiser Permanente and the NBA to offer a similar intervention that uses basketball to engage 18- to 45-year-old men and women in diabetes prevention. In the other, he is recruiting prostate cancer survivors to see if the soccer intervention can improve bone and cardiometabolic health to counter the side effects of hormone therapy treatment in this clinical group.

FROM HERE TO THERE

Implementation science often involves taking a public health intervention that has proven successful in one setting and replicating or adapting it to work in a variety of others. That is what Escoffery and Dr. Ann Mertens, professor of medicine in the medical school, are doing with a study on a survivorship care program for pediatric cancer patients—Cancer SurvivorLink. The program, which was developed and successfully deployed at Children’s Healthcare of Atlanta (CHOA), involves a personal electronic health record and education system to promote adherence to follow-up cancer care for child and adolescent cancer survivors.

“SurvivorLink is a tool for families and young adults who have survived pediatric cancer, storing their survivorship care plan, allowing them to share their health documents with other providers, and

giving them education about what to do to maintain a cancer-free life and to reduce some of the harms from the cancer or its treatment,” says Escoffery.

“The program worked very well at CHOA, so now we need to see if it is scalable to other settings, to discover the best way to deliver the program in different types of centers, and to measure its uptake and effects on improving adherence to follow-up care,” she continues.

Escoffery’s implementation science expertise, honed through years working in behavioral theories and intervention development, is available to other researchers through a Winship shared resource. The Intervention Development, Dissemination, and Implementation Core is led by Escoffery, Dr. Michelle Kegler, professor of behavioral, social, and health education sciences, and Dr. Colleen McBride, Grace Crum Rollins Chair of the Behavioral, Social, and Health Education Sciences Department. A typical client might be a clinician who would like to roll out an evidence-based guideline on depression screening for cancer patients.

“We know that cancer treatment centers should be asking patients on a regular basis to rate their distress on a scale,” says Escoffery. “If they score high enough, they might need a referral to psychosocial intervention. Researchers might want to know how they can get all the different units within a cancer center—which have different staffing, IT, patient flows—to adopt a particular distress screening tool. That’s what our core can help them do.”

BUILDING ON STRENGTHS

Matthew Freeman has been working to build on these strengths, spurred by interest in the topic across Rollins and the university and the availability of funding. “Fundors are recognizing the importance of implementation science to enhance impact,” he says. “As important as funding is for new discoveries, if those discoveries never make it into the field, how much use are they?”

Freeman believes Emory can be a global leader in implementation science. He started an implementation science working group within Rollins a few years ago to bring together like-minded scientists and foster collaborations. He recently expanded it across the university, forming the Network for Evaluation and Implementation Sciences.

“A lot of researchers at Emory are developing and testing interventions across domestic and global contexts, but without calling it implementation science or without knowing how to apply the methods and frameworks from the field,” says Freeman. “So it is being done, yes, but not as systematically as it could be. It has been a fantastic learning experience for many of us, as we try to pull together research in siloed topical areas and develop methodological strengths in implementation science here at Emory. There is a real opportunity for us to become global leaders in this space.” ■

Felipe Lobelo has shown that team sports like soccer can effectively reach populations at risk for diabetes.



Sleep inequality

*Why do African Americans suffer
greater sleep deficits?*



By Martha McKenzie
Photography by Stephen Nowland

Sleep. Children often fight it. Adults may long for it. And many of us don't get enough of it.

Adults should get seven to eight hours of sleep each night, but about a third of the US population falls short of that, according to the Centers for Disease Control and Prevention. That means more than cranky exchanges by the breakroom coffee maker and nodding off in meetings. Sleep deficits have been linked to a host of health problems, including high blood pressure, heart disease, diabetes, stroke, obesity, and depression.

"In public health, we focus so much on nutrition and physical activity that we often overlook sleep," says Dr. Julie Gazmararian, professor of epidemiology. "To me, sleep is the third pillar of health. Sleep has a significant impact on our development, our functioning, and our overall health."

Like so many other conditions, sleep deficits disproportionately affect the black community, with about 46 percent of black Americans failing to get the recommended amount of shut-eye. This variation in sleep may well account for some of the health disparities between races. "We know sleep is critical to good health, and we know African Americans have higher rates of sleep deficits.

What we don't know is why," says Dr. Dayna Johnson, assistant professor of epidemiology. "Most sleep research is focused on white populations, but there is a clear need to understand the sleep of African Americans. If we can determine why African Americans sleep less, we can perhaps find ways to ameliorate that, and in turn we could make some progress reducing the burdens of diseases like hypertension, diabetes, and heart disease in the black community."



Dr. Dayna Johnson studies sleep disparities in the hopes of learning why sleep deficits disproportionately affect the black community.

Johnson has been studying sleep disparities and sleep deficits for years, looking at how factors like neighborhood social cohesion and the built environment impact sleep. She's found a strong relationship between the neighborhood environment and sleep. In unsafe, loud, and dense neighborhoods, everyone—regardless of race—tends to sleep poorly. However, when taking a closer look, she found that black adults were affected most by living in adverse neighborhood environments.

In addition to the neighborhood environment, she also studies housing and sleep. When studying housing as a marker of socioeconomic status, she found a surprising relationship. The greatest racial disparity in sleep between black and white adults existed among those in more stable housing (e.g., higher socioeconomic environments), whereas there was

little difference in the sleep of blacks and whites that lived in lower socioeconomic environments.

Another study made a similar discovery looking at race, occupation, and sleep. This study found sleep improved for whites



as they climbed the labor ladder—sleep deficits were reported by 35 percent of laborers, 26 percent of support workers, and 25 percent of professionals. Black people charted an opposite trajectory—sleep deficits plagued 35 percent of laborers, 37 percent of support workers, and 40 percent of professionals.

“This is shocking to me,” says Johnson. “You would expect to see a protective effect as you move up the ladder into more affluence and better neighborhoods, but we are not seeing that for African Americans. In fact, we’re seeing the opposite.”

What’s going on? Johnson is not sure, but she has some guesses. “If you are black in a majority-white neighborhood, you may be more exposed to stressors like discrimination,” she says. “You may respond by consistently working harder to prove yourself, resulting in more accumulated stress.”

In another study, Johnson is moving from looking at the impact of neighborhood factors to that of the home environment. For this, she is enrolling

Building on sleep strengths

Dr. Julie Gazmararian admits she’s become a bit obsessed with sleep. The more she reads about how much sleep impacts our health, development, and functioning, the more convinced she becomes that it warrants more study.

Toward that end, Gazmararian created the Emory University Sleep Consortium, along with Dr. Dayna Johnson, assistant professor of epidemiology, Dr. Amanda Freeman, senior lecturer in the Center for the Study of Human Health for Emory College, and Dr. Hillary Rodman, associate professor of psychology for Emory College. They hosted a sleep symposium in November, drawing attendees from Emory’s schools of medicine, nursing, arts and sciences, in addition to Oxford College, Georgia Institute of

black people of diverse economic backgrounds in the Atlanta area, but instead of bringing them into a sleep lab—as is common in sleep research—she and her team are going into participants’ homes. “In the lab you are able to get a few other measures, but in the home, we get their actual sleep environment,” says Johnson. “We are not dictating when they go to sleep, they are not in a different bed, and we are able to monitor their sleep in their homes over a 10-day span, so we get more than just a one-night snapshot.”

She also gets to take a good look at participants’ home sleep environment. She places a monitor in their bedrooms that measures air quality, temperature, humidity, light, and noise. Researchers take an inventory of the bedroom—Are there shades in the windows? TVs and laptops in the room? Do other people or pets share the bed? She then monitors participants’ sleep with a wristwatch-like sensor they wear.

Johnson did a similar study with data from the Jackson Heart Study, the largest

single-site investigation of cardiovascular disease among African Americans. She looked at the bedroom environments (noise, light, temperature) and activities (playing video games, watching TV, eating in bed) of participants, combining various factors into a composite score. She found people with the worst scores slept an astounding 109 minutes less than those with the highest scores.

The Jackson Heart Study participants were of higher socioeconomic status than most black adults in the United States. Johnson wants to use her current Atlanta study to see how those results may vary along the socioeconomic ladder.

Building on her theory that stress is a root cause of sleep disparities, Johnson has also launched a clinical trial involving a mindfulness app. Over a six-week span, participants will perform mindfulness exercises before going to bed. Johnson will track their sleep and also compare insulin and stress hormone levels before and after the study via blood draws.

“We’ve known sleep is a problem



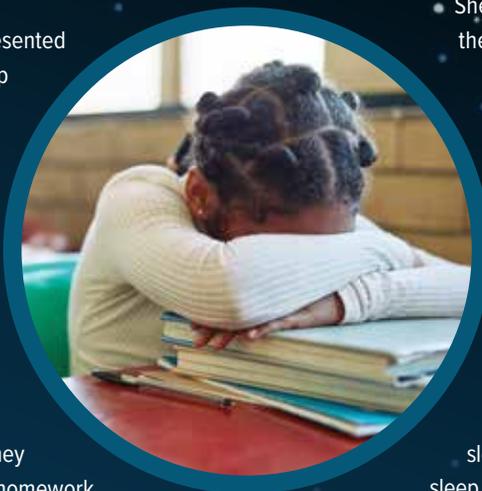
Dr. Julie Gazmararian considers sleep to be the third pillar of health.

in the black community for quite a while, but we’re just now studying the social determinants which are likely contributing to the high burden of poor sleep in this population,” says Johnson. “If we can identify ways to intervene on sleep, maybe we can reduce the burden of poor health outcomes like hypertension and diabetes.” ■

Technology, and Rollins. Faculty and trainees from diverse fields presented research projects ranging from how sleep changes in the postpartum period to whether monarch butterflies sleep.

Gazmararian, professor of epidemiology, presented two posters from her prepandemic work on sleep among high school students in Barrow County, Georgia. In one project, building on data that shows pushing back school start times can improve student attendance and performance, Gazmararian and her colleagues conducted focus groups of students, caregivers/parents, and school personnel and counselors. She found students were getting five to six hours sleep at most. They were getting up at 5:00 or 5:30 in the morning to catch a school bus. Many were working or had after-school activities, so they were getting home late, and they still had to do homework.

Using information from the focus group discussions, she is planning to develop and evaluate a sleep education campaign. Delaying school start times have been shown to be effective with increasing sleep duration, but trying to change school policy is akin to attempting



to make a u-turn in a cruise ship. Gazmararian hopes an effective sleep education campaign can give that cruise ship a nudge.

She is teaming with Johnson on a study looking at the role of sleep in academic performance with a focus on disparities. They plan on enrolling 9th grade students from two Barrow County high schools to complete surveys on their sleep and sleep habits and to wear wrist devices to objectively measure their sleep for one week. They’ll repeat these activities with the same group in a later semester. The team will link survey data and sleep data with grades, test scores, attendance, disciplinary referrals, and tardiness data.

Gazmararian sees Emory leading the way in sleep discovery. “Despite the critical importance of sleep, there are very few US academic institutions that have established sleep programs that are cross-disciplinary and integrate research, teaching, and community-outreach activities,” she says. “Emory’s existing sleep research expertise, education, and clinical training provide a strong foundation for building a leading program in sleep.” ■

The Scholarship

Difference

Funding helps attract
the brightest, most
committed students

What do some of the most outstanding students at Rollins have in common? Scholarships. Scholarships enable Rollins to attract top-flight students and give those students the flexibility to pursue their ideal practicum experiences and careers. Here's a look at some of the standout students who have been awarded scholarships.

By Sylvia Wrobel |

Illustration by Robert Neubecker



Angelica Chima | Tackling health disparities

Born and raised in South Los Angeles, one of four children of Nigerian immigrants, Angelica Chima early in life noticed the differences. If your neighborhood was primarily low-income people of color, the health of the community was significantly neglected. As a child, she didn't understand the causes of such disparities, but she knew she wanted to correct the problems.

Chima entered Harvard as a premed student, planning on becoming an ophthalmologist—but her direction quickly began to shift, beginning with a freshman seminar called Sick and Tired of Being Sick and Tired. Learning about the history of health disparities, especially for black Americans, was “eye opening,” she says. It provided her with the first inkling about public health and the impact on health possible through large, population-wide, institutional, systemic changes.

She interned at Black Women for Wellness in Los Angeles, where she did community assessments and focus groups with teens, centered on topics like sexually transmitted disease prevention and mental health awareness, and at BronxWorks, located in one of the biggest food deserts in New York. There she conducted nutrition classes for children, helped run a farmers market where families could buy fresh food, and participated in an intervention program encouraging local bodegas to carry more fresh fruits and vegetables.

Although Chima would graduate with the full

contingent of science courses needed for medical school, she realized she wanted to be in public health, tackling systemic causes of health disparities and protecting health at a community and global level. It was just a question of where she would go for an MPH.

Why Rollins? She wanted to be in a city filled with social and cultural resources. She wanted it to be diverse and international. And she was ready to leave the frigid New England weather for a warmer clime.

The school also offers the training she wanted in nutrition and food access and in women's health and reproductive justice. It's rich in the global skills she will need to work with Nigerian immigrants, as part of her interest in working with black Americans, or if she decides to work in Nigeria.

But what really tipped the deck in favor of Rollins was a “Visit Emory” weekend where she was able to meet faculty and students and, especially, to interact with “so many other black women who loved what they were doing. I felt as if they were already building a community for me at the school.”

It also helped, she said, when Rollins offered her the James W. Curran Scholarship. “That gave me peace of mind to pursue my educational dreams without the financial burden attached,” she says. “It also reassured me that I was on the right track.”

Chima is entering her second year in behavioral,



social, and health education sciences. Because Rollins lets students tailor their experiences, she is thinking of getting a certificate in social contextual determinants of health, which she believes will help her understand how health disparities arise in the first place. She is now working for Emory's Diabetes Training and Technical Assistance Center as a graduate research assistant, and she has begun sorting through the many postgraduate possibilities for which Rollins has prepared her. ■

Janice D'Souza | Putting together the pieces

Janice D'Souza is a longtime jigsaw puzzle fanatic, with a complex puzzle always taking shape on the dining room table. Before beginning graduate school, she was part of a puzzle club whose members competed to see who could finish their puzzle first. She often won. That skill, together with a fierce commitment to learning everything she needs in order to change women's health, is how she views her life. It's also what brought her to Rollins to prepare for a career in global health.

Born in India, D'Souza was the first in her family to finish college. Berea College offered her a full scholarship, including airfare from hometown Mangalore to Kentucky. When she arrived, she didn't know what feminism was. By the time she graduated, inspired by the social activism

of a faculty adviser, she knew she wanted to work with women in marginalized communities.

After a stint in Chicago with the Episcopal Services Corps, D'Souza was awarded a Clinton Fellowship that took her back to India for a year, traveling to numerous villages and towns, interviewing girls to find out why they were dropping out of school after the eighth grade. It all came down to menstruation, she says, and the taboos related to menstruation. The book she wrote for young girls tries to remove some of this stigma, a stigma she understood from her own Catholic childhood in India when, she says, vaginas were referred to as “shame-shame.” Talking to the girls also made her realize the challenges they encountered related to good hygiene

caused by limited water availability, an issue she would see again and again in poor global communities.

Returning to the states, D'Souza began working with reproductive health issues in Kentucky. She also served as a consultant on the intersection of sexual reproductive health and religion with the Interfaith Youth Corps, for which she still gives training and talks at events across the country.

The more she worked with reproductive health issues, the more she wanted to know. While she was still living in rural Kentucky, a friend introduced her to Roger Rochat, professor of global health and epidemiology. It was a match. “He invested so much time with me,” she says, “even though I was not a student at Rollins. He knew things I wanted to learn, and I knew that he wanted me to be the best I could be.”

In 2018, she and her husband Jordan, an American with expertise in sustainability and environmental health,

moved to Atlanta where D'Souza began working on her MPH in global health as a merit scholar. Her concentration is sexual and reproductive health, but her program is decidedly and intentionally "very intersectional." She's pursuing WASH (Water, Sanitation, and Hygiene) certification. She has taken courses in Emory's Goizueta Business School in supply chain management, wanting to understand how to get, pay for, and store things involved in global public health programs. As another facet of learning how money flows, she has worked with CARE's foundation relationships office writing grants. To get hands-on experience in policy, she now works with the Global WASH policy coordinator at the Centers for Disease Control and Prevention.

A typical day for D'Souza before the pandemic might consist of an early WASH class, testing water in ice machines across the Emory campus; an afternoon reproductive health course, including lectures and experiences like placing IUDs in

ripe papayas; an evening class across campus in the business school; dinner with her husband and golden retriever; and time to work on a presentation/webinar/talk she frequently gives through the Interfaith Corps. (Like culture, she says, understanding religious perspective is yet another part of the puzzle when it comes to improving sexual and reproductive health for women.)

D'Souza spent the summer of 2019 in Bangladesh, working with Ipas, an international organization focused on expanding access to safe abortion and contraceptive care. Everything she had learned seemed pertinent, including the scarcity of clean water that sometimes made it difficult for doctors to wash their hands before and after procedures.

D'Souza now works as the evaluation coordinator for an adolescent sexual health program for the NYC Department of Health. ■



Mariah Landry | Understanding the starting points



When Mariah Landry applied to Rollins' environmental health and epidemiology program, she felt she was "shooting for the stars." She didn't have a strong background in mathematics. Her undergraduate school—the University of Miami in Florida—had not offered courses in public health, and she had no experience that could clearly be labeled that way.

Would the admission committee at Rollins place much stock on what she did have? A double major in nursing and environmental studies, including a summer in Kenya doing wildlife management. Seven years as a nurse, much of it in a Level One Trauma Center in Virginia. Stints as a school nurse and taking care of patients with extreme substance abuse disorder in California and terminally ill patients at Memorial Sloan Kettering in New York. Volunteer work in Latin American including travels with a nutritionist to remote areas in Guatemala.

Landry also had a firm conviction that she should be in public health, an interest first ignited when a college professor gave her a copy of *The Coming Plague*. As a clinician, she realized she was caring for patients who came in with the same problems again and again. She wanted to understand and do something about these problems on a broader population level. She wanted to do public health.

The up-in-the-stars schools to which she applied—Emory and Hopkins—both said yes. She chose Rollins because its comprehensive program combined her own interests in the broken relationship between human and

environmental health and public health initiatives that could change the outlook for patients. She also was impressed that Rollins' partners like the CDC offered students hands-on experiences.

Being accepted as Rollins was one of the biggest surprises of her life, she says. The second was the merit scholarship. In fall 2019, Landry began working on an MPH with a concentration in environmental health and epidemiology. She's also pursuing a graduate certificate in humanitarian emergencies, a unique program offered by Rollins in partnership with CDC's Emergency Response and Recovery Branch. Humanitarian issues encompass general global health concerns as well as security factors unique to emergencies, like water and sanitation; immunization programs; control of diarrheal diseases, acute respiratory infections, and malaria; public health surveillance; reproductive health; war-related injury; and mental health. The humanitarian emergencies program gives students the skills they need to be able to do no harm, work in challenging environments and resource-poor settings, quickly see what needs to be done, efficiently and effectively develop solutions, and provide good evidence to inform decision makers.

Landry loves the courses she has taken so far and looks forward to what the coming year has to offer. She still practices as a nurse, working on weekends in the ICU "float pool" at Emory Healthcare. There she often sees in her patients the endpoint of things people encounter, whether environmental exposures or disparities in access. Now, she's learning why these things can happen. Her favorite course so far—toxicology—explores the harmful effects that chemicals, substances, or situations, can have on people, animals, and the environment and how to prevent those effects in society.

She has seen how what she is learning in public health plays out in the people she saw as a volunteer at the Ventanilla de Salud (or Window to Health), where many of the people arrived at the office having environmentally-related problems and limited access to health care and prevention. The program is designed to promote the health and well being of Mexican nationals in Georgia, Alabama, and Tennessee. For the past five years, it's been a successful partnership between the Consulate General of Mexico and Rollins, which helps administer the program and encourages interested students to volunteer. Landry signed up soon after she arrived. These days she is working virtually, doing phone surveys to describe certain aspects of the COVID-19 experience in the Mexican community.

What are her plans postgraduation? "It would be awesome to go into research," she says, but right now she is just enjoying learning everything she can. ■

Max Spiewak | Mental health policy

As a college student, Max Spiewak planned to become a clinical psychologist. But a year as an AmeriCorps VISTA volunteer—then another year as a full-time employee—in the South Carolina Department of Mental Health changed his mind. He saw the power of data-driven mental health policy.

As a VISTA volunteer, he became a data specialist, analyzing and communicating the impact of community programs. The reports he generated helped increase public understanding of both mental health care and its need for public support.

At the end of his VISTA volunteer year, the department hired him to create systems to develop stronger community relationships. He increasingly realized that what he was doing was public health. He wanted to learn more. He applied to the very few top public health schools with specialized programs in mental health. He was accepted at all of them, but Rollins' offerings seemed designed exactly to his interests.



In fall 2019 Spiewak began a four-semester program leading to a master's of science in public health policy research, a degree option somewhat more focused on research than the traditional MPH. With mental health policy expert Benjamin Druss as his mentor, he is writing a thesis based on analysis of health services data. Druss's expertise on mental health policy was one of the big draws of Rollins for Spiewak, and he knew that he had made the right call that first semester, sitting

in Druss's seminar on the interface between medical and mental health policy in the United States. He also quickly realized that other faculty shared his interest in mental health. He was home.

In addition to classes, Spiewak secured a position working for the Southeast Mental Health Technology Transfer Center located in the school's Department of Health Policy and Management and funded by a \$3.7 million grant from the Substance Abuse and Mental Health Services Administration. The only one of the 10 regional centers to be based in a school of public health, the Rollins center promotes uptake of evidence-based practices for people with serious mental illness and partners, for research and training, with a wide variety of area mental health organizations. Spiewak's job is to develop materials to make sure state agencies have the policies, materials, and resources they need to implement best practices in mental health practices.

Being awarded the Robert W. Woodruff scholarship "changed the calculation" of what work Spiewak will do after graduation—and where he will do it. He says that students with sizable student loans are often under pressure to find jobs paying enough to make their monthly payments. Spiewak's goal is to work in the "not so lucrative" public sector, helping communities develop policies and strengthen programs and connections in mental health. Thanks to a Rollins MSPH, he'll know exactly how to do that. Thanks to a Woodruff scholarship, he will be free to do it where it's most needed. ■

TO LEARN MORE about how to support future public health students through scholarship funding, visit links.emory.edu/RSPHScholarships.

Climate health, women’s health, mental health

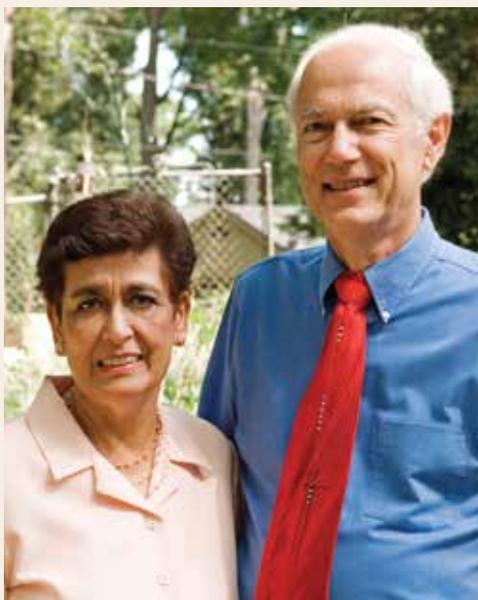
The climate crisis remains an existential threat, even as the world battles a global pandemic. Fortunately, generous partners remain committed to the success of the Georgia Climate Project, a statewide consortium of nine colleges and universities working to accelerate progress on climate change. **The Waterfall Foundation** and the **Wilbur and Hilda Glenn Family Foundation** are among the donors who pledged new support in late 2019 and early 2020. “Responding to climate change requires expertise from multiple disciplines and sectors,” says Dean James Curran. “Our foundation partners see the urgency and are effecting change.”

The grants are strengthening the network of climate experts and developing a portfolio of video and written stories highlighting climate impacts and solutions in Georgia. Support from the Waterfall Foundation, the Wilbur and Hilda Glenn Family Foundation, the Ray C. Anderson Foundation, Regions Bank, and other donors is integral to addressing climate change.

Dr. Roger and Susan Rochat have made an estate gift to support the GEMMA Faculty Scholar Endowment. The fund was established for the purpose of supporting a faculty scholar conducting research related to the prevention of maternal deaths from abortion, a cause to which Rochat has devoted most of his career. The funds were recently used to hire the school’s first GEMMA Scholar, **Dr. Anna Newton-Levison 12MPH 20G**. “Anna and I have been working together in different roles for about 10 years,” says Rochat. “We will be teaching Reproductive Health Program Management together this fall—virtually. And in the course of this first year, I hope that we develop a conceptual framework for how to achieve the global elimination of maternal mortality from abortion worldwide.”

Dr. Eugene and Rose Gangarosa have also committed to support the GEMMA Faculty Scholar Endowment via their estate. “We wanted to contribute in honor of the outstanding contributions Roger has made to our school, and to the field of public health,” says Gangarosa. “Roger is a globally recognized expert in maternal health, and he has been involved with the school since the mid-80s. He served as the first director of the International Health track, the forerunner of the Hubert Department of Global Health.”

Generous support from the **J.B. Fuqua Foundation** and the



Dr. Roger and Susan Rochat



Rex Fuqua

Realan Foundation has led to the establishment of the J. Rex Fuqua Scholarship. Students with a demonstrated interest in mental health, including those pursuing the certificate in mental health, will be eligible. Although the mental health program at Rollins enjoys a national reputation, this is the first Rollins scholarship for students whose career interests include the intersection of mental and public health.

Rex Fuqua and his family have been committed to improving the lives of those with mental illness for decades. At Emory, they have endowed three chairs in the Department of Psychiatry, which have been critical in establishing the Fuqua Center for Late-Life Depression and the Child and Adolescent Mood Disorder program. They have provided significant support for mental health treatment, research, and education.

“Proper clinical care is crucial in the treatment of mental health disorders,” says Fuqua, “however, mental health also needs to be addressed on a population-wide level to create better systems and policies. These include improving access to care and eliminating inequities between mental and physical health treatment. We’re happy to support Rollins students who will go on to play a role in improving the nation’s mental health.” ■

Showing support through scholarship funds

Correction: The article that appeared in the spring 2020 issue of Rollins magazine misspelled **Alisa Long Golson’s** first name in the report of the establishment of the Golson Family Scholarship. We are very grateful for the gift, and we regret the error.

Class notes removed
for privacy.

Looking upstream in the foster system

When a child is removed from their family and placed in foster care, their life changes dramatically. Children in the foster system are four times as likely to attempt suicide. They are vastly more likely than other children to develop substance use disorders, mental health problems, and even diabetes. All in all, their health outcomes across the board are worse than children outside the system.

For **SHEELA BOWLER 13MPH**, there's a need for real change within the foster system. As the director of partnerships and impact at Foster America, a nonprofit dedicated to changing the child welfare system in the United States, Bowler sees the negative health outcomes of children in the foster system and continues to ask "why?"

A key piece in understanding the connection between the foster system and negative health outcomes is Adverse Childhood Experiences (ACEs). Studies about ACEs connect childhood traumatic experiences—including abuse, neglect, separation from caregiver, and parent incarceration—to increased chances of disease and mental illness later in life.

"The repercussions are quite endless when you separate a child from their family," says Bowler. In addition to negative health outcomes, people who experienced the foster system make up a majority of child-trafficking victims and a third of homeless young adults.

These negative impacts disproportionately affect people of color. During a national moment of reckoning with racism, the foster system is yet another area that reflects and perpetuates this centuries-old system of oppression. While one out of every 17 American children enters foster care, for black children that number is one in nine. For Native American children, that number is one in seven.

Since these health problems originate upstream, how do you begin to tackle them? Bowler focuses her work on intervening before the children are in crisis.

The most common reason children are being reported to child welfare is "neglect." This neglect often stems from a lack of resources rather than malice. "A teacher might call in because Johnny doesn't have a coat," says Bowler. "That doesn't warrant a child case. That means someone needs to help Johnny's mom get him a coat."

Resources like affordable housing, home visits to parents, and substance abuse counseling can create safer environments for families with children. But these interventions require coordinated responses between state agencies that have for too long existed in silos.

At Foster America, Bowler coaches fellows who are implementing reform interventions at child welfare agencies throughout the country. From a smartphone app a parent can use to track where they are in the investigation process to a data-integration intervention that matches vulnerable families with needed services, this program is centered around reducing trauma associated with the foster system.

While her undergraduate education helped Bowler realize the ways in which systems drive inequities forward, her time at Rollins brought new hard skills to her framework. At Rollins, she learned how to run needs assessments using community-based participatory methods and channeling insights into program design and evaluation.

And now Bowler is dealing with a child welfare system that is being changed by the pandemic. She is especially concerned about the many children in group home facilities, living in close quarters with high risk of exposure to the coronavirus, and hopes there can be solutions that involve less restrictive and more supportive environments based on what young people and their families want and need.

But the pandemic could change some aspects of the child welfare system for the better. During the pandemic, reports of child maltreatment are down by about 50 percent, but this is likely because teachers—some of the most common sources of reports—and children haven't been in school since March. This doesn't seem to signal that at-risk children are remaining in dangerous situations because there has been no increase in child fatalities. Bowler is hopeful that the decrease in reports is a sign of how many children were referred to the system who didn't need to be.

In addition, the pandemic has allowed parents who would otherwise have to figure out how to attend court hearings—an obstacle that was a challenge for people working multiple inflexible jobs—to tune in online. And social workers are currently more focused on helping people get resources they need rather than investigating families for abuse. Perhaps changes caused by the pandemic have pushed the system toward the right path.

"The system just needs innovation and new ways of thinking. Let the light in a bit for other people to see what's going on. If we are able to better support vulnerable families to stay together, there will be transformative change for communities for the future," said Bowler. "We have to push in that direction," said Bowler.—*Emily Weyrauch*



Would you like to share your story?

Let us know with an email to the editor:

martha.mckenzie@emory.edu

Photo credit: Bryan Meltz

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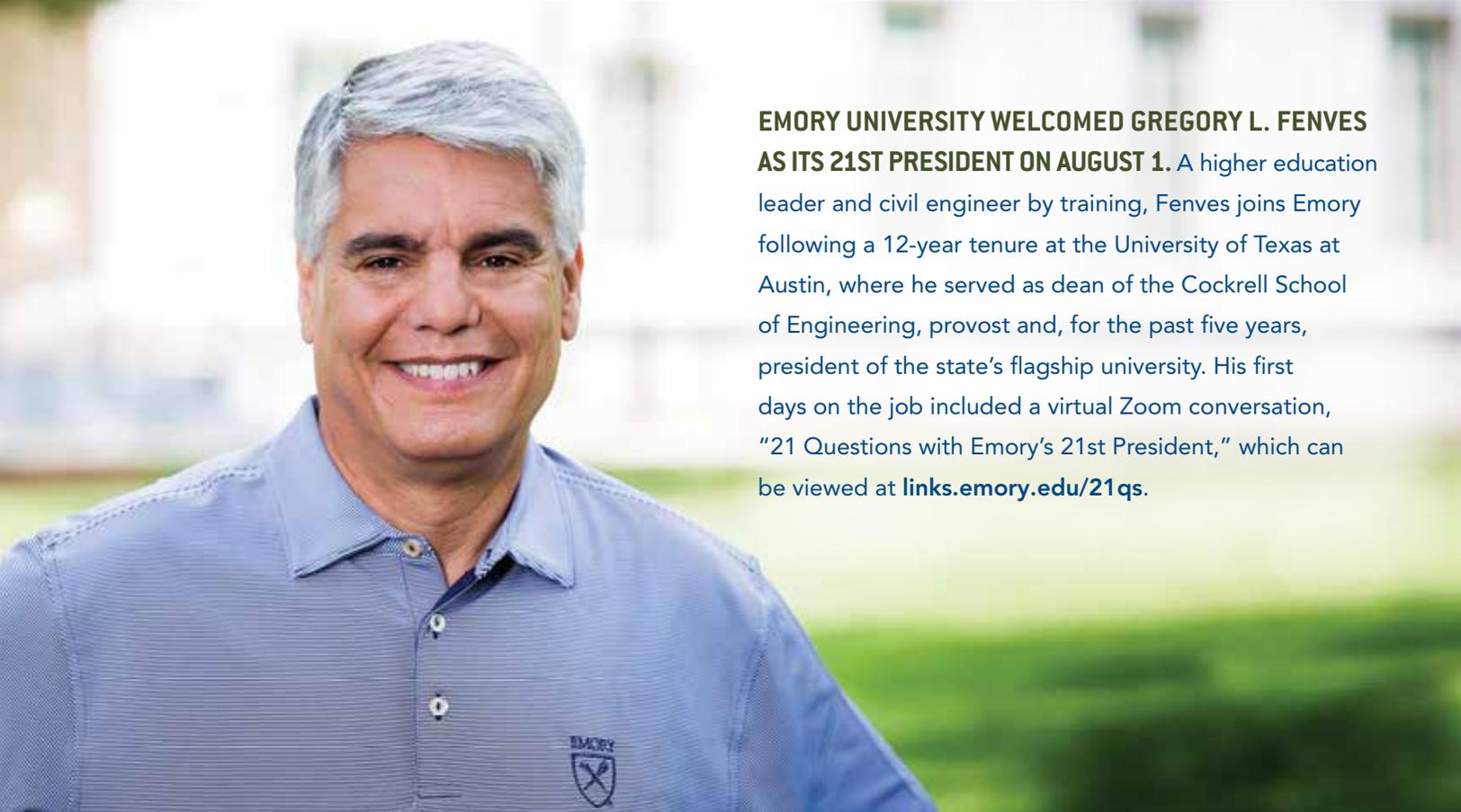
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EMORY UNIVERSITY WELCOMED GREGORY L. FENVES AS ITS 21ST PRESIDENT ON AUGUST 1.

A higher education leader and civil engineer by training, Fenves joins Emory following a 12-year tenure at the University of Texas at Austin, where he served as dean of the Cockrell School of Engineering, provost and, for the past five years, president of the state's flagship university. His first days on the job included a virtual Zoom conversation, "21 Questions with Emory's 21st President," which can be viewed at links.emory.edu/21qs.