

# ROLLINS



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《SPECIAL ISSUE》

# ROLLINS RESPONDS

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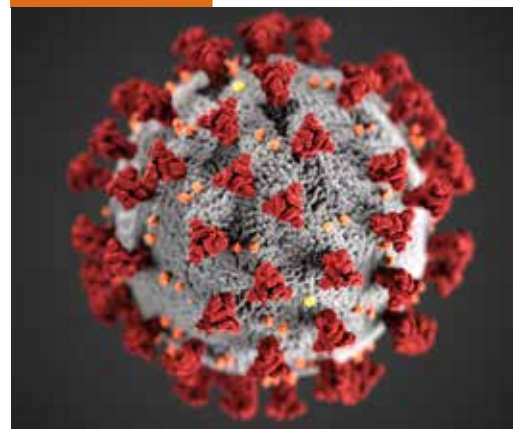
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MOE MOE AUNG 06MPH

Aung works with Marie Stopes Myanmar to make family planning a societal priority. "Lack of access to family planning has far-reaching impacts beyond health, affecting women's and girls' opportunities for education, employment, and overall development," she says.



## In the midst of a pandemic

**We are living through extraordinary times, confronting one of the biggest public health challenges we will face in our lifetimes.**

The COVID-19 pandemic has disrupted our personal and professional lives, forcing us to retreat from our classrooms and labs into our homes. Students, faculty, and staff made the difficult transition to online learning in just a few weeks. Uncertainty about what lies ahead colors our days.

Through all this, Rollins faculty, staff, students, and alumni are rising to the challenge, “leaning in” to do all they can to help with pandemic response efforts. Our faculty are advising state and local health agencies on pandemic response and appearing widely in the media to give expert advice. Our researchers are developing models to predict the most effective distribution of vaccines, when they become available, and the most advantageous public health measures to curb the spread. Our students are providing critical assistance to several local agencies and organizations. And our alumni all over the globe are working on the front lines to bring COVID-19 to heel. I could not be more proud of the contributions the Rollins community is making during this pandemic.

With the cacophony of COVID-19, it can be hard to remember that other facets of Rollins continue. In January, renowned ovarian cancer expert Dr. Joellen Schildkraut joined our strong roster of cancer researchers as the Jules and Uldeen Terry Distinguished Professor of Women’s Health. The Rollins Earn and Learn (REAL) program celebrated 10 years of successfully matching students and partner organizations to the benefit of both. We have unveiled our second named department, the Gangarosa Department of Environmental Health, in honor of Dr. Eugene Gangarosa and his wife, Rose. And construction of the R. Randall Rollins building continues despite the campus shutdown.

To those of you working on the COVID-19 response, thank you for all that you are doing. And to everyone, take care of yourself and stay safe.

James W. Curran, MD, MPH  
James W. Curran Dean of Public Health

## Gangarosa honored with named department

In honor of the leadership and philanthropy of **Dr. Eugene Gangarosa** and his wife, **Rose**, the Department of Environmental Health has been named the Gangarosa Department of Environmental Health. This is the second department within Rollins to be named, following the Hubert Department of Global Health.

Gangarosa is one of the school’s founding fathers. He began teaching in Emory’s Master of Community Health program (the precursor of the MPH program) in 1975 when it was first established. As director of the MPH program from 1983 to 1990, he paved the way for the founding of Emory’s first new school in 72 years in 1990. Gangarosa continues to teach the occasional class at Rollins in his role as emeritus professor and is actively involved with the Center for Global Safe WASH, which he founded.

During his service in World War II, Gangarosa worked to rebuild water and sanitation systems in Italy. His interest in medicine and enteric pathogens took him to Walter Reed Army Institute of Research, where his intestinal biopsy studies are credited with the widespread

adoption of rehydration therapy, which has dramatically influenced the standard operating procedure for treating cholera and saves approximately 1 million children a year. His various public health roles have included serving as director of the University of Maryland’s Pakistan Medical Research Center, working in various leadership positions at the Centers for Disease Control and Prevention, and serving as dean of public health at the American University of Beirut.

Since coming to Rollins, Gangarosa and his wife have been generous supporters of the school. They established the school’s first global field experience fund to give students much-needed experience in international settings. They have endowed three distinguished professorships. The first two are the Eugene J. Gangarosa Professor of Safe Water and Sanitation held by Christine Moe and the Rose Salamone Gangarosa Chair in Sanitation and Water held by Tom Clasen. Their third endowed distinguished professorship will be held by the next chair of the department following the recent retirement of Dr. Paige Tolbert, O. Wayne Rollins Chair of Environmental Health. ■



Unveiling the new department name (l-r): Paige Tolbert, Bill Foege, Jim Curran, Rose and Gene Gangarosa





## Sterk wins 2020 Hatcher Award

**Dr. Claire E. Sterk**, president of Emory University, has been named the 2020 recipient of the Charles R. Hatcher Jr. MD Award for Excellence in Public Health.

A native of the Netherlands, Sterk earned a PhD in sociology from Erasmus University in Rotterdam and a doctorandus degree in medical anthropology from the University of Utrecht. She came to the United States in the 1980s and became a visiting scientist at the Centers for Disease Control and Prevention, where she worked on HIV/AIDS.

Sterk joined Rollins in 1995, with primary research interests in addiction, mental health, and HIV/AIDS. She went on to serve as

the Charles Howard Candler Professor of Public Health, chair of the Department of Behavioral, Social, and Health Education Sciences, and associate dean for research. Her research support from the National Institutes of Health totaled \$35 million and she authored well over 100 academic publications. Her book, *Fast Lives: Women Who Use Crack Cocaine*, describes the impact of the cocaine epidemic on women's lives, their families, and community.

She went on, in 2005, to serve the university as senior vice provost for academic affairs. She became provost and executive vice president for academic affairs in 2013. In this role, she oversaw the implementation of the university's 2005–2015 strategic plan, achieved reaffirmation of Emory's accreditation, and spearheaded faculty development.

Sterk became Emory's first female president in 2016. During her tenure, she guided the annexation of Emory into the city of Atlanta, appointed the university's first vice provost for diversity and inclusion, and created an ombuds office. The university's research funding grew to \$689 million during her four years, and Emory has been named Atlanta's largest employer.

"President Sterk has done a remarkable job during her time at the helm of the university," says Dean James Curran. "And we are thrilled that, even as she steps down from that post, she will remain with Emory and with Rollins. She is returning to her passion, which is and has always been public health." ■

## Environmental Health Chair Tolbert retires

**Dr. Paige Tolbert**, O. Wayne Rollins Chair of Environmental Health, retired in March. Tolbert came to Rollins in 1993, fresh from her postdoc at Harvard. She became interim chair of the department in 2005 and was named chair in 2007.

During her tenure, the environmental health department has more than tripled in size to 21 faculty members. It established a doctoral program, expanded its master's enrollment, and set up state-of-the-art laboratory facilities with the opening of the Claudia Nance Rollins Building.

The department also added numerous centers, including the Southeastern Center for Air Pollution and Epidemiology and HERCULES Exposome Research Center.

"Dr. Tolbert has been an exemplary public health scientist and leader at Emory," says Dean James Curran. "The Gangarosa Department of Environmental Health has grown in size and excellence during her distinguished tenure."

Dr. Thomas Clasen, Rose Salamone Gangarosa Chair in Sanitation and Water, is serving as interim chair of the department. ■



## Loss of a friend and supporter

**Lawrence P. Klamon** died on December 27, 2019, at age 82 following a brief illness. He and his wife, Ann Estes Klamon, have been generous and loyal friends to Rollins, including serving as chair to our Dean's Council and leading our fundraising efforts in Campaign Emory. The Klamons provided support for the James W. Curran Dean of Public Health chair and funded a scholarship for outstanding students. The stunning event space on the eighth floor of the Claudia Nance Rollins Building, the Lawrence P. and Ann Estes Klamon Room, is named in their honor.

Klamon was a lawyer and businessman, working with Fuqua Industries for much of his career, rising to president and CEO. In retirement, he was engaged with numerous civic, educational, and health organizations, including service as president to the Rotary Club of Atlanta and vice chair of the Atlanta Chamber of Commerce.

"Larry and Ann have been extraordinary friends to me and to our school," says Dean James Curran. "We miss Larry greatly, and we will always be grateful for his generosity and his friendship." ■

## A game to curb HIV

A third of new HIV infections in sub-Saharan Africa occur in people ages 15 to 24, and this age group has disproportionately high rates of morbidity and mortality. **Dr. Kate Winskell**, associate professor of global health, tested a novel approach to reducing sexual risk-taking in young people—a smartphone game.

In partnership with the Kenya Medical Research Institute, Winskell enrolled 60 participants, ages 11 to 14 years, in western Kenya. Half received Tumaini—which means "hope for the future" in Swahili—and instructions to play the game for at least one hour a day for 16 days. The other half received no intervention. The pre-teens who got Tumaini showed significant gains, including in sexual health knowledge and self-efficacy, compared to the control group. They also reported improved skills, such as how to set goals and establish plans to achieve them, which was perceived as a key motivator for avoiding or reducing risky sexual behavior.

Smartphone ownership is increasing dramatically in low- and middle-income countries, and games can be designed that do not require internet access. Winskell's study suggests such games may offer a way to reach high-risk populations in low-resource settings. ■



## Public health solutions for commercial sexual exploitation

Rollins has received a \$1 million grant to support solutions to help end commercial sexual exploitation. Led by **Dr. Dabney Evans**, director of the Center for Humanitarian Emergencies, the grant will address the immediate needs of those at risk for or experiencing commercial sexual exploitation in Fulton County while transforming systems to prevent it. Funded by NoVo Foundation, the project is a partnership with youthSpark, the National Center for Civil and Human Rights' LGBTQ Institute, and the International Human Trafficking Institute.

The collaboration is uniquely situated to provide direct services to survivors and at-risk youth, and to drive the systemic change to end commercial sexual exploitation of children in the region. "Atlanta is known as a hub for sex trafficking, thanks to its busy airport, two major interstates, large venues for conferences and sporting events, and a plethora of adult sex businesses," says Evans. "We are really trying to change the narrative. We are working toward Atlanta being a leader in ending commercial sexual exploitation instead of being its hub." ■





## Del Rio leaves chair for Grady post

**Dr. Carlos del Rio** has stepped down as Richard N. Hubert Professor and Chair of the Hubert Department of Global Health to accept the position of executive associate dean for Emory School of Medicine at Grady Health System. **Dr. Usha Ramakrishnan** is serving as interim chair and professor.

Del Rio chaired the department since 2009, during which time it has grown tremendously in both size and stature. Today it boasts 47 full-time faculty and leading programs in both research and education.

His leadership has contributed to the expanded success of research centers and global collaborations. Del Rio has been a researcher and educator focused on HIV care for over 30 years. Lately, he has emerged as an expert on COVID-19 and has become actively engaged in addressing the opioid epidemic.

Del Rio is the principal investigator and co-director of the Emory Center for AIDS Research (CFAR), and has served in numerous leadership positions since joining Emory University's faculty in 1996. He will remain jointly appointed on the faculty of Rollins and continue as principal investigator and co-director of CFAR. ■



Usha Ramakrishnan



## STI rates lower in states with higher minimum wage

Rollins researchers found that states with higher minimum wages experienced lower rates of sexually transmitted infections (STI) among women in metro areas. After adjusting state-level minimum wages for inflation and cost of living, the authors found that a \$1 increase in the price-adjusted state-level minimum wage over time (between 2002-2014) was associated with a 12.2 percent drop in syphilis rates among women and with a 7.4 percent drop in gonorrhea rates in large US metropolitan areas.

If other studies support this finding, the authors recommend future public health strategies aimed at reducing STIs among women should include advocating for a higher minimum wage. The authors note that finding innovative ways to address STIs in the US is particularly important given CDC's 2018 STD Surveillance Report, which showed 2.5 million combined cases of chlamydia, gonorrhea, and syphilis in 2018, a fifth consecutive year of steady increase in STI rates. ■

## Pharmacies underprescribe opioid treatment drug

The drug buprenorphine has been shown to be effective in treating opioid use disorder (OUD), but pharmacies in an area hit hard by the opioid epidemic—the Appalachian region of Kentucky—are reluctant to prescribe it, according to a new study. The research team, led by **Dr. Hannah Cooper**, Rollins Distinguished Professor of Substance Use Disorders, and a colleague from the University of Kentucky interviewed pharmacists operating 15 pharmacies throughout the area. They found that 12 of the 15 pharmacies limited buprenorphine dispensing.

“Federal, state, and local governments are scaling up access to buprenorphine to end the opioid epidemic in the US. Unfortunately, these initiatives focus almost exclusively on increasing buprenorphine prescribing,” says Cooper. “Our findings identify pharmacy-level barriers to dispensing buprenorphine.”



The team found three main factors at play: Fears over exceeding a Drug Enforcement Administration cap; distrust of pharmaceutical companies and prescribers of opioid analgesics; and a general stigma against people who use drugs and/or against the medications to treat substance use disorder. The authors suggest that any buprenorphine prescription initiatives should incorporate pharmacists in the future and should include policy changes to increase dispensing. ■

## MEDIA SAVVY

“LET’S BE CLEAR, CASES ARE NOT GOING DOWN. THE DECISION TO LIFT RESTRICTIONS IS ECONOMIC, BUT PLEASE DON’T SAY IT IS BASED ON PUBLIC HEALTH DATA.”

**CARLOS DEL RIO**, PROFESSOR OF GLOBAL HEALTH AND EPIDEMIOLOGY, WAS QUOTED IN THE ATLANTA JOURNAL-CONSTITUTION

“THEY ARE VULNERABLE PEOPLE LIVING IN VULNERABLE PLACES .... IT’S LIKE OUR WORST NIGHTMARE COMING TRUE.”

**SHIVANI A. PATEL**, ASSISTANT PROFESSOR OF GLOBAL HEALTH, SPOKE ABOUT COVID-19 HITTING RURAL AMERICA TO AP

“THE DANGER IS TO HAVE A MISREPRESENTATION OF HOW LETHAL THE VIRUS IS.”

**FELIPE LOBELO**, ASSOCIATE PROFESSOR OF GLOBAL HEALTH, TOLD POLITICO

## Gaining on \$100 million MacArthur grant

Rollins researchers have submitted two of the highest-scoring proposals, designated as the Top 100, in the John D. and Catherine T. MacArthur Foundation’s 100&Change competition for a single \$100 million grant to help solve one of the world’s most critical social challenges. One of the proposals, Destination Zero, led by **Dr. K.M. Venkat Narayan**, aims at lowering rates of hypertension and diabetes in India and could ultimately impact 100 million people (or more).

The other proposal, Impacting Generations: The Transformative Power of Large-Scale Food Fortification

is led by Nutrition International and includes **Godfrey Oakley** and **Vijaya Kancherla**. This project proposes to support countries with the highest burden of anemia and birth defects to implement large-scale food fortification with two micronutrients—iron and folic acid.

Both entries have been chosen for “Lever for Change”—a process that socializes worthy proposals across a vast range of philanthropies. The top 100 applicants represent the top

21 percent of competition submissions. The vetting involved multiple steps including an administrative review, peer-to-peer review, an evaluation by an external panel of judges, and a technical review by subject matter specialists.

Best known for its MacArthur Fellowships



or Genius Grants, the John D. and Catherine T. MacArthur Foundation began the 100&Change competition to find and fund a single proposal that helps solve one of the world’s most critical social challenges.

The competition is held once every three years. Since the first contest in 2017, other funders and philanthropists have committed an additional \$419 million to date to support bold solutions by 100&Change applicants. ■

## What’s in a (department) name?

The Department of Behavioral Sciences and Health Education has officially changed its name to the Department of Behavioral, Social, and Health Education Sciences (BSHES). The change follows a strategic planning process that resulted

in a new vision for the department. Its two separate tracks—behavioral sciences and health education—were eliminated in favor of one more

flexible track, and social determinants of health were integrated more thoroughly into the entire curriculum. The new name reflects these changes, as well as highlights the scientific rigor behind health education. ■

Never is the mission of public health—  
to promote, protect, and advance  
health in all communities across  
the globe—more critical than in a  
pandemic. This is our wheelhouse.

***THIS IS WHAT WE DO.***

DEAN JAMES W. CURRAN

# ROLLINS RESPONDS

By Martha McKenzie

**A**s the world reels from a lethal new virus with no current vaccine or treatment, all eyes turn to public health for answers and solutions. Rollins is providing them.

From advising state and local officials to appearing in the media to answer questions and dispel myths, and from devising models to predict hotspots to rolling up their sleeves and calling people who might be infected, Rollins faculty, staff, and students are focusing their skills, expertise, and passion on the outbreak response. One professor is advising correctional facilities on how best to deal with infected inmates. Another has turned the pandemic into a real-time case study for his students. And another is using data from the first quarantined cruise ship to study how the virus spreads in a dense environment.

That work will continue long after hospitals have discharged their last COVID-19 patients as public health professionals turn their attention to gaps highlighted by the pandemic. “We need to understand the underlying causes of the large disparities in mortality rates,” says Dean James Curran. “We must foster more transparent communication between countries and agencies. We need to evaluate our surveillance methods.

“This pandemic will be a defining moment in our careers,” Curran continues. “And I could not be more pleased with how the Rollins community is responding.”



## PARTNERING WITH COUNTY AND STATE

The Georgia Department of Public Health (GDPH) and the Fulton County Board of Health (FCBOH) are partnering with Rollins on their COVID-19 response. As chair of the board for the GDPH, Dean Curran has been consulting with Kathleen Toomey, the department's commissioner, since the earliest days of the pandemic. More recently, Dr. Allison Chamberlain, acting director of the Emory Center for Public Health Preparedness and Research, has begun directing a school-wide partnership with the GDPH.

One group of Rollins faculty and students, led by Dr. Hannah Cooper, Rollins Distinguished Professor of Substance Use Disorders, and Dr. Carmen Marsit, associate dean of research, is helping GDPH understand the racial inequalities in the COVID-19 burden and

"How do you go from getting spatial statistics to applying them to make decisions, such as where to best put your resources?" says Clennon. "We are all experienced in interpreting the data and that's where we can help."

In addition to her work with the GDPH, Chamberlain has worked as an epidemiology consultant with the FCBOH since 2017. She has supported high-profile response activities, including activation of the county's emergency operations center for the 2019 Super Bowl and supporting its response to the deadly Legionnaires' Disease outbreak associated with a downtown hotel in that same year.

Because of her consultancy, she was working with the health department even before COVID-19 was identified. More recently she has joined forces with Drs. Neel Gandhi and Sarita Shah, associate

## SHARING EXPERTISE

Never is concise, evidence-based communication more important than in a time of crisis. Radio, TV, and print journalists have called on the expertise of Rollins scientists again and again to help understand and explain the fluid complexities of the novel COVID-19 pandemic. Dr. Carlos del Rio, executive associate dean for Emory at Grady and professor of infectious diseases, epidemiology, and global health, has appeared in national media on a seemingly daily basis. Drs. Matthew Freeman and Karen Levy, associate professors of environmental health, and Dr. Ben Lopman, professor of epidemiology, have been widely interviewed in the local and national media about the epidemiology of the outbreak. Levy helped coalesce a group of infectious disease scientists and clinicians in an open letter covered in *Science* magazine calling for quick and comprehensive action from governments.

Lopman and Chamberlain participated in virtual town halls with state representatives Hank Johnson (4th District) and Lucy McBath (6th District), fielding questions from more than 7,000 concerned constituents who called in to ask about vaccine development, effectiveness of wearing masks, how long the virus can live on surfaces, and much more.

## SERVING DIFFERENT COMMUNITIES

Dr. Anne Spaulding, associate professor of epidemiology and director of the Center for the Health of Incarcerated Persons at Rollins, has long studied the health of a particularly vulnerable population—residents of prisons and jails. Given that half of people who are incarcerated have a chronic medical condition and many are older thanks to spillover from the "three-strikes" law, this population is at high risk for COVID-19.

Spaulding has been spending the bulk of her time since the pandemic hit advising correctional leaders and staff

across the country and the world on how to protect themselves and their charges. A lot of facilities built in the 1990s opened when there was still a lot of tuberculosis circulating within the prison population, so those facilities tend to have many negative-pressure rooms in which sick, infectious prisoners can be isolated. How should isolation be handled in other facilities? Is reducing prison populations by releasing vulnerable prisoners a good idea?

The Interfaith Health program, led by Dr. John Blevins, associate professor of global health, and Mimi Kiser, assistant professor of global health, has developed a platform of resources for faith communities and religious leaders to support a scientifically sound and pastorally sensitive response to the COVID-19 outbreak. The site offers resources



CARLOS DEL RIO IS WIDELY QUOTED IN THE MEDIA. HERE HE GIVES AN INTERVIEW ON WABE BEFORE SHELTER-IN-PLACE ORDERS WENT INTO EFFECT.

Photo credit: LaShawn Hudson, WABE



ALLISON CHAMBERLAIN DIRECTS THE SCHOOL'S COLLABORATION WITH THE GEORGIA DEPARTMENT OF PUBLIC HEALTH FROM HER HOME.



JULIE CLENNON WORKS—REMOTELY—WITH THE GEORGIA DEPARTMENT OF PUBLIC HEALTH TO INTERPRET SPATIAL ANALYSIS RESULTS.

mortality and identify hotspots through geospatial analysis. They are also conducting syndromic surveillance to detect places that are vulnerable to an outbreak before there are confirmed diagnoses and analyzing transmission dynamics and modeling the impact of different interventions, among other things.

Another Rollins group—Dr. Julie Clennon, instructor in biostatistics and bioinformatics; Uriel Kitron, professor and chair of the environmental sciences department at Emory and professor of environmental health and epidemiology at Rollins; and Ian Hennessee, doctoral student in environmental health—is working with GDPH colleagues to look at the spread dynamics in space and time throughout the state, and to identify emerging clusters of concern.

professors of epidemiology, to lead a group of Emory staff and doctoral students to assist with outbreak response.

Chamberlain heads a surge capacity/case investigations team that calls people diagnosed with COVID-19 to glean extra data, such as date of symptom onset, their demographics, a more complete medical history, and course of the illness. Gandhi and Shah coordinate the analytics/data visualization team, helping with geospatial mapping of cases around the county to gain an understanding of changing rates of infection and hotspots.

"These are scary, uncertain times, but I am thrilled to see this level of collaborative engagement right now between Rollins and a local health department," says Chamberlain.

on everything from infection control to congregational care and from community support to specialized ministries, such as homeless ministries, food pantries, and eldercare.

Blevins and Kiser are working with the World Health Organization and other global partners to adapt guidance for infection control and prevention developed in high-resource countries for use in low-resource countries. "The current guidance assumes socioeconomic contexts that simply don't apply in much of the world," says Blevins. "There is a huge need to adapt it so it is practical and effective for communities and households in lower- and middle-income countries."

## REFOCUSING RESEARCH

Where is COVID-19 likely to spread next? When a vaccine becomes available, what is the most efficient way to distribute it? When will disease incidence peak in different areas?

For answers to questions like these, government and public health officials turn to infectious disease modeling experts. Ben Lopman and Dr. Sam Jenness, assistant professor of epidemiology, are just such experts, and they have been retooling previous research to address COVID-19.

Lopman was already planning a study to evaluate the value of people working from home rather than in offices during a flu pandemic to see if it was an effective way to slow the spread of disease. He was gearing up to start the study in the fall when COVID-19 hit. "We are dealing with a pandemic that has driven people to teleworking





BEN LOPMAN IS RETOOLING MODELING WORK HE HAS DONE ON OTHER INFECTIOUS DISEASES TO APPLY TO COVID-19.



in unprecedented numbers,” he says. “So we are moving quickly to conduct this study with a number of companies in the Atlanta area to look at how people’s patterns of social mixing have changed and how that has impacted the spread of COVID-19.”

Lopman and his team have already done a lot of work modeling norovirus and rotavirus vaccines, simulating the impact of vaccination at different coverage levels on child deaths and illness. “We are adapting those models to SARS-CoV-2, the virus that causes COVID-19,” he says. “When a vaccine becomes available, we want to be ready to advise on the best way to distribute it to optimize the public health impact.”

Jenness and his team have developed network models to represent infectious disease transmission in dense environments, using data from the Diamond Princess cruise ship, the first ship quarantined for COVID-19. His research seeks to evaluate the performance and timing of different behavioral (social distancing, isolating) and biologic (wearing masks, better hand hygiene) interventions in curbing transmission in dense environments. His findings would be applicable not only to cruise ships, but also to college dorms, nursing homes, and other places where people live in close quarters.

Earlier in his career, Jenness created a modeling tool, EpiModel, that is open source and freely available to researchers who want to model virus transmission. He is updating it to better work with SARS-CoV-2, and scientists have begun using it to model coronavirus transmission.

#### CORONAVIRUS IN THE CLASSROOM

Drs. Bob Bednarczyk and Maria Sundaram had just begun teaching their course, Evidence-Based Decision-Making, when Sundaram noticed

an interesting cluster of cases of a novel respiratory disease in China. They spent about 10 minutes in one of the first classes discussing it with students—Why might people be concerned? What were the potential similarities with SARS?

“I thought it was a nice discussion point,” says Sundaram, a postdoc in the global health department.

The course had traditionally incorporated case studies, such as the 2009 H1N1 pandemic, to explore decision-making in a crisis. As COVID-19 spread across the globe, Sundaram and Bednarczyk, assistant professor of global health, decided to use the pandemic as a real-time case study.

Students were given various scenarios and asked what data they would need, where they might get it, what various factors they would need to consider. They were asked to put themselves in the shoes of a decision-maker. “If you are in charge of residence life at Emory, what should you do?” says Sundaram. “If you lead a county board of health, what should you do? Then the students are watching the actual decisions play out in real time.”

The Emory School of Medicine, like medical schools all over the country, decided in mid-March to pull students out of clinics and hospitals, largely due to shortages of personal protection equipment. The medical school faculty pulled together, in less than a week, an elective Pathogenesis to Pandemic: A Case Study on the Global Effects of COVID-19. The first class met March 23.

In a testament to Emory’s collaborative spirit, faculty members from all over the university readily volunteered their time, including Carlos del Rio, Allison Chamberlain, Ben Lopman, Samuel Jenness, and Dr.

James Lavery, Hilton Chair in Global Health Ethics. These professors taught segments on epidemiology and the public health response to the outbreak, including modeling transmission of a new infectious disease and ethical issues in a pandemic. “We got an overwhelmingly generous response from Rollins faculty,” says Dr. Varun Phadke, an assistant professor of infectious disease, who co-organized the course. “They are all incredibly busy, but they could not have been more enthusiastic in their response.”

#### STUDENTS RESPOND

When the pandemic spread to Georgia, members of the Student Outbreak and Response Team (SORT) were ready to help. Founded after 9/11, SORT partners with the CDC and state and local health departments to give Rollins students opportunities for hands-on experience responding to public health emergencies. Over the years, SORT members have worked with these partners on outbreaks of Ebola, SARS, and Zika.

SORT members first got involved with the GDPH, where SORT co-president Katelin Reishus 21MPH has been working on viral respiratory pathogens team since October. In March, Reishus was asked to coordinate SORT volunteers to help with the outbreak response. Reishus and her colleagues were involved in active monitoring of travelers coming from China, Iran, and other high-incidence countries and contact tracing when COVID-19 cases were confirmed. As cases mounted and contact tracing became unsustainable, students switched to helping coordinate testing requests.

By mid-April, SORT students were volunteering their time and talents across the city. At the CDC, SORT students are fielding calls from quarantine stations. At the FCBOH, students are helping in the emergency operations center and bolstering the roster of the Medical Reserve Corps by reaching out to people with a background in public health or medicine.

They are lending their epidemiology skills to Emory University Hospital to help forecast personal protection equipment needs. SORT copresidents Reishus and Paige Harton 21MPH were tapped by Rollins to connect with leaders

## REDEFINING THE UNACCEPTABLE

of all the other Rollins student organizations to make sure that the student perspective was included in the quickly developed plan for leaving campus for online learning.

“This is exactly the type of thing SORT was developed to do,” says Allison Chamberlain, the organization’s academic adviser. “This is their Super Bowl. This is all of our Super Bowl.”

The pandemic spurred the creation of a new student initiative, the COVID-19 CROWN Student Task Force. Bria Jarrell 21MPH wanted to gather student volunteers to help with the university’s COVID-19 response, so she posted on her class’s Rollins’ FaceBook group page to see if anyone was interested. They were.

The 40 slots were filled within a few days— participation in the initiative was capped to keep things manageable—and 25 students have signed up to be on the waiting list in case a spot opens.

The CROWN in the group’s name stands for each of the four volunteer teams, which include: Community Outreach, Research Monitoring, Outreach and Well-Being, and Needs Assessment.

The Community Outreach team recruited volunteers to help track COVID-19 in jails and to help the GDPH with contact tracing. In addition, team members are working with a local assisted-living facility, pairing students with residents to talk on the phone on a regular basis. The Research Monitoring team is the “lit review crew.” They monitor the literature and updates on the most current COVID-19 findings and translate them into easily understandable graphics and flyers.

The Outreach and Well-Being team partnered with Emory Campus Life to develop a “Distancing with Dooley” health communication campaign and with Emory’s counseling psychological services to host virtual peer-support groups for Rollins students. The Needs Assessment team developed a survey to assess student needs during this time, which they will share with the school’s administration.

“This group is 100 percent student-driven,” says Joanne Williams, assistant director for student engagement, who helped Jarrell in the early stages. “Students conceived it. They lead it. They make it work. It’s an incredible testament to the commitment and compassion of the students at Rollins.” ■



BOB BEDNARCZYK (TOP) AND MARIA SUNDARAM USED COVID-19 AS A CASE STUDY.



KATELIN REISHUS (TOP) AND PAIGE HARTON LEAD THE SORT COVID-19 RESPONSE.



# ON THE FRONT LINES

Rollins alumni lead the charge  
against COVID-19

By Martha McKenzie | Illustration by Elliot Gordon



**AMI SHAH BROWN OOMPH** WORKS FOR  
INOVIO PHARMACEUTICALS, WHICH IS  
TESTING A COVID-19 VACCINE.

we have quite a database we were able to draw from to rapidly advance our COVID-19 vaccine candidate into clinical trials.”

Inovio also has a proprietary delivery device that enhances the uptake of the medicine. The device creates an electric field in the tissue being injected with the vaccine and follows up with short electrical pulses. Historically, DNA products without a delivery device have “worked wonderfully in the lab, but without direction to get into the cells, they just sit there,” says Brown. “Our device allows the DNA to get into the cells and elicit an immune response.”

The vaccine still has a long road ahead, Brown cautions, and that’s where she comes in. Her role is to help Inovio clear all the hurdles to bring the vaccine to the market. “I work with national and global regulatory agencies to understand licensure requirements to create regulatory pathways in various countries,” she says.

For example, in an appropriate circumstance, the US Food and Drug Administration has a mechanism to evaluate investigational products and approve them for emergency use. Given the COVID-19 pandemic, gathering the data that the FDA requires before Inovio’s vaccine could be considered for such use is important. “I have been thinking about these guidelines to make sure we can meet them in the event that this becomes possible,” says Brown.

Brown is currently navigating the vaccine’s development from her home, with her husband,

Rollins alumni in Georgia, the US, and across the globe are leading the way in responding to the COVID-19 pandemic. Here are just a few of their stories. For a more complete list visit [emory.edu/!rollinsfrontline](https://emory.edu/!rollinsfrontline).

## THE RACE FOR A VACCINE

Dr. Ami Shah Brown OOMPH is on the leading edge of the race to find a COVID-19 vaccine. Brown is senior vice president of regulatory affairs for Inovio Pharmaceuticals, which in early April began testing its vaccine in humans in a Phase 1 clinical trial.

“Inovio had a significant jump start,” says Brown. “We had the benefit of having an established platform and of having worked on a coronavirus vaccine for MERS.”

The platform to which Brown refers is the “infrastructure” of its vaccines. All of Inovio’s drugs begin with a DNA-based plasmid, a small, circular piece of DNA. “They all have the same backbone across every single disease we are trying to impact,” says Brown. “The only thing that is changed is a small piece of DNA that encodes whatever target you are looking for. All of our products have this same structure, and to date, they have shown very similar safety profiles in animals and in humans, so





**ANGELICA GETER FUGERSON 10MPH** ADVISES ATLANTA MAYOR KEISHA LANCE BOTTOMS ON THE CITY'S COVID-19 RESPONSE. THE CITY STREETS WERE EMPTY DUE TO SHELTER-IN-PLACE DIRECTIVES.

Bruce Brown 01MPH, and their three school-age boys. “Working remotely has certainly added to the challenge,” says Brown, who sits on the Rollins Dean’s Council along with her husband. “But when this is finally over, I think you’ll see a lot more people going into public health.”

#### LEADING ATLANTA'S RESPONSE

When Atlanta Mayor Keisha Lance Bottoms appointed Dr. Angelica Geter Fugerson 10MPH as the city’s first chief health officer in July of last year, the goal was to address the heavy burden and disparities of the city’s HIV/AIDS epidemic.

Six months later, the first case of COVID-19 was reported in the US. The next month the virus became Geter Fugerson’s exclusive focus. She and Felipe den Brok, the city’s director of emergency preparedness, were tapped to lead the mayor’s Pandemic Coordination Team.

“It’s an ever-evolving situation,” says Geter Fugerson. “It’s been about staying abreast of public health recommendations in research, identifying best practices in other cities, working with local clinics, and partnering with state and local health departments to make sure we are in alignment with their guidelines and messaging.”

Before joining the mayor’s office, Geter Fugerson served as a research fellow at the CDC, focusing much of her attention on HIV health dispar-

ities in the South. She has the same vulnerable population in her sights today. “The same people who didn’t have access to HIV resources are the same people who don’t have access to COVID-19 resources,” she says. “And while we know we have to keep people safe and flatten the curve, we also have to make sure people have food, that their utilities stay on, and that people who are homeless have access to resources.”

Toward that end, Geter Fugerson and her colleagues have worked with Mayor Bottoms to issue moratoriums on residential evictions and utility cut-offs. The mayor’s office created an emergency fund to support food programs for children and seniors, homeless preparedness, small businesses and hourly wage earners, and other areas impacted by COVID-19. The office has helped establish three testing sites in the city, with the goal of addressing ongoing racial and ethnic COVID-19 testing and treatment disparities.

While Geter Fugerson spends long days ensuring Atlanta residents and the mayor’s staff remain safe and healthy, she envisions a post-pandemic future. “The pandemic has reminded all of us to communicate with each other and partner like never before,” she says. “When this is over, I hope we see more integrated partnerships at the local and state level, more data sharing, more open communications. I’m excited to see what creativity comes out of this.”



**ERIC PEVZNER 98MPH** LEADS THE CDC'S EPIDEMIC INTELLIGENCE SERVICE.

#### DEPLOYING THE DISEASE DETECTIVES

Dr. Eric Pevzner 98MPH PhD doesn’t remember the last time he had a day off. Pevzner leads the CDC’s Epidemic Intelligence Service (EIS)—the agency’s cadre of elite disease detectives. He and his team have been preparing for COVID-19 well before the first case made it to the US.

“We followed the reports of the virus’ spread in China and other countries in the region,” he says. “Given international travel, we knew it was just a matter of time before it came to the US.”

When the first cases did come ashore in January and February, EIS officers were on the scene investigating incidences, tracing contacts, collecting as much data as possible, and implementing control measures. Too quickly, they were forced to change gears. “Once we have community transmission of any pathogen, the jobs of EIS officers and all public health professionals become more complicated,” says Pevzner. “At some point, public health leaders must make the difficult decision to transition from containment to mitigation or slowing the spread.”

Normally EIS officers work all over the country on a wide variety of issues. During a pandemic, however, it’s all-hands-on-deck. All 130 EIS officers who can be deployed to help with COVID-19 response are, including Pevzner. He left Atlanta in mid-March to work on the front lines in Utah, where he remained until the end of April.

Responding to a pandemic such as COVID-19 is exactly what the EIS was created for. Since its inception in the 1950s, its epidemiologists have been among first responders in outbreaks around the world, including Ebola, SARS, HIV, and Zika. Before taking the helm of the EIS, Pevzner was deployed to combat the swine flu in Mexico in 2009 and Ebola in west Africa in 2015.

This pandemic, however, is different. “We have always been able to step into challenging situations, and then we could come back home and escape the situation,” says Pevzner. “There is no escaping this pandemic. It is a 24/7 response for the foreseeable future. All of our officers will be working on this every day until we can control the spread of the disease.”

#### ON THE SCENE OF THE FIRST US CASE

Little did Marissa Cummings 19MPH know when she graduated from Rollins last spring that she would be thrown into the front lines of a pandemic eight months later.

Shortly after leaving Atlanta, she was hired as a high-consequence infectious disease (HCID) coordinator for Northwest Healthcare Response Network, a health care coalition that partners with state and local health departments and supports health care facilities in Washington State. In this role, she develops preparedness and response plans for any given HCID, traveling to facilities to conduct training and tabletop exercises. In fact, she had assisted in a training at Providence Regional Medical Center Everett three weeks before the facility admitted the first COVID-19 patient in the US.

Cummings immediately began working with the county and state health departments to help investigate. “They got access to CDC testing very quickly to confirm the case,” she says. “They did extremely detailed contact tracing to identify anyone who might have been exposed to that patient and had them self-isolate to avoid possibly infecting others. As far as we know, nobody that was exposed to that patient became infected.”

Nevertheless, Cummings and the public health community began working around the clock to prepare for the potential of more cases. A few weeks later, the virus surged through a long-term care facility, and then COVID-19 seemed to literally explode.

“After working with the facility that had the first patient, we were all preparing for what may come next,” she says. “But no one expected it to become a pandemic six weeks later.”

Cummings has since been spending her time working with health care facilities and colleagues at the University of Washington,

collecting data on the number of COVID-19 cases in hospitals and ICUs, the facilities’ personal protective equipment supplies and needs, and their ventilator usage.

“Our governor is using the data we have collected to support his decisions in a phased reopening process and is constantly monitoring it to determine next steps forward or backward,” she says. “It’s been really amazing to witness the data collected from our partners being used in actual, evidence-based public health decision-making in Washington State.” ■

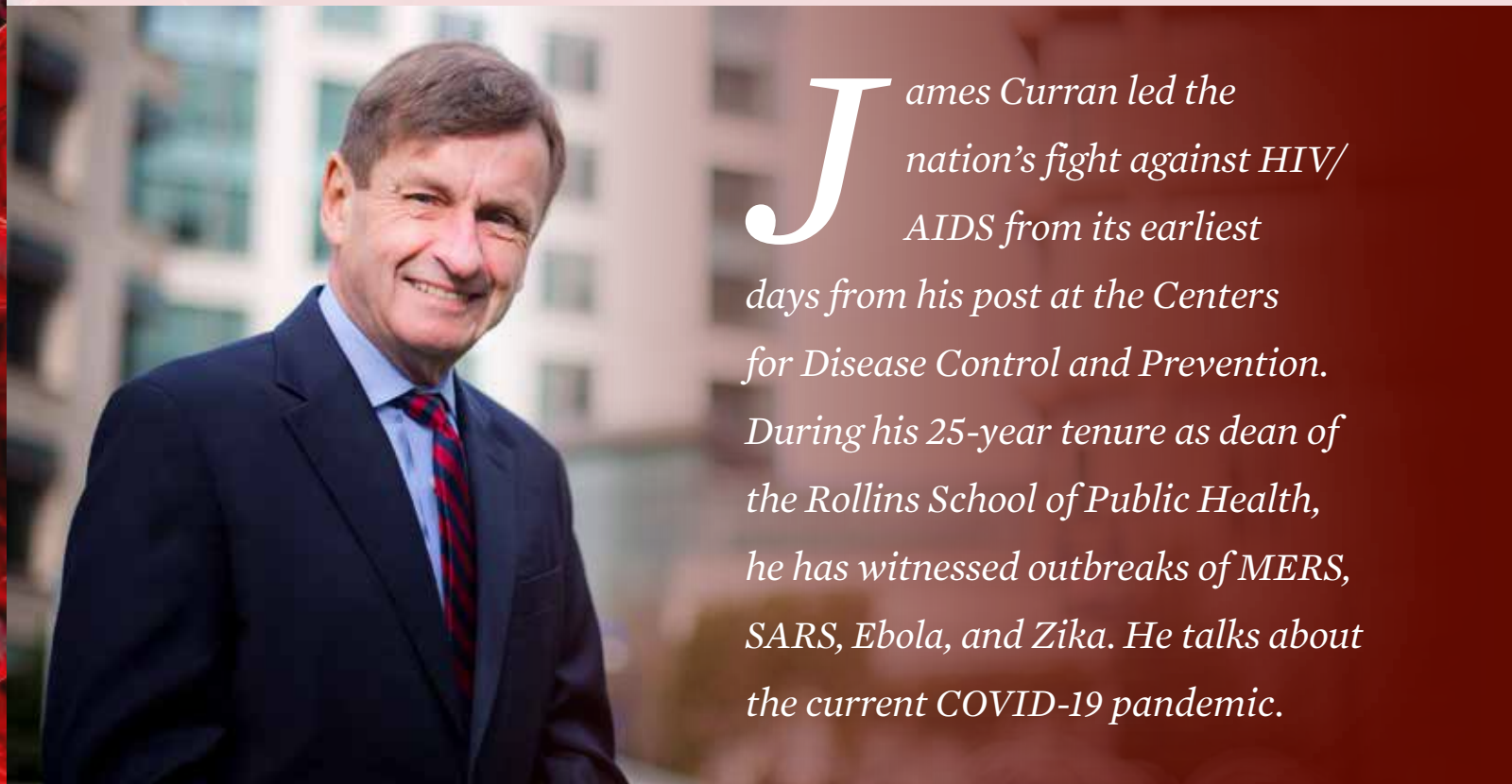


**MARISSA CUMMINGS 19MPH** RESPONDED TO THE FIRST CASES OF COVID-19 IN THE UNITED STATES.



# CURRAN ON CORONAVIRUS

A pandemic expert weighs in on the current crisis



*James Curran led the nation's fight against HIV/AIDS from its earliest days from his post at the Centers for Disease Control and Prevention. During his 25-year tenure as dean of the Rollins School of Public Health, he has witnessed outbreaks of MERS, SARS, Ebola, and Zika. He talks about the current COVID-19 pandemic.*

**You have said before that nothing scares you more than influenza. Is this coronavirus pandemic as alarming as a flu pandemic?** Yes, I think so. The reason respiratory infections that are readily transmitted are so scary is they can rapidly spread from person to person, community to community, and country to country. It's especially scary when people who have minimal symptoms or who are asymptomatic can

become infected and transmit to others. The HIV epidemic, in contrast, was much more difficult to transmit, but there were millions and millions of people infected before anyone even knew the virus existed. And the infection lasts for life with HIV. The benefit of coronavirus and influenza is, if you can find it early, you only need to isolate people for a short period of time unless they become seriously ill. But

it requires a much more rapid response, and virtually everyone in society is at risk. You can't limit it to a set of behaviors, since we are all breathing all the time.

**What has surprised you about this virus?** Our previous experiences with coronaviruses included those which are transmitted easily and cause something akin to the common cold or those that caused serious illness but were not easy to transmit, like SARS and MERS. COVID-19 is a combination of rapid and ready transmissibility along with a very severe illness causing death.

**How would you judge our nation's response to the pandemic so far?** The unavailability of rapid testing very early, although understandable because it's a new virus, really hurt us from being able to identify infected people, prioritize medical care, isolate people who are infected, and test their close contacts.

Once the US started to take this seriously, we've seen a community-wide response, bringing together the private sector, the public sector, the business community, and citizenry to socially distance and take other precautions. Social distancing is absolutely necessary, but it's a blunt instrument when it comes to prevention. There has to be rapid availability of testing, and it can't involve waiting several days to get results.

**How soon do you think we'll have vaccines and treatments available?** There are vaccine trials going on already. That's very encouraging for this early. Contrast this with AIDS, where it took almost two years for the virus to be discovered and four years for a test for the virus to be available. And here we are only months after first cases were reported, and we're already testing vaccines.

As far as treatments, back when I was in medical school, we used to say, you can't treat a virus, you can only treat bacteria. Now there's a whole wide variety of antiviral drugs, including those for HIV, hepatitis C, and influenza. That makes us more optimistic that we can develop treatments, but they still have to be studied in trials to show they are safe enough and effective enough to warrant widespread use.

**Why have other countries been able to flatten their curves but the US is struggling to do so?** We don't have

a national health system. We have a federalist society that allows state and local governments to define their own capacity in public health and the private sector to define how health care is paid for, so there is no natural coordinating body like a minister of health, for example, that exists in other countries.

We have enormous capacity for health care. We have many of the very best hospitals in the world. We have tremendous scientific capacity to develop new therapies and vaccines. But, because of our federalist system, we are not able to respond as rapidly and consistently as more centralized democracies.

In addition, state and local public health has been allowed to erode over time, for budgetary and other reasons, so it's very difficult to pull the kind of response together in the US that we'd like to see.

**What advice do you have for the Rollins community?**

Those of us in public health should lean in. We understand this. We've trained for this. This is our time to do whatever we can to help improve the health of others in a time of great need. There are people putting themselves at risk to respond to the COVID-19 epidemic. My hat is off to them, and we need to help them in any way we can.

**What lessons do we need to take away from this pandemic?** One message we always want to take is the importance of maintaining public health preparedness. The one side effect of this coronavirus epidemic is people understand the importance of public health and the importance of all segments of society working together to prevent illness and save lives.

This pandemic shows that we need to improve surveillance and international communication. The COVID-19 outbreak is one example of why international relationships and diplomacy are so important. Our relationships between countries and between organizations can be built upon public health preparedness as well as economics and religious or military conflicts. I believe in diplomacy and believe all the countries need to learn to get along with each other and communicate transparently. That may be idealistic, but it's no more idealistic than an economy built on globalization and trade or upon peace for all. ■





# Not today cancer

Rollins researchers keep  
the Big C at bay

By Martha McKenzie | Photography by Kay Hinton



**F**rom investigating racial disparities in breast cancer mortality to looking at the relationship between the microbiome and colorectal cancer, or from building cancer surveillance infrastructure in India to evaluating the cost effectiveness of various cancer therapies, Rollins scientists have emerged as a powerful force in cancer prevention research.

“Rollins has a particular strength in this area,” says Dr. Timothy Lash, Rollins professor and chair of the Department of Epidemiology. “We have close ties with the Winship Cancer Institute. The Georgia Cancer Registry and the Emory Prevention Research Center are both located in our school. We probably have 50 researchers at the school working on some aspect of cancer prevention, and we just brought on a renowned ovarian cancer researcher, Joellen Schildkraut.”

Here’s a look at some of the work being done.



### A POWERFUL PARTNER

Winship's Cancer Prevention and Control program coordinates and promotes all of the cancer prevention and control-related research activities within Winship. Lash leads the program, and Rollins researchers are among its most active investigators. Dr. Terry Hartman, professor of epidemiology, studies the role of diet and nutrition in the prevention of cancer. Dr. Nika Fedirko, associate professor of epidemiology, studies the influence of the microbiome

on colorectal cancer risk and progression. And Dr. Robert Bednarczyk, assistant professor of global health, leads a program focused on human papillomavirus (HPV) vaccination uptake.

Bednarczyk's study builds off the fact that only 46 percent of teens in Georgia completed the HPV vaccination series by age 17 in 2016, according to the CDC, despite the vaccine's effectiveness at preventing cervical and other cancers. Through hosts of focus groups across the

state, Bednarczyk found various reasons for the low uptake, including distrust of vaccines in general and the perception that the HPV vaccine could encourage promiscuity, a theory that has been refuted by numerous studies.

Bednarczyk says the research highlights the importance of understanding belief systems and how people make decisions. Discussing people's misconceptions is more effective than dismissing them. "Everybody is trying

to do the best for their children," he says. "We've discovered that it's not just what we are communicating, but how we are communicating it."

### A RICH RESOURCE

The Georgia Cancer Registry collects information on each new diagnosis of cancer within the state and contributes these data to two national population-based databases. The Georgia Center for Cancer Statistics, directed by Dr. Kevin

Ward, is the designated agent of the Georgia Department of Public Health for the purpose of collecting, editing, consolidating, and monitoring cancer data in the state. The registry allows cancer prevention and control leaders to follow cancer trends, identify cancer patterns within the state, prioritize resource utilization, and monitor state progress over time. It's also a valuable resource for countless researchers and students. The registry serves as a sampling frame for recruiting patients to research studies, a linkage source for building enhanced research datasets, a resource for increasing clinical trial participation, and a rich dataset for research mining.

Dr. Joseph Lipscomb, professor of health policy and management, worked with Ward and several other researchers to answer a question posed by the CDC—can population-based cancer registries be used not only to track cancer incidence, but also to identify survivors who are at elevated risk for cancer recurrence or a second primary cancer diagnosis. The team used the state registry to identify breast cancer survivors who were diagnosed between 2000 and 2009, focusing on women who were diagnosed at age 45 or younger since this group has a higher risk of additional cancer than women who got cancer later in life. In addition, they worked directly with these survivors to identify and locate their first-degree female relatives, who are also at heightened risk for developing breast cancer. Then they focused on the subset of survivors and first-degree relatives who reported not having had a breast cancer screening in the past 12 months—and thus were not adhering to nationally recognized screening guidelines.

Half of the breast cancer survivors, and likewise half of the first-degree relatives, were randomized into a high-intensity intervention that included a brochure encouraging screening, phone counseling, mailed reminders, and communications with their primary care providers to encourage screening. The other half of the women received only the brochure. After 12 months, the investigators found

that 72 percent of the survivors across both intervention groups had received mammography screening, though there was no significant difference in the effectiveness of the high- and low-intensity approaches. For first-degree relatives, the high-intensity intervention was significantly more effective than the brochure alone. For Lipscomb and his team, the study showed that cancer registries can be used to identify both high-risk breast cancer survivors and, subsequently, their first-degree relatives as a means to work closely with them to promote guideline cancer screening.

Lash is working with Ward to expand the registry's scope. Like every other registry in the country, the Georgia Cancer Registry has collected data only on primary occurrences of cancer. Lash and Ward have been working for years to add population-wide recurrence data, and they finally got funding to do so.

"Today, when more people are surviving their cancer and perhaps even being cured, it's no longer acceptable to focus only on mortality," says Lash. "With this recurrence registry—the first of its kind in the nation—we will be able to study things like the course of different cancers, how successful we are at treating them, what groups are more at risk for recurrence, and what factors predict good outcomes. This will help us fill in a lot of holes in our knowledge of cancer."

### SERVING RURAL COMMUNITIES

The Emory Prevention Research Center was recently funded by the CDC to expand its work, much of which focuses on cancer prevention and control in rural Southwest Georgia. The center has a broad portfolio, including a study to test whether a smoke-free homes program can support smoking cessation in primary care and another to test whether community coalitions can reduce exposure to secondhand smoke in Armenia and Georgia.

By virtue of joining the CDC Prevention Research Center Network, Rollins and Winship faculty obtained two additional cancer-related grants. Dr. Cam

Dr. Timothy Lash, left, leads Winship's Cancer Prevention and Control program and Dr. Kevin Ward directs the Georgia Center for Cancer Statistics.





**Dr. Michelle Kegler** leads the Emory Prevention Research Center where she works on several studies focused on the home environment.

Escoffery, associate professor of behavioral, social, and health education sciences, leads the Emory Cancer Prevention and Control Research Network, which does collaborative research with other cancer researchers across the US, in combination with a local project to increase HPV vaccination in Southwest Georgia. Drs. Sarah Blake and Kathleen Adams, assistant professor and professor of health policy and management respectively, lead a project evaluating the implementation, cost-effectiveness, and scalability of interventions to increase cancer screening completion among medically underserved women.

In the core research funded by CDC, Dr. Michelle Kegler, principal investigator of the center, is partnering with United Way agencies to expand a successful weight-gain prevention intervention her team and community partners developed in the early 2010s. In the original version, the project paired households with a health coach to focus on their home environment. Participants were asked to select six healthy actions from a list—identifying an unhealthy food often in the house and banning it, always having a low-calorie beverage available, having a scale in a visible location, to name a few—and commit to them for 20 weeks.

The coach made three home visits during that time, as well as contacted them by phone several times. Compared to households in the control group, the intervention households reported larger decreases in daily calorie consumption than the control group and fewer had gained weight.

Kegler and her team are now rolling out the intervention, called Healthy Homes/Healthy Families, in Albany, Columbus, Macon, and Atlanta in partnership with Horizons Community Solutions and four United Way 2-1-1 agencies. Coaches will check in over a 12-week period via phone and text rather than in person. “We were pleased with the results of our first study,” says Kegler, who is a professor of behavioral, social, and health education sciences. “We want to see if it can be just as effective if it’s shorter and less labor-intensive.”

Cancer prevention research at Rollins has long been a strength, and it seems poised to do nothing but grow. “Our school is in the enviable position of being housed in a major research university and having strong affiliations with the National Cancer Institute,” says Lash. “Our researchers are working to prevent cancer here in Georgia and beyond.” ■

# Bolstering ovarian cancer research

## Joellen Schildkraut joins Rollins

**Dr. Joellen Schildkraut** joined the Rollins team in January as the Jules and Uldeen Terry Distinguished Professor of Women’s Health. One of the pioneers in ovarian cancer genetics, Schildkraut is widely recognized as a preeminent scholar in her area.

“When you think about ovarian cancer epidemiology, Joellen Schildkraut is the first name that comes to mind,” says Dr. Timothy Lash, Rollins professor and chair of the epidemiology department. “She is a leader in the study of ovarian cancer.”

Ovarian cancer is relatively rare—with about 22,000 new cases in the US each year compared with more than 330,000 cases of breast cancer—but it is often deadly. That’s because there is no effective screening, and it produces no tell-tale symptoms until its advanced stage. As a result, rather than being diagnosed in its early stage, when the five-year survival rate is 93 percent, ovarian cancer is often not diagnosed until it has spread, when that survival rate drops to 27 percent.

The outlook is even worse for black women. While white women are more likely to be diagnosed with ovarian cancer, black women are more likely to die from it, regardless of the stage or subtype. Schildkraut has been trying to find the reasons behind these disparities.

“If you ask me, Joellen’s most significant work is her study of disparities in ovarian cancer survival,” says Jen Doherty, an endowed chair in cancer research at the University of Utah Huntsman Cancer Institute and a longtime collaborator with Schildkraut. “She has taken it from zero to 100.”

Schildkraut was instrumental in forming the Ovarian Cancer in Women of African Ancestry (OCWAA) consortium, which draws together disparate studies to allow researchers to access enough data to draw meaningful conclusions.

“In order to study a rare disease in a minority population in the US, you need to be able to bring a lot of people together, which is what Joellen has done with OCWAA,” says Doherty. “She has contributed behind the scenes to progress in ovarian cancer research and to the success of a lot of researchers because they could leverage this data for their studies.”

For her own research, Schildkraut is still trying to answer the big question behind mortality disparities—why? “Many people think access to care explains a lot of the differences, but ovarian cancer does not have symptoms or early detection screening, so I think other, perhaps biological factors, are more important factors,” says Schildkraut.



For example, Schildkraut has found that body mass index seems to be more of an ovarian cancer risk factor for black women than for white. In addition, her studies have shown that a family history of breast cancer seems to be more predictive of ovarian cancer in black women than in white women. “I’m surprised by that, and I don’t understand it,” she says.

Schildkraut is also working to identify a genetic overlap between breast and ovarian cancers. She was among the many researchers who linked mutations in the BRCA gene to breast and ovarian cancers, and she is continuing to search for other genetic predictors.

Schildkraut came to Rollins from the University of Virginia School of Medicine, where she was a professor. “Emory’s world-class reputation, its strong epidemiology department, and its affiliation with a comprehensive cancer center made it an ideal place for me to continue my work,” she says. “The research and educational environments here are amazing.” ■



*Earn and Learn program shapes careers, helps partners*

# REAL appeal

By MARTHA MCKENZIE • Photography by STEPHEN NOWLAND

## 10 Years of REAL

**5,328** Total number of students awarded

**150+** Number of partner organizations outside of Emory

**\$22,440,000** Total amount awarded

### TOP 5 PARTNERS

■ **Emory University and affiliates** (Emory Healthcare, The Carter Center, the Task Force for Global Health, Yerkes)

**1,940** STUDENTS

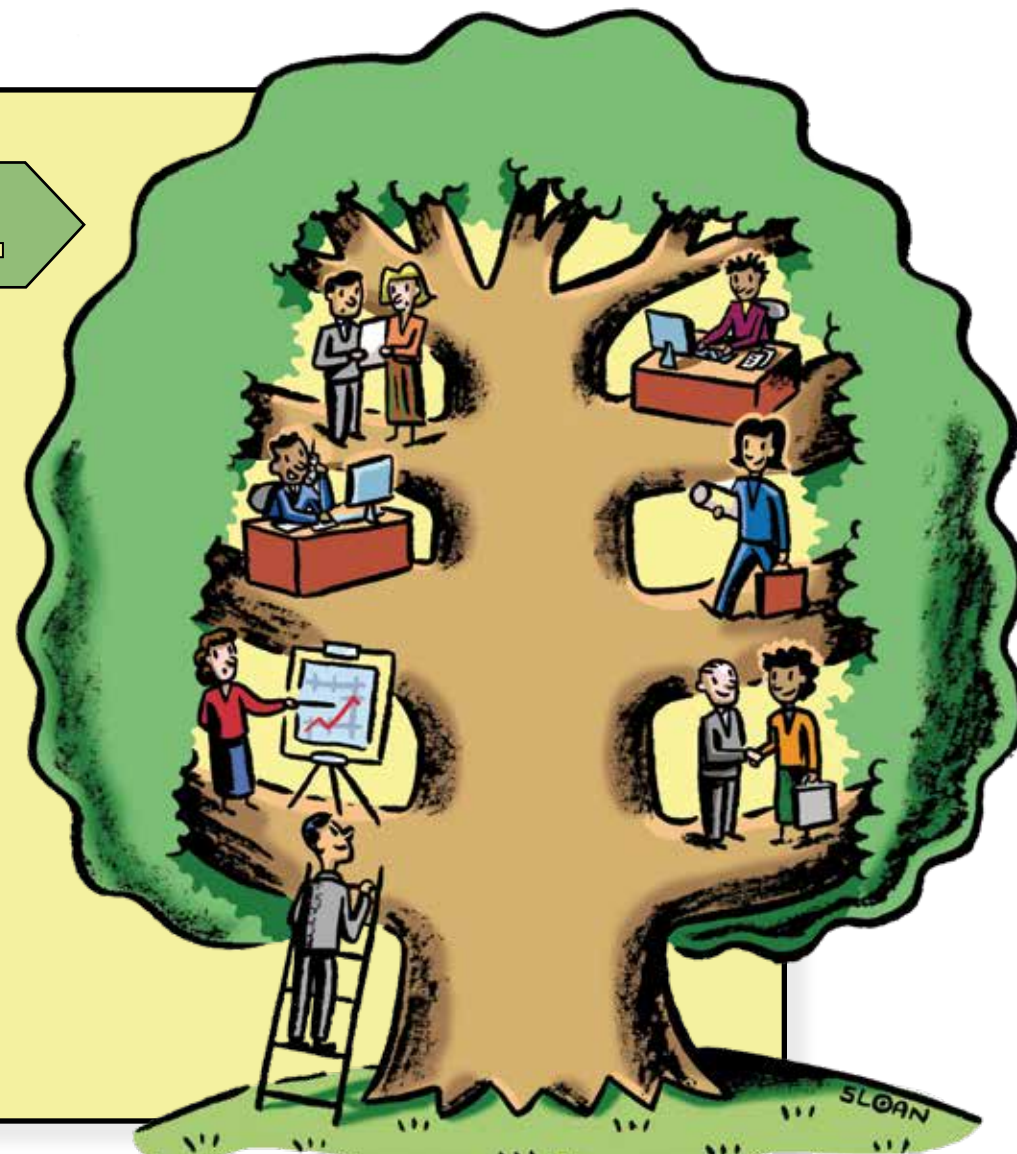
■ **Centers for Disease Control and Prevention**

**1,253** STUDENTS

■ **CARE**

■ **American Cancer Society**

■ **Georgia Department of Public Health**



The Rollins Earn and Learn program was the deciding factor for **Laura Salvatore Adams 16MPH** when she was selecting a graduate school.

**L**aura Salvatore Adams 16MPH applied—and was accepted—to several schools of public health when she decided to pursue an MPH. All had excellent reputations. All offered the health policy and management focus she desired. What tipped the balance in favor of Rollins was the Rollins Earn and Learn (REAL) program, which allowed her to work at Emory Healthcare implementing and analyzing a new software tool while she studied theory in the classroom.

“The REAL program was unique—the other schools not only didn’t offer anything like it, they actually discouraged students from working,” says Adams, who is manager of business applications for Grant Thornton. “I knew I needed to earn some money, but more than that, I needed real-world experience. Learning concepts in books is great but applying them in the field is where you really start to understand them.”

That was exactly the intent when the REAL program was created 10 years ago. In 2009, work-study funding for graduate students was eliminated. Rollins’ Dean

James W. Curran recognized the magnitude of the loss, so he oversaw the launch of REAL, a program in which the school and partner agencies and organizations split the cost of employing students. The students are able to earn needed funds, engage in hands-on research, and perform actual public health practice. Employers get to hire enthusiastic, committed students at a discount and to mentor the next generation of public health practitioners.

Today, half of all Rollins students receive a REAL award, which are given on a first-come, first-served basis. Some 5,300 students have worked through REAL since its inception, with a total of \$22.4 million awarded. Employer partnerships have grown from nine to more than 150, including the Centers for Disease Control and Prevention; Children’s Healthcare of Atlanta; the American Cancer Society; CARE; federal, state, and county government agencies; and Rollins.

“REAL is a signature program of our school,” says Heather Zesiger, senior director of student engagement. “It is definitely one of the things that sets us apart from other schools of public health, and both employers and students rate the program extremely high.”





REAL's program leaders, l-r: **Prudence Goss**, assistant dean of admissions and student services; **Catherine Strate**, registration director; **Heather Zesiger**, senior director of student engagement; and **Lisa Parker**, REAL manager.

Dr. Dayna Johnson was happy to discover the REAL program as a source of affordable research assistants when she joined Rollins as assistant professor of epidemiology in September 2018. “As a young investigator and new faculty member, grant funding is not plentiful,” she says. “Being able to hire students at a discounted rate to help with my sleep research has been invaluable. They collected data and built databases, and they did it at about a fifth of the cost I would have paid without the program.”

The American Cancer Society has been employing REAL students since the program began. Students have contributed in a variety of ways, from participating in operational aspects of research, to data analysis, to publishing studies. “Often the REAL students work on a project that we have been wanting to do but for which we haven’t had the manpower,” says Dr. Marji McCullough, senior scientific director of epidemiology research. “They provide critical help and contribute importantly to our mission.”

Allison Snyder agrees. Until recently, she worked as a project support specialist at the Task Force for Global Health’s Neglected Tropical Disease (NTD) Support Center, and she points to the success she has had with her REAL student, Hasna Zainul 20MPH, as illustrative of the value of the program. During Zainul’s two-year stint at the Task Force, she has helped compile two compendiums of the 200-plus operational research studies the center manages, worked on quality control and development within an online project management tool, and boiled down a complex WHO manual on program monitoring guidelines into digestible videos.

“Hasna navigated everything beautifully,” says Snyder. “She had no background in video production, for example, but she taught herself through YouTube tutorials. She ended up taking big, complex 100-page PDFs and turning them into bite-sized three-to five-minute FAQ videos. So an NTD manager who does not have time to wade through a massive report can quickly and easily find the specific information they are looking for. As we have found with our other REAL students, Hasna has risen to the level of working at the same ability level as a full-time employee. The only difference is she works 20 hours a week instead of 40.”

For her part, Zainul counts her REAL experience among her most beneficial at Rollins. “You get to start implementing everything you are learning in the classroom from Day One,” she says. “That makes such a big difference. And perhaps just as important are the connections that working in a global health organization allow you to make in that field. Someone I knew from working at the Task Force connected me with a former colleague at the CDC, which resulted in a practicum in a completely different topic area that I also had an interest in. I’ve come to realize that everyone knows everyone else in the field of public health and that people are more than willing to make connections to help you succeed. Once you are able to break into that network, everything seems much more accessible.”

Like Zainul, REAL students eagerly sing the praises of the program. In addition to hands-on experience and connections, the work often fulfills applied practice experience (or practicum)

requirements, leads to thesis topics, offers opportunities to publish papers, and always boosts the resume.

The financial benefit, however, cannot be ignored. Students can earn up to \$5,000 a year through their REAL position, regardless of whether they are getting other financial aid. That money comes in very handy for students like Cassidy Whitson 20MPH.

“I came to Rollins directly from the Peace Corps, so I didn’t have a large bank account,” she says. “I was definitely looking for a school that offered financial aid. And since I didn’t have a hard science or public health background, I saw REAL as a great opportunity to gain that experience. I looked at several public health schools and did not see a program like this one anywhere else.”

Her REAL experience with the CDC helped Whitson narrow her career focus. “I came to Rollins saying I loved everything—sexual and reproductive health, WASH [Water, Sanitation, and Hygiene], humanitarian emergencies,” she says. “Over the course of highlighting work around World Water Day and World Toilet Day, I found that I most enjoy WASH work, and that’s where I’d like to focus my career.”

Just as helpfully, REAL can lead students to identify paths they do *not* want to go down. Shelby Rhee 18MPH came to Rollins convinced she wanted to work in health communications. After a year working on a CDC communications team on public health preparedness, she changed her mind. “I found communications to be more product-based than idea-based,” she says. “I was a bit surprised by that and didn’t find it a good match for me.”

For her second REAL year, she switched to the CDC’s public health ethics unit, a “fun consulting group within the agency that helps think through big ethical issues within the CDC,” says Rhee. “We looked at how the CDC implements policies and the strategies involved. I found that a much better fit, so I changed my career focus. I’m happy I had the opportunity to see that the communications path wasn’t right for me during my MPH rather than after I had graduated and gotten a job in the field.”

Today Rhee works on a CDC policy team as a public health



**Allison Snyder** is now project manager of the Campaign Effectiveness program at the Task Force for Global Health. She considers contributions by REAL students invaluable.

analyst and Presidential Management Fellow. She credits her REAL experience with helping her win the highly competitive fellowship.

What will the next ten years bring for REAL? “We’d like to expand it to include global partners through international remote work arrangements,” says Zesiger. “And we’d like to amplify its impact by making it available to every Rollins student. When you have a program as successful as REAL has been, you just want to keep making it better and better.” ■



## Showing support through scholarship funds

**Dr. Bruce A. Fowler** is concerned about the future of the planet. “This is the only home we’ve got,” says Fowler, an adjunct professor at Rollins. “We need a robust public health infrastructure and well-trained people to keep this home habitable.”

He points to the recent coronavirus outbreak as but the most recent public health hurdle. “We can’t even predict what challenges we’ll face ahead,” he says. “We need to nurture a core of people with the expertise, knowledge, and vision to deal with them.”

Toward that end, Fowler has established the Bruce A. Fowler Scholarship in environmental health. He hopes it will help to cultivate such experts, as well as thwart a problem he knows all



**Dr. Bruce A. Fowler**



**Alisa Long Golson 98MPH and her husband, Brian**

too well from his days as director of the University of Maryland program in toxicology. “As a program director, it used to drive me crazy when we found an outstanding student who wanted to come to our school but lost them because we didn’t have a way to support them financially,” says Fowler, who is also founding partner at Toxicology and Risk Assessment Consulting Services. “I hope this scholarship will help the department recruit and support the most outstanding students out there.”

Two new scholarships have been created in the Department of Health Policy and Management. **Alisa Long Golson 98MPH** and her husband, Brian, have established the Golson Family Scholarship. “We are at a point in our lives where giving back is very important to us,” says Alisa. “Emory means a great deal to me and my family. I have been so impressed with what my Rollins classmates are doing and the difference they are making. We wanted to support health policy and management students to keep making that difference.”

**Dr. Michael O. Ugwueke 86MPH** and his wife, Rebecca N. Ugwueke, have endowed a scholarship for a health policy and management MPH student. The Ugwueke Family Scholarship will support students who have demonstrated a commitment to improving health in West African countries. “Emory has been a very important part of molding my passion and my profession,” says Ugwueke, CEO of Methodist Le Bonheur Healthcare in Memphis. “I wanted to give back, and I wanted to recognize those who are struggling to afford tuition, since I was in that same position.” Being raised in eastern Nigeria, Ugwueke says he also wants to support students who are interested in addressing the health issues of his home country and its neighbors. ■



**Dr. Michael O. Ugwueke 86MPH with his wife, Rebecca.**

## CLASS NOTES

### 2000s

**TOLTON RAMAL PACE 00C 02MPH** is senior programs manager with the City of Atlanta. In this role, he provides programmatic and fiscal management to ensure implementation of the city’s multimillion dollar federal grant awards. This includes the Workforce Innovation and Opportunity Act, which is designed to help job seekers access employment, education, training, and support services to succeed in the labor market. Pace was also selected to serve as the president-elect of the Caucus of Emory Black Alumni (CEBA) in fall 2018, to serve a two-year term. He will begin another two-year term as president of CEBA in the fall of 2020.



Born to **CASSANDRA MARTIN FRAZIER 04PH** of Marietta, GA, a son, Eli Carmen, on July 31, 2019.

**LAUREN SOUTIEA 06MPH** and her husband Greg recently quit their jobs in Boston to follow their dreams of running an inn. After Emory, Lauren worked in the public health sector until she and her husband decided to purchase the Craignair Inn and Restaurant in Dec. 2018. The inn is located in Spruce Head, Maine, and offers 22 guest rooms, ocean views, a full-service restaurant, and a new electric vehicle charging station.



## IN MEMORIAM

### 1970s

**WILMA A. LYGHTNER KIRCHHOFFER 77PH** of Atlanta on February 10, 2020. She was the founder of Youth Leadership for Global Health and was an active member of the Friendship Force of Greater Atlanta. Survivors include her two sons, eight grandchildren, and six great-grandchildren.



### 1980s

**DANIEL S. BLUMENTHAL 86PH** of St. Louis, MO, on July 25, 2019, at 77. Blumenthal graduated from Oberlin College in Ohio and the University of Chicago School of Medicine. He was board-certified in both pediatrics and preventive medicine. He served as the first Volunteers in Service to America physician in Lee County, AR. He later joined the faculty in the pediatrics department at Emory. He went on to Morehouse School of Medicine and spent almost 40 years there. He loved music, skiing, and travelling. Survivors include his wife, Marjorie, and three children.



### 1990s

**DOLLIE AVIS (DURRETT) DANIELS 91MPH** of Athens, GA, on Sep. 17, 2019, at 89. Daniels received a BA from Eckerd College before coming to Emory. She was director of Graduate Studies and Associate Faculty for Rollins in epidemiology and received the Shephard Award for her master’s research in 1992. She enjoyed collecting antiques and first-edition books, and she was a talented seamstress/needlework artist. She is survived by her four children, Charles, Stevie, Deborah, and Carrie.

**DR. VIRGINIA LEE SEERY 96MPH** of Atlanta, on Nov. 25, 2019, at age 85. Her service was held at Immaculate Heart of Mary Catholic Church.

### 2010s

**ERICKA NESHEA BREWER 16MPH** of Snellville, GA, on Sep. 6, 2019. Brewer graduated from Fort Valley State University with a BS in biology/pre-med and completed her master’s in prevention science at Emory. She worked as a clinical research associate and co-owned the K.E.Y. Event Planning Company. She loved fashion, singing, and dancing. She was preceded in death by her father, Gary H. Brewer. She is survived by her mother, Cynthia, three sisters, and three brothers.



# Promoting family planning

While millions of people in Myanmar have been displaced by natural disasters and conflicts, the upheavals contribute to another less-reported challenge: just one-third of all women and one in two married women here, many of them impoverished and living in hard-to-reach areas, use any modern method of contraception.

MOE MOE AUNG O6MPH is working to ensure that family planning—long considered a taboo topic in Myanmar—becomes a societal priority. As director of programs for Marie Stopes Myanmar, she plays an instrumental role in bringing contraception to hundreds of thousands of women.

In 2018 alone, Marie Stopes Myanmar, a branch of Marie Stopes International, the London-based nongovernmental organization (NGO) known for providing contraception and safe abortions mostly in developing countries, provided family planning services to nearly 549,000 people in Myanmar. Efforts helped to prevent more than 200,000 unintended pregnancies.

“Lack of access to family planning resulting in unintended pregnancies has far-reaching impacts beyond health, affecting women’s and girls’ opportunities for education, employment, and overall development,” says Aung, who joined the organization in 2006. “Access to contraception really transforms their lives and fosters gender equality.

“Over time, political commitment and investment in family planning have improved, and the community’s knowledge of, attitude toward, and use of contraception have risen,” she adds. “There is more talk around women’s rights and sexual and reproductive health and rights. However, intensified efforts are still needed in order to reduce unmet need and promote equity.”

In a country where abortion is illegal—except to save the life of the woman—contraception is key for reducing maternal mortality. Unsafe abortions are the second-leading cause of maternal deaths in Myanmar, Aung says.

While the country was run by a military-led authoritarian government until 2015, Marie Stopes—one of just a handful of providers of contraceptives in the country—has a fairly good relationship with the leadership at different levels of the health ministry. Government responses toward NGOs can vary, requiring a tactful approach by public health workers.

“Some government officials and other stakeholders can be quite obstructive of the sensitive work that we

do,” Aung says. “Perseverance, humility, and working with like-minded people are important, and being able to make progress despite the challenges is rewarding.”

It was while working in a public hospital—after earning a medical degree from the Institute of Medicine in the Myanmar capital of Yangon—that Aung saw a future in public health. At the hospital in Hpa-an City, she witnessed women dying during pregnancy, labor, and shortly after birth. She also saw children dying of malnutrition, diarrhea, and pneumonia, as well as people in the prime of their lives perishing from tuberculosis, malaria, and AIDS.

“Many such deaths could have been averted through preventive and promotive health interventions and a community-oriented approach,” she says.

In 2004, she enrolled at Rollins as part of the William H. Foege Global Health Fellowship program, named after the physician and epidemiologist who led smallpox eradication. The fellowship program, funded by the Bill & Melinda Gates Foundation, helps mid-career public health professionals in developing countries advance their careers by developing connections with public health experts from government, the private sector, and academia in the United States and around the world.

It was during her time at Emory that Aung looked at the “big picture” in public health. She was inspired by the role that various government and nonprofit organizations play in tackling global challenges. Those organizations included the Centers for Disease Control and Prevention, The Carter Center, the Bill & Melinda Gates Foundation, and CARE USA. She also was profoundly affected by her coursework.

“I still remember and apply the principles that were introduced to me during my reproductive health program management course: Do what you are deeply passionate about, do what you can be best in the world at, apply humility and professional will in leadership, and apply business principles in the social sector to move from a good to a great institution,” Aung says. —Andrew Faught



Photo credit: Aye Thada Hla

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The spread of the COVID-19 pandemic demands that we commit our energy to finding ways to flatten the curve and limit exposure. Gifts to the Public Health Preparedness and Research Fund will support Rollins' research and response efforts related to COVID-19 and pandemic preparedness including: modeling vaccine strategies; investigating best methods to control pandemics; evaluating interventions to curb transmission; advising local boards of health on pandemic response; implementing and evaluating employee screening programs.

Preparedness in the face of a crisis like COVID-19 saves lives. Support the Rollins COVID-19 response at [MOMENTUM.EMORY.EDU/](https://momentum.emory.edu/)

