

UNIVERSITY OF GEORGIA™ — COLLEGE OF

PUBLIC HEALTH

— 2021 ANNUAL MAGAZINE —

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FROM THE DEAN



front of statistics class. The faculty at Emory's Rollins School of Public Health, when I was an assistant professor there, and later at the University of Minnesota, who did not object when I had to bring a child to a faculty meeting or evening class. Parents should not have to choose between education and career and their children. The support of these individuals allowed me to pursue the path that led me to serve as dean today.

What does it take to make a difference – in someone's life, in a community, in the world? Sometimes, we don't even realize how our choices and actions are making a difference until much later. Last year, I got a note from a former MPH student who had taken my program evaluation class 14 years ago. She wrote, "I don't know if you will remember me, but I'll never forget you." She shared that, in response to a viral Facebook post, she wrote about an experience she'd had in my class as a new mother:

"I took two-month-old Sadie to a night class because I had no place else to put her. She started to cry in the middle of the lecture and instead of getting mad, the professor held her and walked around with her as she continued the lecture. All the other students thought it was adorable and whimsical, but I cried in exhausted gratitude. The professor's name was Marsha Davis and I will never forget how kind she was and what that meant to me."

I remember that night very well, and her note caused me to reflect on the difference my professors and mentors have made in my life. The professor at Columbia who saved a seat for me in the

Making a difference – sometimes big, sometimes small – happens in our public health work, too. Great moments in the history of public health feel monumental in the retelling – the eradication of smallpox, the COVID-19 vaccine, policies to promote safer workplaces, better sanitation, fewer deaths in childbirth. But these advances represent a collection of discoveries and collaborations that, over time, created ripple effects that now touch every community.

The UGA College of Public Health is seeking to make its own impact and see the ripple effect throughout the communities we serve in Georgia and around the world. In this issue, you'll see how our faculty, students, and alumni are embracing innovation and a new point of view in our educational programs, research, and community outreach and engagement to improve the public's health.

Sometimes it just takes shifting your approach, meeting people where they are, to bring about meaningful change. As a College, we are setting a path to do just that, to make the differences we can to make the world a kinder, healthier, and safer place for all.

Marsha Davis

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**UNIVERSITY OF
GEORGIA**
College of Public Health

ABOUT THE UGA COLLEGE OF PUBLIC HEALTH

The University of Georgia College of Public Health is committed to improving the health and well-being of all within our home state and around the world through innovative research, exemplary education, and engaged service.

Founded in 2005 as a response to the state's need to address important health concerns in Georgia, the College of Public Health is comprised of four academic departments and four research institutes.

As a fully-accredited College of Public Health, we are fulfilling UGA's mission as the state's land-grant university to train future leaders responsible for the public health and well-being of Georgians.

Our dedicated faculty and students are working in and with communities to address the issues that matter to them, including aging, disaster preparedness, environmental science, infectious disease prevention, maternal and child health, obesity, and shaping policy.

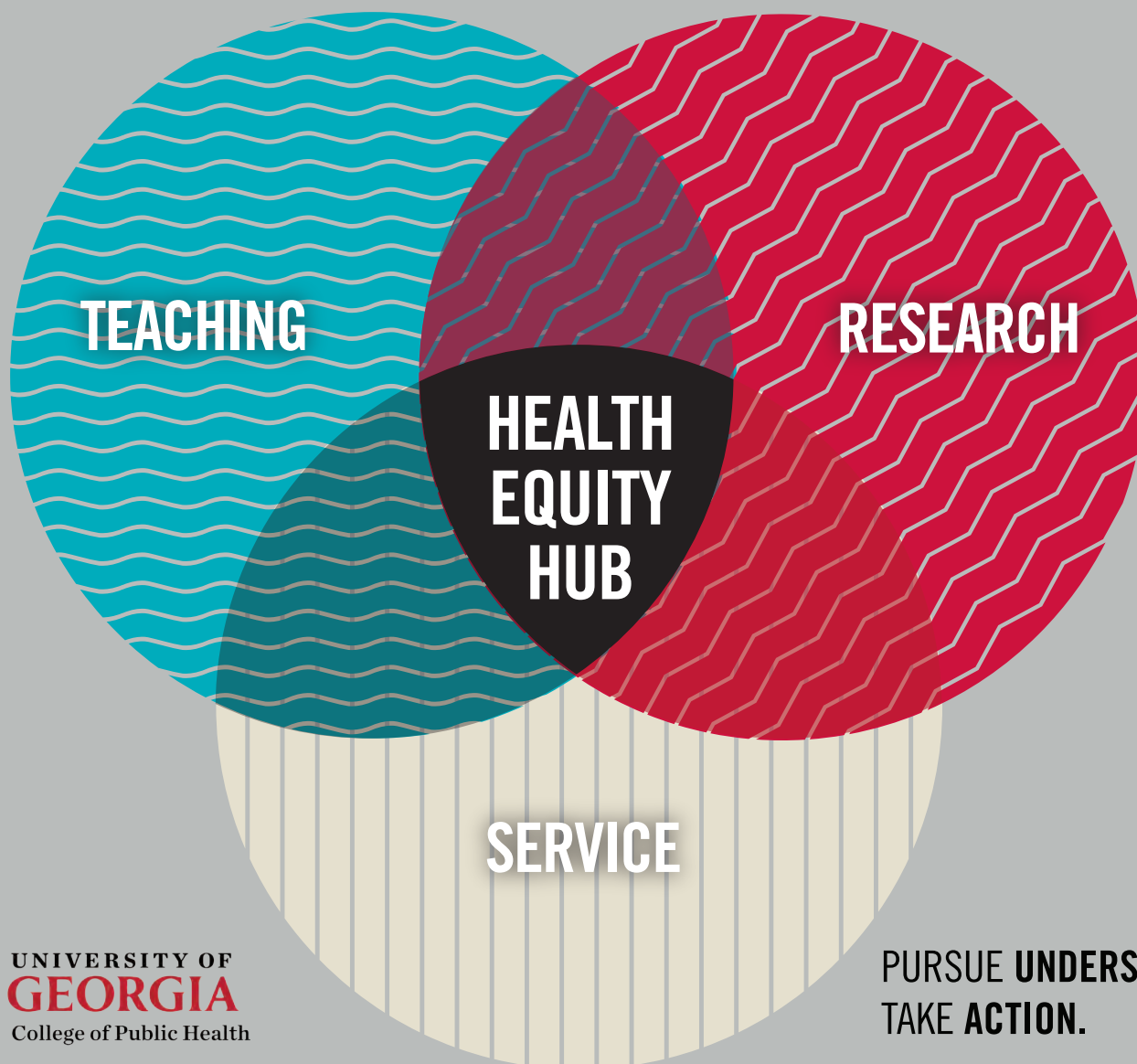
CPH LAUNCHES HEALTH EQUITY HUB TO TACKLE DISPARITIES IN GEORGIA



The creation of the Hub is a commitment to advancing health for communities across the state, said Grace Bagwell Adams, assistant dean for outreach, engagement, and equity.

“Health equity is embedded in all that we do in the College of Public Health,” said Adams, who notes that the Hub will serve as the nexus and home for the College’s efforts to improve public health for all. As part of this initiative, and in partnership with the Georgia Municipal Association (GMA), the College selected five Health Equity Fellows who worked directly with local government officials in Georgia communities of need to carry out projects to address health disparities.

Read more on page 14.



THE “EYES” HAVE IT!

Associate professor Lisa Renzi-Hammond took the TEDxUGA stage in March 2021 to explain how measuring the density of lutein deposits in the eye, a simple and quick test, can help providers and patients monitor brain health and their risk of chronic disease better than most of today’s typical labs.

“I would learn about your diet quality, how often you are eating those nutrient-dense foods that contain antioxidants and anti-inflammatories like lutein. I would learn how effectively your body is pulling nutrition up from those foods and depositing it into your tissues to protect them,” said Renzi-Hammond in her talk.

Watch Lisa’s Full Talk: tiny.cc/LisaTEDtalk



PUBLIC HEALTH, JOURNALISM OFFER JOINT CERTIFICATE IN STRATEGIC HEALTH & RISK COMMUNICATION

Moving to address the growing demand for professional health communicators, UGA’s College of Journalism and Mass Communication and the College of Public Health are partnering to educate undergraduate students in communication principles needed to address public health issues with an 18-hour interdisciplinary certificate in Strategic Health & Risk Communication.

“We expect students to come out of the program ready to illustrate the process of developing empirically-informed health communication campaigns for public health purposes,” said CPH clinical assistant professor Chrissy Proctor. “In addition, students will have the opportunity to practice the application of strategic public health communication through project-based and experiential learning opportunities.”



Read more: t.uga.edu/7j3

CPH FACULTY FORM INTERDISCIPLINARY RESEARCH WORKING GROUPS

In Fall 2020, the College formed 9 research working groups to align our talents and resources across departments and across disciplines to strengthen our work addressing key public health challenges. Topics include aging; health disparities; disaster public health; telemedicine; reproductive, parent, and child health; and infectious disease, among others.



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College of Public Health

See what we're doing: t.uga.edu/7j4

SOME CONGRATULATIONS ARE IN ORDER



Kerstin Emerson, clinical associate professor in CPH's Institute of Gerontology, has been named as the new director of our Office of Online Learning. As head of the College of Public Health's Office of Online Learning, Emerson will work with College leadership to advance CPH's goal to be a leader in hands-on, interactive teaching.

"We already offer two fully online certificates, and we are exploring what other programs would be good for offering online. We will develop these programs thoughtfully, assuring they meet high-quality standards," said Emerson. "Additionally, we want to focus on offering high-quality community engagement and education. The pandemic showed us the power of leveraging online to reach the community, but it also taught us that this needs to be done well to be truly effective," she said.

Read more: t.uga.edu/7j7

Health policy and management faculty member Janani R. Thapa was appointed to a new role for the College – Director of Diversity, Equity, and Inclusion. As director, Thapa will lead the College's initiatives to foster a culture of belonging for CPH faculty, staff, and students. The heart of this effort will be creating a plan to advance diversity, equity, and inclusion in all areas of the College.

"One intervention does not work for all. One way does not work for all," said Thapa. "We need to be careful to integrate all voices where we can."

Read more: t.uga.edu/7j6





ANNUAL CONFERENCE HIGHLIGHTS COMMUNICATION AND BUILDING TRUST IN ADDRESSING COVID-19, RACIAL EQUITY

CPH hosted the ninth annual State of the Public's Health Conference virtually on January 12, 2021. This year's program featured discussions about racial equity in public health, the COVID-19 vaccine and vaccine hesitancy, and the collision of COVID-19 and the opioid epidemic in Georgia.



Public health microbiologist and science writer Amber Schmidtke, who has been at the forefront of timely news on the state's COVID-19 case, hospitalization and death data since March 2020, was the morning keynote speaker, and, Renée Branch Canady, chief executive officer of the Michigan Public Health Institute, closed the day charging public health leaders with setting the stage to advance health equity in their organizations and communities.

Read more: t.uga.edu/7j5



UNIVERSITY OF
GEORGIA
College of Public Health

PURSUE **UNDERSTANDING.** TAKE **ACTION.**

Black Alumni Connection Seminar Series

Hosted by the CPH Alumni Board

RECOGNIZING PUBLIC HEALTH CHANGEMAKERS OF COLOR

To commemorate the 60th anniversary of desegregation at UGA and to honor UGA public health changemakers of color, the College of Public Health held a three-part Black Alumni Connection seminar series connecting notable Black alumni with the broader alumni community and current students. Guests included LaTonia McGinnis, BSEd '99, Health Promotion & Education; Erika Watkins, BSEd '99, Health Promotion & Education; and LaNeesha Scott, MPH, BSEH '91.

Watch the series: tiny.cc/BACplaylist

JOSÉ CORDERO HONORED BY THE AMERICAN ACADEMY OF PEDIATRICS

Renowned maternal and infant health researcher and EPIBIO department head José Cordero was selected to receive the 2021 Arnold J. Capute Award from the American Academy of Pediatrics (AAP) Council on Children with Disabilities. The Capute Award recognizes a physician who has made notable contributions to the health and well-being of children with disabilities through service and/or advocacy at the local, state or national level.

“His contributions in birth defects, developmental disabilities, and environmental influences in pregnancy and early childhood, and his work as the founding director of the National Center for Birth Defects and Developmental Disabilities, are just some of the reasons why Dr. Cordero was selected for this prestigious award,” said Dennis Kuo, chairperson of the Council on Children with Disabilities.



CPH WELCOMES ITS NEW ALUMNI BOARD



The College of Public Health is pleased to announce the launch of the CPH Alumni Board. The creation of the board is the culmination of efforts led by the College's Alumni Working Group to envision and put into action a plan for engaging CPH's current and future alumni community.

Board president Erica Parks, who served as a member of the alumni working group, says her goal is to "build a solid foundation for the CPH Alumni Board by intentionally recruiting alumni, engaging the communities we serve, and collaborating with our partners and stakeholders."

Learn more about the Board, its mission, and meet its inaugural members: <https://t.uga.edu/7tS>

THE 2021-2022 CPH ALUMNI BOARD MEMBERS INCLUDE:

ERICA PARKS (MPH '11)
PRESIDENT

KIM METCALF (BSEH '93, MS '96)
VICE PRESIDENT

MERIDITH KELLER WOODMAN
(BSED '96) EXEC. SECRETARY

SAMRINA JAMAL (BS '17, MS '18)
DEPUTY SECRETARY

ADAM BOWLING (BSEH '13)

**QUINTUNYA CHAPMAN-
HAMILTON (BSHP '16)**

LORI ELMORE (BSED '00)

**ADAM GOBIN (BS '06, AB '06,
MPH '08)**

LATONIA MCGINNIS (BSED '99)

LANEESHA V. SCOTT (BSEH '91)

RAEGAN A. TUFF (PHD '09)

**VALERIE KIMBROUGH (MPH
'19, MHA '20) EX-OFFICIO**

PLEASE HOLD MY ALLIGATOR

UGA students, teachers unite to enhance science instruction in Georgia

Julia Frederick still recalls the excitement on their faces – an assembly of students and parents looking on as Frederick dissected ticks under a microscope, explained tick behavior, and offered tips on how to avoid tick-borne diseases.



Julia Frederick talks ticks and offers a demonstration on bug behavior during a STEAM night at Otwell Middle School October 2019. (Contributed)

An environmental health doctoral student studying vector-borne diseases, this was the first time Frederick (pictured left) had shared her research with young people at a STEM/STEAM night organized by a middle school in Cumming, Georgia.

“I’d never seen a group of fifth and six graders so excited about bugs...or learning about general public health safety,” she said.

It’s through events like these that Frederick and other graduate students from the UGA College of Public Health are helping bring the latest science from Georgia’s leading research institutions into K-12 classrooms across the state.

They lead the Georgia chapter of Scientific Research and Education Network (SciREN), a graduate student-led outreach program that brings scientists and educators together with the goal of enhancing STEM/STEAM instruction in the state.

“Through SciREN, researchers join efforts with local teachers to expose elementary,

middle and high school students to cutting-edge research. SciREN serves to both increase public scientific literacy and inspire young people to care about our world,” said CPH alumnae and SciREN Georgia founder Maite Bucher, who brought the program to UGA in 2016 from the University of North Carolina.

Each SciREN chapter holds two events a year: a lesson plan writing workshop and an annual meeting where graduate students first share their lesson plans with teachers from across the state. Through these events, SciREN supports young researchers in enhancing their outreach and communication skills, building connections with local teachers and fellow scientists, and broadening the impact of their work into communities.

LEARNING TO HOW TO LESSON PLAN

Liz French, BioSTEAM Coordinator at Jefferson City Schools in northeast Georgia, joins the SciREN Georgia team each year to help train researchers in K-12 lesson planning. A panel of teachers, with specializations in special education, preschool, and elementary, middle,



SciREN Georgia team members welcome educators to their February 2019 networking event at the State Botanical Gardens of Georgia. (Contributed)

and high school education also answer questions and offer guidance during the lesson planning workshop.

“We discuss how to choose lesson topics, incorporate the Georgia Standards of Excellence, and structure a lesson plan. I also emphasize how to include active learning in lessons and tips for assessing student learning,” said French.

French first became involved with SciREN Georgia’s lesson writing workshops as a master’s student in forestry resources at UGA in 2017. She had previously worked as an environmental educator for 4-H, and as a graduate student, was teaching students on campus and in local K-12 schools about watershed issues and other environmental topics.

“I love being able to help with these workshops. The graduate students who attend always have wonderful ideas for lessons and activities that students would love,” she said.



Megan Beaudry poses with an alligator during SciREN Georgia’s February 2019 networking session at the State Botanical Garden of Georgia. (Contributed)

SciREN Georgia debuts and disseminates the student-developed lesson plans during an annual spring meeting held in Athens, Georgia. There, teachers from across the state are invited to take part in lesson plan demonstrations, connect with local scientists interested in visiting their

classrooms, and exchange ideas with other K-12 STEM educators. To date, participants have represented school districts from at least 16 Georgia counties.

IMPROVING SCIENCE LITERACY

Programs like SciREN that foster exchanges between scientists and educators are very important to improving the scientific literacy of young people, said French.

“In my experience, students of all ages really enjoy being able to learn from scientists at universities and in the field,” she said. “Young students are introduced to new fields of science, research processes, passions, and even possible career paths through these partnerships.”

In 5th grade, Megan Beaudry’s older sister lent her *The Hot Zone* by Richard Preston, a 1994 non-fiction book tracing the origins and outbreaks of viral hemorrhagic fevers, including Ebola. The connections the book made between human health, animal health and the environment thrilled her.

“It was around this time that we began studying genetics and human health in school – and I realized you can be interested in human health and not want to be a doctor. You can be a scientist,” said Beaudry.

Helping young people make similar connections through learning experiences that nurture their curiosity and love for science is at the heart of why Beaudry became involved in SciREN.

“There are endless opportunities in science to study what interests you,” said Beaudry, who now studies genomics and microbial water quality using next-generation sequencing tools.

“I find it really funny now looking back at little 5th grade Meg and her first thoughts about being a scientist. Today, I am basically living that dream.”

```
#utility functions
```

```
readinteger <- function()
```

```
[
  n <- readline(prompt="Enter an integer: ")
  if(!grepl("^[0-9]+$",n))
```

R YOU READY TO WORK WITH DATA?

```
# read program code here
num <- round(runif(1) * 100, digits = 0)
guess <- -1
```

```
cat("Guess a number between 0 and 100.\n")
```

```
while(guess != num)
```

```
[
  guess <- readinteger()
```

```
if (guess == num)
```

```
[
  cat("Congratulations,", num, "is
  right.\n")
```

```
] else if (guess < num)
```

```
cat("It's bigger.\n")
```

```
] else if (guess > num)
```

```
cat("It's smaller.\n")
```

```
]
```

Epidemiology & biostatistics (EPIBIO) faculty at the UGA College of Public Health are working to demystify modeling and data analysis to better prepare students for day one on the job.

DEMYSTIFYING MODELING

The dynamics of disease spread can get complicated, and visualizing transmission depends increasingly on computational modeling.

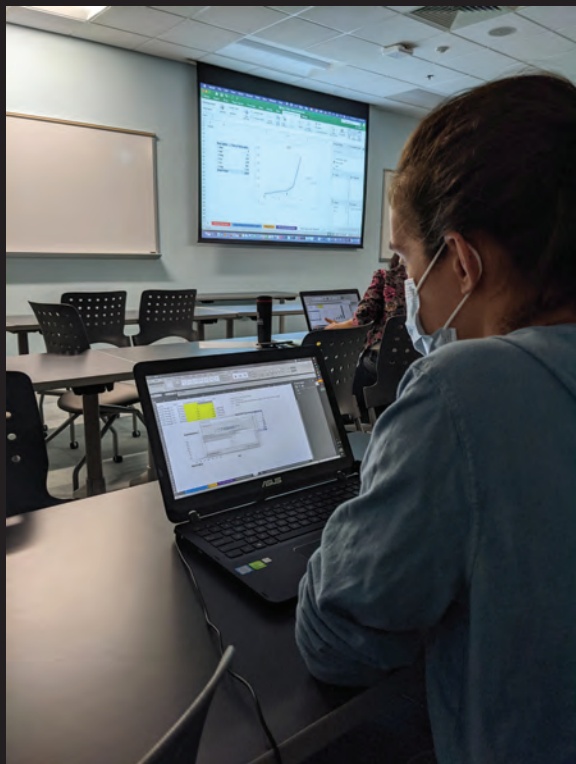


Professor Andreas Handel teaches graduate courses on infectious disease modeling, and semester after semester, he saw students struggling. Most, he said, lacked the needed mathematical or coding know-how to manage the existing textbook materials.

"There are some students who didn't get the concepts I wanted to teach them because they were so stuck with the coding," he said.

In response to this dilemma, Handel worked for more than a year to build a new software tool designed for public health students who want to learn more about the conditions that influence disease transmission but aren't ready to start writing computer code. In 2017, Handel launched Dynamical Systems Approach to Infectious Disease Epidemiology (DSAIDE), a free and publicly available R package that has been downloaded thousands of times since its release.

Today's public health students will be on the front lines of the next major disease



New MPH students got a crash course in data analysis during 2-day bootcamp in fall 2021.

outbreak, so it's critical for them to grasp these concepts, he said.

Shortly after Handel released his DSAIDE package, he worked with Brian McKay, then a postdoctoral fellow with the department, to develop an R package for their undergraduate elementary biostatistics lab.

Students no longer had to report to a designated lab once a week to work through their labs with proprietary software in a finite time frame. They had the freedom to "work on their own time, at their own pace, and this allows them to revisit the content," said McKay, and this made a notable impact on the student experience.

BRIDGING TRAINING GAPS

CPH has also reimagined how first-year master's students are introduced to the data-intensive training that is vital to our graduate programs.

"The expectation for high data competency is not always realistic considering many students have not had the opportunity to train in data-rich educational offerings and professional experiences," said EPIBIO assistant professor Allan Tate.

In spring 2021, CPH piloted a 2-day data fluency workshop to identify training gaps that our master's students may have that could be addressed in the first weeks of the program, and it integrated tools to train students on data exploration outside of a coding environment – for example, in spreadsheets.

"The feedback was exceptional and confirmed our impressions that new onboarding offerings were needed to eliminate unnecessary barriers to academic success in our first semester graduate programs," said Tate.

CPH launched its first formalized data onboarding workshop in fall 2021 and is exploring a half-semester course to equip graduate students with skills to work with novel data types, like the data produced by social networks and BIG data sources, and also to create new data coaching opportunities for doctoral students to develop their skills teaching the next generation of public health analysts.



Allan Tate reviews visualization options based on local COVID-19.



READY TO DO MY PART

Five public health students
partnered with five cities in
Georgia to tackle longstanding
health issues.

The thing Amber Bullard remembered most was the smell.

It was strong, sharp and heavy, eternally hanging in the air during Georgia's hot, humid days. The predominantly Black neighborhood she grew up in was situated in the shadows of a nearby industrial plant, which belched out smoke and steam throughout the day.

"I just remember waking up in the morning, going to school and being able to smell different things in the air and knowing that it was coming from that plant," she said.

Even if the pungent odor didn't present an immediate physical harm to the community's residents, it did impact the mental well-being in the neighborhood. For many, it was easier to stay inside and avoid it altogether than venture outside to work in a garden, play basketball or simply go for a walk. And there wasn't much anyone could do about it.

Nearly 15 years later, Bullard (pictured right) would learn about a similar challenge weighing on a community like hers,



but this time she would have the tools, resources and access to make a difference through a collaborative program offered to students at UGA's College of Public Health.

Bullard, a health promotion and behavior student at the College, was one of five students chosen to make up the inaugural cohort of the Health Equity Fellows program.

The program is part of a broader effort

by the College to tackle health inequities in rural and underserved communities across Georgia, the Health Equity Hub.

"The Health Equity Hub is really a place for the College where teaching, research and service come together," said Dr. Grace Bagwell Adams (pictured left), the



assistant dean of the Office of Outreach, Engagement and Equity. The Fellows program, she said, represents the heart of this effort.

"That sweet spot to me is when we can bring our faculty who are doing research and service work together with our students and get them out into the community," she said.

MAKING A DIFFERENCE ACROSS GEORGIA

In 2019, the College restructured its outreach administrative unit to create the new Office of Outreach, Engagement and Equity. This office pursues activities and engagements designed to improve the health of Georgia's communities and their citizens, relying on collaboration to offer educational, research and training opportunities for those in need across the state.

"It's really an effort to express the College's priorities in this area of health equity, working to close the gap of health disparities in Georgia, which is what I really believe we should be doing as a College," said Adams.

In practice, this takes many forms, such as coordinating and sharing community-based research or working with communities to develop, implement and support local health initiatives. The

Health Equity Fellows program takes those various components and meshes them into an immersive experience that brings to life the College's commitment to learning, research and service.

The application process attracted a great deal of interest from students eager to make a difference, applying what they were learning in the classroom to the field. Amber Bullard and Jennifer Quezada, a pair of undergraduate students studying health promotion and behavior, were chosen, as were two master of public health students, Carlyncia McDowell and Harrison Huang, and epidemiology doctoral student Kenya Murray.

Students were paired with local government officials in communities in need across the state thanks to an ongoing collaboration with the Georgia Municipal Association. GMA helped facilitate the process for pairing the students with the community, leaning on their network of contacts and stakeholders to identify the relevant needs and determine the right fits.

"We realized there could be a lot of ways we could put this research to good use, and there are a lot of things that we're doing in these areas so we were just delighted to have the expertise of the students," said Becky Taylor,

GMA's Director of Federal Relations and Research. "We just felt like we had tapped into a great resource that we had not had access to before. We know our leaders know there are these issues out there, but they needed somebody with the expertise and understanding of public health issues to come in, provide some insights, do some research and put together some data."



With many voices coming to the table, it required the cohort to be flexible and be ready to adapt their initial project pitches.

"It was great seeing all of their ideas up front, but it's also really important when you're doing community work to listen to community members," said Dr. Christina Proctor, one of the academic mentors involved with the program. "Out of all these great ideas the students had, I don't even think any of them got to do any of that work. They listened to those community stakeholders and partners, and they learned about the work that needed to be done in the areas they were assigned. It was wonderful to see all of them just accept that feedback, and then take on topics many of them had never even thought about."

OUTSIDE THEIR COMFORT ZONE

Letting the communities drive the areas of research and service opened new avenues for the students and their mentors to explore. Bullard, for instance, was tasked with evaluating the impact of noise pollution on residents of College Park.

The community is home to Hartsfield-Jackson International Airport, bringing with it a cacophony of noises fueled by both air and road traffic. During her work, which included regular consultations with College Park officials, including its mayor, she discovered this saturation of sound disrupted the day-to-day activities many people take for granted. Going to the park or walking one's dog was often accompanied by the steady sound of jet engines, resulting in many residents remaining in their homes for much of the day.

"We all know that getting outside and being able to leave the home is good for our mental health," noted Bullard. "And not being able to do that makes them feel antsy and feel like they can't live their everyday lives. That was something they were very candid about."

At first, a project focusing on a major environmental health hazard seemed a bit beyond her scope. However, Proctor pointed out that Bullard, like many of the fellows, was eager to step out of her comfort zone if it meant the community was better served. For Bullard, that included attending community meetings, participating in a webinar with the Federal Aviation Administration (FAA), hosting qualitative interviews with local stakeholders and working closely with Gary Young, the director of airport affairs for College Park.

Bullard's experience paralleled the rest of her cohort.

McDowell, Murray, Huang and Quezada also found themselves becoming intertwined with the fabric of those places, working closely with local stakeholders to address generational issues, while also compiling important data and research to inform future efforts. Given the dearth of available research on health disparities in rural Georgia, the work the students and their academic mentors did was crucial.

"A lot of research studies use rural communities as a proxy," Murray noted. "So, you'll do a research study in Mississippi and allow that to serve as a proxy for all rural communities in places like Arkansas or Alabama. They treat rural health like a monolith, and that's not always true because what is being experienced in Mississippi may be very different and opposite than what someone in a rural community in Alabama may be experiencing."

The goal was to uncover what the community truly needed to help address the problem, and that meant lots of listening and an unrivaled experience in the field that included being the primary person responsible for making comments to a crucial FAA document stemming from all that investigative work.



COLLEGE PARK, GEORGIA



REPRESENTATION MATTERS

The launch of the Health Equity Fellows program arrived at a tenuous moment in American life. The COVID-19 pandemic brutally exposed the vast health disparities in communities across the country, with those divides exacerbated by race and class. Additionally, the racial and social justice movement that grew in response to the killing of George Floyd helped to shine a light on those gaps, spurring many to action.

The students who applied for the program were no exception, seeking to do their part to remedy the previous wrongs. Equally as powerful as the passion behind their purpose was the diversity of the cohort as all five fellows are people of color.

This type of representation, both in the inaugural cohort as well as future ones, enables the College to support communities with the extraordinary talents of students who look like the populations they serve.



Carlyncia McDowell



Kenya Murray



Harrison Huang



Jennifer Quezada



HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT
COLLEGE PARK, GEORGIA



MOULTRIE, GEORGIA

“(As a person of color), seeing representation in action really just makes you comfortable,” McDowell said. “Seeing someone who is like you who’s in that position, it kind of gives you a sense that I can do this. And they don’t have to have the same personality as you. But you can see how people are treating them, you can see how they treat other people, and you can learn vicariously through others.”

Representation is a crucial component of enhancing diversity, equity and inclusion initiatives, but it’s also just one piece of a broader, more complicated puzzle. Murray, for instance, noted the structural barriers that still exist for Black students interested in pursuing a career in public health.

“There’s a deficit of programs that are in communities of color that are focused on public health and epidemiology, so that’s a structural issue,” Murray said. “You can have representation all day long, but if you don’t have access to the schools that are accredited to go and get a degree or become a scientist, the problem will still persist.”

EYEING THE FUTURE

The success of the initial Health Equity Fellows cohort has spurred the College to expand the program, extending the

length of service to the entire school year rather than one semester. Funding for the program is provided by the endowed Public Health Outreach Fund, enabling the College to continue its work of serving communities across Georgia.

Requests for applications for fall went out in August.

“In the first iteration this past spring, we learned a lot, as what we launched was kind of a pilot program,” said Adams. “One of the things the cities, fellows and mentors all said was ‘we just wish we had longer to do the work because the semester is not really long enough.’ So we’re going to extend it to be the whole academic year.”

And the work continues for some of the Fellows, despite the official end of the cohort. Carlyncia McDowell, for instance, has stayed onboard to see through the issue that still needed to be addressed in Milledgeville as a result of her needs assessment project. She says she might volunteer some of her time in the upcoming year.

It’s a testament to the purpose and passion that drives these students, pushing them to find ways to not merely serve, but make a lasting difference wherever they go.



SEEKING FOR MALE



SOLUTIONS INFERTILITY

For reasons that aren't completely understood, rates of male infertility in the United States and many Western nations have been on a steady upward trajectory for the past several decades.

"This is a growing problem that keeps getting worse with time," said Charles Easley, an associate professor in the University of Georgia College of Public Health. "About 10% of men of reproductive age in America have some type of infertility issue, and 45% of those patients have no treatment options at all."

With a team of scientists that includes undergraduate and graduate students, postdoctoral researchers, a research coordinator, and a lab manager, Easley is conducting research that offers hope for couples struggling with infertility. His work also has the potential to help keep reproductive toxicants out of the products that millions of people use daily.

AN INFERTILITY CRISIS

Declining levels of male fertility date back to at least the 1970s and have been attributed to a variety of factors, including lifestyle and certain medical therapies.

Exposure to environmental toxicants such as chemicals that disrupt the endocrine system is thought to play an important role, as well, but Easley points out that avoiding some of these everyday chemicals is "borderline impossible."

If you're sitting on a foam-covered chair, for example, chemicals that impart flame retardance are leaching through the fabric and into your body. Compounds used in plastic food packaging, children's toys, and some cosmetics have been shown to disrupt the endocrine system, as well. Byproducts from industrial processes make their way into the air we breathe, the water we drink, and the food we eat.

A major roadblock to the effective assessment of reproductive toxicity has been that results from studies on mice and other animals don't necessarily translate to humans. In a breakthrough that has the potential to dramatically improve the testing of chemicals, Easley and his colleagues have developed a method to direct stem cells to become sperm precursors that can be used to screen chemicals for toxicity. Funded by a grant from the Bill and Melinda Gates Foundation, Easley is adapting the same

stem-cell based model to rapidly screen candidates for male contraceptives for effectiveness.

“It’s a unique model that can rapidly and robustly assess impacts on fertility so we can make better decisions going forward,” Easley said.



(L-R) Lab manager and graduate student Beth Waters and professor Charles Easley looking at cell samples through a microscope. (Photo by Peter Frey/UGA)

NEW HOPE FOR TREATING INFERTILITY

The ability to direct stem cells to become precursors to sperm cells holds promise for men suffering from infertility, as well. Easley and his colleagues made international news in 2012 when they developed a method to take skin cells and transform them into sperm precursors. Funded by a grant from the National Institutes of Health, he and colleagues at the University of Pittsburgh and Oregon National Primate Research Center are studying whether these sperm precursors can be used to create healthy embryos.

If proven safe and effective, first in animal trials and then in human clinical trials, the technique could potentially give infertile men a chance at fatherhood. With the support of the Georgia Research Alliance, Easley has founded a company, known as Fertiligen, to help make his discoveries more widely available.

“The idea is that for someone who is rendered sterile by chemotherapy as a child and now, as an adult, has no options, we can use their skin cells to restore their

natural fertility,” said Easley, a member of the university’s Regenerative Bioscience Center.

THE IMPORTANCE OF MENTORSHIP

Easley became interested in addressing the infertility crisis after meeting the researcher who would later become his postdoctoral mentor, professor Gerald Schatten at the University of Pittsburgh. He credits mentors such as Schatten and several other collaborators with guiding and inspiring him, and he aims to do the same for his students at UGA.

One of his doctoral students, Katherine Watkins Greeson, was the lead author on an influential study that combined epidemiological data with results from Easley’s stem cell model to show how environmental toxicants can affect reproductive health—even in the offspring of those who are exposed. He helped another student secure an internship at the Scientific Center of Excellence for Reproductive and Regenerative Medicine in Croatia. Others have participated in the Experiential Professional Development Program offered by the Graduate School. Undergraduates also get research experiences in his lab and read, interpret and analyze scientific papers in his courses.

“I’ve been so fortunate to have great mentors,” Easley said. “My philosophy is to let the students dictate where they want their career paths to go and do everything I can to help them get there.”



(L-R) Lab manager and graduate student Beth Waters and professor Charles Easley talking in the laboratory. (Photo by Peter Frey/UGA)



WHAT WE ARE MISSING ABOUT STIMULANT ABUSE

College students who misuse stimulant drugs or nootropics like Adderall or Ritalin are also likely to drink heavily and use other drugs, according to new research from the University of Georgia.

Students who reported binge drinking or frequent marijuana use were eight times more likely to have used prescription stimulants or “study drugs” they did not have a prescription for.

The study, which was published recently in the *Journal of American College Health*, paints a different picture of prescription stimulant users than most universities may be familiar with, said study author Ash Warnock, a doctoral student in the department of health promotion and behavior.

The storyline of a college student who doesn’t have a medical need for a stimulant bumming a pill from a classmate or friend to help them focus and study took off several years ago. But the perception that this type of abuse of cognitive enhancers is reserved for ambitious high achievers may be off the mark, said Warnock.

CATCHING UP ON STUDIES

“Stimulant use may be a kind of catch-up behavior, he said. ‘Some studies have shown that students who party with drugs and alcohol on the weekends use stimulants like an academic catch up because they’re behind on their studies.’”

In reality, stimulant use is likely to do more harm than good.

“We know that students that use prescription stimulants are more likely to have depression or have anxiety, or have sleep problems,” said Warnock. “The fact is that these drugs don’t help you academically. It’s a subjective effect. You feel lifted. You feel up, and so, you feel like you might be more focused, but the research doesn’t show that. The research shows that people that do stimulants like this likely do worse.”

YOU FEEL LIFTED. YOU FEEL UP, AND SO, YOU FEEL LIKE YOU MIGHT BE MORE FOCUSED, BUT THE RESEARCH DOESN’T SHOW THAT.

But little work has been done to explore the relationship between stimulant abuse and problematic alcohol and drug use. Warnock’s study sought to fill in the gaps by surveying recent alcohol, marijuana and prescription stimulant use among college students at two major universities in the Southeast.

ALCOHOL AND DRUG ABUSE AMONG COLLEGE STUDENTS

The study analyzed survey responses from over 600 students that described their alcohol and drug use over the past 30 days, including nonprescription stimulant use. Heavy alcohol use was defined as having four or five drinks on at least one occasion in the 30 days, and frequent marijuana use was defined as using marijuana more than three times in the past 30 days.

One in five students reported ever having used a prescription stimulant, and 8.9% of the sample reported using stimulants in the past 30 days. Among this group, students who reported any alcohol and marijuana use were three times more likely to use stimulants. Frequent alcohol and marijuana use was even more strongly associated with stimulant use.

The results point to a strong behavioral link among polysubstance users, which had not been clearly established before, said Warnock.



SAMPLE LIMITATIONS

One notable limitation of the study was in the makeup of the sample. Though the analysis controlled for student involvement in organizations like Greek life or religious and service groups, the study sample isn’t entirely representative of the typical student body.

“The sample is very white and very Greek, and students involved in those activities are more likely to be involved in drug and alcohol use, so that does skew the results a bit,” he said. But he still feels confident that this study helps to expand the scope of risky behavior interventions on campus.

“It is important for universities to know that students who are involved with those kinds of substances are likely to be involved in prescription stimulants also. We need to be aware of the additive health effects of these behaviors,” said Warnock.



REACHING THOSE WHO NEED TO BE REACHED

Partnerships with local clinics provided real-world opportunities for CPH health administration students to support health care delivery during pandemic. This is one alumna's experience.



When Devynn Sharpe (pictured left) began her internship at Gwinnett Clinic, she didn't expect to gain hands-on experience delivering health care services amidst a once in a lifetime pandemic.

"Everything that I did or was exposed to was either what I wanted to do, or I knew was going to help me in the process of getting to where I wanted to be in my career. When the pandemic hit, being a part of managing, that was when I realized this is definitely something that I want to be a part of," said Sharpe, who graduated with her Master of Public Health and Master of Health Administration in May.

Sharpe was part of Gwinnett Clinic's core COVID-19 response team, a big role for a practice that spanned 19 clinics and serves a county with over 1 million residents who represent 60 different nationalities.

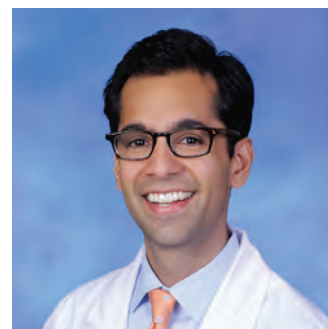
"To serve the needs of Gwinnett County, you have to offer an experience that speaks to the diversity of metro Atlanta, and that is a unique challenge that we faced, and they were in log step in every way to reach the patients who

needed to be reached," said Dr. Deep Shah, primary care physician at Gwinnett Clinic and Sharpe's mentor. Gwinnett Clinic has hosted students from the College of Public Health since 2017.


Sharpe's role was focused on procuring testing supplies and developing the materials for onboarding telemedicine patients and the materials used to welcome patients back into the office once lockdowns had been lifted. Now, Sharpe is employed full-time at Gwinnett Clinic as an operations assistant. She credits her internship experience for helping her get there.

"These internships really get your feet wet in the world of healthcare or public health, and you get to be exposed to so many different things and see it firsthand," she said.

Shah (pictured right) agrees that hands-on learning is critical to preparing students for careers in public health and healthcare.



"There is whiteboard leadership and real-world leadership, and you need to learn both in order to be an effective servant leader working in medical practices or hospitals. Internships like this one teach you how to work with people different from you and how to build a coalition to implement change and in a way that feels inclusive and reaches those that need to be reached," he said.



BEING TRUE TO BOTH SIDES OF MYSELF

SJ Henderson
*Master of Public Health and
Master of Social Work, 2020*

*SJ Henderson on the set of her “Letters to Kalief”
project in 2018. (Contributed)*

Growing up, poetry had provided SJ Henderson (MSW/MPH '20) with a way to break out of her shell and connect with the world around her. Now as a public health researcher and violence prevention advocate, art continues to play a role in how Henderson brings people together to affect change.

After graduating with a Bachelor of Science in Biology from Alabama A&M University in 2013, Henderson (*pictured above*) made the unconventional choice of taking a few years off to travel around the country and perform spoken word poetry.

While she traveled and performed, she set her sights on finding a graduate program that appealed to her interests in public health and advocacy.

“I liked the idea that I could go into public health and be a part of a team that really advocated for changes at a more systemic level,” said Henderson.

The reputation of UGA’s Master of Public Health program as well the opportunity to earn a second master’s in social work, eventually led her to enroll in the College of Public Health in 2017.

ADVOCACY THROUGH ART

Like many young Black people, Henderson


had followed the story of Kalief Browder, who at 16 years old was arrested for allegedly stealing a backpack and incarcerated for three years at Riker’s Island. When Henderson learned later he died from suicide, years after his release without charge, she was overwhelmed with emotions.

“What trauma did he go through that, when he was finally home and could heal, he still couldn’t fathom a world where he could exist anymore? I really wished I could have been his friend, that I could have reached out to him and helped him find a reason to live.”

She started pouring her feelings into a diary, filling pages with random thoughts, poetry, and pages of research on systemic racism. This work would find its final form as “Letters to Kalief,” a docudrama aimed at raising awareness and fostering dialogue about mental illness, mass incarceration, systemic racism and other issues facing Black communities.

Henderson enjoyed bringing the creative language of poetry and prose together with research on the issues that mattered most to her.

“The project allowed me bring a variety of people together to create a bigger conversation. Art has the power to touch hearts. If I can get you to care about these issues, I can inspire you to fight for change with me,” she said.



SJ on the set performing her spoken word piece “Black is Badass” for fellow MSW alum Luke Slaboda’s multimedia project “Black is Beautiful.”
(Contributed)

ADVOCACY THROUGH RESEARCH AND POETRY

Henderson later applied the research she’d done producing “Letters to Kalief” to her MPH capstone project, which looked at how exclusionary housing policies and infrastructural violence resulted in long-term toxic exposure for Black communities, further broadening her view on how racial inequities impact public health.

For her study, Henderson examined literature documenting contaminated wells in Dickinson County, Tennessee; carcinogens emitted from industrial plants in North Birmingham, Alabama; and the lead water crisis in Flint, Michigan. In all three cases, Black neighborhoods were isolated from health and community resources, and prolonged exposure to environmental toxins led to negative health outcomes including developmental delays, cancer, and death.

“In my thesis, I use the term infrastructural violence very intentionally when talking about environmental racism, because I want to make it clear that environmental racism is an act of violence,” she said.

In her introduction, Henderson shared the story of Freddie Gray, a 25-year old Black man who died from spinal injuries sustained during an arrest by police for the alleged possession of a knife. Gray grew up in a poor neighborhood with underfunded schools, and as a child, even tested positive for lead poisoning for which he never received any treatment, said Henderson.

“Yes, he died because of police brutality, but

how was he living before that? How did this impact the person he was? There was so much wrong with his environment. He was already a victim to environmental racism before he died by police brutality.”

While her research offered ways to move forward through increased government transparency and accountability and connections with trusted members of Black communities, Henderson said efforts to rebuild trust in these communities will require a lot of work.

“There’s been so much harm caused by environmental racism that people in these communities, and these are really poor communities, have normalized having poor access to resources,” she said.

Henderson’s study, “Environmental Racism and the Contamination of Black Lives: A Literature Review,” was published in the *Journal of African American Studies* in January 2020.

And then the pandemic hit the U.S., and George Floyd, a 46-year Black man, was murdered by police in Minneapolis. Henderson found herself again turning to poetry in order make sense these devastating events.

As a part of Shelter Projects, a micro-fellowship awarded by UGA’s Willson Center for Humanities and Arts, Henderson created a spoken word performance, informed by her research, that reflected on the collective trauma and grief experienced by the Black community during the “twin pandemics” of systemic racism and COVID-19.

"Define Pandemic?" debuted in Flagpole Magazine, and Henderson was invited to present the work at both the College's January 2021 State of the Public's Health Conference and the Healthcare Georgia Foundation's Connections Conference in March 2022. A \$5,000 grant from the Foundation allowed her to produce a video to accompany her poem.

You can view the video at:
<https://www.healthcaregeorgia.org/define-pandemic/>

"You could never have told me as an undergrad, always looking for her next research opportunity, that my first invitation to speak at a public health conference would be because of my poetry," said Henderson. "The experience helped me realize that not only could I do both, but that I was more valuable doing both and being true to both sides of myself."

ADVOCACY THROUGH LEADERSHIP

Henderson graduated in December 2020 with master's degrees in social work and public health and now serves as Director of Violence Prevention and Education at Wilmington College.

In the role, she is leading new efforts, funded by a grant from the U.S. Department of Justice's Office of Violence Against Women, to strengthen services provided to victims of domestic violence, dating violence, sexual assault and stalking. Henderson also hopes to play a major part in creating policies that are more trauma-informed and survivor-centered.

"It is definitely difficult at times to be in this position," said Henderson. "But I feel my work advocating for students continues to be empowered by my experiences on the ground as a volunteer, and as a researcher, fighting for survivors."

WHO INSPIRED ME?

RICK DUNN | CEO, ATHENS CLARKE COUNTY HIGH SCHOOL COMPLETION INITIATIVE

"I met him through MEU Radio but he became a mentor and helped me get involved in the community in other ways as he is very involved himself. He told me about REACH and invited me as a guest speaker at Foothill Charter High School where I discussed overcoming adversity. He was the first person to tell me about certain places I could volunteer my time and certain people I should meet that I eventually did as I continued to seek my own growth and purpose. His influence was **COMMUNITY**."

SHANE SIMS | DIRECTOR, PEOPLE LIVING IN RECOVERY

"I met him through a class where he was a guest speaker and reached out to him 1:1 so I could hear more about his story. He was serving life in prison and is now the executive director of the peer-led recovery nonprofit People Living in Recovery (PLR), serves as a chaplain for the ACC Police Department, as well as an advisory board member. He also is very

involved in the community. He mentored me at a time where I needed to re-learn resilience and who better than him. He showed me how to be resilient without being bitter; I accepted the things that we have to lose along the way or the tough lessons we have to learn to grow and the fact that we can have accountability in situations even if we are the victim and that acceptance is freeing. His influence was **RESILIENCE**."

TRAVIS WILLIAMS | DIRECTOR OF OPERATIONS AND PROGRAMS, CHESS & COMMUNITY

"I met him through Chess and Community. He was basically my supervisor and became my mentor. He helped me further develop my critical thinking skills and self-awareness. He also showed me that it was OK to speak up, but you have to know the consequences of speaking up and be OK with that reality and sacrifice that you will constantly have to make as a change agent. At a time where I was slowly letting go of who I was because I thought I was sabotaging myself through unapologetic advocacy, he helped me hold on and showed me how to be more strategic and more responsible with my voice. He is also very involved in the community. His influence was **INTENTIONALITY**."



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