UNIVERSITY OF GEORGIA™ — COLLEGE OF

PUBLIC HEALTH

2019 ANNUAL MAGAZINE —







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FROM THE DEAN



Change is in the air! Leaves changing. Seasons changing. And Dr. Phillip Williams, Founding Dean of the College of Public Health, retired after 25 years (14 years as Dean) of exemplary service to UGA.

As I step into the role of Dean, I am honored to lead the College through our season of change. However, the foundation of who we are as a College has not changed.

- We do action-oriented research to advance science and inform policy.
- We are committed to developing the next generation of public health leaders by preparing students to be researchers, practitioners, and health advocates.
- We engage with communities throughout the state, the nation, and globally to learn from each other about improving the public's health.
- We believe that everyone deserves the right to a healthy life and we work hard to find solutions to our most pressing health challenges.

 And, to quote my favorite musician, Bruce Springsteen, "at the end of every hardearned day, people find some reason to believe." And we believe that the world will be better because of what we do in public health.

Public health is needed more than ever in the world as its population grows older, climates change, chronic disease increases, the health of mother and children is vulnerable, and health disparities continue to exist by income, race, ethnicity, sexual orientation, and geography.

We need to prepare our students for this changing world where the jobs are going to be jobs of thinking, creating, and working in teams. The competencies that we will need to instill in our students are those of data, technological, and human literacy.

Our work should be devoted to increasing every opportunity for mothers, children, and families to survive and thrive; providing a high quality of life for our seniors; exploring novel methods to stop infection and its spread; and manage disasters from physical and social perspectives. Giving all people the chance for a healthy life will remain at the core of our public health values.

This is our field, and that is our charge.



CONTE

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CPH's new dean says her interest in public health was sparked by the field's focus on community service – a value she learned from her rural Southern upbringing.

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Before Hurricane Maria, CPH epidemiologist and Puerto Rico native José Cordero was working to prevent preterm births. Now he's working to make sure the island can handle the next storm.

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CPH researchers are using cell phone records and genomics to get at where and when tuberculosis is spreading in urban Uganda.

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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.



BEYOND THE STATUS QUO: BUILDING A STRONGER COMMUNITY PARTNERSHIP

Grace Bagwell Adams, an assistant professor of health policy and management, was one of three UGA faculty members selected to present at TEDxUGA: AMPLIFY 2019. She spoke to a packed house, inviting listeners to rethink how communities can work together to overcome challenges.

"We need to become bridge builders, connecting points of strength in our communities," said Adams in her talk, which centered on her work with the Athens Wellbeing Project (AWP). The goal of this unprecedented, multisector partnership is to collect and analyze representative data from households in Athens-Clarke County to inform policy that improves the lives and wellbeing of all Athens residents. As the AWP's principal investigator, Adams has taken a strength-based approach to build a network of project champions and break down silos that lead to service redundancies.

Adams recently presented findings and recommendations from phase one of the project to the Athens-Clarke County mayor and Board of Commissioners, who are using the findings to underpin a \$4 million stimulus package to promote wellness in the county.



COLLEGE OF PUBLIC HEALTH LAUNCHES MASTER OF HEALTH ADMINISTRATION DEGREE

The College of Public Health announced the launch of a Master of Health Administration (MHA) degree program in June.

The program is designed for students who aspire to leadership positions in healthcare. Through a structured curriculum and practice-based learning opportunities, the program aims to provide foundational knowledge and professional skills that will prepare students for administration careers.

"While students will get similar training in management, organizational theories and practices, policy strategies, and leadership principles that they would in other programs, the UGA MHA is specifically tailored to the healthcare administration sector," said program coordinator Lesley Clack, assistant professor in health policy and management.

The MHA is widely recognized as the degree of choice by employers when hiring for healthcare administrative positions in the U.S. The launch of the MHA degree program at UGA CPH reflects the college's commitment to training the future public health and healthcare workforce to care for a growing and aging population.

The curriculum includes courses in the core discipline of health administration, as well as courses specific to public



health. In addition, the MHA program offers students a wide array of healthcare administrative internships and practical capstone experiences, as well as opportunities to collaborate with other health executive professionals in the Athens community.

"The program curriculum also helps develop the communication and critical thinking skills needed to address, manage, and overcome challenges in healthcare administration," said Clack.

The inaugural cohort began classes in August.



The College of Public Health's Toni Miles was invited to join a new state Task Force on Healthcare Access and Cost, led by Georgia Lieutenant Governor Geoff Duncan.

In late August, Duncan announced the Task Force and outlined the goals for the fifteen-member group, which includes five elected officials.

The group will pinpoint improvements that can be made to tackle the cost and access burdens to healthcare across Georgia. Specifically, the Task Force will evaluate price transparency and other free market solutions, data and technology utilization, and employer innovation, according to Duncan's office.

Miles, faculty in UGA's College of Public Health, says she's excited about bringing the perspective of public health to the discussion of healthcare cost reduction to the group.

She points to two major public health challenges impacting Georgia – mother and child health and the aging population.

"Public health nurses can help to improve Georgia's infant and maternal issues. At the other end of life, hospice is primarily a home-based service," she said. "These are just two of the larger issues in public health that can be addressed by the Task Force."

Miles' prior experience as a health policy advisor includes the U.S. Senate Finance Committee as a Congressional Fellow, the Georgia Taskforce for Alzheimer's and Related Dementias (GARD), and the State of Kentucky Cabinet for Health and Family Services.

The Task Force kicked off with its first meeting on September 5th. The group will meet twice more in 2019.

Read more: t.uqa.edu/5h3

UGA CPH FACULTY LEAD LARGEST EVER REGION-WIDE EBOLA RESPONSE TRAINING







Photos by Rebecca Ayer, 2019.

In the largest Ebola response training to date, a team of planners led by faculty and staff at the University of Georgia hosted a tabletop exercise engaging nearly 45 emergency response coalitions and various state and federal partners across six Southeast states within the U.S. Department of Health and Human Services' (HHS) Region IV.

Supported by a grant from the Healthcare Preparedness Program at the Georgia Department of Public Health, the Institute for Disaster Management facilitated the training in their Emergency Operations Center in June.

"The purpose of this exercise is to evaluate our tier three frontline facilities in Georgia," said Curt Harris, director of the Institute for Disaster Management.

"We want to ensure that all providers who encounter a patient with a highly infectious disease knows how to identify and isolate them, and ultimately inform authorities so the patient can get to definitive care and minimize the risk to the public."

Tier three facilities include primary care and urgent care clinics, dialysis clinics, and school nurse clinics, as well as emergency responders such as paramedics and law enforcement.

The daylong exercise included five sessions that walked coalitions through the proper protocols to safely handle an Ebola patient and prevent an outbreak. In November, coalition members will participate in a full-scale exercise.

Read more: t.uqa.edu/5h1

NEWS & NOTES

BEER CHOSEN AS ONE OF UGA'S FIRST INNOVATION FELLOWS



Jenay Beer, an assistant professor in the college's Institute of Gerontology, has been selected as UGA's inaugural Innovation Fellows for fall 2019. Throughout the semester, she will receive a crash course in technology commercialization and learn how they can shape their research programs to more effectively align with industry priorities and, ultimately, serve the public's needs.

Beer designs assistive technologies for older adults that can help them manage life and health transitions as they age. Such technologies could include assistive robots, personal monitoring or communication systems, or other innovations.

"I am so grateful for being selected as an UGA Innovation Fellow—this is an amazing opportunity," Beer said. "The skills I will learn from this program will transform my research from formative investigations to full-scale commercial health interventions to improve the lives of older adults with dementia and their caregivers. Dementia caregiving is in need of a disruption. UGA is providing the tools and training so researchers, such as myself, can play a role in creating such disruptive innovative solutions."

Read more: t.uqa.edu/5h2

HECKMAN NAMED INCOMING EDITOR OF JOURNAL OF RURAL MENTAL HEALTH

Timothy Heckman, associate dean for research & faculty affairs and professor of health promotion and behavior at the College of Public Health, was recently named Incoming Editor of the *Journal of Rural Mental Health*.

The journal is an official publication of the American Psychological Association and affiliated with the National Association of Rural Mental Health. Heckman will begin a five-year term as editor in 2020, during which time he hopes to elevate the visibility and impact of rural mental health research to support the work of public health researchers and practitioners, policymakers, and rural-based community-based organizations.



"My goal is for the journal to play an important role in enabling rural persons to access evidence-based and affordable mental health services," said Heckman.

IN THIS ISSUE...

The world is changing rapidly. Our warming environment is presenting the public health field with new challenges — how do we prepare our communities and healthcare infrastructure for recurring massive weather events? How do we secure our food system and prevent waterborne infections? Meanwhile, the innovative application of existing and new technologies is empowering public health practitioners to overcome age—old barriers to healthcare access.

The UGA College of Public Health is changing, too. Under new leadership, the college is looking to build upon its foundation and be an agent of change in Georgia. This issue of the College of Public Health magazine will highlight how our committed to making it happen.



What is public health? It's a question Marsha Davis has heard many times over her career, and the answer is both simple and complex.

"We say 'everything is public health,' and that's because we know there is so much that can impact the public's health – from access to healthy foods to affordable healthcare, but we have come to understand that health is also influenced by community-wide factors," said Davis.

And it's working to address the needs of communities, in Georgia and around the globe, that motivate Davis as she steps into the office of dean at the University of Georgia College of Public Health.

TAKING ROOT

It was the community work that first attracted Davis to public health, a passion she learned from her father, who worked as a carpenter in rural Siler City, North Carolina.

"He taught me the values of community work and that everyone has a part in that regardless of where you are coming from in your own culture, beliefs or life experiences," said Davis. "It's walking in the shoes of other people that is important to understand in public health."

Over her career, Davis has led multiple landmark communitybased programs aimed at improving the health of children and their families. Initially trained as an educational psychologist, Davis began a pre-doctoral fellowship in epidemiology at the University of Minnesota where she brought her background in research methods and evaluation to the Minnesota Heart Health Program

"Evaluation's roots are in educational psychology," she said. "The research methods that are used in community-based studies come from education, though they have been furthered in public health."

Davis continued to design and evaluate community-based health promotion programs as a faculty member at Emory University's Rollins School of Public Health and again as part of the faculty at Minnesota, where she chaired the maternal and child health program and continued her research in nutrition and physical activity programs for children and their families in various communities and populations.

WORKING FOR GEORGIA'S COMMUNITIES

In 2006, Davis arrived at the University of Georgia College of Public, and she was inspired by the commitment to serve Georgia's communities has the state's flagship and landgrant university.

CHANGING LEADERSHIP

"We have a responsibility to serve all 159 counties in the state," said Davis. "Our work can make a real difference at the local, grassroots level."

Another key aspect of the college's presence in communities throughout the state is that it is uniquely positioned to identify the most pressing public health challenges faced by our communities, especially rural communities, and mobilize efforts to and address them.

And the challenges are great. Georgia has the highest maternal mortality rate and is ranked among the top ten worst in the country on infant mortality rates. The uninsured rate hit 13.4% in 2018, and rural communities have been hit especially hard by provider shortages and hospital closings.

WE HAVE A RESPONSIBILITY TO SERVE ALL 159 COUNTIES IN THE STATE OF GEORGIA.



While at UGA, Davis has been awarded more than \$15 million from federal agencies such as the National Institutes of Health, Centers for Disease Control and Prevention, and U.S. Department of Agriculture to address health issues in Georgia.

Her work has contributed to an improvement in health rankings for a number of counties and a significant economic impact for the state.

Davis' commitment to serving the state led to her being named as the College's associate dean for outreach and engagement in 2013, a role in which she coordinated efforts aimed at building the capacity of Georgia's public health workforce and fostering partnerships to improve community health.

Davis is responsible for founding and organizing the College's annual State of the Public's Health (SOPH) Conference and the UGA Public Health Leadership Academy (PHLA).

Davis is also seeking to build further research and outreach collaborations within the College of Public Health and with other schools and colleges across campus.

Today's major public health issues can only be addressed through a multi-sector and multi-disciplinary approach, said Davis.

"Take maternal and child health, for example. We need research contributions from epidemiology, health promotion and behavior, pharmacy, medicine, social work and others to find solutions to lowering Georgia's high maternal and infant mortality rates," she said.

BUILDING PROGRAMS FOR NOW

Learning to collaborate and problem solve with a team will be critical skills for the next generation of public health leaders. Innovating the education experience for public health students is another priority for Davis.

"We will need to instill these competencies through more projectbased study, more experiential learning," she said.



As dean, Davis will once again bring her talent for evaluation to the table as the college looks ahead.

"Evaluation really is about making data-driven decisions for program improvements, and that's what I want to bring to the college," she said.

Nationally, MPH enrollment is plateauing, while bachelor's degrees are on trend to overtake the master's degrees – a trend Davis is already observing at UGA.

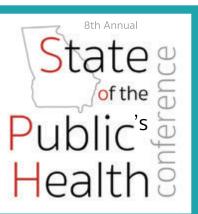
Generation Z students are interested in an education they can apply and are focused on the value of a degree, she said.

"We have to create a curriculum that emphasizes the human, data, and technology skills public health students need to enter the workforce and make immediate impacts on the communities they serve," she said.

An integrated curriculum, digital badges, stackable certificates, and 'MicroMasters' will be needed and will be in demand, she added.

Ultimately, Davis' hope is to prepare students to do the work of public health while encouraging their personal passions and purpose to make a difference.

"It's about making healthier lives possible for all people," she said. "That is public health."



The SOPH Conference, now in its eight year, serves as College's signature outreach event, connecting UGA faculty to public health leaders and workers throughout the state and also providing a place to discuss priorities and strategies for improving public health in Georgia. Founded in 2014, the PHLA aims to improve the health of Georgians by increasing the capacity of leaders to work collaboratively and transform the health of their communities.



HONORING UGA PUBLIC HEALTH'S FOUNDING DEAN

Phillip L. Williams, founding dean of College of Public Health, retired on December 1, 2018 after 13 years advancing the College's mission to address Georgia's public health challenges through training, research and service. During a career in academia and industry, he built a reputation as a nationally known expert on chemical exposure and other toxicological threats.

Before the College officially opened its doors, Williams worked to lay the groundwork for programs that would elevate public health at the University of Georgia, the state's land-grant and sea-grant university. It was an effort that led first to the launch of a Master of Public Health program at UGA in 2004 and, ultimately, the creation of the College in 2005.

During his tenure as dean, the College received full accreditation in 2009 and reaccreditation for seven more years in 2014, doubled its initial enrollment to more than 1,000 current students, conferred more than 2,300 doctoral, master's and undergraduate degrees, and moved seven of the college's eight units to the UGA Health Sciences Campus.

The fruits of his steadfast guidance can be seen in abundance at UGA. He had a vision for the College of Public Health and had the dedication to see it to completion. Countless students and faculty have benefited from his dedication and talents as the first Dean of the College of Public Health. I count it as a life blessing to be included as a beneficiary of his legacy.

KIM METCALF

former student (BSEH '93, MSEH '96) and CEO of environmental consulting firm, Riverbend Environmental

From the beginning, Dr. Williams always held steadfast the importance of excellence in faculty, staff, students, funding and facilities. In addition, an initial goal was to achieve accreditation which was awarded first in June 2009. Dr. Williams was a leader and friend to all who met him. He genuinely cared about the development of faculty, staff, and students.

SANDRA MCPEAKE

Assistant to the Dean (retired in 2010)

The goal was to learn as much as possible about what was needed to begin a program and college. What began as part of an initiative turned into a successful College of Public Health. Much was due to Phil's leadership, his ability to successfully advocate for the college, and I suspect skills that came from his consulting days. Definitely good memories I will cherish.

STUART FELDMAN

Interim Head and Professor, Department of Health Policy & Management

Not having prior academic administrative experience, his appointment by the new Provost, Arnett Mace, was met with some skepticism. Phil's transformation from professor and researcher was remarkable. His deep dedication and clear mission focus were reflected in many milestone accomplishments. As a witness to his leadership in those early years, he has earned the sincere gratitude for what he did for the faculty, staff, colleagues, and students as our Founding Dean.

ROBERT GALEN

Professor Emeritus in Epidemiology and former Senior Associate Dean

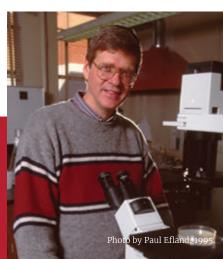
SERVICE & ACCOLADES

Williams served on a number of boards, shaping public health in Georgia

- State of Georgia Board of Public Health
- Governor's Advisory Council on Childhood Obesity
- · Council for Education in Public Health
- Board of Scientific Counselors, CDC's National Center for Environmental Health/Agency for Toxic Substances and Disease Registry
- Georgia Public Health Commission

Other notable accolades

- Named "Georgia Giant in Public Health" by the Association of State and Territorial Health Officials, 2017
- Named the Georgia Power Professor in Environmental Health, 2001



DEAN PHILLIP L. WILLIAMS ENDOWMENT FUND

To honor Dr. Phillip William's legacy as founding dean, the UGA College of Public has created a fund that will be used to establish a Distinguished Professorship in his name.

You can contribute to the fund by visiting: https://publichealth.uqa.edu/about/our-founding-dean/



José Cordero had seen the news reports.

When the lingering bands of Hurricane Maria finally gave way to blue skies, the enormity of the storm's impact on the island of Puerto Rico was laid bare.

Beginning in the southeast corner of the island, the storm had slowly crawled across the land, dumping unprecedented amounts of rain and battering homes with 155 mile per hour sustained winds.

Puerto Rico was devasted.

As soon as the first non-emergency flights could return to the island, Cordero, Patel Distinguished Professor of Public Health and head of the department of epidemiology and biostatistics, was on one.

A leading epidemiologist in the area of prenatal health, his research for the past decade had been dedicated to improving the health of mothers and babies in Puerto Rico.

But Cordero was not only returning to a research site. He was returning home.

Born and raised in Puerto Rico, Cordero left home to further his training in the burgeoning field of prenatal genetic testing. Eventually, Cordero transitioned his work into epidemiology, dedicating his career to identifying the factors that can lead to preterm births, birth defects and infant deaths.

In 2005, Cordero was asked to return home to help Puerto Rican health officials figure out what could be behind an unprecedented spike in preterm births. Between 1990 and 2007, Puerto Rico experienced a doubling in preterm birth rates, and no one knew why.

"To me, it was an eye opener," said Cordero. "It became evident that the usual suspects like access to healthcare, maternal education, none of those explained why we had such an increase in preterm births in Puerto Rico." He very quickly learned that Puerto Rico had more EPA-recognized toxic waste sites per square mile than any other jurisdiction in the U.S. The University of Puerto Rico, in partnership with Northeastern University, put together plan to look at environmental toxins and pregnancy.

Cordero currently co-directs the Puerto Rico Test site for Exploring Contamination Threats (PROTECT) Center as well as the Center for Research on Early Childhood Exposure and Development (CRECE), both of which examine how exposure to environmental contaminants contributes to the high rate of preterm birth.

He regularly flies back and forth between Puerto Rico and Athens to care for patients and collect data, so he was eager to get to Manati, on the northern coast, to learn how his patients and staff fared.

He wasn't prepared for the scene he would find, peering down over a once familiar landscape, that now seemed alien.

"It was beyond belief. It was like a giant mower had come through and taken all the leaves," said Cordero. "There were some trees standing, many fallen, but they were just like toothpicks that had been blown away."

The plane passed over homes, roofs missing. "We could see into their homes, and it was like that until we arrived at the airport," remembered Cordero.

Maria was the third major hurricane to hit U.S. territory in the 2017 season and the most intense. In the weeks that followed, the U.S. government and emergency aid groups were on hand to help Puerto Rico begin rebuilding.

Cordero was there, too.





Like most islanders, the staff working at his research clinics in Manati were heavily impacted by the storm. Nearly half had no running water, and several had to go source water from the local river.

"That was a reason that we immediately began requesting and received water filters. We trained our staff on how to use them and had them distribute filters to their communities," said Cordero. "That was our first involvement."

Expanding his sight to the local community health clinics, Cordero leveraged his connections with groups in the U.S. to ship in much needed medications and other supplies such as intravenous fluids and insulin.

"It was sort of like group-to-group direct aid instead of going through all the convoluted process of FEMA that really was very deficient," he said.

QUICKLY, HIS ROLE IN PUERTO RICO PUBLIC HEALTH SHIFTED TO INCLUDE DISASTER PREPAREDNESS

It took two weeks for Cordero's own clinic to regain power. In that time, many participants came to the clinics looking for supplies like baby diapers and for information. It was

CHANGING WORLD

moving, says Cordero, to see how much the community relied on the clinic for help.

The PROTECT Center has cultivated a culture of trust with the community. They'd rejected the traditional biomedical approach of collecting samples and information from patients without any commitment to report findings back to participants.

From the outset, the project was designed to be community-based, participatory research. Cordero wants the families in Manati to learn as much from his work as he does.

Cordero feels his team's work had a positive effect.

In the months that followed Maria, Cordero's team was recruited by Medtronic, a pharmaceutical devices company and the largest private sector employer in Puerto Rico, to conduct a needs assessment in the five municipalities where the company operates.

"That's something our community engagement group is very experienced in doing, and we're doing that as we speak," said Cordero. "What we expect is we'll have an opportunity to identify areas where Medtronic and our program can collaborate in improving community resilience because hurricanes are going to continue to come."

Today, Cordero is working with local private and government entities to better prepare the island for the next big storm. He is also supporting the development of an institute of public health, aimed at supporting the island's public health department in their work.

"The health department infrastructure is very poor," he said, "and the primary lab lost their roof, so they had to stop operations."

For almost ten months, all the public health testing from leptospirosis to dengue was sent to the CDC, said Cordero.

In 2019, Puerto Rico's infrastructure continues to recover. And new sectors are joining in the effort to build a more robust healthcare system, including private companies like Verizon Wireless.

Cordero says he is glad to see that the effort to avoid the catastrophe of Maria and protect the health and safety of Puerto Ricans is being shared across multiple sectors.

As the promise of stronger and more destructive storms threaten the Caribbean and eastern U.S., Cordero sees the role of public health as crucial.

Representing the college at a recent National Academies of Sciences, Engineering, and Medicine meeting on data collection following large-scale weather disasters, Cordero said that understanding the specific impacts of disasters can shape policy and save lives.

But we should never lose sight of the reason behind the work. "The data – the dots on a map –remember, those are people," he said.





AMERICA IS GETTING OLDER.

As the first baby boomers begin to retire, daily headlines are already warning of the 'silver tsunami,' who threaten to upend our healthcare system, our economy, and even our families.

But faculty at the Institute of Gerontology (IOG) housed within UGA's College of Public Health take a different view. They want to reframe the story we tell each other and ourselves about aging, and aging research.

"We want to help older adults thrive as they age," said Kerstin Emerson, IOG's resident gerontologist, "and that involves understanding the biological, psychological, and social factors that impact a person's experience."



THE FUTURE IS NOW

CHANGING WORLD

Jenay Beer has been thinking about how people interact with robots since she was a kid.

She grew up watching Star Wars, fascinated by the way R2D2 "beep-booped" his way through conversations with other characters, and The Jetsons, where Rosie wheeled about frenetically managing the family's futuristic home.

Now, Beer studies how robots can best meet the needs of an aging population.

It turns out that assistive robotics is catching up to the imagination of Hollywood, and Beer is at the forefront of the field, discovering how to best adapt robots for home and healthcare settings.

"At the heart of every technological advance is a human programming the device," she said, "so it's important to make sure the person remains the focus."

An engineering psychologist by training, Beer asks a lot of questions about the suitability of robots designed for human interaction — what might drive a person to want to adopt a robot? What tasks should, could, and will the robots perform? How might robots be used, and potentially misused?

For older people, who are experiencing cognitive decline or physical impairments, these questions are particularly important.

Beer has assessed the functionality of telepresence systems – think, Skype on wheels – for healthcare and home settings, and more recently, she has been thinking through how socially assistive robots can aid persons with dementia and their caregivers with daily tasks and even reminiscent therapy.





Over the last decade, public health professionals have begun to recognize the importance of social networks to a person's mental and physical health. Loneliness has been the focus of **Kerstin Emerson**'s research for the last five years.

Loneliness can affect anyone, but older people are particular vulnerable, says Emerson. Studies estimate that nearly 1 in 3 older adults are lonely in the U.S., which can lead to real mental health issues, as well as a range of physical ones.

Sustained loneliness has been linked to heart disease, high blood pressure, disability, cognitive decline, depression, early entry into nursing homes and increased doctor's visits.

"Recent studies have even suggested that loneliness is a risk factor for early death comparable to smoking or being an alcoholic," said Emerson.

Emerson's research has characterized the scope of the problem for the public at large, but also how loneliness and socially isolation impacts minority communities. She has found that groups who are more community – and family –centric, experience lower rates of loneliness compared to others.

The importance of staying connected to a social group, says Emerson, cannot be overstated.

But sometimes physical or geographic limitations make socializing difficult, so Emerson is looking into how online forums and support groups may help socially isolated individuals find connection.



AT THE VANGUARD

Perhaps more important to their individual areas of research, the IOG team celebrates collaboration.

"The team approaches challenges from a truly interdisciplinary perspective- both in the asking of the big questions, as well as in their approach to answering them," said Emerson.

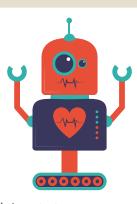
The team was recently funded to take on a new project that brings together their disparate areas of expertise.

"We're programming a robot to deliver cognitive training in the form of piano lessons," said Beer.

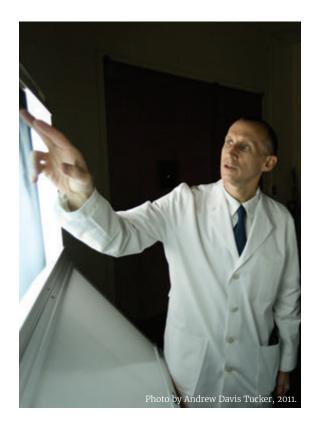
Learning to play a musical instrument can help boost brain function, but some older adults may have trouble accessing traditional piano lessons, she explained, "so a robotic agent may be able to open the door to access this learning opportunity."

The project has dual aims to improve cognitive functioning and to reduce feelings of loneliness in socially isolated older adults, drawing on the subject matter and methodological backgrounds of all three team members.

"It truly is the definition of interdisciplinary work, and the outcomes we hope to see in this project and in all the work we do will, we believe, change how people experience aging," added Renzi-Hammond.







CELLPHONES MAKE A LOT OF THINGS EASIER.

Keeping in touch with family, finding directions to the closest gas station, taking photos of everyday life.

But for the University of Georgia's Christopher Whalen, cellphones may also hold the key to tracking how tuberculosis spreads through communities in Africa.

Tuberculosis is the ninth leading cause of death worldwide and the No. 1 deadliest infectious disease on the planet.

Despite the arrival of a vaccine in 1921, effective treatment options since 1952, and numerous disease prevention campaigns, tuberculosis remains uncontrolled in many parts of the world, especially in low- and middle-income countries.

Disease burden is a measurement that tries to quantify the impact of a health problem (cost, mortality, etc.). In sub-Saharan Africa, the burden of tuberculosis, or TB, is high and made worse because of the HIV epidemic. New cases of TB number in the millions each year throughout the African continent.

As a physician and an epidemiologist, Whalen has dedicated his career to preventing the spread of TB.

"To make progress in curbing the epidemic of tuberculosis, new cases must be prevented," said Whalen, the Holbrook Distinguished Professor in Global Health and director of the Global Health Institute at UGA's College of Public Health.

CHANGING WORLD

The standard approach to tuberculosis control today relies on detection and treatment, but this approach doesn't work in areas where the disease burden is high and new cases are numerous. As Whalen explained, "By the time a case is diagnosed and treated, the next generation of cases has already been newly infected."

African countries accounted for almost one out of every four new cases of TB worldwide in 2017, according to the World Health Organization. The rate is even higher in urban settings, like Uganda's capital city of Kampala.

For over 30 years, Whalen has been working with colleagues at Makerere University in Kampala to discover better ways of limiting TB's spread.

Beginning in the 1990s, Whalen and a team of Ugandan scientists performed some of the first epidemiological studies on the effect of the HIV epidemic on its sister epidemic of TB in high-burden communities.



TO MAKE PROGRESS IN CURBING THE EPIDEMIC OF TUBERCULOSIS, NEW CASES MUST BE PREVENTED.

They formalized the standard public health practice of contact tracing—identifying and gathering information about any person who comes into contact with an infected patient—as a research tool to learn how TB spreads both inside a household and within social networks.

In 2018, he was awarded a grant from the National Institutes of Health to map the TB transmission in Kampala using a combination of patient lab samples and cellphone records.

"Everyone is carrying a cellphone," said Whalen. "By using archived cell phone records, we can map where TB cases move and measure how much time (patients) spent in different places."

The team will integrate this data with a genomic profile of the M. tuberculosis bacteria from patient lab samples. Through genomic testing, Whalen can trace one unique bacterium through communities, and the cellphone data provides a timeline for where and when new patients are infected.

"Our world today is an increasingly interrelated global community," said Whalen. "The diseases that threaten one community, one place, do not respect geographical boundaries."

Whalen's work not only changes the game for TB prevention in Uganda but also protects communities across the globe.



Dr. Whalen was named to the **Karen and Jim Holbrook Distinguished Professorship in Global Health** in July in honor of his prodigious research accomplishments and his commitment to training a generation of Ugandan health care providers.

Karen Holbrook served as provost and senior vice president for academic affairs at the University of Georgia from 1998 to 2002. Dr. Holbrook and her husband established the professorship to build upon existing strengths in global health research throughout the college, increase international collaborations, and expand experiential learning activities for students in international public health.

SAFER WATERS

Finding the pathogens making the most of warming waters

By: Leigh Beeson

Five deaths. Almost 100 hospitalizations. And more than 200 people infected.

Spanning over three months and stretching across 36 states, the 2018 outbreak of E. coli was the largest of its kind in more than a decade.

Tainted lettuce was eventually blamed for the outbreak, but it was really an issue of tainted water.

The bacteria had somehow made its way into the canal that irrigated the soon-to-be-sold romaine lettuce.

The College of Public Health's Erin Lipp is tracking what's becoming a growing problem of dangerous levels of pathogens finding their way into water sources.

Quickly determining which bodies of water are contaminated and what products are tainted can mean the difference between a handful of people becoming ill and hundreds.

"We've been seeing an increase in outbreaks of bacteria like E. coli and salmonella in fresh produce over the last several years," says Lipp. "We tend to think of these pathogens as causing foodborne disease, but in many cases, it is ultimately the water that is the real source."

Waterborne exposure to disease-causing bacteria isn't a new phenomenon, but as sea temperatures rise and extreme weather events become less predictable, it is becoming more frequent.

"We see big changes in water quality when we have these very high-intensity precipitation events," Lipp says. "We'll get massive runoff of contaminants—very high levels of salmonella and E. coli, for example—that will go from numbers that are relatively reasonable up by 100-fold in a relatively short period of time."

The life-threatening bacteria vibrio—which has several strains that can cause severe gastrointestinal issues, loss of limbs, or even death—is one that's making the most of the warmer temperatures.

"Vibrio probably has the most direct link to climate change that we've been able to confirm," says Lipp. "These organisms simply divide quickly at warm temperatures, and the warmer the water is, the faster they divide."

VIBRIO PROBABLY HAS THE MOST DIRECT LINK TO CLIMATE CHANGE THAT WE'VE BEEN ABLE TO CONFIRM.

The bacteria's range is also spreading, both in terms of latitude and seasons. There have been outbreaks in New England and as far north as Alaska. And outbreaks are expanding into late spring and early fall while the waters are still warm.

"The take-home message is that we are entering a riskier time," says Lipp, who participated in the U.S. National Assessment on Climate Change and Health in 2009. "It may not always translate into more people getting sick, but the risk of contracting something is increasing."

That's where research like Lipp's becomes critical to protecting the public's health. By tracking bacteria in water supplies and pinpointing animals that may be carriers, public health officials can minimize the public's risk of exposure.

"The increased risk is scary, but we have an immense ability to deal with these problems, especially when we're dealing with water infrastructure," Lipp says. "We know what we need to do. It's just a matter of getting it done."

CHANGING WORLD

DOES THERAPY HAVE TO BE FACE-TO-FACE TO BE EFFECTIVE?

This was the question at the heart of Tim Heckman's research for the past several years.

Heckman studies the intersection of HIV and mental health. Specifically, his work since the early 1990s has looked at ways to help prevent and treat HIV in rural communities.

"No one was focused there," said Heckman. "Having grown up in a rural community, I would often think about what it would be like to live in a small town with HIV, experiencing the stigma and the lack of resources available to you."

Depression is very common among people living with HIV, and those who live in rural areas are more likely to experience it than their urban counterparts. They are also less likely to see a mental health provider.

This can become a problem for both the individual and their community. Depression contributes to nonadherence to antiretroviral treatment, which not only compromises an infected person's immune system and overall health, but also increases the chance of transmitting the virus to an uninfected person.

Interpersonal psychotherapy is a common, in-person treatment for depression, but mental health providers are particularly rare in rural communities. The primary resource

sometimes offer counseling.

But the stigma associated with visiting designated HIV clinics discourages some from seeking the care they need, even when it is available, said Heckman.

"Given the high rate of stigma and lack of access to care in

for most communities is a Ryan White clinic, which can

those areas, we concluded that if people can't come to the necessary venues for treatment, then we should take the treatment to them."

Heckman, along with a team representing psychologists and HIV researchers from across the U.S., wanted to find out whether traditional one-on-one, in-person therapy could be delivered successfully over the phone. In short, yes.

In a randomized clinic trials, Heckman and his colleagues tested the efficacy of "tele-IPT" with 147 individuals living in rural communities across 28 states.

TELETHERAPY IS INEXPENSIVE, MAINTAINS PRIVACY, AND MEETS PEOPLE WHERE THEY ARE.

Study participants received nine weekly phone calls from a clinical psychologist and reported their progress immediately after completing the therapy and in follow-up surveys four and eight months after treatment ended.

Results showed that the benefits of tele-IPT persisted.

"After teletherapy, they enjoyed an improved mood, a better outlook on life, they were more hopeful about things, more likely to re- engage with things they'd given up when they were depressed," said Heckman.

Teletherapy, he argues, is inexpensive, maintains privacy, and meets patients where they are. The next step is to work with HIV/AIDS service organizations and practitioners in rural communities to roll out treatment to people who need it.

Two of Heckman's colleagues from the College of Public Health and UGA's College of Education are already piloting some of this roll out. Using a video conferencing system, the project connects doctoral counseling students to HIV clinics in rural Georgia.

"Some people are not comfortable in face-toface settings and now they have an efficacious treatment they can participate in without leaving the safety and the confines of their homes," said Heckman. "We hope that this type of teletherapy will reach people who otherwise won't get access to the treatments that they need."





CPH STUDENTS CONTRIBUTE TO NORTHEAST GEORGIA'S FIRST SCHOOL-BASED HEALTH CENTER

This fall, the Clarke County School District (CCSD) opened Northeast Georgia's first school-based health center (SBHC) on Athens' east side.

One-third of adults and one in four children in Athens-Clarke County live below the poverty line.

The new clinic will provide comprehensive medical, dental, and health care services to students at Gaines Elementary and Hilsman Middle schools, improving health care access for more than 1,200 children in Athens-Clarke County.

It's a monumental community health effort that four graduate students from the UGA College of Public Health were able to be a part of through the support of a student-focused mini-grant program, launched in Fall 2018 by the College faculty's Diversity Committee.

The program, called Community Mini-Grants for Inclusion, Research, and Engagement, awards funding to student-led community outreach projects that focus on addressing health disparities in Athens-Clarke County.

Graduate students Shellie Bardgett (BSHP '17, MPH '19), Michael Bien (MPH '19), Valerie Kimbrough (MPH '19), and Nicholas Mallis (MPH '19) received funding through the program in January 2019 for a research proposal exploring the potential need and impact of a school-based health center in Athens.

"School-based health centers can play a big part in improving the health and academic success of students. The aim of our project was to talk to teachers, school nurses, and school community leaders and survey them on the needs of their students and how a community-based clinic might fit in," said Bien.

The student team's first assignment was to assist the CCSD task force in the analysis of needs assessment surveys delivered to parents and students at Hilsman and Gaines during March 2019. A total of 125 parents and 427 students completed the surveys. The public health students provided their analysis findings to the SDHC task force in April 2019.

PEOPLE OF CPH

Survey results solidly confirmed a need for an SBHC in Clarke County, said Bien. Nearly one-quarter of the parents surveyed had trouble getting medical, dental or mental health services for their children, and 18% reported no regular source of health care.

Parents also identified the inability to take time off from work and lack of transportation as their most significant barriers to accessing care for their children.

"For low income families, it's really difficult for parents to leave work to pick up their kid and take them to a doctor," said Bien. "The new school-based clinic will be able to help parents by providing the care their children need on site and in real time."

Results from the student surveys confirmed parent survey findings that certain student healthcare needs are not being met, particularly mental health and dental care.

SCHOOL-BASED HEALTH CENTER

Serving students, faculty, and staff at Hilsman Middle School and Gaines School Elementary School

FALL 2019 LAUNCH

approximately 1,300 students
will have access to
health services through
SBHC in a given year



The SBHC will help reduce missed class time and allow for healthy, productive learning.

SBHCs increase educational success by providing physical and mental health care that creates a more positive overall school climate (APHA, 2018)









Valerie Kimbrough prepares classroom health kits to be distributed to Clarke County teachers.

Mallis, who led the CPH team's analysis efforts, was surprised to see the need for mental health services rank so highly with both parents and students.

"I was a particularly taken aback by the fact that half of the students reported at least one mental health concern. It surprised me that these students, some as young as 4th grade, were saying, 'Yes, I need mental health services, and I can't get them.'" said Mallis. "Luckily, one of the main goals of this clinic is to meet this need."

To help educate Hilsman and Gaines faculty and staff about the benefits provided by the new SBHC and engage their help in getting students enrolled in the clinic, the team developed an outreach plan, including materials that teachers could use to answer questions from students or parents.

"The teachers will be responsible for interacting with parents and obtaining the consent forms required for each child to be able to access the SBHC's health care services," said Bien. "So, it was important for us to provide a way to answer questions, show appreciation, and build excitement about the new clinic."

The effort was a resounding success and the school district is now making plans to adopt the students' outreach model for their engagement efforts in the upcoming year.



At first glance, Briana Hayes' list of accomplishments reads like that of a typical high achiever at UGA.

She is third-year health promotion major with an interest in community health, a Presidential Leadership Scholar, an Honors student, and a member of the Dean William Tate Honor Society. She's served two-terms as a Student Government Association senator, and she is an accomplished pianist and an avid golfer.

But Hayes can claim one crowning achievement others cannot – Miss University of Georgia 2019 – and since earning that title, Hayes has made it her mission to elevate the importance of service and public health across Georgia.

As Miss UGA, she works to raise awareness and funds for Children's Miracle Network (CMN) Hospitals. Her most recent campaign – "Kiss a Dawg, Cure a Child" – encourages UGA fans to donate to a CMN Hospital, then post a picture of themselves kissing a dog on social media.

Her platform "Creating Believers: Today's Youth, Today's Volunteers" aims to inspire youth in realizing their purpose by providing them with opportunities to become civically engaged. She travels regularly across the state to participate in charity events and visit schools sharing her mission and her passion for volunteering.

Originally from a small town in South Georgia, Hayes' call to service and, ultimately to the field of public health, begins with her rural roots.

"The truth is that public health is a grave concern in rural communities and one that is often overlooked. This presents a major issue, as health is the cornerstone of an individual's wholeness and wellbeing," she said.

Many of Georgia's public health issues have hit Hayes close to home. Pageant swimsuit competitions had her obsessing over her own weight. Her father was diagnosed as pre-diabetic. Her grandfather, who smoked for many years, died from lung cancer.

Hayes is proud to be pursuing her degree in the College of Public Health and is especially eager to use the knowledge she is gaining to make a positive impact in her community.

"I don't think health is something that is pushed enough within Southern culture, especially African American Southern culture. My hope is to one day be able to give back to people that I grew up around and help them focus on a healthier lifestyle."

In the year ahead, Hayes is focused on fostering a new mentorship program she founded for rural students at UGA called RISE — Rural Students Igniting Success in Education — which launched officially in September. Through the program, she wants to give incoming rural students an advantage she didn't have as a freshman.

"When you are able to connect with people who have a similar background as you, it makes this transition to life at UGA a lot easier," said Hayes.

PEOPLE OF CPH

TALKING HEALTH LITERACY AT APHA 2019

College of Public Health doctoral student Jessica Shotwell will present her research as part of the Delta Omega poster session at the 2019 American Public Health Association annual meeting.

Shotwell was one of twenty-nine students selected to present their scholarship and research at the meeting.

Each year, the Delta Omega Honorary Society in Public Health and the Academic Public Health Caucus sponsor a student poster session with presenters selected from local chapters of Delta Omega at CEPH-accredited schools and programs of public health.

Shotwell's poster will represent the culmination of two years of data collection across three large, Athens, Georgia-based health care clinics on health literacy, health autonomy and shared decision making.

One of the more striking findings of her study was that women reported lower levels of shared decision making and were more likely to feel disadvantaged in their interactions with their healthcare providers compared to men.

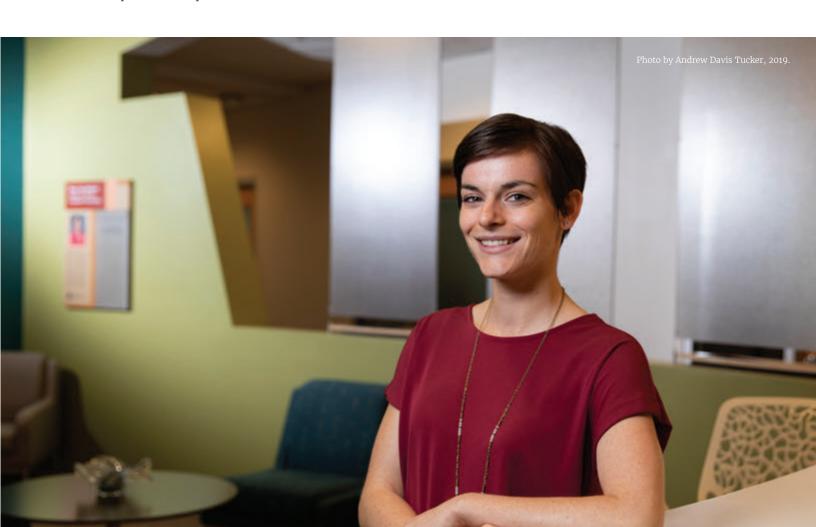
"This idea of health literacy, the capacity to understand health information and apply it to your life, is a strong predictor and correlate to health status and health behaviors," said Shotwell.

"What these data show is that women don't feel they're afforded the same opportunities to engage and converse with their doctors compared to men."

The data also has implications for older adults. Overall, older respondents reported low levels of health literacy and shared decision making, which reflects findings in other studies.

Shotwell, who is training to be a gerontologist, is working with older adult–facing organizations in Athens to educate the city's growing aging population on how to avoid miscommunication at the doctor's office.

This poster session was created by Delta Omega to encourage and recognize the public health leaders of tomorrow. The sessions will be held on Monday, November 4 and Tuesday, November 5, in Philadelphia.





PEOPLE OF CPH

A passionate advocate for public health, Arezoo Risman (MPH '11) has worked as a health communications specialist at the Centers for Disease Control and Prevention for the past 10 years, translating the CDC's scientific findings to audiences around the world. Risman was recognized as one of UGA's 40 Under 40 Class of 2019 — a select group of young alumni who are leaders in their chosen fields and professions.



Why did you choose to study at UGA College of Public Health? How did you know you belonged at UGA CPH?

I always wanted to be part of a big school. After visiting the campus in Athens, I instantly felt like I was part of a big family with the same goals, visions, and drive. I knew this was where I wanted to pursue my graduate education alongside some of the most talented individuals nationwide who soon would become my future colleagues.

What's your favorite UGA CPH memory?

I'll never forget the first day of orientation. I had made some amazing friends that morning, and I offered to drive everyone to lunch. The parking deck was so big and new to me that when we got there, I completely forgot where I parked earlier in the day! Fortunately, with the help of my new friends—and a car alarm—we laughed so hard across every level of the parking deck in an unforgettable bonding activity in search of my car. Talk about a first impression!

What made you choose this profession?

I always knew I wanted to be in the healthcare industry, but just didn't know what. Initially I thought the only career I could have in healthcare was to be a physician, but deep down I knew I craved something on a more global spectrum.

When I discovered the world of public health and how it promotes the health and wellbeing of people and their communities from a preventative scope, it instantly was so much more alluring to me. I love helping people by nature, so knowing my efforts could reach millions across the world instead of just helping people one-on-one like traditional medicine, I knew it was the right fit for me.

Where do you work today and what do you do?

I currently work in CDC's Office of the Chief Operating Officer, as a business account manager and office lead for internal emergency communications in Atlanta, Georgia.

What do you find most rewarding about your career working in public health?

I love waking up in the morning knowing that my agency works 24/7 to protect the health and safety of the American

people. The CDC's prestige is so well known that it is such an honor to not only just work here, but to also have some of the most intelligent people of the world as your colleagues. Truly very humbling.

What additional activities and causes do you enjoy dedicating your time to?

Outside of CDC, I recently founded Helping Kids Heal, LLC. Dedicated to children going through childhood trauma, this book series written by a team of experts hopes to be the conversation starter for children and concerned adults who wish to start a tough conversation. Our hope is to bring peace, comfort, and healing for children who might be going through a tough time.



In my spare time, I love spending quality time with family and friends, traveling, and practicing mindfulness and meditation through yoga.

How has your UGA CPH education contributed to your success? What makes alumni of UGA CPH unique?

The fundamental knowledge of public health received at UGA CPH has been invaluable throughout my career. CPH alumni are unique because we have been trained to know the different dimensions of public health, and we come out of our graduate studies truly understanding how everything in public health is all-interconnected. Whether it is the epidemiologist on the field, the scientist in the lab, the lobbyist in Washington, or the communicator in the newsroom—we all come together as one with one shared goal: preventing the spread of disease.

What advice do you have for students and recent graduates?

I would tell students and recent graduates to take some time to do some introspective reflections to see what career would best suit you before jumping into something you "think" is best for you.

I remember as a student looking at all the career options and thinking, these are all so different how can I ever decide? It truly wasn't until I spent some time shadowing others and being part of the industry before really knowing that public health was the field for me. Don't allow salaries to be the influencing factor on your decision—be sure to pick the career that is right for you based on the industry you want to be in, the type of work—life balance you would want to have, and the kind of legacy you want to be known for. Ultimately you want to make sure you wake up every morning excited for the day, and ready to make the most of it.



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Convening cross-sector public health champions to share ideas and expertise, and to generate solutions for Georgia communities.





