“Public health is so all-encompassing that I genuinely believe it touches every other field — not only the health sciences, like medicine, pharmacy and dentistry, but also chemistry, communications, city planning and more.”

From the Dean

This issue of Carolina Public Health magazine discusses why the world needs public health. A related question that I answer often in my role as dean is, “What is public health?”

I’m always tempted to respond: “What isn’t?”

After three years of living in a pandemic, many people identify public health through epidemiology. Yes! Creating vaccines and sharing masking guidance are essential public health tasks.

However, that’s not all epidemiologists do, nor does it represent the whole of this field.

Public health is also keeping workers safe on the job, improving traffic patterns to reduce car wrecks, getting healthy food to hungry kids, testing street drugs for dangerous additives and planning ahead to mitigate the effects of climate change.

And that’s not nearly all. We also make birth safer, ensure communities have clean drinking water, design well-run clinical trials, support people through healthy lifestyle changes and advocate for policies that mean everyone can visit a health care provider when they need to.

If any of these examples surprises you, you’re not alone. Public health is so all-encompassing that I genuinely believe it touches every other field — not only the health sciences, like medicine, pharmacy and dentistry, but also chemistry, communications, city planning and more.

Here is the ultimate goal of public health: We want people to lead safe and healthy lives. That means instead of investing directly in patient care, public health invests in improving well-being.

Here’s one example of the public health mindset, explained beautifully by Master of Public Health student Callia Cox, who is studying to become a registered dietitian:

“I realized in order to effectively help people eat better, I had to gain the skills to figure out each individual’s top priority. Someone worrying about eviction just can’t focus on getting more vegetables in their diet.”

This approach of addressing people’s most pressing needs first is why, to my mind, public health is the foundational layer in the pyramid of overall health and well-being. Our work creates a sturdy base upon which individuals and whole societies can then build additional layers, such as increasing generational wealth, exploring self-care and enjoying long, fulfilling lives.

As the pandemic reaches a different phase, many people are turning their gaze away from public health. We are, however, still in the middle of multiple crises: systemic racism, poor mental health and opioid misuse, to name a few. Our work is by no means done.

As the epic quest to achieve health and well-being for all continues on a global scale, I am reinvigorated every day by what I witness all around me at the Gillings School.

When a student tests water samples for toxins in one of our labs, when a staff member connects a worried parent with community resources, when a faculty researcher presents evidence to support a national policy change — this is public health in action.

For me, these efforts are also the source of boundless hope.

Dr. Nancy Messonnier
Dean and Bryson Distinguished Professor in Public Health
UNC Gillings School of Global Public Health

From: Nancy Messonnier
To: Nancy Messonnier
Subject: [email]

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Why the world needs public health

Three years ago, public health rose to a challenge that shook the world.

Under the pressure of time, uncertainty and withering scrutiny, public health efforts confronted an unprecedented viral threat, aided the rapid development of revolutionary therapeutics and vaccine technology, and helped us understand our role in caring for one another. As the United States confronted the impacts of structural racism, public health played a necessary part in finding new solutions to improve health inequities.

Though we are called public health, we have endured on the periphery of public awareness — working to prevent illnesses, deaths and disasters that are difficult to measure when they do not occur. When COVID-19 brought our school into the spotlight, the world saw the strength of our values: cooperation, inclusion, equity, empathy and perseverance.

But this experience has not been without challenges. Preventable illness and death have caused suffering for millions. The number of people whose lives have been altered by long COVID increases every day. Our health care systems are strained, and lack of public health funding and organization have prevented proactive responses. We are still chipping away at the structural barriers to health care access, systemic equity, climate change, clean water and many other factors that impact our well-being.

Furthermore, a crisis of trust has polarized the public. Experiences of racism, discrimination and economic hardship have led to medical mistrust. Disinformation and lack of public health communication have led to confusion about what is fact. Distrust in the institutions once thought unassailable — the schools, doctors, media and governments that are so important to a healthy society — have left many feeling fractured and disheartened.

As this issue of Carolina Public Health will demonstrate, public health is no stranger to these challenges. Indeed, it is the institution with the knowledge, resources and practices best suited to tackle them. The world needs public health because our foundation is rooted in the very values necessary to design evidence-based solutions, adapt to adversity and collaborate for the common good.

The world needs public health, because we are the future-minded researchers who work behind the scenes to prevent disease, prepare for disasters, promote health and prolong life.

The world needs public health, because we are the advocates for policies that are informed by evidence and rooted in equity and inclusion.

The world needs public health, because we are the partners who elevate community voices and approach health solutions from new perspectives.

The world needs public health, because we are the practitioners who work locally and globally, with an understanding that our impact must support human rights and reduce harm.

And the world needs public health, because we are the communicators who strive to educate with empathy, trust and accuracy.

At the Gillings School, we aim to instill public health leaders with knowledge and skills that reflect these institutional values. And we strive to live these values as we press forward in the journey toward lasting change.

But our work does not end if we stumble on the road to that change. On the contrary, that is when our work begins anew.
The long run: Public health behind the scenes

In 2020, as people worldwide remained in lockdown, public health leaders and health care providers worked nonstop to stem the tide of COVID-19. Dictionaries chose “pandemic” as their Word of the Year, social media was flooded with memes and quarantine jokes, and videoconferencing technologies changed the way people lived, worked and communicated.

For most of us, it was the first time we’d heard so much about the “coronavirus” — a virus whose variants Ralph Baric, PhD, William R. Kenan Distinguished Professor of epidemiology, had been studying for more than three decades. Thanks to their familiarity with the virus, researchers at the Baric Lab and throughout Gillings were at the nexus of pandemic response — playing a critical role in testing vaccines and treatments, predicting viral spread, and helping world leaders mitigate the pandemic’s impacts. Public health was suddenly center stage in the global spotlight.

That’s more the exception than the rule. While public health work is vital to the overall health and well-being of our society, most of the time that work is done over “the long run” — persistently, cumulatively and largely out of view of the general public.

BIOSTATISTICS

Longitudinal studies are, by their very definition, a type of research done through a long-term lens. The Collaborative Studies Coordinating Center (CSCC), housed in the Department of Biostatistics at Gillings, is home to two long-running longitudinal cohort studies that have tracked the same pools of participants over several decades, generating findings that have led to important changes in public health and in the practice of medicine.

One of the world’s most significant heart health studies, the Atherosclerosis Risk in Communities (ARIC) study, began in 1986, enrolling a cohort of nearly 16,000 adults from four United States communities and monitoring them in the years since through clinic visits, phone calls and other measures. The Hispanic Community Health Study (HCHS/SOL) began in 2006, following the health issues of nearly 16,000 Hispanic/Latinx adults.

Between them, so far, the two studies have spawned more than 3,000 publications and almost 200 ancillary studies. Their findings have led to the development of new heart medicines, helped identify risk factors for several illnesses, highlighted health disparities, and influenced clinical guidelines that doctors use to treat coronary heart disease, diabetes, stroke and chronic kidney disease.

“The original study has essentially become the infrastructure, and researchers are coming to us and saying, ‘Here’s what I’m interested in. I heard you have the best cohort — would you be willing to partner?’ That’s where a lot of the current work is being done,” says Kevin Anstrom, PhD, director of the CSCC and professor of biostatistics. “These standing cohorts have a very detailed history over a long period of time.”

ENVIRONMENTAL SCIENCES AND ENGINEERING

Working over a long period of time is not unusual for most academic researchers, especially those hoping to influence public policy. One factor is the time-consuming nature of regulatory, legislative and policymaking processes; another challenge is translating highly complex, technical information into a navigable road map for change.

Atmospheric chemical processes, for example, have significant effects on air quality and are a major factor in climate change. Over the past three decades, Gillings’ Department of Environmental Sciences and Engineering has been a leader in advancing the scientific understanding of the atmospheric processes that create ozone and aerosols, with faculty and staff making major contributions to the field, including building the world’s first smog chamber. Over the years, multiple findings and innovations have been instrumental in creating more effective pollution controls and influencing policy change.

The School’s reputation as an air-quality leader and the fact that all the atmospheric chemistry models are tested on experiments in its smog chamber helped entice Professor Will Vizuete, PhD, a chemical engineer by training, to join the faculty in 2005. “I could do modeling anywhere in the world, but what’s nice about Gillings is that all these scientific discoveries are done in-house,” says Vizuete, who develops and runs sophisticated models that determine how aerosol and other air particles interact chemically with the atmosphere. “I have access to all that data and can incorporate that science into my work.” Vizuete collaborates with department chemists and statisticians at Gillings, along with colleagues in other academic fields, on long-term projects that have led to key innovations. He’s also continuing to work closely with policymakers, the Environmental Protection Agency, and the oil and gas industry in Houston on air-pollution policies and strategies — a relationship that began more than 20 years ago when, as a graduate student in Texas, Vizuete developed models that led to new ozone controls. This work had a major impact, taking Houston from one of the dirtiest cities...
in America in 2000 to meeting national standards by 2009 and saving countless lives in the process. His more recent projects involve running models based on data from the state of Texas to determine the sources and chemical compositions of a variety of pollutants in Houston; his work will serve as the foundation for the new pollution controls and policy decisions.

HEALTH BEHAVIOR
Marissa Hall, PhD, an assistant professor in health behavior, has her eye on policy changes, too. She conducts innovative experimental research on the efficacy of warning labels on tobacco products and, more recently, on alcohol and food products. Her lab is the UNC Mini Mart, a physical convenience store on campus where her experimental studies simulate a real-world shopping experience to test how consumers react to packaging labels, shelf placement and other variables that might affect shopping choices. Nine Latin American countries have recently adopted visually engaging, front-of-package warning labels about the nutritional composition of sugary drinks and other highly processed foods — and initial evaluations indicate consumers are buying fewer unhealthy products. Now Hall is excited about the opportunity to influence the U.S.’s path on that same topic. Last fall, Hall was one of the first scientists to study using social media as a tool to help survivors increase their physical activity or make lifestyle behavior changes. She investigates the most effective ways to use social media, activity trackers and other technology in the context of interventions to encourage survivors of adolescent and young adult cancer to engage in healthy behaviors. To this day, Valle maintains relationships with many of the advocates she met decades ago and works closely with a community advisory board of AYA survivors.

MATERNAL AND CHILD HEALTH
Local community leaders often are a key resource for researchers who work directly with individuals and families — and as such, they gain insights into the research process that the general public usually lacks. Kavita Singh, PhD, associate professor of maternal and child health, collaborates with families and research partners in several African countries to evaluate interventions designed to reduce maternal and infant mortality.

Many of these interventions, such as early breastfeeding and keeping a baby warm through simple skin-to-skin contact, are “natural” approaches that are found to benefit all newborns and feasible to implement in low-resource settings. Singh’s work helps countries make effective strategies and interventions more accessible to new parents regardless of their geographic locations or their financial situations.

Maternal and child health is another area of public health with an eye on future impacts. Evidence abounds that a healthy first thousand days of life, from conception to age two, is key to giving an individual a good start in life, and that early-life stress can contribute to poorer physical and mental health down the road. Singh has seen a shift in awareness of the importance of improving the health of pregnant individuals and the importance of giving children a healthy start. “There is now more of an understanding that the first month of life can be a vulnerable time in an individual’s life and that we have newborn interventions that don’t require a lot of technology or electricity,” Singh says. “Globally, there is also more of an awareness that we need more research into developing and evaluating more of these types of newborn interventions.”

Increasing the public’s understanding of the importance of public health is an enduring challenge. Whether they are suddenly thrust into the media spotlight or continuing their work in a less public way, Gillings faculty remain dedicated to the vital mission of improving public health. They’re on it — and they’re in it for the long run.
Many faculty and researchers at the UNC Gillings School of Global Public Health are exploring the social drivers that increase rates of chronic disease among vulnerable and marginalized populations.

**Chantel Martin, PhD**, assistant professor of epidemiology at the Gillings School, is studying the impact of neighborhood social conditions and environmental toxins on inequalities in chronic disease risk and the underlying biological mechanisms linking neighborhood conditions to health.

Both historical and current policies around residential segregation have created disadvantaged neighborhoods. People residing in disadvantaged neighborhoods face limited access to economic opportunities, quality health care and healthy food choices. They also face higher levels of crime and policing and more environmental toxins. All these social factors have a profound impact on well-being and mean that no one’s health exists in a vacuum.

**Deshira Wallace, PhD**, assistant professor of health behavior, examines how various sources of stress, including racism, can affect the management of conditions like Type 2 diabetes and contribute to cardiovascular disease risk. For example, if an individual thinks that they might be stopped because of their skin color, they may feel less safe running outside and struggle to engage in the recommended physical activities to manage their diabetes.

“People are exposed to physical, social and political factors that change the calculus on how they can control their individual health,” said Wallace. “If we focus on individual health, then we are not fulfilling our public health mission to facilitate environments that reduce disproportionate risks and barriers to allow individuals to live the lives they want to live.”

Wallace’s work also explores the impact that policies, such as migration policies, have on health. Discrimination against the Latinx community can create barriers to important services like health insurance. It also makes it harder to obtain essential needs, like a driver’s license, which is often necessary to access quality health care and other services.

**Anissa I. Vines, PhD**, associate professor of epidemiology, also researches social drivers of health inequity but with a focus on psychosocial stressors in the lives of Black women. Her work includes the study of racism both as a chronic stressor and a determinant of other stressors on health issues, including depression and the increased incidence of uterine fibroids.

“Racism is a unique chronic stressor that can dysregulate the body’s homeostasis, or state of balance, leading to adverse mental and physical outcomes,” said Vines. “Racism operates at the individual level, but it also influences other stressors, too. For example, discriminatory practices and policies in schools and neighborhoods thwart economic opportunity and contribute to high effort coping. Because of this, racism has an intergenerational influence on determinants of health.”

Researchers at the Gillings School are hopeful that public health leaders can put these learnings into practice to positively impact public health.

“With research linking structural and institutional racism to health inequities, it’s now important to identify effective policies and multilevel interventions to reduce and, ultimately, eliminate health inequities,” said Martin.
O.J. McGhee

McGhee’s personal motto is the quote from activist and author James Baldwin: “Not everything that is faced can be changed, but nothing can be changed until it is faced.” In his 22 years working at Gillings, McGhee has been a force for change, both at the School and beyond the Chapel Hill community.

McGhee is an associate director for the School’s Instructional Media Services and End-User Support teams. Since his arrival at Gillings, he has been the mastermind behind the production of the School’s annual Minority Health Conference keynote broadcast and the National Health Equity Research Webcast. McGhee’s also been closely with McGhee on them. “The more I worked with him, the more I realized that his technical knowledge, judgment and people skills were way better than mine. His dedication to the conference broadcasts’ success led him to go many extra miles on our behalf.”

Going the extra mile comes naturally to McGhee, whose first name is Onegaa (mwan-ga), a Swahili pronunciation that means to “shine a light.” He earned a bachelor’s in mass media arts from Clark Atlanta University, where he played football and worked at the school’s TV station. He won a public broadcasting fellowship to Ohio University for a master’s in telecommunications management and is pursuing a doctoral degree in educational leadership from UNC Wilmington. His career has included jobs at Black Entertainment Television, the Black College Satellite Network as well as Florida A&M University, and adjunct professorships at Morgan State and NC State Universities.

After arriving at UNC in 2001, McGhee got involved on campus in various ways, such as coaching club football, PA announcer for the women’s basketball team and joining the Campus Safety Commission. His most visible role has been as a leader of the Carolina Black Caucus, which has promoted, advocated and celebrated UNC Black faculty and staff since 1974.

McGhee was on its executive committee for nearly a decade and served as chair from 2015-2018, a time when conversations about race in America were intensifying. Among his achievements as chair were working with local leaders to install a grave marker in the Old Chapel Hill Cemetery in remembrance of the 361 unmarked African American graves there and petitioning for the removal of the confederate statue “Silent Sam” from McCorkle Place.

“Because of his unwavering and genuine concern for the advancement of his peers and students alike, I could not think of a more fitting individual to carry the banner of leader for the Carolina Black Caucus,” says DeVetta Holman-Copeland, PhD, UNC’s Coordinator of Resiliency and Student Success and a caucus executive committee member. “His determination is relentless, but it is O.J.’s kind spirit that leaves such a lasting impression. He is a full-circle, inclusive, servant leader committed to the growth of people and their communities.”

McGhee’s work in social justice started early. Growing up in southeast Washington, D.C., he accompanied his mother to Union Temple Baptist Church, which was active in the Black liberation movement. He remembers participating in protests against apartheid at the South African Embassy and marches to observe Dr. Martin Luther King Jr.’s birthday as a federal holiday.

“I was involved in those kinds of activities early on in life,” says McGhee, who lives in Raleigh with his wife, Kimberly. Their daughter, Kyla, is a freshman journalism student at Carolina. “At first I was a foot soldier and then began taking on more leadership roles.”

His leadership has led to multiple awards recognizing his excellence in technology and in working toward a more inclusive campus, including the University’s 2019 Staff Diversity Award, the Black Alumni Reunion’s Hortense McClinton Staff Award and the UNC IT Team Award. But one of the biggest rewards for McGhee is to work at a School that aims to promote equity and humanity.

“Being in this environment — in terms of what public health is and stands for — is one of the reasons I really enjoy working at Gillings,” McGhee says. “The faculty, staff and students all exemplify what I think we as a society should be working toward.”

LEFT McGhee and former assistant basketball coach Tracey Williams-Johnson present Karen Parker (the first African American woman to graduate from UNC) with an award during the 2017 Black History Month Tribute game. BELOW RIGHT Past Carolina Black Caucus Chairs with Hortense McClinton (first Black faculty member at UNC) at the renaming ceremony of the McClinton & Henry Owl residential halls. BELOW LEFT Protest at the NC Board of Governors meeting over the Nikole Hannah Jones tenure controversy.
Building global partnerships on water

Water is a vital resource for human life and public health, yet nearly 40% of the world’s population is water insecure. The UNC Water Institute is working to build and strengthen international partnerships to solve what Director Aaron Salzberg, PhD, calls “the water headache.”

“Ensuring that people have access to the water they need, where they need it, when they need it is amazingly complicated — there is no silver bullet,” says Salzberg, who is the Don and Jennifer Holzworth Distinguished Professor in the Gillings School’s Department of Environmental Sciences and Engineering (ESE) and has led the Institute for the past four years. “Even something you would think is simple, like putting a tap in someone’s house or building a well in a community, happens within a broader hydrological, social, technical, financial, and political context that can make things complicated fast. There are all sorts of factors that go into providing water services that are affordable, sustainable and equitable.”

As members of The Water Institute, several ESE faculty members — Professor Howard Weinberg, PhD; Assistant Professor Michael Fisher, PhD; Assistant Professor Musa Manga, PhD; and Associate Professor Joe Brown, PhD, PE — investigate the public health aspects of this complicated problem, such as chemical and fecal contaminants, water sanitation and treatment, and environmental health microbiology.

The complexity of water is also why global solutions are important. Salzberg — who, in his prior role at the United States Department of State, worked with the United Nations (UN), the G7 and other international partners to establish global practices promoting sustainable and integrated management of water resources on a global scale — has put his extensive global leadership experience to work at the Institute, which in the past few years has:

• Led the development of the first hydrological research strategy for the World Meteorological Organization, the only intergovernmental body that deals with water, weather and climate. The idea behind the strategy is to prioritize research on hydrological services and provide a platform to discuss how countries need to manage issues at the nexus of water, climate and weather.
• Worked closely with the Biden Administration to develop the White House Action Plan on Global Water Security, elevating water security as a priority issue of the U.S. government.
• Collaborated with international partners to catalyze action around lead and drinking water, which has produced a global pledge that commits governments to take the necessary steps to eradicate lead in drinking water by 2040. The Global Lead Pledge was launched in March at the UN 2023 Water Conference — the largest UN hosted meeting on water in nearly 50 years.

“These are some really exciting things that we’ve been able to do that are transformational on a global scale,” Salzberg says. “The UN proposal is supported by the World Health Organization, UNICEF, several countries including Ghana, Uganda and South Africa, and a host of other partners. It’s a step toward helping build global awareness and capacity to address some of these challenges around lead and drinking water. It’s also a perfect example of using science and evidence to drive policy.”

Closer to home, Salzberg convened a working group of faculty to develop a strategy to help the North Carolina Department of Environmental Quality determine how best to invest federal COVID-19 recovery funds in infrastructure improvements that increase access to safe drinking water and sanitation services in disadvantaged communities across the state. The Institute is also working with a private company to test emerging technologies that make it easier and most cost-effective detect lead in water.

“The Water Institute is a bit of an anathema within academia because we’re really trying to unite science, policy and practice,” Salzberg says. “The practice component is not where many faculty traditionally spend much of their time — but that’s not the case at Gillings. A lot of faculty here focus on implementation science and are engaged in the field because at the end of the day they want to see their science improve public health, so they work really hard to tie their research to practice. That’s why I love the fact that the Water Institute is embedded within Gillings — it’s the right fit.”

UNC Water Institute Director Aaron Salzberg, PhD, participates in the launch of a global pledge aiming to eliminate lead from all drinking water supply systems by 2040. The pledge was launched in March during the United Nations 2023 Water Conference in New York.
By now, either you or someone you know may have said something like, “I’m doing my own research.” Of course, we hear this most recently around COVID-19 vaccines. But does the internet actually allow for that? Is it even possible to “do your own research?”

Francesca Tripodi, PhD, an assistant professor at the UNC School of Information and Library Science and media scholar whose research examines the relationship between social media, political partisanship and democratic participation, revealing how Google and Wikipedia are manipulated for political gains. “A lot of my research thinks about the ways in which the way we see the world shapes the kinds of keywords that we put into search bars.”

“For example, in the Google search bar, your inputs are your geographic location or your search history, but your results are primarily driven by the keywords that you put in — what is your query? They then match this query with what information scientists refer to as ‘relevance,’ and this relevance is highly connected to the keywords that you start with.”

The problem, however, is that these keywords can be quite polarized, and even the most enlightened among us might not be aware of our own implicit biases.

A simple but helpful example is what happens when you search “illegal alien” versus “undocumented worker.” You will get dramatically different returns that likely confirm your existing beliefs because they’re driven by relevance. Tripodi explains, “Google is taking those words and attempting to match them with all the information that they have stored in their database. So those keywords are going to largely drive the results that are returned. We tend to think of Google as a giant library, but they’re not really a helpful librarian. They’re a multi-million-dollar industry driven by stakeholder interests.”

Author Kurt Anderson won a Peabody Award for his work as host of public radio’s “Studio 360.” His 2017 book Fantasyland: How America Went Haywire — A 500-Year History explores the theory that America has always been a place where people were attracted to impossible “land of milk and honey” dreams.

“The large problem is when we, as a society, can’t agree on facts,” he said. Clearly, that presents a problem when dealing with public health crises. Opinions can trump facts, sometimes with deadly results.

Cynthia Miller-Idriss, PhD, is a professor at the school of public affairs at American University in Washington, D.C., where she is the director of the Polarization and Extremism Research and Innovation Lab, or PERIL.

“Conspiracy theories don’t just operate by one person going into YouTube and getting down a rabbit hole of bad information. The notion that communities believed bad information has been around for as long as time.”

Francesca Tripodi, PhD

Disinformation's impact on public health

Opinions can trump facts, sometimes with deadly results.
for something else, leading them to vote against public health legislation. “The tempo has definitely increased around bills being introduced to undo vaccination requirements for school children.”

It’s been said that nature abhors a vacuum. The same might be true on the internet, but these vacuums are known as “data voids.” A data void is when little to no good information about a subject exists online. And when there are these kinds of pockets of returns, it allows them to be manipulated very easily. Tripodi explains, “Conspiracy theorists are really good at maximizing and taking advantage of data voids. This relates back to my concept of how you see the world shapes your keywords to begin with. In other words, if you Google, "are vaccines safe?" with a question mark, the CDC has preemptively filled that void with a lot of good information that tells you they’re pretty safe. But what if I belong to a mom group on Facebook like Parents Against Vaccination? I’m not going to Google "are vaccines safe?" because I’m part of a community that says they’re not.”

“The way Google orders information and its desire to help drive search and best match your query is not an environment that’s going to expose you to good information if your starting point is a place where good information doesn’t exist. That’s the fundamental relationship to public health crises.”

Having a more nuanced understanding of how search works is important because all of us are so reliant on it. We have the ability to change how we search, not just what we search. But we also have the ability to approach these difficult conversations with greater kindness, empathy and understanding. The foundation for belief in any conspiracy theory or misinformation campaign springs from a desire for agency, community and to make sense of a confusing world.

Anderson is optimistic. “I am somewhat hopeful that the younger people, digital natives, are less easily hoodwinked. As opposed to us older folks who may think, ‘It’s on my computer along with ABC News, so it must be true.’ That’s part of the problem and that’s where we are right now.”

Disruptive artificial intelligence chatbots like ChatGPT further blur the lines between fact and fiction in ways that are not yet well-understood but pose potential threats to getting at the truth.

Noel Brewer, PhD, is the Gillings Distinguished Professor in the Department of Health Behavior at the Gillings School. His research focuses on three main areas: ways to increase vaccine uptake, communication about the harms of vaping and smoking and risk perception, and appropriate use of cancer screening tests. While he agrees that the impact of social media and the internet is undeniable, he calls its effects more "lumpy." Brewer says, “Vaccination rates in the United States are still very high. The CDC has been very effective in that regard. Other countries have not fared so well.”

In terms of social media, however, Brewer takes a nuanced view. The target of social media is not always an individual. It can often times be policy makers and social media can give the impression that there is a lot of support for something, or the decay of support are really good at maximizing and taking advantage of data voids. This relates back to my concept of how you see the world shapes your keywords to begin with. In other words, if you Google, “are vaccines safe?” with a question mark, the CDC has preemptively filled that void with a lot of good information that tells you they’re pretty safe. But what if I belong to a mom group on Facebook like Parents Against Vaccination? I’m not going to Google “are vaccines safe?” because I’m part of a community that says they’re not.”

"The way Google orders information and its desire to help drive search and best match your query is not an environment that’s going to expose you to good information if your starting point is a place where good information doesn’t exist. That’s the fundamental relationship to public health crises.”

She points to massive disinformation campaigns that are undermining faith in elections and confidence in the electoral system. In terms of public health, the undermining of scientific expertise also contributes to threats against health care workers and county officials who set health mandates.

Of course, one of the biggest accelerants of disinformation and conspiracies is the rise of the internet, specifically Google. As Anderson observes, “Google search came along in September 1998. What else happened in 1998? The false medical study arguing that vaccines cause autism. That was a perfect first case study of how falsehood and panicky viral belief gets out of control thanks to this new mechanism we have, which is to say, the internet. And here we find ourselves 25 years on, and we still don’t know how to drive this car.”

“Vaccination rates in the US are still very high. The CDC has been very effective in that regard. Other countries have not fared so well.”

Noel Brewer, PhD

The Pivot Podcast: Confronting Misinformation in Public Health
To learn more about the impact of conspiracy theories on public health, check out our Pivot episode “How Are Conspiracy Theories Public Health Crises?” Host Matthew Chamberlin speaks with experts in the study of the effects of disinformation. Just search “Pivot Gillings” on your favorite podcast app.
When climate change puts sanitation at risk

The impact of climate change may evoke images of extreme weather, wildfires and floods, but for those without stable housing or sanitation infrastructure, even small increases in average rainfall and temperature can have disastrous consequences.

In many growing cities in Africa, housing has not kept pace with rapid city expansion. This has left many families to live in informal communities — low-income areas where homes are not durable and lack protection from flooding or high temperatures. The strain of climate change makes it difficult for utilities to provide adequate sanitation and ventilation to these areas, putting residents at risk of flood damage, water-borne diseases and overheating.

Sarah Lebu, a doctoral student in environmental sciences and engineering, focuses her research at the intersection of climate change and city planning. Born in Kenya, her work is centralized in Eastern Africa, including Nairobi, where approximately 60–70% of people live in informal communities with few toilets and minimal infrastructure for drainage or clean water.

“Many of these services are sold,” Lebu said. “Imagine having to buy every ounce of water you drink or pay to use the toilet each time you go. It’s very expensive.”

Plans for city development don’t often take residents into consideration: whether homes are susceptible to flooding, whether toilets are available, or whether unique health needs of women, children, people with disabilities and other groups are met. In many ways, her work is one of environmental justice, collaborating with communities to map structural inequities and alert city leaders.

“When governments operate like a community doesn’t exist, we need to get them to understand the conditions there,” she explained. “The best people to articulate that are the residents themselves.”

As an undergraduate, Lebu studied wildlife health in Uganda during the 2010 anthrax outbreak. It led her to study public health and city planning in Berkeley, California, before coming to UNC-Chapel Hill. She believes her public health training helped her synthesize the technical and people skills needed to understand resident needs, identify trusted community leaders and support them with data to make a compelling case to policymakers.

“In this work, cultural humility is critical. I am just a facilitator — contributing and learning from the community. I’m not the expert there.”

Lebu explored this approach during a project in Mathare, an informal settlement in Nairobi, where only one in seven households had a toilet. After going door to door, she found that most people acknowledged the need for better sanitation, but they couldn’t make decisions about their homes because they were tenants of landowners who lived miles away.

“We learned to build a chain of communication, where we talked to women who were home while their husbands were at work. And then we would meet husbands who would help us meet the landowners.”

This approach has driven policy breakthroughs, as she saw in her work to help the informal community of Mukuru in Nairobi attain a Special Planning Area designation that would halt potentially harmful development activities. Lebu’s team worked with non-governmental representatives to identify natural leaders in Mukuru, collaborate on a map of community health risks and bring that information to city hall.

“That was a powerful blueprint to guide other informal settlements in the area. And after that, we started creating a master plan where we consider not just health but how we can prevent health impacts to communities affected by industry or pollution.”

She currently works with the UNC Water Institute, alongside Jennifer and Don Holzworth Distinguished Professor Aaron Salzberg, PhD, Associate Professor Joe Brown, PhD, PE, and Assistant Professor Musa Manga, PhD. Her work models how extreme rainfall and flooding will affect sanitation and uses participatory methods to understand what that impact will look like in communities. She stresses the need for decolonization in global health through research practices that reflect cultural humility and explore issues often overlooked.

“People talk about diarrhea or cholera,” she explained, “but women also report high rates of sexual violence, because they encounter predators while walking long distances to toilets on unlit streets. Women and children also adjust their diets because they can’t go to the bathroom at night, which results in urinary tract infections. I want to ensure that these are not forgotten in the sanitation sector.”

For Lebu — who grew up in a rural town near Lake Victoria and experienced sanitation challenges in the water there — it has been powerful to see the circle of inclusion broadening. Being able to attend professional conferences and co-author studies alongside local community members brings her optimism for the future.

“Getting people to speak up and be part of the solution is important. I think public health is moving more in that direction, and I really appreciate that.”

Examples of informal communities in Nairobi, Kenya.
Honoring a love for learning through travel

As classmates at UNC’s Kenan-Flagler Business School, Michol Dawson, BSPH (1999), MBA, and David Amuda, MBA, seized the opportunity to study and visit other countries as part of Kenan-Flagler’s global immersion program. Their love for travel continued as their friendship grew into more: they got engaged on vacation in Hawaii, got married in 2008 and moved to David’s home state of California.

And over the 21-plus years since they first met, they visited all six inhabited continents. When they weren’t crisscrossing the globe, Michol (pronounced Mitchell) cared for patients in the Sleep Disorders Center at Providence St. Joseph Hospital in Orange, California. She worked there for 10 years and eventually became supervisor after quitting her corporate job to further her education and pursue her passion for health care.

“I’m convinced that in a former life she was a travel agent — she loved looking up destinations, always did a ton of research and acquired knowledge about a place to the level that she was practically a local,” says David, adding that Michol’s natural affinity for research led her to minor in information and library sciences while at UNC. “Whether it was Machu Picchu or the Australian outback, we did a lot of wonderful things together. And, in retrospect, I’m so glad we did, because tomorrow is not promised.”

Michol unexpectedly passed away in May 2022, barely two weeks after her 45th birthday. Even amid his shock and grief, David drew inspiration from his beloved wife.

“During that first week without her, I thought a lot about her unfulfilled work. I wanted to pay it forward to help those in the future pursue their dreams — particularly in public health — like she had the opportunity to do.”

David and Michol made it a tradition to donate annually to Carolina as a way to stay connected to the school and to reflect on their experiences there. But David and his father-in-law, Harold Dawson, wanting to make a more lasting impact, decided to establish a new endowment fund at Gilling in Michol’s memory: The Michol Anne Dawson Student Acceleration Fund.

They decided the fund should support student practice in global health after learning that several students traveled to some of the same countries — particularly in Africa — that David and Michol had loved to explore. “I found out there was a student working in Tanzania and immediately thought that Michol would love to be associated with that work,” David says. “That was the spark.”

Tanzania held a special place their hearts, as Michol had organized a safari trip in 2017 to Tanzania and Kenya for Harold, David and herself. “We saw all the animals you could see in the Serengeti,” says Harold, reminiscing about lions feeding on cape buffalo just 10 feet from their vehicle and about being cautioned by a Masai guide not to get too close to an elephant and her calf. “I had always wanted to go on safari — to be immersed in nature and get a better understanding of the animals. It was really something.”

It was just like Michol to plan a trip that would mean a lot to her father. “Her thoughtfulness and compassion for others were well-known to her family, friends and colleagues. “She was always taking care of people, listening to their problems and trying to help,” Harold says. “That was just her personality, and that guided her to move in the direction she ultimately moved in with her career. She cared about helping people.”

The Michol Anne Dawson Student Acceleration Fund supports research, travel, practice and dissertation projects — or other needs that allow students to apply knowledge beyond the classroom. Preference is given to work focused on global public health issues that affect African countries and/or North Carolina. Donate online: go.unc.edu/MicholAnneDawson

A public health approach to reproductive care

The ability to make decisions about having a child can shape the rest of a person’s life.

While raising children can bring profound joy, pregnancy can carry substantial health risks and financial burdens. In the United States, there are nearly 33 maternal deaths for every 100,000 births, according to 2021 data from the Centers for Disease Control and Prevention. This rate is more than twice as high for Black mothers and nearly double for those in rural areas. Around 12% of births are in counties with limited or no access to maternity care.

The cost of giving birth and raising children in the U.S. is among the highest of any high-income country, yet many parents have few resources for employment leave or economic support.

These factors don’t just affect individuals. Without autonomy to control when and if they have children, people face poorer health and worse social and economic outcomes, which has a broader ripple effect on families and communities.

Limitations around contraception access, safe abortion services and high-quality reproductive care are not a challenge for the U.S. alone. These restrictions impact health and increase inequity around the globe, according to Sian Curtis, PhD, professor of maternal and child health at the Gillings School.

“We know that countries with more restrictive reproductive health laws have poorer reproductive health outcomes,” she explained. “The World Health Organization estimates that about 287,000 women die every year from pregnancy or birth complications, and many more experience other negative health consequences. The lifetime risk of dying from these conditions is massively different between countries, and it’s an indicator of many kinds of inequalities and structural injustices.”

Limits to reproductive care can impact children, as well. Globally, around 5 million children under age 5 die every year — rates that Curtis says could be improved by birth spacing, high-quality prenatal and delivery care, and access to child health services.
Pregnancy itself can carry complications that range from exacerbating existing health conditions to putting a strain on economic security or physical safety.

“There are circumstances where it’s better for a person’s health not to be pregnant, whether that’s physical health, socio-economic health or mental health,” said Alice Cartwright, a doctoral candidate in maternal and child health at the Gillings School. “People should have full, affordable access to contraceptive options, but we’re never going to be in a situation where everyone is using contraception that’s 100% effective all the time.”

Cartwright is a former project director with Advancing New Standards in Reproductive Health (ANSIRH), the research program at the University of California San Francisco that conducted the Turnaway Study. That study found that people in the U.S. who were forced to carry unwanted pregnancies to term not only risked possible complications but were also less likely to receive advanced degrees and more likely to stay in relationships with abusive partners. They were also four times more likely to fall below the federal poverty level, a status that further contributes to health hardships for parents and children.

These outcomes are preventable.

A public health response to these challenges must consider the cultural and historical contexts through which decisions and restrictions around family planning occur. One strategy is to train health providers, religious leaders and community advocates to have non-judgmental conversations about reproductive health and consider how factors like health care access, intersectional identity, social values and family dynamics impact reproductive autonomy.

“There are layers of stigma around these conversations that are tied up in norms about morals, about gender, about religion,” Curtis said. “One way we can address this is through values clarification and attitude transformation exercises, which get people to think about how others approach these issues in a constructive and empathetic way.”

Well-designed public health approaches make space for these conversations and support people in making fully informed decisions about pregnancy. Part of the work is recognizing how legal restrictions and structural barriers like systemic racism and gender bias contribute to poorer health outcomes. In the U.S., restrictions on reproductive services increased immediately after the Supreme Court’s ruling on Dobbs v. Jackson. Unfortunately, data from the Guttmacher Institute show that these restrictions make it more likely that people in need of reproductive care, including abortion, will be harmed, criminalized or face life-threatening circumstances.

“There are dire consequences when physicians are forced to practice not based on medical training or scientific evidence but rather on legal considerations,” Amy Bryant, MD, MSCR

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“People often don’t understand that this could have implications for them and their loved ones,” said Bryant. “As we see more of the consequences, I think people will see that it could have an impact on their care, too.”

Curtis also has found optimism in global trends. As more countries engage in open and empathetic conversations around reproductive care, many are integrating a full range of high-quality services into reproductive health and consider how factors like health care access, intersectional identity, social values and family dynamics impact reproductive autonomy.

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Amy Bryant, MD, MSCR
Community partnerships to fight hunger in North Carolina

More than 1.2 million North Carolinians have challenges accessing enough food — and more than 30% of them are children. Through the UNC Center for Health Promotion and Disease Prevention (HPDP), Gillings School faculty and students are working with community partners to improve access to nutritious food.

In partnership with the state Department of Public Instruction, which administers N.C.’s school and summer nutrition programs, CHI launched SummerMeals4NCKids in 2021 to support summer nutrition programs, using special events, social media, online toolkits, word of mouth and other means to promote the programs and raise awareness of meal sites and sponsors in local communities. As part of that initiative, CHI offered a paid internship pairing college students with summer meals programs in different parts of the state, where they learned about and worked to support nutrition programs in the community.

“We have a large focus on rural areas because it’s more challenging to reach students. So it’s important to get partners involved,” says CHI member and Assistant Professor of Nutrition Jessica Soldavini, PhD, MPH, RD, LDN, whose passion for fighting hunger began with an internship at a local health department more than a decade ago. “The internship is a great way for students to go into the community and help with a lot of different tasks.”

Through its work on community-based food systems, the Food Fitness and Opportunity Research Collaborative (FFORC) relies on partnerships to improve access to healthy foods in low-resource communities.

FFORC lead and Assistant Professor of Nutrition Molly De Marco, PhD, MPH came to UNC-Chapel Hill in 2007 to do her postdoctoral work at the UNC Sheps Center, where she was part of a UNC-Shaw University Divinity School health disparities project with a network of N.C. Black churches called the Carolina Hunger Initiative (CHI) and the Food Fitness and Opportunity Research Collaborative (FFORC), are doing crucial public health work in addressing the challenge of food insecurity from different but complementary angles.

With a focus on child nutrition, CHI aims to bridge the gap between daily school meals and the summer months. In North Carolina, about 900,000 children are eligible for free and reduced-price school meals. Federal summer nutrition programs are available to provide free meals to children in low-income areas during the summer months, but prior to the COVID-19 pandemic, only 12 children for every 100 eligible for free and reduced-price meals received summer meals. Lack of access — the availability of meal sites varies from community to community, and not all families have access to a nearby meal site — and lack of awareness of the summer meals program are both barriers to participation that CHI is working to overcome.

**“We can’t truly partner with communities unless we understand where they’re coming from.”**

Molly De Marco, PhD, MPH

DC2 Network. She collaborated with prolific health inequities researcher Paul Godfrey, MD, PhD, and, through that work, met Warren County pastor Rev. Bill Kearney, who had prior experience working on wellness initiatives with academic institutions.

Together, they applied for a grant to launch a community-based participatory research project examining the impacts of a church garden on food knowledge, attitudes, behaviors and empowerment. Empowerment was something of particular interest to Kearney, who wanted to know if participating in a community garden would instill an “I can” attitude in his faith community members. De Marco helped him determine how to measure that.

“In this work, there is mutual learning, and both partners bring value,” says Kearney, who now works full-time with UNC and several other FFORC community partners. “The University brought its academic and technical expertise, and the church brought its facility, good will, the legacy of community, and farm skill and experience.”

FFORC has established nearly 20 community gardens in eastern N.C. and has started several other community-based projects. Members of the collaborative also organize field trips to state cultural and historical sites, such as the International Civil Rights Museum in Greensboro and former plantations where people had been enslaved in Durham and Whitakers, and spend time together in the communities where they work.

“It’s important to help our teams understand each other and build trust,” De Marco says. “We can’t truly partner with communities unless we understand where they’re coming from.”

*View online go.unc.edu/cph-2023*
Pear Fruit “Donuts”

Ingredients
- 2 ripe fresh pears
- ¾ of a cup yogurt

Toppings such as:
- Toasted “O” cereal
- Strawberries or other berries diced roughly one third cup of berries
- Pomegranate
- Sprinkles
- Green pumpkin seeds (pepitas)
- Granola

Instructions
- Slice pear into round circles. You will be cutting right through the core.
- Remove the core of the pear to create an “O” shape. Use a small cookie cutter or melon baller.
- Using a spatula or the back of a spoon, “frost” pears with yogurt.
- Add toppings and enjoy!

Shepherd’s Pie

Ingredients

Potatoes
- 1 pound of Yukon golden potatoes, peeled and diced
- ¾ of a cup of no-added-sodium chicken broth
- 2 tbsp of plain nonfat Greek yogurt
- Chili powder to taste

Filling
- 1 pound of lean ground turkey
- 1 tsp of olive oil
- 1 medium yellow onion, diced
- 1 celery stalk, diced
- 2 gloves of minced garlic
- 8 oz of bella mushrooms, diced
- 1 bag (10 oz) of mixed veggies: carrots, corn, peas, green beans
- 1 bag (10 oz) of mixed veggies: carrots, corn, peas, green beans
- 1/2 tsp of salt and pepper

Instructions
- Bring a medium pot of salted water to a boil.
- Place potatoes in the water and boil until they are soft, about 12-15 minutes.
- Drain the potatoes and put in a separate bowl.
- Mash the potatoes with chicken broth, plain greek yogurt, 1/2 tsp salt and pepper; set aside.
- Preheat the oven to 400°F.
- In a large pan, brown the ground turkey over medium high heat, breaking the meat up as it cooks. Season the meat with salt and pepper to taste.
- When cooked, remove from the pan and set aside on a plate.
- Add the oil, onion, garlic, mushrooms and celery into the same pan used to brown the ground turkey and sauté on medium heat for about 6 to 8 minutes, until the vegetables are tender.
- Add the flour, frozen vegetables, chicken broth, tomato paste, Worcestershire sauce, rosemary, thyme and cooked meat and mix well.
- Simmer on low for about 8-10 minutes.
- Spread the meat on the bottom of the casserole dish. Top with mashed potatoes and sprinkle with chili powder.
- Bake for 20 to 25 minutes, then place under the broiler 1 to 2 minutes until the potatoes turn golden.
- Remove from the oven and let it cool 5 minutes before serving.
Enduring impact through a legacy of mentorship

Public health lost a fierce champion for equity and justice when Jo Anne Earp, ScD, died in November 2022.

Earp was a nationally recognized researcher and academic leader who, during her 50-year career, was committed to eliminating racial health disparities through the power of community advocacy. She led the Gillings School’s Department of Health Behavior for 13 years, and her years as an activist in the civil rights movement informed the research questions she asked, the interventions she developed and tested, and her approach to developing the talents of generations of faculty and students in health behavior.

Hundreds of students and colleagues called her friend and mentor, reflecting Earp’s commitment to fostering cooperation, building bridges and elevating voices from underrepresented groups. Because of that mentorship, her influence will endure for generations — in the halls of the Gillings School, in the pages of research journals, on the front lines of public health practice and in the gathering spaces of community allies.

“As a medical sociologist, she studied social networks and the influence certain individuals in those networks could have in communities,” said Elizabeth French, MA, associate dean for strategic initiatives. Through rigorous survey and mixed methods research, Earp identified ways that boundary spanners — people able to move fluidly across different cultures, communities, educations and more — could be formally engaged as trusted sources of health information, thereby connecting people to critically important health resources.

Using this approach, she co-founded the North Carolina Breast Cancer Screening Program, which was able to overcome longstanding medical mistrust and breast cancer stigma to close gaps in mammography rates among Black women in eastern N.C.

“I doubt the School ever has known a more dedicated and effective mentor.”

Dean Emerita Barbara K. Rimer, DrPH, MPH
“I doubt the School ever has known a more dedicated and effective mentor,” seconded Dean Emerita Barbara K. Rimer, DrPH, MPH. “To have been ‘Earped’ was to have had one’s papers subjected to her purple pen, thereby joining a special group that resulted in leaps of quality. I counted on Jo Anne’s candid feedback and thoughtful observations about my performance as dean, and I will be forever grateful for how she made me better.”

Melissa Gilkey, PhD, associate professor of health behavior, fondly recalled Earp’s “encyclopedic” knowledge of mentees, from work to families to assorted trivia about personal histories and preferences. “Whenever I had big news about my career, Jo Anne was the person I wanted to share it with first because she could see the big picture, understand the implications and ask the hard questions that would help me clarify next steps,” she said. “Her delight in my successes and concern for my challenges meant so much because she really knew me.”

Though Earp retired in 2013, her work in public health never truly ended. Even in the weeks up to her passing, she made time to check in and spent hours sharing strategies or celebrating successes.

“If someone had the odds stacked against them, she would remove every barrier she could to create opportunities for them.”

Kurt Ribisl, PhD
Gillings Alumni: Where are they now?

Arbor Quist, PhD ‘21 EPIDEMIOLOGY
POSTDOCTORAL RESEARCHER, UNIVERSITY OF SOUTHERN CALIFORNIA ENVIRONMENTAL HEALTH CENTERS, LOS ANGELES, CALIFORNIA
Quist focuses on the ways disasters related to climate change exacerbate health disparities. As a researcher at the Gillings School, she studied links between hog feeding operations and illness in nearby communities.

Emily Grant, MPH ‘21 MPH@UNC
MEDICAL STUDENT IN SPOKANE, WASHINGTON
Grant, who is currently seeking a Doctor of Medicine degree, conducted master’s research on the effects of smoke from wildfires that was published in the Journal of Climate Change and Health.

Eric Daza, DrPH ‘15 BIOSTATISTICS
LEAD BIOSTATISTICIAN IN DATA SCIENCE AT EVIDATION, SAN MATEO, CALIFORNIA
Daza is a biostatistician and health data scientist who focuses on how to use data from a single person to make inferences about that individual’s health. He publishes a blog called “Stats-of-1” and a podcast “N-of-5 Minutes” exploring this concept.

Dilshad Jaff, MD, MPH ‘15 MATERNAL AND CHILD HEALTH
GILLINGS HUMANITARIAN FELLOW AT THE UNC GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH, CHAPEL HILL, NORTH CAROLINA
Jaff, who has more than 20 years’ experience in complex humanitarian crises in conflict zones in the Middle East and Africa, has explored the mental health needs of internally displaced persons in the Kurdistan Region of Iraq. His research highlighted a “critical need” for mental health services among these populations.

David Steeb, Pharm.D, MPH ‘17 PUBLIC HEALTH LEADERSHIP
DEAN, COLLEGE OF POPULATION HEALTH AT THE UNIVERSITY OF HEALTH SCIENCES AND PHARMACY, ST. LOUIS, MISSOURI
As leader of this new school since March 2022, Steeb has the opportunity to shape its priorities and collaborations for the future, with the aim of promoting health equity and improving health outcomes locally and globally.

Hope Thomson, MPH ‘21 ENVIRONMENTAL SCIENCES AND ENGINEERING (ESE)
PROJECT DIRECTOR AT THE UNC ENVIRONMENTAL FINANCE CENTER, CHAPEL HILL, NORTH CAROLINA
After Hurricane Florence brought record rainfall to eastern North Carolina, Thomson worked to understand the true cost of flooding. By focusing on effects typically excluded from damage assessments, for example, costs related to mortgage default, her work will help policymakers develop better strategies for disaster recovery.

Michael Wilson, MPH ‘14 HEALTH BEHAVIOR
EXECUTIVE DIRECTOR, ADVANCE ACCESS & DELIVERY SOUTH AFRICA; CO-FOUNDER/DIRECTOR, BELLHAVEN HARM REDUCTION CENTRE, DURBAN, SOUTH AFRICA; ADJUNCT ASSISTANT PROFESSOR, UNC GILLINGS
Wilson co-founded Bellhaven, the first low-threshold harm reduction center in South Africa providing services daily to more than 200 low-income and unhoused people.

Ronald Aubert, PhD ‘90 EPIDEMIOLOGY
INTERIM DEAN, BROWN UNIVERSITY SCHOOL OF PUBLIC HEALTH, PROVIDENCE, RHODE ISLAND
Since April 2022, Aubert has served as interim dean while Dean Ashish Jha, MD, MPH, is on temporary assignment as White House COVID-19 response coordinator. His career in public health has included research, education, practice and leadership in the public and private sectors.

Ruwaydah Sideek, BSPH ‘20 NUTRITION
FORMER CARE NAVIGATOR, NATIONAL HEALTH CORPS, PHILADELPHIA, PENNSYLVANIA
After graduation, Sideek, who is now in medical school, worked to build healthy communities by providing essential health education and access to services for people in communities plagued by histories of racial and economic inequity.

Emilia Ndely-Ogundipe MHA ‘15 HEALTH POLICY AND MANAGEMENT
WHITE HOUSE PRESIDENTIAL INNOVATION FELLOW, WASHINGTON, D.C.
As innovation fellow, Ndely-Ogundipe is collaborating with top civil servants and change-makers working within the federal government to tackle some of our nation’s biggest challenges.

I was able to finish my degree and contribute to research that I am passionate about, and which will help me better care for my future patients, while still spending precious time with my family.”

Bellhaven shows the type of transformation possible when a city goes from a punitive approach to one that supports people.”

Where are they now?

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Dr. Sharrelle Barber disrupts the status quo

What’s your role in public health?

My role is to disrupt the status quo and think about what we need to do differently to really address structural racism and the root cause of racial health inequities.

Can you describe your focus area in one sentence?

My focus is on understanding the ways that racism produces racial-health inequities and mobilizing evidence and narratives toward anti-racism solutions.

How have you pivoted in response to the coronavirus pandemic?

One thing was immediately clear: the importance of documenting what was happening. However, the Ubuntu Center itself represents the real pivot. It exists not just to document the impact of racism, but to define and advance anti-racism solutions.

Who are you when you’re at home?

I’m very relaxed, and I feel like I’m deeply reflective. My window faces a path that goes through a wooded area. Since the pandemic, I’ve been working from home a lot more, and I’ve been able to literally observe the seasons change. It grounds me in a way that I didn’t realize I needed. Seeing the trees budding for spring is a reminder that, although the work is hard and challenging — and you don’t change these things overnight — there’s hope and promise. I try to stay hopeful and keep myself optimistic about the possibility of making lasting change.

For more Gillings stories of impact, discovery and surprise in public health:

- The Pivot articles: sph.unc.edu/comm/the-pivot
- The Pivot podcast: Search “pivot gillings” on your favorite podcast app

Dr. Sharrelle Barber is assistant professor of epidemiology and director of the Ubuntu Center on Racism, Global Movements and Population Health Equity at the Drexel University Dornsife School of Public Health.
Gillings takes care of Gillings

Health has many facets beyond the physical — it’s also emotional, social, financial, academic and environmental.

As a school of public health, our commitment to well-being starts internally. We cannot demonstrate leadership in this multi-dimensional public health approach if we don’t first put it into practice on our own campus.

“We want to make sure that everyone, every student, is developing in all areas,” said Charletta Sims Evans, MED, associate dean for student affairs. “Supporting mental health and well-being is a part of that. You can’t function in a classroom if you’re not taking care of yourself.”

For years, the Gillings School has explored new ways to promote campus well-being. Sims Evans, who is chair of the Mental Health and Well-being Task Force, has led the effort to support the student body. The task force seeks to reduce student stressors by broadening access to funding and support resources, providing safe avenues to share concerns and address mental health, and creating opportunities to connect with peers and explore academic flexibility.

These strategies are based on student feedback, along with advice from leadership groups like the Minority Student Caucus and the Student Government Association.

Based on task force recommendations, a faculty mentoring committee has also been established to provide faculty with mentorship training, and the student affairs office has hired a second career services coordinator to help students prepare for life after graduation. They will soon be adding a Gillings-dedicated counselor from UNC’s Counseling and Psychological Services (CAPS), as well.

Gillings leadership also provides many well-being resources through its Culture of Health initiative, which was inspired by the Robert Wood Johnson Foundation and uses the Centers for Disease Control and Prevention’s Worksite Health ScoreCard to identify areas that can effectively foster wellness. The Culture of Health was initially established under the leadership of Dean Emerita Barbara K. Rimer, DrPH, MPH, and led by Penny Slade-Sawyer, a longstanding public health leader and former senior consultant for the North Carolina Institute for Public Health. It is currently co-chaired by Rhoda Cerny and Melissa Walter, MPH, RDN, LDN, who collaborate with staff in academics, facilities and wellness providers around campus to offer weekly yoga classes, mindful relaxation sessions, walking groups, healthy snacks, nutrition and self-care infographics, training on mental health and environmental safety, and more. These events are open to all students, faculty and staff.

“There are so many things involved in creating a Culture of Health,” Cerny says. “There are people working on practical safety and health strategies. But two of my favorite things to do are to provide opportunities for students and employees to relax and practice self-care in the middle of their busy days and to create fun events for people to get together and enjoy each other’s company.”

The Culture of Health website shares resources and suggestions that can be incorporated into daily routines, including podcast and webinar recommendations, nutrition suggestions, personal activities, and collaborative events. But it can be hard for people to find time to take a break from work and prioritize well-being. Cerny says that this is where the culture in Culture of Health is critical. Leadership is a critical component in modeling that culture.

“We’ve had students from our Total Worker Health® graduate program give us ideas on how to encourage that culture among leadership,” she said. “One suggestion is to ensure that all managers and supervisors attend trainings so that they can be resources for employee well-being, but it’s important for someone in leadership to advocate for that.”

Most recently, School leadership created a resource to address food insecurity after a survey found that nearly 10% of Gillings students did not have consistent access to food. Associate Professor Amanda Holliday, MS, RD, LDN, and the Nutrition Coalition worked with student and University groups to establish CJ’s Cupboard, a food pantry located in 2210 McGavran-Greenberg Hall that serves the entire Gillings community.

CJ’s Cupboard carries non-perishable foods, utensils, sanitary items, oral care, diapers and other personal necessities. Most popular among them, according to Holliday, are foods that meet cultural or dietary needs and items that are in small, easy-to-carry packages. They also partner with Good Bowls to provide nutritious frozen meals.

CJ’s Cupboard is located at 2210 McGavran-Greenberg Hall and is always seeking donations of nutrient-dense and non-perishable items.

“The goal is to normalize this,” she said. “We all forget our lunch or have months where the money runs out. I encourage anyone to go to CJ’s if they need to. The door is always unlocked.”

Since its inception, the Cupboard has seen visits from handfuls of students every day, and because it relies on donations, it can be hard to keep food in stock. Donations can be dropped off at any time, and donors are encouraged to purchase items from the cupboard’s online wish list at amzn.to/41LBypV.

“We are a flagship school of public health,” Holliday said. “We should do the very basics for our own. And that includes food.”

The School and University collaborate on other avenues of support, as well, including work/life and wellness programs for employees and the Heels Care Network, which is a hub of mental health and well-being resources. Peers for Progress, housed in the Department of Health Behavior, also works with Sims Evans to provide peer support groups to the Gillings community.

We know that promoting health is a continuously evolving process that is informed by the unique needs of our community. Students in need of support can reach out to CAPS, and the UNC Employee Assistance Program can provide valuable personal and professional resources for faculty and staff.
Evan Mayo-Wilson

Evan Mayo-Wilson, DPhil, MPA, has a lot of questions. “In research, every time you start digging into something, you realize how much isn’t known about it,” says Mayo-Wilson, an associate professor of epidemiology who joined the Gillings faculty last fall. “Every question you answer generates two more questions.”

For almost a decade, Mayo-Wilson’s inquiring mind has been digging into the effects, including negative effects, of gabapentin, a drug used for pain and other health problems. More broadly and longer term, he focuses on improving the methodology of research in a more systematic way: In other words, are researchers asking the right questions and using appropriate methods to answer them?

Because there are many clinical trials and observational studies about most health interventions, Mayo-Wilson aims to synthesize all available evidence to better inform the research process and guide decision-making. “I’m interested in how we pull all of that information together in a rigorous way and how we can improve that process to make better policy decisions and better recommendations for care,” he says.

Mayo-Wilson, who grew up in Pittsburgh and has earned degrees from Columbia University, the University of Pennsylvania and the University of Oxford, began focusing on gabapentin harms while working at Johns Hopkins and continued while he was an associate professor at Indiana University. This research path eventually led him to the Gillings School.

“Being at Gillings is a great opportunity to collaborate with people who are doing that type of work and who understand where opportunities for methodological advancement might be,” he says.

In addition to his own research, Mayo-Wilson is a co-scientific director for peer review at the Patient-Centered Outcomes Research Institute (PCORI), contracted with Origin Editorial. Former director of the UNC Sheps Center for Health Services Research Tim Carey, MD, MPH, a semi-retired UNC research professor in medicine and adjunct professor of epidemiology, has worked closely with Mayo-Wilson for several years. Mayo-Wilson and Carey currently serve as co-scientific directors.

“Evan has a way of communicating with great clarity,” says Carey, adding that having Mayo-Wilson at Carolina not only benefits Gillings but any school or department that does scientific research. “It’s easy sometimes to talk in epi-speak — very technical and specialized — but Evan is very good at expressing concepts in terms that the average clinician, researcher and disease advocate can understand.”

When he’s not working, Mayo-Wilson is spending time with his family. His wife, Larissa Jennings Mayo-Wilson, is also on faculty at Gillings in both the departments of health behavior and maternal and child health. They enjoy hiking and camping — though like many parents of young children, most of their time and energy is focused on raising their son, who’s 1½ years old.

“I used to have hobbies,” Mayo-Wilson jokes, “but right now, we’re really enjoying a full night’s sleep — we went for about a year without that.”

Larissa Jennings Mayo-Wilson

An associate professor of health behavior and maternal and child health, Larissa Jennings Mayo-Wilson, PhD MHS, ended up in academia after working in finance, teaching algebra, working with a foundation and the private sector, and starting a tutoring business.

Her diverse career path is in part an acknowledgement of her family’s history. Many women in Jennings Mayo-Wilson’s family have been small business owners: her great grandmother had a candy store in the 1930s, her grandmother was a teacher who also ran a rental consignment store. Her parents’ professions influenced her path, as well: her father was a professor in education and her mother, a certified public accountant and tutor.

“I come from a family of teachers and knew I’d go into education, but I love numbers and think about the cost behind things. I’ve also always been interested in health and medicine, and all of that comes together through public health,” says Jennings Mayo-Wilson, whose research includes economic factors linked to inequities in sexual and reproductive health, especially among young adults in the United States and Africa. “In public health schools, we teach and mentor students, and as a behavioral scientist primarily working in underserved communities and countries, I’m interested in using health behavior interventions to help economically vulnerable communities and families.”

Her primary research project is working with Baltimore-area youth as director and principal investigator of the EMERGE Project (Engaging Microenterprise For Resource Generation and Health Empowerment), a five-year clinical trial funded by the National Institutes of Health (NIH). EMERGE is a microenterprise intervention that aims to increase employment and HIV-preventive practices among economically vulnerable young adults who face financial and social barriers in accessing health care. EMERGE provides enrolled youth with micro-grants, small business education, employment opportunities, mentoring, and information on sexual health and HIV.

“Larissa is an amazing colleague,” says Audrey Pettifor, PhD, Gillings professor of epidemiology who first met Jennings Mayo-Wilson through the HIV Prevention Trials Network (HPTN) Scholars Program. They now work together as part of the newly funded NIH Adolescent Trials Network (ATN), with the goal of reducing new HIV infections among adolescents in the U.S. and southern Africa. “She is friendly, hardworking, smart, and brings a great mix of quantitative and qualitative methods, and she has expertise in economic-strengthening interventions. Larissa is a star!”

Jennings Mayo-Wilson and her husband, Evan Mayo-Wilson, both joined Gillings in the fall of 2022 after being on the faculty at Indiana University and at Johns Hopkins Bloomberg School of Public Health, where she also earned her master’s and doctoral degrees after graduating from Harvard. Coming to a top-tier research university — plus the rarity of having two faculty positions on the same campus — was a key reason the Mayo-Wilsons and their toddler son, Aiden, made the move from the Midwest to Chapel Hill.

“It is wonderful being in North Carolina and working on research that I care greatly about,” Jennings Mayo-Wilson says, “and we are really lucky to work at such a high-caliber school together.”
HONORING LEGACY THROUGH GIVING

Several beloved members of the UNC Gillings School of Global Public Health faculty have inspired charitable funds in honor of their legacies. In each case, friends, former students and colleagues of the esteemed professors ran fundraising campaigns and advocated the creation of these funds.

HONORING GENI ENG

Geni Eng, DrPH, is a professor emerita of health behavior at the Gillings School whose work has been celebrated for its community-mindedness. Eng has led efforts to address health inequities through her research, which includes the five-year ACCURE (Accountability for Cancer Care through Undoing Racism and Equity) study.

The Geni Eng Community Equity Award and Lecture Fund seeks to honor Eng by providing one student award and sponsoring an annual community-based lecture.

Edith Parker, DrPH, dean of the College of Public Health Health at the University of Iowa and a former student of Eng’s, said, “This fund reinforces the importance of the community-engaged approach that Geni is so committed to. It recognizes the tremendous role that communities play in students’ education and honors the time-consuming work that students put into community research.”

HONORING JOHN CASSEL

After working as a physician in health clinics in Black African communities in South Africa, John Cassel, MD, MPH, served as the first permanent, full-time chair of the Gillings School’s Department of Epidemiology. Cassel fought for more inclusive public health measures that account for social determinants of adverse health and respond to the needs of vulnerable communities.

The John Cassel Scholarship Endowment Fund seeks to honor that legacy by supporting doctoral students in epidemiology with particular attention to enhancing the social, economic and cultural diversity of the Gillings student body. This support will allow them to focus on completing their final year of dissertation research without financial burdens.

“John Cassel was easily 40 years ahead of his time. He was recruiting women into the doctoral program in the 1970s and was researching social injustice and the exposures accounting for multiple health conditions before that was a topic of discussion,” said Michele Forman, PhD, former head of nutrition science at Purdue University, current president of the American College of Epidemiology Foundation and former student of Cassel’s. “My hope is that the students benefiting from this fund will learn more about John Cassel and help carry on his legacy.”

REMEMBERING JOHN CASSEL

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CELEBRATING THE WORK OF SUSAN ENNETT

Susan Ennett, PhD, recently retired after decades of teaching health behavior. A passionate teacher and mentor, Ennett was committed to building a program that provided students with holistic support along with the necessary career skills and expertise.

The Susan T. Ennett Doctoral Scholarship will support doctoral students in the Department of Health Behavior, with a special emphasis on the first year of a student’s doctoral program.

“Susan Ennett was my faculty advisor and chair of my dissertation committee, so I saw firsthand that she is keenly aware of the burdens and needs of doctoral students,” said Melissa Cox, PhD, assistant professor of health behavior at the Gillings School. “My hope is that this fund will help current and future doctoral students feel more supported and that they will have a greater capacity to complete their studies while maintaining other important facets of their lives.”

Edith Parker and Cassel are giants in their respective fields. With the establishment of these funds, their legacies will live on and inspire a new generation of passionate public health professionals.

“The need for public health to address many of the world’s greatest needs has never been more obvious,” said Debbie Winn, PhD, former acting director of the Division of Cancer Prevention at the National Cancer Institute and a former student of Cassel’s. “The new funds will support talented students receiving the best education possible so they can make a major impact in public health.”

- Contribute to the Geni Eng Community Equity Award and Lecture Fund: go.unc.edu/GeniEngEndowment
- Contribute to the John Cassel Scholarship Endowment: go.unc.edu/Cassel
- Contribute to the Susan T. Ennett Doctoral Scholarship: go.unc.edu/SusanEnnett
SCHOOL NEWS

Here are some examples of the many honors, grants and recognitions School students, faculty and alumni received in the past year.

Eight teams of students and alumni participated in the School’s second Pitch Competition, where they explored creative solutions to pressing public health challenges and presented their ideas to a panel of judges. The HIV/AIDS Network for Disaster Survivors (HANDS), which ensures continuity of care for HIV+ evacuees during hurricanes, won first place. The team includes Master of Public Health (MPH) students Lauren Fidek (HB), John Rawell (HB) and Cotie San (EQUITY).

Doctoral candidate in biostatistics Ann Marie Weideman, MS, has received two prestigious scholarships in the field of statistics: the Gertrude M. Cox Scholarship, which is awarded by the American Statistical Association (ASA), and the Ellis R. Ott Scholarship from the Statistics Division of the American Society for Quality.

Rosa Cuppari, MS (ASA), and the Ellis R. Ott Scholarship from the Statistics which is awarded by the American Statistical Association.

Students

Fawn Rhodes, a student in the online Master of Public Health (MPH) program, received a Health Equity Award from the New Hanover County Office of Diversity in recognition of her work as the county’s public health equity coordinator. She describes her work as “a cultural revolution of efforts that began during the pandemic,” which shined a light on the inequities and disparities within historically marginalized populations in New Hanover County.

Carrie Alspaugh, MD, and Jeannie Salisbury, both students in the MPH+PhD Leadership Acceleration were selected as N.C. Albert Schweitzer Fellows for 2022-23. They are among 28 N.C. graduate fellows who develop leadership skills by collaborating with community organizations to develop and implement service projects that address the root causes of health disparities in underserved communities while also fulfilling their academic responsibilities. Alspaugh and Salisbury are working on a rural public health project addressing food insecurity.

Gillings graduate student Amy Kryston, who is pursuing an MPH degree in global health, was named the inaugural recipient of the environmental justice graduate research award from the UNC Institute for the Environment. This $50,000 annual stipend is awarded to a UNC graduate student who can demonstrate a research plan that broadens understanding of environmental justice issues in underserved communities. Kryston is examining septic systems and other on-site sanitation usage and their relationship to health and socioeconomic indicators in rural and underserved communities in N.C., a state where nearly 50% of the population uses on-site sanitation systems.

Brooke Staley, MPH, a doctoral candidate in epidemiology and former co-chair of the Minority Student Caucus, was selected as one of 38 awardees in the 2022 Ford Foundation Dissertation Fellowship Competition. From more than 600 applicants, she is the first Gillings student to receive this distinction, which is rarely awarded to public health trainees. The award recognizes candidates who demonstrate superior academic achievement, show promise of future achievement as scholars and teachers, and to use diversity and social justice as a platform to understand complex social or environmental challenges, with a goal of informing decisions using coal as a power source.

MPH student Karlyn Conery was one of 22 students selected for the summer 2022 Substance Abuse and Mental Health Services Administration (SAMHSA) Internship Program and was able to equitably engage graduate students and recent undergraduates from underrepresented populations to work in the public health field.

Purva Trivedi, graduate teaching assistant and MPH student for her work in equity, social justice and human rights (EQUITY), and Caroline Burz Goodwin for her teaching assistant and doctoral student in nutrition, received the 2023 Gillings School Graduate Teaching Assistant (TA) Award.

EXAMPLES OF GRANTS/CONTRACTS

A team of UNC researchers won a five-year, $3 million National Cancer Institute (NCI) grant to assess approaches to scalable, cost-effective screening and treatment strategies to prevent cancer among women living with HIV in low- and middle-income countries and in underserved U.S. communities. Co-principal investigators from Gillings include Jennifer S. Smith, PhD, professor of epidemiology and UNC Lineberger Comprehensive Cancer Center member; and Michael Hudgens, PhD, professor and associate chair of biostatistics and the director of the Biostatistics Core of the UNC Center for AIDS Research. Co-investigators from Gillings include Bonnie Shock-Sa, DPh, professor of biostatistics; and Lisa P. Spees, PhD, assistant professor of health policy and management.

NCI awarded $9.3 million in support of two five-year research projects from UNC researchers in partnership with other institutions as part of the Pancreatic Ductal Adenocarcinoma Stromal Reprogramming Consortium, which focuses on identifying, integrating and mechanistically evaluating additional tumor microenvironment elements that drive pancreatic cancer progression and response to therapy.

Naim Rashid, PhD, associate professor of biostatistics, will study an integrative tumor stroma and stroma to understand and predict treatment response.

The National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), has established an Antiviral Drug Discovery (AVIDD) Center to develop oral antivirals that can combat pandemic-level viruses like COVID-19. The center builds upon and is highly affiliated with UNC’s Rapidly Emerging Antiviral Drug Development Institute (READDI). The READDI-AVIDD Center (READDI- AVIDD) is a public-private partnership with a renowned, interdisciplinary research team of experts from the Gillings School, UNC School of Medicine and UNC Eshelman School of Pharmacy. They will apply cutting-edge technologies to develop oral therapies that target viral families with high potential to cause a pandemic in the future.

An interdisciplinary collaboration of UNC researchers co-led by Beth Moracco, PhD, associate professor of health behavior at Gillings and associate director of the UNC Injury Prevention Research Center — has received a state grant from the state’s N.C. Evaluation of Fund Grants program to improve Domestic Violence Intervention Programs, which are court-mandated intervention programs intended to be an alternative to incarceration and reduce recidivism related to acts of domestic violence. The Fund was created in 2021 to support research partnerships with state agencies to inform policy and program decisions.

Alison Stuebe, MD, professor of obstetrics and gynecology at the School of Medicine and professor of maternal and child health at the Gillings School, is part of a team of researchers that received a $2.4 million grant from the American Heart Association to improve maternal care teams and overcome health care disparities by developing an educational curriculum for students across varying medical fields that are part of the birthing experience.

A research team led by Julia Rager, PhD, assistant professor of environmental sciences and engineering, received more than $500,000 from the Environmental Protection Agency’s (EPA) Science to Achieve Results (STAR) program to study toxic mixtures of chemicals in wildfire smoke. The funding is part of $17 million awarded to 11 institutions working on innovative approaches to inform human health risk assessment of environmental chemicals.

Alexandra Lightfoot, EDD, associate professor of health behavior; and Jen Medearis Costello, MS, an adjunct instructional professor in the MPH program, are part of a UNC-Chapel Hill Center for Women’s Health Research study receiving $12.5 million over the next five years from the National Heart, Lung, and Blood Institute to identify strategies for implementing pregnancy-related hypertension best practices in the outpatient setting with the goal of reducing maternal mortality. The National Institute of Diabetes and Kidney Diseases (NIDDK), part of the NIH, has awarded $4 million to establish the N.C. Consortium for Diversity in Maternal, Infant, and Child Obesity, and Diabetes Research, a five-year collaboration between the Gillings School’s Nutrition Obesity Research Center (NORC) and the Nutrition Research Center (NRC) to provide career advancement for nutrition, obesity and diabetes researchers from underrepresented groups, and ultimately, diversify the research workforce dedicated to investigating chronic disease conditions.

Researchers in the Department of Environmental Sciences and Engineering have been awarded a $799,833 grant from the United States Environmental Protection Agency (EPA) to develop methods that can improve the detection of emerging air pollutants, including per- and polyfluoroalkyl substances (PFAS). Jason Surratt, PhD, principal investigator and professor of environmental sciences and engineering, will lead the study team, which includes Professor and Chair Barbara Turpin, PhD, and Associate Professor Zhenta Zhang, PhD.
FACULTY HONORS

Fourteen Gillings faculty members were named to Clarivate’s 2022 list of Highly Cited Researchers™, which recognizes the world's most influential global research scientists and social scientists whose work is frequently cited by their peers during the last decade. They are:

- Ralph S. Baric, PhD, William R. Kenan, Jr. Distinguished Professor of epidemiology;
- Noel T. Brewer, PhD, Gillings Distinguished Professor in Public Health and professor of health behavior;
- Stephen R. Cole, PhD, professor of epidemiology;
- Kelly R. Evenson, PhD, professor of epidemiology;
- Rachel Graham, PhD, assistant professor of epidemiology;
- Lisa Gralinski, PhD, assistant professor of epidemiology;
- Sarah Leist, PhD, research associate in epidemiology;
- Hans W. Paerl, PhD, professor of marine and environmental sciences and engineering and William R. Kenan, Jr. Distinguished Professor at UNC’s Institute of Marine Sciences;
- Barry M. Popkin, PhD, William R. Kenan, Jr. Distinguished Professor of nutrition;
- Bryce Reeve, PhD, adjunct professor of health policy and management at Gillings and professor of population health sciences and pediatrics at Duke University;
- Kurt Ribisl, PhD, chair and Jo Anne Earp Distinguished Professor in the health behavior;
- Alexandra Schaefer, PhD, assistant professor of epidemiology;
- Timothy Sheahan, PhD, assistant professor of epidemiology; and
- Amy Sims, PhD, associate professor of epidemiology.

Barl Ralph, PhD, the William R. Kenan, Jr. Distinguished Professor of epidemiology at Gillings; professor of microbiology and immunology at the School of Medicine; and member of the UNC Lineberger Comprehensive Cancer Center, was elected in 2022 to the American Academy of Arts and Sciences. Founded in 1780, the Academy is both an honorary society that recognizes the excellence of its members and an independent research center convening leaders from across disciplines, professions and perspectives to address significant challenges.

Chantel Martin, PhD, assistant professor of epidemiology, received the 2022 Gillings Faculty Award for Excellence in Health Equity Research, which recognizes excellence in research by faculty in the Gillings School that advances the health inequities.

Nancy Messonnier, MD, dean and Bryan Distinguished Professor in Public Health at Gillings who is also the director of the National Academy of Medicine (NAM). One of the highest honors in the fields of health and medicine, election to the academy recognizes individuals who have demonstrated outstanding professional achievement and commitment to service throughout their careers. Messonnier was selected for NAM membership in 2021 and has been working with the group for about a year.

Melinda Beck, PhD, interim department chair and professor of nutrition at the Gillings School, is among four Carolina faculty members selected as 2022 fellows of the American Association for the Advancement of Science, the world’s largest general scientific society and publisher of the academic journal Science. The selection is one of the most distinguished honors in the scientific community.

Michael R. Kosorok, PhD, William R. Kenan, Jr. Distinguished Professor of Biostatistics at Gillings and professor of statistics and operations research at the College of Arts and Sciences, is the 2023 recipient of the George W. Snedecor Award from the Committee of Presidents of Statistical Societies. The award recognizes Kosorok’s foundational, creative and original contributions to mathematical statistics; methodological developments in empirical processes; and machine learning, addressing precision health; and mentoring of students, postdocs and junior faculty. Kosorok also was named president-elect of the Institute of Mathematical Statistics, an international nonprofit organization for scholars and professionals that fosters the development and dissemination of theory and applications of statistics and probability.

Charletta Sims Evans, MDE, associate dean for student affairs, received the Rebecca Clark Staff Award for Moral Courage, which recognizes an individual who demonstrates a strong commitment to social justice, during University Day 2022. Sims Evans has been on the leading edge of advocacy for staff and students, especially during the pandemic when mental health issues escalated. She pioneered a system for reporting microaggressions and recently established a conversation between students and staff following an incident of racial bias and harm. She addresses challenging situations head-on to promote and sustain a safe and inclusive environment.

The following faculty members recently completed work funded by Gillings Innovation Laboratory awards (GILS), which support innovative and interdisciplinary research projects addressing public health and environmental concerns.

- Orlando Coronell, PhD, associate professor of environmental sciences and engineering, led a study exploring a promising new type of battery technology called a battery-on-a-chip (CGB), which has the potential to leverage sustainable saltwater-based energy to mitigate factors that contribute to pollution and climate change.
- Stephanie Engel, PhD, professor of epidemiology, led a study using state-of-the-art imaging and analysis to examine the effects of phthalates, or environmental toxins, on early brain development.
- Karston Baumann, PhD, assistant professor of environmental sciences and engineering, and Barbara Turpin, PhD, professor and chair of environmental sciences and engineering, co-led a study examining air from UNC-Chapel Hill dorm rooms and a UNC football game to learn how to reduce the risk of exposure to infectious viruses.
- Audrey Pettifor, PhD, professor of epidemiology, led a team of UNC researchers working with South Africa’s University of the Witwatersrand to understand COVID-19’s impact on social determinants of health and to examine access to information, prevention tools and vaccines.
- Naya Villarreal, MPH — global health associate director for Research, Innovation and Global Solutions and assistant professor of health behavior at Gillings — was one of 60 2022 Aspen Ideas: Health Fellows, a diverse group of health leaders from more than 25 states in the U.S. and five other countries who were selected for their work, accomplishments and ability to transform ideas into action.
- Jill Stewart, PhD, the Philip C. Singer Distinguished Professor of Environmental Sciences and Engineering, is deputy director of a new Engineering Research Center (ERC) funded by a $9, $26 million grant from the National Science Foundation (NSF). The Engineering Research Center for Precision Microbiome Engineering, or PreME, aims to understand and improve the microbiomes that shape the structures in which we live, work and play — what scientists call the “built environment.”

Amanda Holliday, MS, RDN, LDN, associate professor of nutrition and the program director of the Master of Public Health in Nutrition and Dietetics Program, was elected as the 2022-2023 chair of the North Carolina Board of Dietetics/ Nutrition (NCBDN) — the licensing board for dietitians/nutritionists and dietetic technicians in the state. She also was appointed to serve on the N.C. Institute of Medicine’s Task Force on Healthy Aging, which focuses on policies and practices that support aging in place in N.C. communities.

Leena Nylander-French, PhD, CHI, director of the N.C. Occupational and Safety and Health Education Resource Center (NC OSHERC) and professor of occupational and environmental health, and John Staley, PhD, NC OSHERC deputy director and adjunct associate professor of health policy and management, were recognized by the National Institute for Occupational Safety and Health (NIOSH) for their work assisting underserved workers and small businesses during the COVID-19 pandemic. Their program won an honorable mention in the intervention category of the NIOSH Bullard-Sherwood Research-to-Practice (I2P) Awards.

Aaron Salzberg, PhD, director of The Water Institute and the Don and Jennifer Hollworth Professor in the Department of Environmental Sciences and Engineering, was one of three UNC faculty to receive the Office of the Vice Provost for Global Affairs (OVPGA) and the Faculty Award for Global Excellence in recognition of his contributions to advance global partnerships, education and research at UNC.

The U.S. Environmental Protection Agency (EPA) selected Michael Hudgens, PhD, professor of environmental sciences and engineering, to serve a three-year term on the new Social and Community Science subcommittee of the EPA Board of Scientific Counselors (BOSC), a federal committee that advises the EPA’s Office of Research and Development on technical and management issues of its research programs.

David Martinez, PhD, virologist and postdoctoral researcher at Gillings, was one of 10 recipients of the 2022 Dr. Eddie Méndez award. The recipients are postdoctoral researchers from across the country with research expertise in cancer, infectious disease and basic sciences.

Saame “Raz” Shaikh, PhD, associate professor and associate chair for research in the Department of Nutrition, will serve as director-at-large for nutrition science mechanisms on the American Society for Nutrition (ASN)’s board of directors.

The student-nominated Teaching Excellence and Innovation Awards honor Gillings faculty members who inspire students, engage in student learning through creative, engaging and innovative teaching methods; and/or support student success in the classroom and student growth as public health professionals. The 2022-23 award winners are:

- Naim Rashid, PhD, associate professor of biostatistics;
- Chantel Martin, PhD, assistant professor of epidemiology;
- Musa Manga, PhD, assistant professor of environmental sciences and engineering;
- Abigail Hatcher, PhD, assistant professor of health behavior;
- Melanie Studer, PhD, MSHA, assistant professor and director of undergraduate studies for the Department of Health Policy and Management;
- Auncheal Palmquist, PhD, MA, IBCLC, assistant professor of maternal and child health;
- Anna Kachokska, PhD, assistant professor of nutrition; and
- Emily Taylor, MPH, adjunct instructor for MPH@UNC.

Michael Hudgens, PhD, professor and associate chair of biostatistics, received the John E. Larsh Jr. Award for Mentoring, one of the School’s most prestigious awards, which recognizes the faculty member who best exemplifies the qualities of mentoring and commitment to students.

Lindsey Smith-Taillie, PhD, associate professor and associate chair of nutrition and dietetics in the Department of Nutrition, received the Edward G. McGavran Award for Excellence in Education in Diversity (HEED) Award from INSIGHT into Diversity magazine for outstanding commitment to and ongoing promotion of inclusive excellence. The award reflects one of the school’s core values to build, support and sustain a diverse, equitable and inclusive anti-racist community that can address the impact of systemic racism on health inequities.

SPRING 2023

CAROLINA PUBLIC HEALTH MAGAZINE
in Teaching, which recognizes career-long excellence in teaching by a faculty member at the Gillings School.

Jason West, PhD, professor and director of graduate studies in the Department of Environmental Sciences and Engineering, received one of the School’s most prestigious awards, the Bernard G. Greenberg Alumni Award for excellence in teaching, research and service.

FACULTY POSITIONS

Elizabeth Mayer-Davis, PhD, the Cary C. Boshmer Distinguished Professor of Medicine, was named dean of the School of Public Health, has been named associate of all diversity, equity and inclusion initiatives. Where she oversaw the design and implementation at Georgia State University School of Public Health, as assistant dean for diversity, equity and inclusion.

ALUMNI

Leah McCall Devin, DDS, MPH, professor of the practice in health policy and management and 1984 Master of Public Health alumna, received the 2023 Harriet Hyton Barr Alumni Award, which honors an alumnus or alumna for outstanding achievements and contributions to public health.

Christina Mack, PhD, Alumna and adjunct associate professor of epidemiology, was named chief scientific officer (CSD) for Real World Solutions at the pharmaceutical research organization IQVIA. She replaces Nancy Dreyer, PhD, ’79, associate professor of epidemiology, who is retiring after nearly 20 years with the company. Mack earned two degrees in epidemiology from Gillings: a Master of Science in Public Health (2010) and a Doctor of Philosophy degree (2013).

Environmental sciences and engineering alumni Calvin Arter, PhD (’21), and David Gorelick, PhD (’21), were named to the 50th class of the Distinguished Alumni for Excellence in Advancement of Science (AAS) Science and Technology Policy Fellows (STPF). The program places scientists with a doctoral or master’s degree in engineering in federal government agencies to provide scientific expertise in policymaking. Arter works with the U.S. Department of State’s Office of Management Strategy and Solutions as a member of the Greening Diplomacy Initiative (GDI), aiming to reduce the country’s environmental footprint in diplomatic engagements. Gorelick works with the Canadian Affairs in the U.S. Department of State, focusing mainly on negotiations between the two countries on how to manage hydroelectric in watersheds that span the border.

Two Gillings graduates received 2022 Distinguished Alumni Awards from UNC-Chapel Hill during University Day in recognition of their outstanding contributions to humanity:

- Nicole K. Bates, MPH (’00), DrPH (’08), is associate professor, is a Gillings graduate in health behavior and the School of Social Work. Her research focuses on the social determinants of health, disparities in health care and the role of social policy in improving health outcomes.
- F. DuBois Bowman, PhD (’00), a graduate of the University of Michigan School of Public Health, was named a Fellow of the National Academy of Medicine, a recognition that highlights a career of excellence in health-related research.

In addition, the School honored two Gillings graduates for their contributions to public health:

- Emilia Nkely-Gundipe, MHA (’15) for her leadership in public health policy and management, and
- Emilia Nkely-Gundipe, MHA (’15) for her leadership in public health policy and management, and

Announcements of faculty and staff appointments, promotions, and awards have been set aside for inclusion in the Gillings School’s annual alumni newsletter.

Two Gillings graduates received 2022 Distinguished Alumni Awards from UNC-Chapel Hill during University Day in recognition of their outstanding contributions to humanity:

- Nicole K. Bates, MPH (’00), DrPH (’08), is associate professor, is a Gillings graduate in health behavior and the School of Social Work. Her research focuses on the social determinants of health, disparities in health care and the role of social policy in improving health outcomes.
- F. DuBois Bowman, PhD (’00), a graduate of the University of Michigan School of Public Health, was named a Fellow of the National Academy of Medicine, a recognition that highlights a career of excellence in health-related research.

In addition, the School honored two Gillings graduates for their contributions to public health:

- Emilia Nkely-Gundipe, MHA (’15) for her leadership in public health policy and management, and
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Public health practitioners protect and improve the health of people and communities. They focus on root causes of disease and use evidence to develop policies and practices that create the conditions for people to thrive. Their remit is broad, as are the scope and actions of the UNC Gillings School of Global Public Health. Unrestricted giving supports timely solutions to pressing public health challenges.

Charitable giving supports excellence in research, education and practice at the Gillings School through merit-based scholarships, professorships, project-based support and unrestricted giving. These funds make up a portion of our operating budget and the rest coming from such sources as state appropriations, student tuition and government grants.

Contributions from generous members of our community fueled record-breaking success during the Campaign for Carolina, raising millions to support public health across North Carolina and around the world.

As well as educating the next generation of public health leaders, members of the UNC Gillings faculty are engaged in diverse projects, from engineering new ways to filter PFAS (per- and polyfluoroalkyl substances or “forever chemicals”) from water to training health care workers to provide mothers and newborns with evidence-based care. They pursue the aim of improved health wherever it leads.

Tackling big problems means working across disciplines, institutions and sectors. We must remain nimble and flexible while working within unavoidable constraints. By providing flexibility, unrestricted giving amplifies our impact, allowing the Gillings School to allocate funding toward the areas of greatest need and emerging issues. For example, flexible funding allowed us to pursue studies that directly contributed to our understanding of the COVID-19 pandemic.

“Making a planned gift was the best way for us to make a big impact on that pool of unrestricted funds,” said Todd A. Durham, PhD ’16 (health policy and management), MS ’95 (biostatistics), member of the Public Health Foundation Board of Directors (the organization that manages funds raised through annual giving). “Whether to attract students or deal with emergencies, I know it will be used well.”

Hear from other Board members on the following pages.

Your gift is crucial to our continued innovation in research, education and practice.

Please contact us to learn more about how you can support the School’s mission to improve public health, promote individual well-being and eliminate health inequities across North Carolina and around the world: (919) 966-0198 or email.sph@unc.edu
Still the number one public school of public health in the country

Gillings is, once again, the #1 public school of public health in the United States, according to the 2023-24 rankings from U.S. News and World Report.

Thank you so much for your continued support!

The reason I support Gillings is simple: I've had a blessed life. What the School has provided for me in terms of development, perspective, context and grounding — that's where I owe much of my success."

Mark M. Gordon, MHSA, BSPH ’86
(health policy and management)
Senior Vice President, Cone Health
President, North and East Markets, Burlington, NC