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PUBLIC HEALTH

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**Public Health Foundation board
members and many others
at the Gillings School were
saddened to learn of Dr. Yen's
sudden passing on Aug. 21. We
send our condolences to his
family, colleagues and friends.*

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DEAN
Barbara K. Rimer, DrPH

COMMUNICATIONS DIRECTOR (INTERIM)
Elizabeth French, MA

EDITOR
Linda Kastleman

ASSOCIATE DEAN FOR ADVANCEMENT
Karissa Grasty

DESIGN AND PRODUCTION
Rivers Agency

PHOTOGRAPHY
Brian Strickland

CONTRIBUTING WRITERS
Elizabeth French, Linda Kastleman, Laura Linnan, Michele Lynn, Barbara Rimer, Jennie Saia, Jim Schnabel, Ann Simpson, Melanie Studer and Aiya Williams

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Send correspondence to Editor, *Carolina Public Health*, Gillings School of Global Public Health, Campus Box 7400, Chapel Hill, NC 27599-7400, or email sphcomm@listserv.unc.edu.

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From the Dean

WHY WE ARE CHANGING

The MPH is a practice degree that evolved over nearly 80 years at the Gillings School, and longer nationally, in response to societal trends, advances in research and changing views of public health. The classic MPH degree – the one I, many of our readers and thousands of Gillings School alumni attained – has served us well. I'm proud of the training we and other schools of public health have provided. As public health has grown in stature, and our School's reputation has grown, the value of our MPH degrees has grown.

One marker of that value is our amazing track record. Within one year of graduation, 99 percent of our graduates either have jobs or plans for more education. To maintain that record, we must prepare students for the rapidly evolving world they will inherit, with the knowledge and skills employers need. We want to give students more than degrees and jobs; we want them to have a spectacular education that will last a lifetime, even as knowledge and fields evolve.

BARBARA K. RIMER

DEAR READERS —

We are energized by the work our dedicated faculty and staff are doing, with substantial input from students, to examine, reimagine and reengineer our academic degrees, especially the Master of Public Health (MPH). While schools around the world are making changes, partly in response to our accreditor's 2016 guidelines, we're doing it with our unique Gillings stamp.

This issue of *Carolina Public Health* is devoted to sharing the story of our academic journey, with special focus on the MPH – the foundational public health degree.

Several factors converged to shift thinking about the MPH. After a multi-year process of national assessment, in which many of us participated, our accreditor issued new guidelines that freed us from many old ways of operating (e.g., dividing learning needs into five core disciplines), while making us more accountable for students' achievement of predefined competencies.

Employers from public- and private-sector organizations want students to demonstrate skills in cultural competence, data visualization, teamwork, budgeting, communication and other areas, in addition to domain skills. Students also gave us a lot of feedback. Many wished the MPH courses – the five disciplinary courses they all took – gave them more opportunities to work with students across the School.

To solve some of public health's most challenging problems, such as the opioid epidemic, obesity, cancers and heart disease, emerging infections and lack of access to clean water, our graduates will work in interdisciplinary teams across North Carolina and around the world. Why not train them in teams and let them solve real problems while they are students?

This convergence for change led to an 18-month process at the Gillings School, in which teams of faculty, staff and students imagined the future state for core courses taken by all MPH (and many other) students. Planning intentionally, the teams meticulously devised integrated core courses in which students from across the School come together. Students work under the direction of committed faculty members, often teaching in teams, using state-of-the-art teaching methods, and supported by specially selected and trained teaching assistants and fellows.

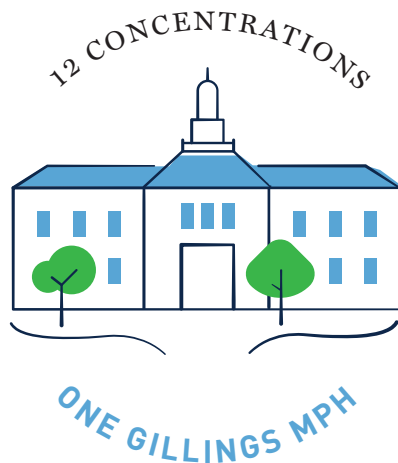
“Our core and other courses will be among the most intelligently designed anywhere.”

- DR. BARBARA K. RIMER

In interdisciplinary teams, the faculty leaders cover didactic information, but they also, for example, will use

live data to learn in-depth about a community and then propose solutions to a public health challenge. Students will acquire basic knowledge and skills in understanding populations and use analytic tools to characterize risk. We are connecting information to skills building and practice, using the kinds of data and problems our graduates will experience in the world beyond graduate school. Among other products, they will write white papers and present potential solutions and evaluation strategies.

New core courses were launched in fall 2018. We are fine-tuning them continually.



Instead of offering only department- and discipline-focused MPH degrees, we'll have one MPH degree, the Gillings MPH, with 12 concentrations (see page 12), several of which are cross-departmental. Each has been built or rebuilt for the 21st century, assuring relevance. Several concentrations will be offered both in the full-time residential program and in an online format, accessible to part-time students.

Gillings School students always have gotten – and will continue to get – outstanding training. All our students will acquire rigorous, carefully designed education for the 21st century. Our core and other courses will be among the most intelligently designed anywhere.

The process has been intense, challenging and stressful, but our students deserve the best. We are looking forward to completing the challenge and launching all 12 new concentrations in 2019.

The MPH for the 21st century? *We're on it!*

Warm regards,

A handwritten signature in black ink that reads 'Barbara K. Rimer'.

BARBARA K. RIMER, DrPH

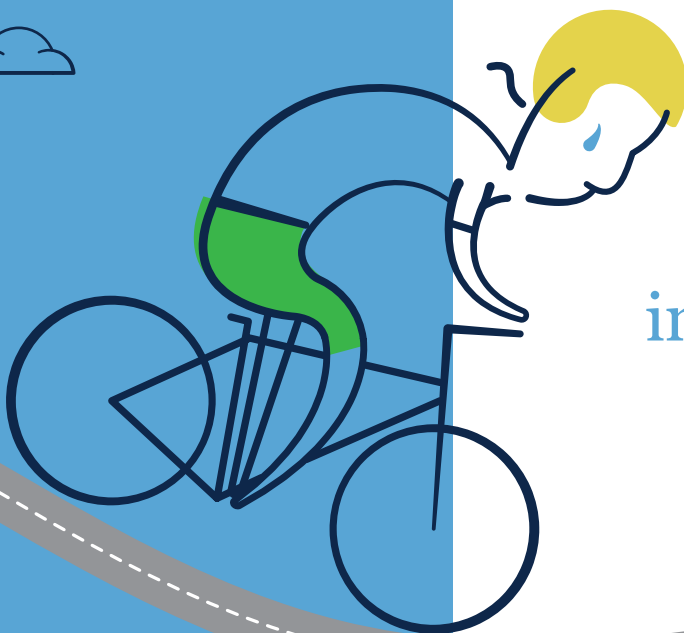


LEADERSHIP PERSPECTIVE



Dr. Laura A. Linnan

What students
learn at the
Gillings School
positions them
to be leaders
in their fields.



A Vision for Academics

BY LAURA A. LINNAN, ScD

Senior Associate Dean for Academic and Student Affairs

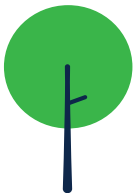
Commitment to teaching and high-quality programs is a core value at the Gillings School.

When I was recruited to the UNC Gillings School of Global Public Health in 1999, the rigorous research and commitment to excellence were strong incentives to join the faculty here. I also admired the high expectations placed on quality teaching, and that was a major draw, given my practice-based background.

Almost 20 years later, that commitment to teaching – and to developing a stellar public health workforce – are still signature features of the School. The fact that

99 percent of our students get jobs or continue their educations within one year post-graduation illustrates this commitment and speaks volumes about students' experiences between matriculation and graduation.

They arrive on campus with a passion to have a positive influence on the health of people, organizations and communities in North Carolina, across the United States and around the world, and they leave prepared to do just that. Regardless of the field of study, what students learn at the Gillings School positions them to be leaders in their fields.





**DR. LAURA
LINNAN**

We are making momentous changes in our educational programs. It has been my privilege to work with students, faculty and alumni to help facilitate this growth. Now, as senior associate dean for academic and student affairs, it has been the opportunity of a lifetime to help lead Gillings School efforts in redesigning our already excellent programs – making them even stronger, more student-centered and laser-focused on meeting workforce needs for the 21st century.

We are motivated by powerful changes in the world, new guidelines from our accreditor, the Council on Education for Public Health (CEPH), needs of students and employers, and our recognition that public health is an evolving profession. These drivers brought faculty, staff, students and alumni together to examine and reshape our curricula. The results have been amazing! An initiative that began as a renewal of core foundational training courses taken by all Master of Public Health (MPH) and Master of Science in Public Health (MSPH) students has expanded to touch all parts of our teaching mission:

OUR MPH CORE COURSES, LAUNCHED THIS FALL, HAVE BEEN TRANSFORMED INTO A FULLY INTEGRATED, 12-CREDIT CORE MPH/MSPH TRAINING PROGRAM.

This program brings together faculty and students from all departments to identify, develop, implement and evaluate public health problems – and propose strategic solutions. Team-based, interdisciplinary training allows students to dig into real-world problems that prepare them for public health jobs of today – and tomorrow.

WE ARE EXPANDING OUR ONLINE TRAINING PROGRAM, MPH@UNC.

We also are partnering with faculty from UNC Asheville and the Mountain Area Health Education Center (MAHEC) on a version of the Gillings MPH degree aimed at increasing access to public health training in western North Carolina (see page 18).

WE ARE EXPANDING OUR MPH CONCENTRATIONS UNDER ONE DEGREE.

We will continue offering department-based concentrations (formerly eight separate MPH degrees) but also will add new cross-departmental concentrations – global health; health equity, social justice and human rights; and public health data science. All concentrations will launch by fall 2019.

STRATEGIC CHANGES IN OUR UNDERGRADUATE AND DOCTORAL DEGREE PROGRAMS ARE UNDERWAY.

As with the Gillings MPH, we are approaching these changes with a strong commitment to educational excellence, rigorous training, state-of-the-science educational methods, an abiding focus on student and employer needs, a continuous quality improvement mindset and evaluation of our programs to ensure they deliver on our intentions.

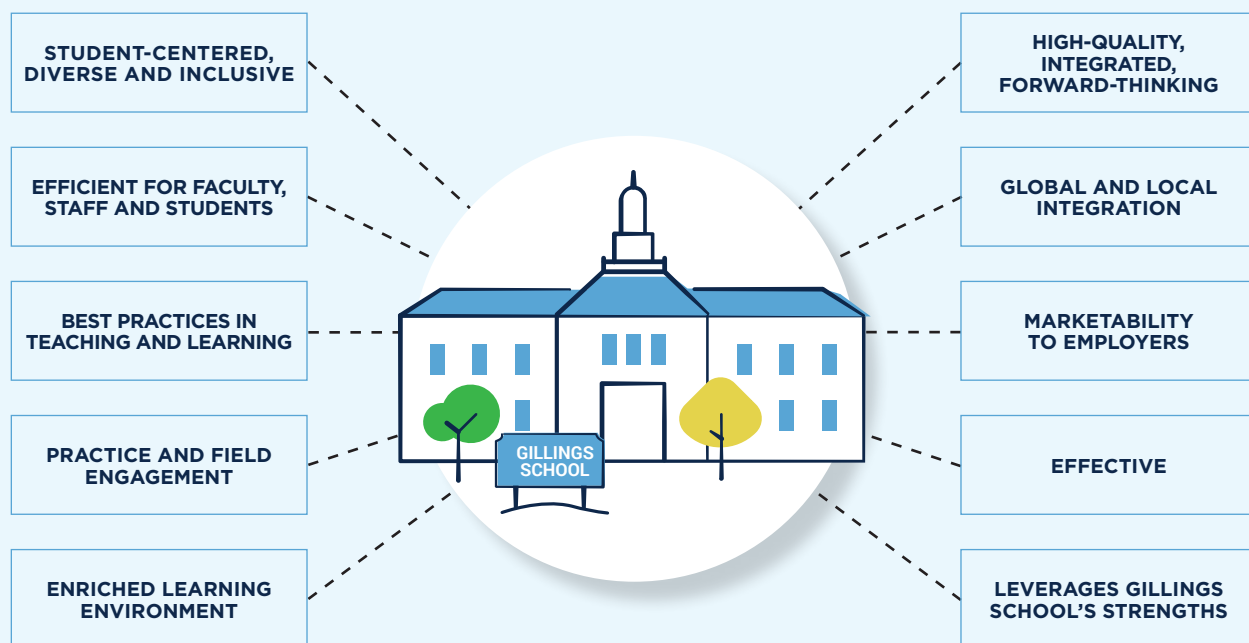
“As leaders in education, our job is not to control those whom we serve, but to unleash their talent,” wrote George Couros, in *The Innovator’s Mindset* (2015).

We think that the profound changes we are making in our academic programs will do just that – unleash our students’ talent.

“If innovation is going to be a priority in education,” Couros continued, “we need to create a culture [in which] trust is the norm.”

Having been entrusted to lead this change process, I am grateful to the many students, faculty and staff members who have been full partners in developing the phenomenally creative, rigorous and potentially life-changing suite of residential and online courses that constitute our new core public health curriculum. Our educational programs are changing, but our deep commitment to students and communities persists as we educate the next generation of public health leaders. In this way, we will demonstrate our full commitment to our responsibilities as the #1 *public* school of public health in the country.

OUR GUIDING PRINCIPLES FOR CURRICULUM CHANGES



Degrees Under (Re)Construction

Following are interviews with leaders in other Gillings School degree programs – the Bachelor of Science in Public Health (BSPH), Master of Public Health (MPH), Doctor of Public Health (DrPH), online MPH@UNC and the UNC Gillings MPH Program in Asheville, N.C. The BSPH and DrPH programs will undergo changes soon, and our new MPH offerings will continue to be refined.



LEARN MORE ABOUT THE NEW MPH DEGREE, BEGINNING ON **PAGE 20**.

TRAINING UNDERGRADUATES IN PUBLIC HEALTH

BY MELANIE STUDER

The Gillings School BSPH prepares students to enter the workforce or pursue higher education.

We spoke recently with Melanie Studer, MHSA, health policy and management doctoral student and teaching fellow in academic affairs at the Gillings School, about the School's Bachelor of Science in Public Health (BSPH) degree.

What is the history of undergraduate education at the UNC Gillings School of Global Public Health?

The Gillings School has offered undergraduate public health education to students since the 1940s. We were one of the first schools of public health with the vision to see undergraduate training as an important part of public health education. Currently, we support the BSPH degree as one of four majors – biostatistics, environmental health science, health policy and management, and nutrition.

About 250 BSPH students are enrolled in 2018-2019 across the four majors, representing about 15 percent of total School enrollment. Applications and enrollment numbers have been increasing steadily – it's exciting to see!



What is unique about the Gillings School's BSPH degree?

Our undergraduate degree provides outstanding public health training through a uniquely Gillings School approach.

Admission to the four majors is selective, with students applying during the spring of sophomore year for admission in the fall of junior year.

I can't say enough about the students who matriculate into our public health majors. They are amazing! They demonstrate strong academic ability, a passion for public health, and relevant professional, service and/or research experience.

Our undergraduate majors are specialized, offering rigorous, discipline-specific training that incorporates high-impact learning experiences, including research opportunities, internships and capstone projects. For example, BSPH students in health policy and management work in consulting teams with health organizations to solve real-world problems; BSPH students in nutrition conduct research in the labs of their faculty mentors. Undergraduate students often are co-authors on faculty research publications.

Our undergraduate students frequently cite as strengths of the BSPH degree the individualized support and faculty mentorship they receive. They also acknowledge the many benefits of being part of the broader Gillings School community, including the opportunity to enroll in graduate-level coursework and interact with our graduate students and alumni.

After graduation, our BSPH students are successful, securing employment in diverse health and public health-related organizations and admission to top graduate and professional degree programs. A survey of recent BSPH graduates one year after graduation revealed that 57 percent of graduates were employed (at consulting firms, hospitals and other health care provider organizations, and at colleges and universities), and 36 percent were pursuing higher education (either a graduate or professional degree).

What is the vision for the future of the program?

School leaders, with input from faculty, staff, students and alumni, are at the start of a strategic planning process to determine the future direction of undergraduate public health education at the UNC Gillings School.

There has been tremendous growth in undergraduate public health education in the U.S. over the past decade. For example, the number of institutions offering undergraduate public health degree programs has increased from 83 in 2003 to more than 271 in 2016, and the number of undergraduate public health degree conferrals rose from 1,372 per year in 2003 to 12,895 per year in 2016 (see tinyurl.com/ph-reports-undergrad-ed).

Undergraduate training is a potential growth opportunity for the Gillings School, and we are exploring multiple options for growth, including increasing enrollment in undergraduate majors, offering a public health minor, expanding introductory public health course offerings across campus, expanding accelerated bachelor's-to-master's program offerings, and offering earlier entry into the majors.

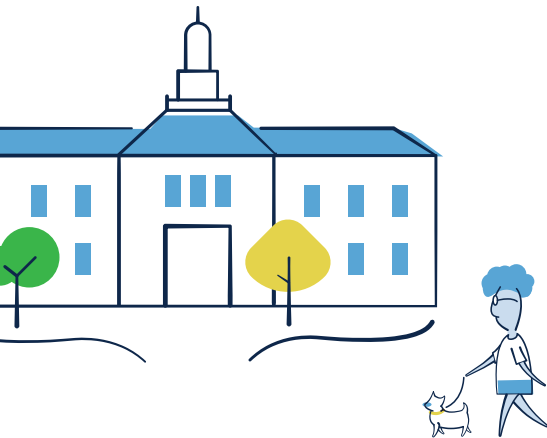
We will discuss all these options, and we look forward to building upon the strengths of the School's current BSPH degree programs and expanding public health training opportunities for more undergraduate students in the future.



MELANIE STUDER

Our Shiny, New Master of Public Health

WE'VE REDESIGNED OUR MPH TO GIVE STUDENTS THE EDUCATION THEY NEED AND EMPLOYERS WANT.



After nearly three years of planning, Gillings School faculty, staff and students debuted an innovative new Master of Public Health degree in fall 2018 – one of the first of its kind.

More than 60 faculty members, staff and many others in the Gillings School of Global Public Health community collaborated to design the program.

“The new degree is a strategic response to a changing work world,” says Karin Yeatts, PhD, associate professor of epidemiology, award-winning teacher and lead instructor of the new Methods and Measures core course.

“The new degree is a strategic response to a changing work world.”

- DR. KARIN YEATTS

“It is an interdisciplinary, collaborative, broad-based program that familiarizes our students with a wide range of issues in the public health field before they focus on more specific content in their areas of concentration.”

Students enroll in an integrated core of 12 credits in the first year,

six credits each semester. Fall classes include Understanding Public Health Issues, Methods and Measures for Public Health, and Data Analysis for Public Health. In the spring, students take Conceptualizing Public Health Solutions and Developing, Implementing and Evaluating Public Health Solutions.

“This is such an exciting concept in learning,” says Varsha Subramanyam, MPH, a spring 2018 Gillings School alumna, who worked with the team that developed the new core courses. “This interdisciplinary curriculum enables all students to study and work together in teams to learn the foundational concepts of public health before moving to their content areas.”

This is how students will work throughout their careers.

Subramanyam noted that there is room in the curriculum for open discussion about societal factors and systemic issues that affect public health, including racial justice, immigration and LGBTQ rights.

“This interdisciplinary curriculum enables all students to study and work together in teams to learn the foundational concepts of public health before moving to their content areas.”

- VARSHA SUBRAMANYAM



DR. KARIN
YEATTS

Previously, graduate students took five specific, discipline-based courses in health policy and management, health behavior, environmental sciences and engineering, epidemiology and biostatistics. Since no particular order of study was required, students could be at the School for a year or more of their two-year program and never learn about all the School's disciplines or meet the students working in them. They could miss central concepts fundamental to their practica and other work.

Today, the MPH is being designed intentionally to assure that all experiences are well timed, well taught and well thought-out.

“I'm proud to have been invited to help shape the new program,” Subramanyam says. “It's important that students helped to develop the core courses, as they have an overview of the whole program and know what the

classroom experience is like. We made recommendations for syllabi, for instance, trying to balance team projects and individual work. It is really a student-centric program, and I think student input will continue to be valued.”

“At the Gillings School, we're excited about training the next generation of public health professionals,” says Laura Linnan, ScD, professor of health behavior and senior associate dean for academic and student affairs. “We know that in the real world – and we've heard this from employers – people work in teams and collaborate with people from many disciplines. This new program prepares our students to work in the real world and solve real-world problems.”

12 MPH CONCENTRATIONS



APPLIED EPIDEMIOLOGY



**ENVIRONMENTAL
HEALTH SOLUTIONS**



GLOBAL HEALTH



HEALTH BEHAVIOR



**HEALTH EQUITY,
SOCIAL JUSTICE
AND HUMAN RIGHTS**



HEALTH POLICY



**LEADERSHIP
IN PRACTICE**



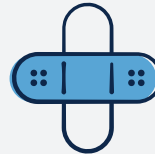
**MATERNAL, CHILD
AND FAMILY HEALTH**



NUTRITION



**NUTRITION, WITH
REGISTERED DIETITIAN
(RD) TRAINING**



**POPULATION HEALTH
FOR CLINICIANS**



**PUBLIC HEALTH
DATA SCIENCE**

Linnan says the curriculum will introduce students both to historic and emerging public health issues – from obesity and infectious diseases to opioid misuse and distracted driving.

The new core lays a foundation in the first year. Some concentration coursework begins, leading to a practicum experience in the summer before the second year. The second year is all content and skills-building in one of the 12 concentration areas (see above), as students prepare to transition into their post-graduation jobs.

The same concentrations are offered in an online degree program, MPH@UNC.

“Helping envision and develop the core courses has been one of the most challenging – and rewarding – experiences of my teaching career,” says Shelley Golden, PhD, assistant professor of health behavior at the Gillings School. “It has made me rethink my own perspective on public health and consider how much my way of seeing is informed by the discipline in which



I was trained. Getting to work so closely with colleagues from across the School – all of whom are fantastic educators – has really helped me grow, both pedagogically and as a public health professional.”

“Helping envision and develop the core courses has been one of the most challenging – and rewarding – experiences of my teaching career.”

- DR. SHELLEY GOLDEN



“Students today are global and connected,” says Barbara K. Rimer, DrPH, dean and Alumni Distinguished Professor at the Gillings School. “Tools and methods have evolved and will continue to do so. The ways we work have changed, too.”

Now, Rimer says, public health professionals work in teams and across disciplines to solve complex problems affecting populations and individuals. Like people in many fields today, public health professionals must learn new methods and tools quickly, knowing that they also will change.

“It is essential that we graduate curious, critically thinking professionals who are culturally competent, strong communicators and adept in the skills of data science,” Rimer says. “No matter what their disciplines and focus areas, they must be flexible, nimble and adept at synthesizing information from many sources. Our students will be prepared for this world.”

- BY LINDA KASTLEMAN



TOP AND CENTER: Members of the MPH steering committee pose before getting back to planning.

BOTTOM: Instructors in the MPH core courses are from departments across the School.

THE GILLINGS SCHOOL'S ONLINE DrPH

*A committed global network of mid-career
public health leaders since 2005*



Dr. Pam Silberman chats online with her DrPH students.

The executive online Doctor of Public Health (DrPH) program in health leadership exemplifies the Gillings School's commitment to ensuring that public health leaders have the skills and knowledge they need to be effective.

Available to professionals who have at least five years' experience post-master's degree in mid- to senior-level leadership positions, the DrPH program aims to enhance the capacity of health leaders to be more effective in improving the public's health at local, state, national and international levels.

ONE-THIRD TO ONE-HALF OF EACH COHORT - COMPOSED OF A DIVERSE GROUP OF STUDENTS WITH A WIDE RANGE OF BACKGROUNDS - LIVE AND WORK OUTSIDE THE UNITED STATES.

"We use a cohort model in which all students take the same classes throughout the program," says Pam Silberman, JD, DrPH, professor of health policy and management and director of the DrPH program.

Students meet online one night per week, over two years, for classes taught via videoconferencing. The classes are augmented with five of the six onsite sessions on the UNC-Chapel Hill campus. While students are not in the same location for most of the program, they feel a strong sense of community, and that shapes their experiences while in the program.

Because the DrPH program focuses on both local and global systems, one of the six in-person meetings is in a location where students can

come to understand the workings of a health care system other than their own – often in London.

“We provide students with a wide array of courses that give them a grounding in the skills they need to be more effective leaders,” says Silberman.

Since the DrPH program is an applied practice degree, the focus of the dissertation is to understand and identify strategies to address a current public health problem and detail those strategies in a “plan for change.”

Silberman says that, while there is a practicum requirement, students can practice from the outset what they are learning – as working full time is a program requirement.

“We consistently hear from students that they apply what they learn in class in their jobs,” she says.

The Gillings School was one of the first public health schools to offer an online DrPH program designed for mid-career leaders at work in the field.

NOW, 13 YEARS LATER, MORE THAN 100 PEOPLE HAVE SUCCESSFULLY DEFENDED THEIR DISSERTATIONS.

In 1992, in response to a 1988 landmark report by The Institute of Medicine (now the National Academies of Sciences, Engineering and Medicine’s Health and Medicine Division), which noted the need for public health practitioner leadership training, the School offered a one-year residential program. Recognizing the challenges for working professionals to take leave to attend a residential doctoral program, UNC developed the online two-year executive program in 2005. Since then, it has become one of the most competitive and emulated DrPH programs.

Silberman and her colleagues continually work to improve it.

In the last few years, the curriculum has grown to include classes in systems thinking, program planning and implementation science. Plans are underway to add classes on effective education and pedagogy skills.

“As we look to the future, we want to monitor what we’re offering and provide the right skill sets to ensure leaders are as effective as they can be,” says Silberman.

“As we look to the future, we want to monitor what we’re offering and provide the right skill sets to ensure leaders are as effective as they can be.”

- DR. PAM SILBERMAN

Graduates continue to find benefit.

In a 2015 alumni survey, 96 percent of respondents reported that they would “strongly” or “very strongly” recommend the program. Almost four-fifths (79 percent) reported that the Gillings School’s DrPH program accelerated their careers or promotion paths, and 76 percent reported taking on more leadership roles as a result of their training.

Silberman says that graduates form an enduring learning community that strengthens the field of public health.

“Within each cohort, students develop lifelong friendships,” she says. “Long after the program is over, those ongoing relationships provide a continuous learning environment in which our graduates provide professional and personal support to one another.”

- BY MICHELE LYNN



The Gillings School's MPH@UNC

NEWLY DESIGNED ONLINE DEGREE OFFERS QUALITY
EDUCATION IN A FLEXIBLE FORMAT



Dr. Todd Nicolet

“We want to reach people who can’t participate in our traditional programs because of work or life commitments.”

- DR. TODD NICOLET

As one of the pioneers in high-quality online education, UNC Gillings School of Global Public Health has delivered courses to a wide range of students.

With the fall 2018 launch of MPH@UNC – the Gillings School’s new online Master of Public Health (MPH) program, a partnership with 2U – the School is strengthening and expanding its online offerings and sharing them with an even broader and more diverse audience.

“We want to reach people who would make excellent students and alumni but can’t participate in our traditional programs because of work or life commitments,” says Todd Nicolet, PhD, vice dean at the Gillings School. “We’re working on reaching those students by having more flexible course offerings, delivered in the most effective, highest-quality way possible.”

MPH@UNC is supported by 2U, the industry leader in working with higher education institutions to promote and design online programs.

The first cohort of about 70 MPH@UNC students will work toward an MPH degree that is newly designed for both the residential and online programs.

“We are opening up public health to people from a number of different backgrounds who may not have considered that the field was a fit for them,” says Anna Schenck, PhD, Professor of the Practice and director of the School’s Public Health Leadership Program.

“The problems that public health must solve – concerns such as opioid misuse, obesity and health inequities – are

complex issues,” Schenck says. “They require cross-sector collaborations, with voices from many fields, including transportation, housing, health care, education and many others, working together.”

Schenck says the new online program provides an excellent public health education to people who traditionally might not receive public health training.

“We can bring people into the field of public health without their having to leave their jobs in education or city and regional planning,” she says. “We want people embedded in those areas to have public health leadership skills.”

In fact, Leadership in Practice, based in the Public Health Leadership Program, is one of the initial concentrations offered by MPH@UNC.

“One of the first things we tell our students is that public health is a team sport; it is not something you can do by yourself,” Schenck says. “That means having the skill to bring others together, forge a common vision, prioritize the options and make a plan to move forward. Our students, who will have the leadership skills to bring people together and plan strategically, also will be steeped in assessment, policy development and evaluation, the main tools used by public health professionals to achieve change.”

Nutrition is another of the first concentrations offered to MPH@UNC students.

“Nutrition is absolutely critical to health, disease prevention and the treatment of many of the chronic diseases that affect people here in North Carolina and around the world,” says Elizabeth Mayer-Davis, PhD, RD, Cary C. Boshamer Distinguished Professor of nutrition and medicine and chair of the Gillings School’s nutrition department.

Mayer-Davis says many dietitians are employed in health departments, hospitals and other locations in which having an MPH degree will increase greatly their capacity to improve health outcomes.

“One of the first things we tell our students is that public health is a team sport.”

- DR. ANNA SCHENCK

“To be able to provide an excellent education in nutrition so that our students can serve populations at high risk for nutrition-sensitive conditions is really a tremendous advance for our school,” she says.

A new requirement by the Academy of Nutrition and Dietetics, which accredits registered dietitians (RDs), calls for RDs to have a graduate degree. The new online UNC program will allow people to earn the master’s degree in a way that fits with their family and work lives.

“We’re excited about the MPH@UNC,” Mayer-Davis says, “and we feel strongly that the online degree



must be excellent and of the same quality that we provide to our residential students.”

Nicolet believes the MPH program is one of the best at training public health practitioners.

“We hope,” he says, “that by being able to reach more people with a Gillings MPH education, we can expand the number of excellent public health practitioners and really make a difference in public health.”

- BY MICHELE LYNN

Our MPH Program in Asheville

MEETING A PRESSING NEED FOR PUBLIC HEALTH PROFESSIONALS
IN WESTERN NORTH CAROLINA



Dr. Travis Johnson (right), interim director of the Asheville MPH program, poses with Drs. Ameen Batada (left) and Amy Lanou, consultants and instructors in the program.

The idea behind the new UNC Gillings MPH Program in Asheville is simple,” says Travis Johnson, MD, MPH, assistant professor in the Gillings School’s Public Health Leadership Program and interim director of the MPH in Asheville, North Carolina. “We admire the Gillings School’s master’s program, and we wanted to make it happen here, to draw people to learn and live in western North Carolina – and hopefully to stay and work here, where they are needed, after they graduate.”

The residential program employs a hybrid format that combines online tools with weekly face-to-face classes, held at UNC Asheville and the Mountain Area Health Education Center (MAHEC). The degree’s format enables working professionals to hone their public health

leadership skills with Gillings School and UNC Asheville faculty members and community health practitioners.

One of the drivers of the program is Jeff Heck, MD, chief executive officer of MAHEC. A health innovator who brought a satellite program of UNC-Chapel Hill’s School of Medicine to Asheville, Heck spearheaded a campaign to open a UNC Health Sciences Campus to improve health in the western part of the state.

“Western North Carolina is an area of great need,” Heck says. “Many counties are affected by shortages of health care providers, jobs and social services. The collaboration with nationally ranked UNC-Chapel Hill programs in health brings quality education to this part of the state at a lower cost to our students.”

Heck also notes that to succeed in value-based care, providers must develop an innovative, interdisciplinary and community-based focus.

“Gillings School leaders will help train the current and future workforce to address the social determinants of health – for example, housing, transportation and child care – which have profound impact upon health care outcomes,” he says.

Johnson, who also is an attending physician at MAHEC and affiliate professor at UNC Asheville, says he and other program planners were inspired by the Gillings School’s mission – *to improve public health, promote individual well-being and eliminate health inequities across North Carolina and around the world* – and by the

School's philosophy of "local is global," the notion that the same principles promote health equity in western North Carolina as in rural areas of other countries.

He praises collaborative relationships with Gillings School faculty and staff members, including Todd Nicolet, PhD, vice dean, Anna Schenck, PhD, Professor of the Practice and director of the Public Health Leadership Program, Laura Linnan, ScD, senior associate dean for academic and student affairs, the core instructors in the Chapel Hill program, "and of course, Dean Barbara Rimer, who has championed this effort from the beginning."

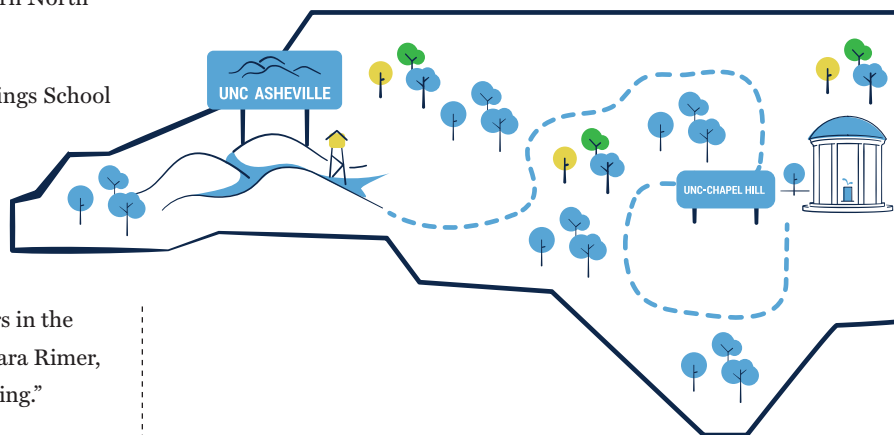
Johnson notes three particularly exciting elements of the collaboration – a place-based approach, practicality and potential impact.

"Place-based education nurtures a student's passion to care for his or her community, moving them from being a passive observer to an engaged community member," Johnson says. "The practicality has to do with three excellent institutions coming together and drawing the best from each. As to impact – I'm overjoyed to think about the impact graduates of this innovative program and their projects can have on community health in western North Carolina."

Two leading consultants for the program are Amy Lanou, PhD, professor and chair, and Ameena Batada, DrPH, associate professor, both in UNC Asheville's Department of Health and Wellness. Lanou also serves as executive director of the North Carolina Center for Health and Wellness. Batada also teaches this fall's Methods and Measures course in the MPH program.

"This fall's program takes the best aspects of the Gillings School's online program, MPH@UNC, and offers in-person time that provides personalized teaching and support," Batada says. "It will allow students to work while studying and will allow our first cohort, of about 15, to learn from other health professionals here in western North Carolina."

Batada says she knows many students and alumni of UNC Asheville's health and wellness program will be interested in the Asheville-based MPH program.



"Like many other health professionals working in the Mission Health hospital system and other organizations, our students and alumni see the value of understanding public health issues, data analytics, and community health program planning and evaluation," she says.

Lanou, who will teach Nutrition Policy, says it has been rewarding to work with MAHEC and the Gillings School.

"It has been a treat to see UNC Asheville 'at the table' in these discussions," she says, "and to experience enthusiastic engagement from everyone involved to develop a strong, rural-focused MPH program that will benefit the western part of our state."

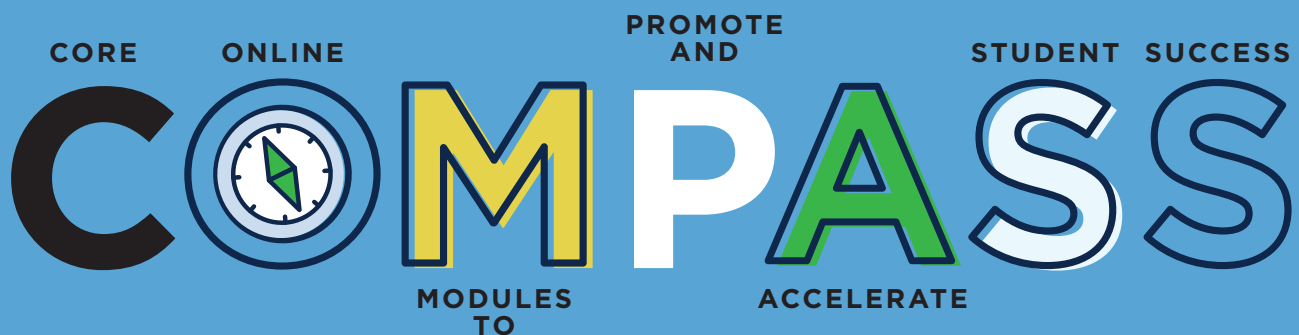
Sarah Thach, MPH, a Gillings School health behavior alumna, is MAHEC's interim associate director for community partnerships. In that role, she develops practicum opportunities for the new MPH students.

"People have clamored for this MPH program for decades," Thach says. "It meets a pressing need for people working in public health jobs in the Asheville area who want to earn a master's degree without leaving their jobs or uprooting their families. Given that we have a rich history of regional hospital collaboration and a long history of MAHEC's and UNCA's engagement in community health initiatives, western North Carolina provides fertile ground for new Gillings School research interventions."

- BY LINDA KASTLEMAN



Finding your



At the Gillings School, we are committed
to students' success.

A new set of online training modules,
which students complete prior to arriving on campus,
is a concrete representation of that commitment.

“COMPASS, an acronym for ‘core online modules to promote and accelerate student success,’ is an innovation of which we’re very proud,” says Aiya Williams, MS, instructional technology manager at the Gillings School. “It is part of the Gillings School’s commitment to ensure that students have the background, skills and support to succeed in the Master of Public Health (MPH) or Master of Science in Public Health (MSPH) program from day one.”

Williams notes that many students entering an MPH or MSPH program benefit from early assessment of skills in two areas – quantitative and writing. When these two modules are completed, results can help students identify gaps in their skills. Resources can be provided by the School to fill those gaps and help support student success.

Current students, faculty and alumni have helped develop COMPASS. For instance, the ethics and justice module, a cornerstone of the MPH degree program, is an introduction to a School that has a long and proud history of working for social justice and equity in North Carolina and around the world.

Leadership and teamwork are a key competency for MPH/ MSPH graduates. Students will build on the topics described in this module in all aspects of their training at the Gillings School.

Resources and research ethics modules help students with practical information and required trainings. Free access is provided to CITI Research Ethics (citiprogram.org) certifications, which are required for research involving human subjects. Students also receive a technology orientation so they can become familiar with the Sakai learning management system before they start classes, which saves time and prepares students to engage quickly.

Students are encouraged to begin COMPASS immediately after the initial welcome email arrives.

“Rather than waiting until a student gets to campus – where there is potential to be overwhelmed by all the information typically shared at orientation – students can learn about essential information and expectations before they arrive,” says Dr. Laura Linnan. “Upon completion of COMPASS, we believe students will ‘hit the ground running’ on the first day of their training program at the Gillings School, which will position them on an excellent pathway for success.”



AIYA WILLIAMS

Among the available modules are:

**RESOURCES AVAILABLE AT THE
UNIVERSITY OF NORTH CAROLINA AND
THE GILLINGS SCHOOL**

ETHICS AND JUSTICE

QUANTITATIVE SKILLS

HONOR CODE AND PLAGIARISM

**WRITING, CITING AND USING THE
LIBRARY EFFICIENTLY**

LEADERSHIP AND TEAMWORK

RESEARCH ETHICS

- BY LINDA KASTLEMAN AND AIYA WILLIAMS

Perspectives from Faculty and Students

I'm excited that students in the new MPH program will get to work closely with students from different backgrounds—biostatistics, epidemiology, leadership, maternal and child health, and others. You learn so much when you build bridges across disciplines!



JULIANA DEGROOT

*MPH Student, Health Behavior
Teaching Assistant*

I'm one of the few MPH students in biostatistics. I know that for some people, graduate-level biostatistics can be an adjustment. I want to make sure students in the core aren't too anxious. I want us to do everything we can to facilitate their positive experience here. I also think that being part of the core will help *me* learn the material in a deeper, more integrated way.



DANA SESSOMS

*MPH Student, Biostatistics
Teaching Assistant*

Several of the fall 2018 MPH core course instructors – Drs. Shelley Golden, Courtney Woods, Jane Monaco and I – recorded a podcast for our incoming students. Putting it together epitomized the best parts of developing the MPH core program – and is a testament to our wonderful colleagues across multiple departments.

As we discussed the classic Geoffrey Rose article, “Sick Individuals, Sick Populations,”* each of us reflected on different key ideas of the article that we ‘see’ first because of our discipline-specific training.

From our conversations, we gained new perspectives that led us to better appreciate and understand the field of public health. Our goal with the new MPH core is that our students also will develop this appreciation and understanding.



KARIN YEATTS, PHD

*Associate Professor of Epidemiology
and key committee member for
development of the MPH Core*

*See tinyurl.com/LJE-2001.

Having interdisciplinary opportunities will be great for students. This fall, they will have five big topics to select from – obesity, vector-borne diseases, maternal mortality and morbidity, substance use disorders and air pollution. Teams of students will select a location and a population for examining more deeply the scope and impact of the problem.



GHANJA O'FLAHERTY

*Doctoral Student, Environmental
Sciences and Engineering
Teaching Assistant*

What they're
saying...

...about our
new programs

I learn best through real-world examples and case studies. The new MPH core helps reinforce concepts we're working to understand and allows us to explore sensitive issues that we will deal with in our future work lives. Those lessons that previously may have been only conceptual now have concrete connections – and allow us to apply what we've learned and build on it. The core can be a testing ground before we go out to our work in the field.



AMANDA BROWN MARUZIAK

*Doctoral Student, Epidemiology
Teaching Assistant*

As a teaching fellow in the MPH core, I am able to participate in the development of an integrative experience for the teaching assistants (TAs). TAs will create an individual training plan so they can gain important skills in this role. They can sit down with course instructors to map the skills they want to learn and practice – and then develop approaches to fully developing those skills. We will have ongoing feedback between the TAs and instructors – that's exciting!



GABRIELLE JENKINS

*Doctoral Student, Epidemiology
Senior Teaching Fellow*

MEET ALETA GAERTNER

I provide relevant tools and resources to foster innovation in curriculum design and development that incorporates pedagogical best practices. Accreditation criteria are essentially minimum standards of best educational practices for promoting successful student learning outcomes, which in turn benefit employers and society. I strive to support faculty in what has become a Gillings School brand – to exceed minimum standards by infusing passion, experience and creativity into teaching.

Using pedagogical tools helps students understand the value of competency-based training and how it equips them to make an impact. One example of such a tool is the new Gillings School syllabus template. The syllabus incorporates formatting and components grounded in research in the ways students learn best. It is a map, showing students the destination and signposts that mark their journey – what and how they will learn, how they will be assessed, and how they will demonstrate competence. Faculty use the syllabus template as a course design and development tool to show students the full arc of the learning experience.

I am delighted to partner with colleagues at the number one *public* school of public health. Together, we are working to assure accessible, exceptional training that empowers students to improve the public's health.



Aleta Evans Gaertner, MPH, joined the Gillings School in November 2017 as coordinator for curriculum assessment, accreditation and pedagogy.



INTRODUCTION TO
MASTER OF
PUBLIC HEALTH
CONCENTRATIONS

Gillings' New MPH Degree

A completely redeveloped core and 12 specialized areas of study

BY DR. LAURA LINNAN



Our new MPH degree offers a well-built foundation and all the tools students need for success.

In fall 2019, the UNC Gillings School of Global Public Health will roll out 12 new Master of Public Health (MPH) concentrations – or specialized areas of study – as one degree.

How, in a School with broad-ranging strengths and a history of strong department-based degrees, could we select concentrations that meet workforce needs while continuing to offer variety and depth?

In short, we practiced what we preach – good data collection and collaboration. Faculty from across the Gillings School worked with students and alumni to propose our new specialized areas of study. We spoke with employers to determine what they look for in Gillings School graduates. We reviewed the literature to identify best practices in teaching and learning, delved into critical writings on the future of higher education, jobs and MPH training. After selecting concentrations that best leverage our strengths and meet workforce needs, we incorporated new criteria, competency-based learning opportunities, and the practicum and integrated learning experiences established by the Council on Education in Public Health (CEPH).

This fall, we begin to see the fruits of our labor – 2018-2019 is a transition year during which students are still completing their traditional, department-based degrees. Yet, this fall, we also launched our new 12-credit integrated “core,” or training in foundational public health knowledge (see pages 26-27), and we are now in the process of fully developing the remainder of the 42-credit MPH curriculum that will prepare students for 21st-century jobs. Specifically, we will roll out all 12 new concentrations for MPH students in the fall 2019 incoming cohort.

Public health practitioners must span disciplinary boundaries, work with many kinds of people and work effectively in teams. They may work locally and globally,







Our team-based, integrated, core training offers MPH students a world-class foundation in public health practice.

and may change focus during their careers. The new Gillings MPH fully addresses each of these individual and workforce needs. Our team-based, integrated, core training offers MPH students a world-class foundation in public health practice.

For example, this fall, student teams are working on one of five major issues – obesity, vector-borne diseases, maternal mortality and morbidity, substance use disorders or air pollution. In working through these public health challenges – and other conceptual and skills-based content in the MPH core – students also will attain many cross-cutting skills, including cultural competence, data visualization and communications. Through their chosen concentration, students will investigate more deeply an area about which they are passionate, and may develop more subject-centered competencies (see pages 26-27). Through nine elective credits, they will expand knowledge in their concentration area or gain knowledge and skill in another, related area.

The final result is an innovative, flexible curriculum that gives our students skills and knowledge they need to succeed. We are excited to begin this next part of our journey!

OUR NEW MASTER OF PUBLIC HEALTH CONCENTRATIONS

CONCENTRATION	BASED IN	LED BY
 APPLIED EPIDEMIOLOGY	DEPARTMENT OF EPIDEMIOLOGY (EPID)	Karin Yeatts, PhD , associate professor, EPID
 ENVIRONMENTAL HEALTH SOLUTIONS	DEPARTMENT OF ENVIRONMENTAL SCIENCES AND ENGINEERING (ESE)	Courtney Woods, PhD , assistant professor, ESE Barbara Turpin, PhD , professor and chair, ESE
 GLOBAL HEALTH	DEPARTMENT OF HEALTH BEHAVIOR (HB)	Suzanne Maman, PhD , professor, HB Rohit Ramaswamy, PhD , professor, PHLP Ilene Speizer, PhD , professor, MCH Jill Stewart, PhD , associate professor, ESE, and deputy director of the UNC Center for Galápagos Studies
 HEALTH BEHAVIOR	DEPARTMENT OF HEALTH BEHAVIOR (HB)	Beth Moracco, PhD , associate professor, HB
 HEALTH EQUITY, SOCIAL JUSTICE AND HUMAN RIGHTS	DEPARTMENT OF EPIDEMIOLOGY (EPID)	Geni Eng, DrPH , professor, HB Joanna “Asia” Maselko, ScD , associate professor, EPID Anissa Vines, PhD , assistant professor, EPID Courtney Woods, PhD , assistant professor, ESE <i>With thanks to Allison Aiello, PhD, professor, EPID, founding co-leader</i>
 HEALTH POLICY	DEPARTMENT OF HEALTH POLICY AND MANAGEMENT (HPM)	Morris Weinberger, PhD , Vergil N. Slee Distinguished Professor of Healthcare Quality Management and chair, HPM Pam Silberman, JD, DrPH , Professor of the Practice, HPM





Gillings MPH Structure

CORE + CONCENTRATION + MINOR OR ELECTIVES

42 total credits

FROM START TO FINISH

CONCENTRATIONS

CONCENTRATION	BASED IN	LED BY
 LEADERSHIP IN PRACTICE	PUBLIC HEALTH LEADERSHIP PROGRAM (PHLP)	Vaughn Upshaw, DrPH, EdD , professor, PHLP
 MATERNAL, CHILD AND FAMILY HEALTH	DEPARTMENT OF MATERNAL AND CHILD HEALTH (MCH)	Kavita Singh Ongechi, PhD , associate professor, MCH Meghan Shanahan, PhD , assistant professor, MCH <i>With thanks for planning and support to Lewis Margolis, MD, associate professor, MCH (retired)</i>
 NUTRITION	DEPARTMENT OF NUTRITION (NUTR)	Melinda Beck, PhD , professor and associate chair, NUTR Amanda Holliday, MS, RD , assistant professor, NUTR
 NUTRITION, WITH RD TRAINING	DEPARTMENT OF NUTRITION (NUTR)	Melinda Beck, PhD , professor and associate chair, NUTR Amanda Holliday, MS, RD , assistant professor, NUTR
 POPULATION HEALTH FOR CLINICIANS	PUBLIC HEALTH LEADERSHIP PROGRAM (PHLP)	Anna Schenck, PhD , Professor of the Practice and director, PHLP Cynthia Feltner, MD, MPH , director, Health Care and Prevention MD/MPH Program, PHLP
 PUBLIC HEALTH DATA SCIENCE	DEPARTMENT OF BIOSTATISTICS (BIOS)	Lisa LaVange, PhD , professor and associate chair, BIOS, and director, UNC Collaborative Studies Coordinating Center

GILLINGS MPH
CORE
12 credits

+

CONCENTRATION
COURSES
15 credits

+

APPLIED
PRACTICUM
3 credits

+

INTEGRATED
LEARNING
EXPERIENCE
3 credits

+

ELECTIVES
9 credits

=

**GILLINGS
MPH**

THE NEW GLOBAL HEALTH CONCENTRATION

Working with ‘global’ populations in North Carolina and around the world



Left to right are Drs. Suzanne Maman, Rohit Ramaswamy, Jill Stewart and Ilene Speizer, co-leads for the global health concentration. Their disciplines – health behavior, leadership, environmental sciences and engineering, and maternal and child health, respectively – reflect the broad base of the concentration.

The word global in “UNC Gillings School of Global Public Health” is not incidental.

Since its earliest days, when faculty members traveled around the world to teach, collaborate and consult, the Gillings School’s focus has been on both local and global public health. The late Dan Okun, PhD, Kenan Distinguished Professor and chair of environmental sciences and engineering, reportedly worked in more than 90 countries. Students from around the world enrolled in UNC’s public health school.

Today, the Gillings School is in the vanguard of training students to solve global health problems, and our researchers and practitioners are leaders in public health efforts throughout the world. More than 80 of them work on projects that connect North Carolina to global communities.

The School is poised to continue its leadership through the newly designed global health concentration, set to be unveiled in fall 2019.



**DR. SUZANNE
MAMAN**

“The global health concentration creates a new set of courses, taught by faculty across several departments, which focus on global health in an integrated way.”

— DR. ILENE SPEIZER

Peggy Bentley, PhD, Carla Smith Chamblee Distinguished Professor of Global Nutrition and associate dean for global health, was among the first people to recognize the intersection of North Carolina and the world, and she encouraged the School to adopt the phrase, “local is global.” By that, she meant that problems examined and solved in developing countries also may have application in rural North Carolina, and vice versa.

This perspective now is part of the revised global health competencies developed by an Association of Schools and Programs of Public Health (ASPPH) committee on which Bentley served. In 2009, School leaders undertook a concerted effort to integrate global health content into courses throughout the curriculum. This was a major advance, one that many other Schools regarded as a good strategy.

“The global health concentration,” says Ilene Speizer, PhD, professor of maternal and child health and one of four co-leads for the new concentration, “creates a new set of courses, taught by faculty across several departments, which focus on global health in an integrated way.”

Developing that shared set of skills is at the heart of the school’s curriculum redesign.

“This is part of a movement within the Gillings School to develop a more unified MPH program,” says Suzanne Maman, PhD, professor of health behavior and concentration lead. “It allows for a core set of integrated courses, which all students take, and then concentration-specific courses.”

The global health concentration models the importance of working across disciplines. Faculty members from diverse fields, whose work is global, have designed the concentration.

Maman, a social scientist trained in public health, focuses on developing, implementing and evaluating HIV and intimate partner violence-prevention interventions in a variety of global settings, primarily in sub-Saharan Africa.

Speizer, who also works in sub-Saharan Africa, focuses on sexual and reproductive health issues among women, men and couples.

Jill Stewart, PhD, associate professor of environmental sciences and engineering, and Rohit Ramaswamy, PhD, professor in the Public Health Leadership Program and in maternal and child health, are also concentration co-leads.

Stewart seeks to understand environmental determinants of disease – and to understand and engineer solutions that ensure the health and well-being of local and global populations. Ramaswamy, who is trained in civil engineering, specializes in improving health systems in the United States, India, South Africa and Ghana.

While interdisciplinary training is key, Maman stresses that the curriculum is focused on providing students with skills they can apply in a variety of work settings.

“Our students will leave with skills in program planning, implementation, and monitoring and evaluation, using both qualitative and quantitative methods,” she says. “We know those skills will get our students jobs in which they can make an impact in any global environment.”

Ramaswamy says a unique quality of the Gillings School is that its faculty members are not only research leaders, but also leaders in the translation of research to practice.

“The global health concentration will help students put the skills into practice,” he says, “so that as graduating master’s students, they can make immediate impact in the world.”

An applied practical learning experience is part of the MPH curriculum, and the global health concentration faculty will help students leverage School connections with Triangle (N.C.)-based nongovernmental organizations dedicated to global health work, such as FHI 360, RTI International and IntraHealth. UNC’s strong presence in global public health – with longstanding partnerships in Malawi, Zambia, South Africa, Vietnam, China, Latin America and other areas – also provides opportunities for students to learn from researchers and practitioners, both in the classroom and through practicum projects.

Global health concentration graduates will just as likely be working in the United States as in global settings.

“We are as dedicated to populations in North Carolina as we are to populations in Africa,” says Ramaswamy. “When we talk about global public health, it’s important to understand that this is not just for students who want to work outside the U.S. The things we teach will be of great value to students who want to work with immigrant, refugee and vulnerable populations in the U.S.”

“Preparing students to treat and prevent diseases worldwide is necessary to ensure healthy populations at home,” says Stewart. “Health threats such as emerging diseases and the rising threat of antimicrobial resistance require us all to think and act on a global scale.”

Maman is thrilled by the School’s commitment to raise the profile of its global health training.

“We’re going to develop an incredible skill set among cohorts of trained MPH professionals who then will have great careers, through which they will have an impact on global health at all levels,” she says. “Our students will work with global populations here in the U.S. and throughout the world, in research, practice and policy, and in settings ranging from community organizations to ministries of public health.”

- BY MICHELE LYNN



Working on a global health project are (left to right) epidemiology student Charlotte Lane, Dr. Dilshad Jaff, health policy and management student Sheila Vipul Patel, Professor Sheila Leatherman and postdoctoral research associate Dr. Linda Tawfik.

A Vision for Guaranteed Global Experiences

“When you work in a new community, whether nearby or far away, you’re bound to acquire a new perspective. It’s impossible to come back and think of those other places as ‘other.’”

- JULIE MacMILLAN, MPH

*Managing Director
Research, Innovation and Global Solutions*

The Gillings School is renowned for accelerating public health solutions with worldwide impact. The challenge of solving great public health threats in today’s environment requires practitioners who possess global experience, understanding, competence and empathy.

Ensuring that all Master of Public Health (MPH) students at the Gillings School have the opportunity for experiences in both local and global learning and practice – mentored, hands-on learning through which classroom training is applied to improve health in real-world settings – is critically important.

Accreditation requirements set expectations for practica, but each school applies its own special stamp to these experiences. Because so many students want global experiences, enabling our students to obtain them, regardless of their financial status, is now one of the School’s highest priorities.

Critical public health issues – such as ensuring clean water, preventing diseases, strengthening health systems, and improving nutrition and child health – transcend borders, regions, cultures, income, religions, races and ethnicities, whether the challenges are found in North Carolina or elsewhere in the world.

The Gillings School faculty trains MPH students to “dig deep” into critical thinking, to understand urgent public health problems and their underlying causes, and most of all, to solve problems. Partnering with faculty, community partners and others, they help discover and deliver lasting solutions for communities and assess the impact of their work until its effectiveness is understood.

With active projects throughout North Carolina, the U.S. and in more than 60 countries, from Guatemala to Tanzania, the catchphrase *From the Well to the World™* is an achievable goal.

ENGAGEMENT BEYOND BORDERS FOR EVERY MPH STUDENT

Students who have had an opportunity to work in local communities around the world value the experience as a life-enhancing one. Increasingly, Gillings School students are examining health programs in both U.S. and global settings.

“The walls of countries are permeable spaces where diseases and health threats travel freely,” says Dean Barbara K. Rimer. “A safer, healthier and greener world depends upon the people we are training today.”

Rebecca Bartlett, MPH, is a maternal and child health alumna.

“My practicum experiences at IntraHealth and Remote Area Medical allowed me to refine my skills as a public health practitioner behind the scenes, as opposed to at the bedside, which I was more accustomed to,” says Bartlett. “In my current work, I daily use the skills I harnessed in both these placements. I also became more confident as a researcher because I was pushed to step outside my comfort zone.”

Bartlett is a nurse-midwife in Melbourne, Australia, where she works for Birth for Humankind, a charitable organization, and runs mAdapt, a social enterprise she founded during her time at the Gillings School. Her *local* experience at IntraHealth, based in Durham, N.C., has been applicable *globally* to her work in Melbourne.

Michael Wilson, MPH, a health behavior alumnus, is co-founder and partnerships lead at Advance Access and Delivery Inc., a global nonprofit that works to overcome barriers to high-quality health care and affordable medicines.

“During my internship with Helen Keller International in Vietnam, my Gillings School coursework came to life – and my passion for a career in global public health deepened,” Wilson says. “I learned to work and communicate with co-workers in a very different setting than I was used to and gained skills that have enhanced my career.”

Wilson says he made many connections in Vietnam that remain useful in his current position.

“The experience was incredibly valuable, both personally and professionally,” he says. “I hope future UNC public health students will have similar opportunities to enrich their MPH coursework.”

Since 2016, Gillings School students have had practica in 37 countries. About 20 percent of our MPH students secure funding for global experiences each year.

“Our dream for a Global Experience Fund,” Rimer says, “would offer an unprecedented distinction of scale – one that guarantees every residential MPH student a global experience from a broad array of opportunities.”

- BY ANN SIMPSON AND LINDA KASTLEMAN



READ MORE ABOUT BARTLETT IN THE SPRING 2018 CAROLINA PUBLIC HEALTH, AT SPH.UNC.EDU/TRAJECTORIES-2018-1.



TO DISCOVER HOW YOU CAN SUPPORT GLOBAL EXPERIENCES FOR GILLINGS SCHOOL STUDENTS, PLEASE SEE **PAGE 53**.

Public Health

DATA SCIENCE

A SKILL SET MUCH IN DEMAND



Dr. Lisa LaVange

It's "America's hottest job," says *Bloomberg*; "the sexiest job of the 21st century," declares *Harvard Business Review*.

In virtually all major sectors of the global economy, employers large and small – from Google and the Gates Foundation to local startups – are clamoring for credentialed data scientists.

"I don't think there are many employers out there who are not in need of this skill set right now," says Lisa LaVange, PhD, professor and associate chair of biostatistics at UNC's Gillings School of Global Public Health. LaVange oversees the new Public Health Data Science concentration, scheduled to become part of the Gillings School's MPH program in 2019.

“[Students will] go on to do great things with these skills – from finding new ways to monitor and measure public health to finding cures for diseases.”

- DR. LISA LaVANGE

Until last year, LaVange directed the Office of Biostatistics in the U.S. Food and Drug Administration’s Center for Drug Evaluation and Research, and in that role, had to face the data science skills shortage herself.

“More than 200 statistics reviewers worked for me at FDA, most of them with PhDs, but it wasn’t enough,” she says.

“We needed more data scientists, because there are more data now, and so many questions we need to ask of the data.”

Health-focused organizations always have needed experts in statistics and computation, but in the age of the internet, as data gathering has become ubiquitous, this need intensified. Data sets from traditional sources, such as clinical trials and population studies, are becoming larger and more complex. Many new, nontraditional sources of data exist, including electronic health records, patient registries, insurance claims databases, clinical genomic databases, even internet browsing histories and search-term trends.

“We’re now in a world where everyone’s data are out there, one way or another,” LaVange says.

Health professionals are attempting to learn more from these data – for example, by running virtual clinical trials on integrated sets of insurance claims databases or by gathering and analyzing disease-outbreak data and broadcasting the results in real-time to clinicians or epidemiologists with mobile apps.

Moreover, the new emphasis on very large databases, distributed computing power and artificial intelligence (AI)-related analytical techniques has drawn a new type of organization – the “big tech” company – into the public health space. Google, Microsoft and Amazon all have major public health-related projects in the works.

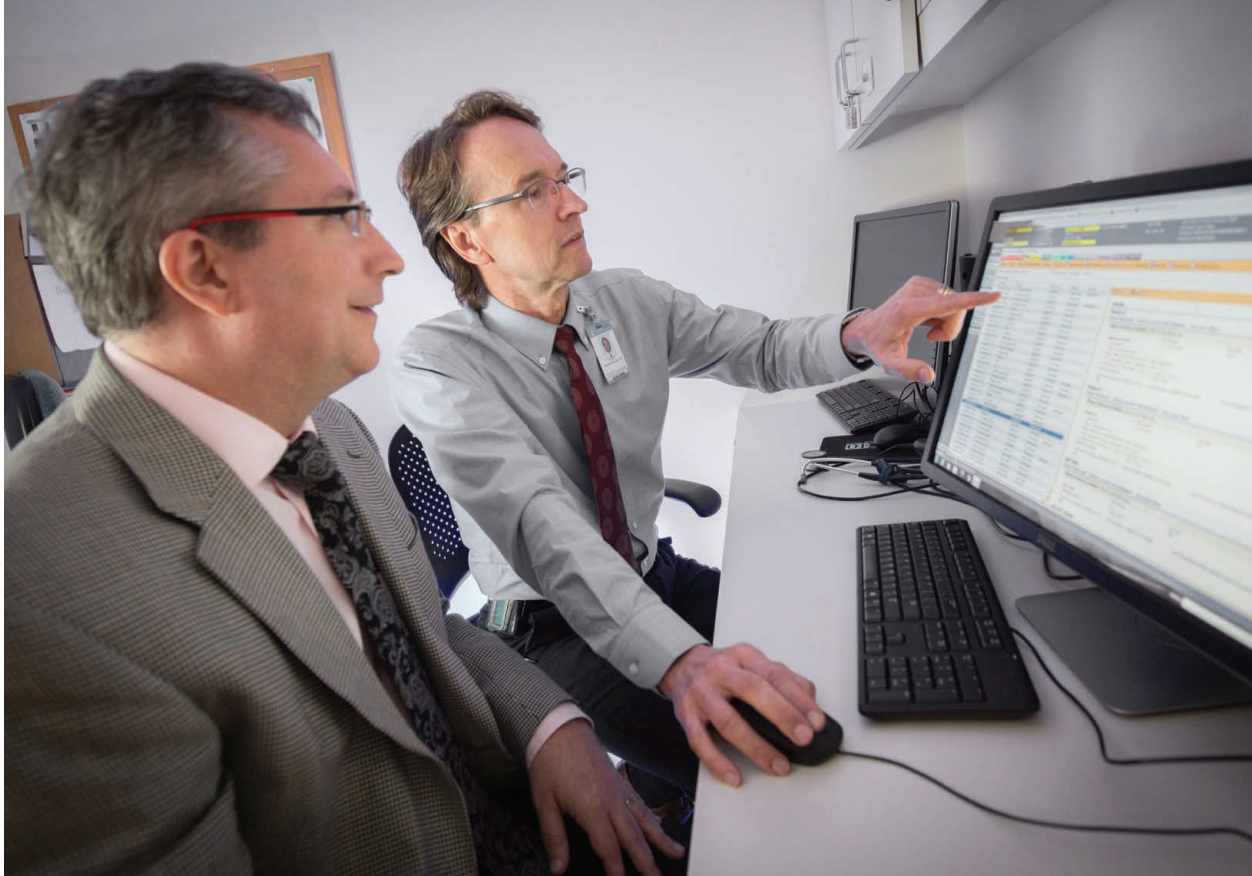
A key problem for those wanting to make use of the new Niagara of health data is that it is often less filtered, less “clean,” than traditional health data.

“You want to make inferences from some of these enormous data sets as if they were carefully collected and curated data from well-designed studies, but usually they’re not,” LaVange says.

Drawing useful conclusions from such data may be possible only with cutting-edge analytical approaches – thus, the enormous demand for data scientists trained in the latest methods. LaVange and her Gillings School colleagues aim to give that training to students who join the Public Health Data Science MPH program. (See sph.unc.edu/mph-data-science.)

Data science is a mix of computer science, statistics and applied math tools, so incoming students will have majored or had some undergraduate coursework in those areas.

“They should know linear algebra and calculus, and have some computer science exposure, although we’ll teach programming languages and coding in our program,” LaVange says.



Dr. Michael Kosorok (foreground) discusses precision medicine strategies with Dr. George Retsch-Bogart, a pediatric pulmonologist at the UNC School of Medicine. Precision medicine is one application of data science and machine learning methods that are the focus of the new Public Health Data Science concentration.

Biostatistics chair Michael Kosorok, PhD, W.R. Kenan Jr. Distinguished Professor, is an internationally recognized expert on machine learning, and the program includes a course focused on that. Other coursework covers probability and statistical inference, experimental design, epidemiology, and advanced data-mining and statistical analysis.

“One thing we’ll include that generally isn’t found in data science degree programs outside the health field is a familiarity with public health-related databases,” LaVange says. “Because the epidemiology department is working with us in developing the data science curriculum, for example, we are able to tap their tremendous expertise with Medicare and other claims data, and that will be a terrific benefit for the students.”

Despite the health focus, participants in the program should emerge from it with the skills they need to be successful job candidates in Silicon Valley, on Wall Street or in Washington, D.C. – wherever data need mining and

processing. LaVange expects, though, that most will want to use their newfound knowledge to improve public health.

“We will get them excited about public health problems to which they can apply their skills,” she says. “They’ll be able to go on to do great things with these skills – from finding new ways to monitor and measure public health to finding cures for diseases.”

- BY JIM SCHNABEL



READ A PROFILE OF LaVANGE ON **PAGE 36**.

Lisa LaVange

HIGH-IMPACT LEADER IN DATA SCIENCE



Dr. Lisa LaVange

Lisa LaVange, PhD, who rejoined the Gillings School in January 2018 as biostatistics professor, associate chair and director of the Collaborative Studies Coordinating Center (CSCC), is one of America's leading biostatisticians. She has a formidable mix of teaching and "real-world" experience.

From 2011 to 2017, she was a senior official at the U.S. Food and Drug Administration (FDA). As director of the Office of Biostatistics in the Center for Drug Evaluation and Research, she had one of the most important jobs in the country – overseeing the analyses of clinical trial data in new drug applications and safety monitoring data on drugs already approved.

"It was a high-impact job, and I had a ball," she says.

In previous positions, she worked at RTI International, coordinating clinical trials and analyzing survey data; as vice president of biostatistics at the multinational contract research organization, Quintiles Inc.; and as a vice president overseeing data and statistical operations and participating in strategic planning at Inspire Pharmaceuticals.

Despite her varied, four-decade career in pharmaceuticals, academia, government and the nonprofit world, LaVange has resided in Chapel Hill more or less continuously since her teens.

"I've been based here ever since I came to UNC as a freshman in 1971," she says. "I never gave up my basketball tickets!"

She earned a doctorate in biostatistics at UNC in 1983 and became an adjunct faculty member in 1989 while working at RTI. From 2005 to 2011, just prior to joining the FDA,

she was professor of biostatistics and director of the CSCC, which oversees large clinical trials and population studies. The latter include the Atherosclerosis Risk in Communities Study (see tinyurl.com/ARIC-study), sponsored by the National Heart, Lung and Blood Institute (NHLBI), which has tracked the health of about 16,000 people since 1987, and the NHLBI-sponsored Hispanic Community Health Study/Study of Latinos (HCHS/SOL), the largest longitudinal cohort study conducted to date of Hispanics living in the U.S.

“By now, we have gigabytes of high-quality data from ARIC and are on our way to amassing similar amounts from HCHS/SOL, with 16,000 cohort members followed since 2010 and now gearing up for their third clinic visit,” LaVange says.

Following her recent election as the 2018 president of the American Statistical Association, the largest professional statistical organization in the world, with nearly 20,000 members, she decided to step down from the FDA. She returned to the Gillings School to teach and mentor students – and take on new roles and responsibilities, including “firing up” the School’s data science programs.

LaVange says she is particularly excited to be involved in the data science initiatives at the Gillings School and across campus.

“Harnessing the full power of big data could not be more important than it is today,” she says. “The ability to tailor medicines to patients, for example, is becoming more and more possible, thanks to research being done by Gillings School biostatisticians and other faculty members in data mining and machine learning. We have new, smart tools to tap different data sources in ways we could only imagine a decade ago. These are exciting times to be at the Gillings School!”

- BY JIM SCHNABEL

“Harnessing the full power of big data could not be more important than it is today. These are exciting times to be at the Gillings School!”

- DR. LISA LaVANGE



Students in the public health data science concentration will graduate with skills to be successful job candidates in Silicon Valley, on Wall Street or in Washington, D.C. – wherever data need mining and processing.

THE EQUITY CONCENTRATION

An interdisciplinary approach to eliminating health inequities

HHealth equity. Social justice.
Human rights.

“These concepts are foundational to public health research and practice,” says Anissa Vines, PhD, assistant professor of epidemiology at the Gillings School. “This is what our field is about – ensuring that everyone has access to the resources they need to be healthy and to live life to the fullest, physically, mentally and socially.”

Vines, former associate director of the School’s Program on Ethnicity, Culture and Health Outcomes (ECHO), is now a co-lead for the new Master of Public Health (MPH) concentration Health Equity, Social Justice and Human Rights.

Other co-leads are Joanna “Asia” Maselko, ScD, associate professor of epidemiology, Courtney Woods, PhD, assistant professor of environmental sciences and engineering, and Geni Eng, DrPH, professor of health behavior. Allison Aiello, PhD, professor of epidemiology, also was a founding co-leader of the concentration.



Program co-leaders Drs. Courtney Woods, Asia Maselko and Anissa Vines (left to right) meet to discuss plans for the Equity concentration, one of the 12 new specialized fields of study within the Gillings School’s Master of Public Health degree.

Together, they represent a wealth of varied experiences and approaches to achieving health equity and eliminating health disparities.

Students in the cross-cutting, interdisciplinary Equity concentration can look forward to developing skills that will help them improve population health through measuring, identifying and intervening to eliminate health

inequities and improve social justice and human rights.

“This concentration is so important,” Vines says. “Public health experts have worked for decades – *centuries* – to reduce health disparities, but the inequities in health still haven’t been eliminated.”

The Equity concentration will be unique in the ways it helps students

understand the social determinants of health and outlines the historical underpinnings that have structured how people live, work and play.

“This context,” Vines says, “will enable our students to think creatively about innovative solutions that address root causes standing between some populations and better health.”

“Our co-leads are from three traditional Gillings School departments, and we also have strong representation and teaching from other departments,” says Maselko. “Being a co-led structure makes us stronger, as students will be exposed to diverse approaches to the topics we cover. We are very excited about the interdisciplinary training our students will receive.”

“Drs. Maselko and Vines represent epidemiology and focus on social determinants in study design, data interpretation and data analysis,” says Woods. “I use community-driven approaches for environmental exposure, risk and health impact assessment, and Dr. Eng, along with others from the field of health behavior, brings critical theory for assessing public health problems and engaging communities to help design effective, multi-level solutions. Other core faculty members from our leadership team will help students understand the importance of using an equity lens in policy and program design.”

“Local community partners will be involved in the fieldwork and training of our students, offering them access to individuals and organizations who are involved in developing solutions,” says Vines. “In addition to empowering students to make an immediate impact, the concentration will provide the leadership experience and confidence graduates will need as they move into the public health workforce.”

Eng notes that the Gillings School’s emphasis on system change interventions that enhance health equity for everyone requires establishing partnerships both with health care organizations and communities that experience inequities.



DR. JOANNA
“ASIA” MASELKO

“Students will learn how to develop innovative strategies for shifting decision-making power through community-engaged work – and through action that promotes equity in health outcomes,” Eng says.

Vines says many students and faculty members helped develop and supported the formation of a concentration that focused on equity, social justice and human rights.

“The enthusiasm and encouragement of our students was an integral driver for developing the concentration, and their input helped shape its overall goals,” she says.

In the course of the two-year program, students also will learn to evaluate scientific literature and examine data across public sectors; apply concepts, theories, and frameworks to address the social determinants of health and inequities; evaluate the impact of programs and policies; and develop culturally appropriate health communications.

As graduates, students will be prepared for a broad range of local and global careers within health agencies, nonprofit organizations, academic institutions, health care organizations and the private sector. They may choose to develop or help change health policy, contribute to the urban planning sector or housing market, conduct scientific research, or bring their unique expertise to settings as diverse as schools, hospitals and the criminal justice system.

“Our goal with this concentration,” Vines says, “is to infuse the workforce with individuals trained to think creatively about addressing historical racial, ethnic and geographic health inequities. Public health is everywhere, and inequities are, too. Our graduates will be able to make an impact in any sector they choose to enter.”

- BY JENNIE SAIA



Dr. Geni Eng

“Students will learn how to develop innovative strategies for shifting decision-making power through community-engaged work.”

- DR. GENI ENG

Kauline Cipriani, PhD

CHAMPIONING INCLUSIVE EXCELLENCE

When you take a coffee break with Dr. Kauline Cipriani, you can learn a lot.

For example:

“You can have diversity without inclusion,” says the Gillings School’s new assistant dean for inclusive excellence, blowing gently on her tea, “but you cannot have inclusion without diversity.”

This is why she uses the phrase “inclusive excellence” when explaining her goals for the Gillings School. The term, coined by the Association of American Colleges and Universities, hints at how well-implemented, inclusive policies seep into every aspect of an institution, making it better from the inside out.



Dr. Kauline Cipriani

“I’m here because the Gillings School leadership wants to be proactive about inclusive excellence and recognizes it as a critical need in public health education.”

- DR. KAULINE CIPRIANI

“Diversity is too often only a buzzword,” Cipriani says. “Rather than deciding that an arbitrary number of diverse students or employees is ‘enough,’ let’s train ourselves to keep inclusion central to every aspect of what we do. When we participate in a vendor bidding process – be it toilet paper or printing paper – is someone ensuring that female- and minority-owned businesses are participating?”

The example is not random, she says. “It’s indicative of how inclusive we are as an organization.”

Cipriani joined the Gillings School in February 2018. The path to her current role has been a winding one, which began when she left her home in Trinidad and Tobago to become a student at Prairie View A&M University, in Texas. When she arrived there, she was confident she would become a medical doctor. Instead, two summers as a research assistant in Purdue University labs led to a lifelong love of research and a doctorate in food microbiology.

“The plan was to become a tenured professor and do research,” she recalls. “I have always loved academia. Life happened, though, and I found myself needing the stability of an administrative job. I was hired into Purdue’s Science Diversity Office, and eventually realized I’d landed right where I needed to be.”

Cipriani became fascinated with diversity in higher education.

Soon after she completed her doctorate, she was asked to help develop the university’s first campus-wide strategic plan for diversity and inclusion. She also worked within academic affairs, becoming familiar with the inner workings of university administration.



DR. KAULINE
CIPRIANI

Over the next decade, during which she became assistant dean for diversity and inclusion at the Purdue College of Veterinary Medicine, she led many efforts in the pursuit of inclusive excellence.

Then came her arrival at the Gillings School, where she leads efforts to enhance the School's inclusive excellence.

"I really enjoy building new things," Cipriani says. "I applied for this job because it offered a chance to be creative and to see initiatives grow and thrive over time. When I first started, I went on a listening and learning tour and heard from people all over the School. Based on those conversations, I identified two priorities to address if we're to have a more inclusive environment at the Gillings School."

First, she heard a need for more cultural competence in the classroom. Students expressed a deep desire for more faculty members who have expertise leading discussions on racial inequities, the health/wealth gap and other uncomfortable topics critical to making public health truly about health for all.

Encouragingly, Cipriani heard many faculty members express a wish for training in the exact same competencies.

She also learned of the need to address certain climate concerns at the School, which will help to ensure that all faculty, staff and students feel at home where they work and study.

"It says a lot that my role even exists," she says. "I'm here because the Gillings School leadership wants to be proactive about inclusive excellence and recognizes it as a critical need in public health education and a key component for excellence."

In addition to finding traction in her new career role, Cipriani, as a relative newcomer to Chapel Hill, has had to make new friends. Asked how she approaches getting to know a stranger, she replies:

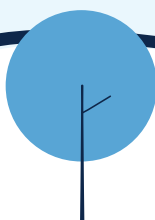
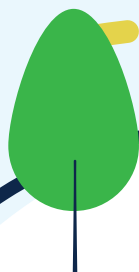
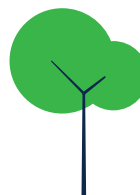
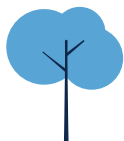
I take a risk! I'd recommend it to everyone. Do something you normally never would, speak to someone you'd usually shy away from, and see if it's as awful as you imagined ... or if you actually enjoy it.

As human beings, we all have to fight against becoming set in our ways. The pull is always toward inertia, and our worthwhile challenge is to resist that pull and seek out opportunities to grow beyond our own expectations.

- BY JENNIE SAIA



"On a journey toward justice"



Selected News & Awards

READ MORE AT
SPH.UNC.EDU/NEWS



Students

RECOGNITION

Micaela Acomb and **Nisha Vashist (HPM)** and **Anna Leonard (HB)** were selected as 2018 Winston Policy Scholars.

Brian Castrucci, MA, doctoral student in HPM's executive leadership (DrPH) program, was appointed chief executive officer of the de Beaumont Foundation, which aims to improve the capacity of local and state health departments.

Elizabeth Christenson, ESE doctoral student, was awarded a Boren Fellowship to study critical languages abroad.

PUBLICATIONS

Alex Gertner, HPM doctoral student, led a study that found policy changes increased access to naloxone, a drug that reverses opioid overdoses. The article, co-authored by **Marisa Domino, PhD**, HPM professor, and others, was published June 22 in *Drug and Alcohol Dependence*.

Jennifer Spencer, MSPH, doctoral student in HPM, is lead author of an article, published May 30 in *Health Sciences Research*, which explores increasing disparity in mortality rates between urban and rural counties in the U.S.

Faculty

RECOGNITION

Clare Barrington, PhD, HB associate professor, and a team of HIV/AIDS researchers, won the International Council of AIDS Service Organizations' 2018 Robert Carr Research Award. Barrington's project, set in Guatemala, was the first study to document the process of creating a community-based clinic for pre-exposure prophylaxis for gay men in Central America.

Greg Characklis, PhD, Philip C. Singer Distinguished Professor of ESE and director of UNC's Center on Financial Risk in Environmental Systems, won the American Society of Civil Engineers' Environment and Water Resources Institute's Service to the Profession Award in June.

Stephen Cole, PhD, EPID professor, received the Excellence in Education Award from the Society for Epidemiologic Research. "My mission," Cole said, "is to be courageous and kind, to make better decisions (which requires me to learn) and to improve human life (which drives me to teach)."

Sian Curtis, PhD, associate professor of MCH and senior evaluation specialist at MEASURE Evaluation, co-authored, "How does integrating HIV and TB services affect health outcomes for HIV-TB co-infected patients in Ukraine?" An abstract of the work won the International AIDS Society's (IAS) TB/HIV Research Prize, presented July 27 at the IAS annual conference in Amsterdam.

Donald Holzworth, MS, executive in residence and adjunct professor of HPM, was named Triangle Global Health Consortium's 2018 Global Health Champion for his career-long commitment to the advancement of global health.

Leslie Lytle, PhD, professor of HB and NUTR, was inducted into the 'Hall of Fame' by Purdue University's Department of Nutrition Science.

A study by **Stephen Hursting, PhD**, NUTR professor, was one of the most-cited papers of 2016 in all American Association for Cancer Research journals. Published in May 2016 in *Cancer Prevention Research*, the study is titled, "Obesity-association Alterations in Inflammation, Epigenetics and Mammary Tumor Growth Persist in Formerly Obese Mice."

Til Stürmer, MD, PhD, Nancy A. Dreyer Distinguished Professor and chair of EPID, is co-author of a paper recently awarded an honorable mention for the Ronald D. Mann Best Paper Award for articles published in 2017 in *Pharmacoepidemiology and Drug Safety*. The paper, "The feasibility of using multiple databases to study rare outcomes: The potential effect of long-acting beta agonists with inhaled corticosteroid therapy on asthma mortality," was co-authored by researchers from RTI Health Solutions, Harvard Medical School, GlaxoSmithKline and HealthCore Inc., and published online Dec. 21, 2016.

Faculty

RECOGNITION continued

Glenn Walters, PhD, ESE research associate and director of the ESE Design Center, is teaching “Introduction to Design and Making” for the second time this fall. Innovate Carolina provides materials for the course, which aims to spark innovation and entrepreneurship in students by allowing them to explore digital fabrication (“making”) technologies.

Aaron Williams, MBA, adjunct professor of HPM and longtime executive at RTI International, was awarded “emeritus” status by RTI, in recognition of his long and distinguished career in public service. Williams was the 18th director of the Peace Corps (2009-2012), worked for 12 years with RTI in international program management, policy reform, government relations and communications (2002-2009, 2012-2018), and served 22 years as a foreign services officer (1976-1998).

PUBLICATIONS

Human and bat caliciviruses may have descended from a common ancestor, indicating potential for bat viruses to cross species barriers and infect humans. So found a study, led by **Jacob Kocher, PhD**, postdoctoral research assistant in the lab of **Ralph Baric, PhD**, EPID professor, and published May 22 in *mBio*.

Jamie Bartram, PhD, Don and Jennifer Holzworth Distinguished Professor of ESE, and **Clarissa Brocklehurst, MASc**, adjunct professor at the Water Institute at UNC, co-authored a critique of the U.N.’s global goals for water and sanitation. The invited article was published April 26 in the inaugural issue of *Nature’s* new journal, *NPJ Clean Water*.

A study published May 29 in *Annals of Behavioral Medicine* shows that graphic picture warnings on cigarette packs change behavior because the images are upsetting and memorable. Co-authors, including **Noel Brewer, PhD**, professor; **Kurt Ribisl, PhD**, professor and chair; and **Marcella Boynton, PhD**, assistant professor, all in HB, found that smokers made attempts to quit because they wanted to avoid seeing the packs. Alumni **Humberto Parada Jr., PhD**, and **Marissa G. Hall, PhD**, and media and journalism professor **Seth Noar, PhD**, also are co-authors.

GRANTS

Mirek Styblo, PhD, NUTR professor, and **Rebecca Fry, PhD**, Carol Remmer Angle Distinguished Professor of ESE, were awarded more than \$2.2 million by the National Institutes of Health (NIH) to study diabetes associated with exposure to arsenic, a common contaminant in food and drinking water.

Allison Aiello, PhD, EPID professor, received a five-year, \$3.5 million National Institute of Minority Health and Health Disparities grant to investigate the influence of psychosocial experiences upon people’s cardiometabolic and mental health.

Dr. Rebecca Fry and **Michael O’Shea, MD, MPH**, C. Richard Morris Distinguished Professor of Pediatrics in the UNC School of Medicine, were awarded more than \$20 million by NIH to continue the Environmental Influences on Child Health Outcomes (ECHO) program.

Alexander Keil, PhD, assistant professor of EPID, and **Dr. Rebecca Fry** are principal investigators for a new \$1.4 million NIH award to assess the impact of environmental exposure to metals found in well water upon birth defects.

Alumni

RECOGNITION

Three alumni were appointed to deanships. **Paul Erwin, MD, MPH, DrPH**, was selected as dean of the University of Alabama at Birmingham's School of Public Health; **Edith Parker, DrPH**, was named to lead the College of Public Health at the University of Iowa; and **DuBois Bowman, PhD**, is the new dean of the University of Michigan's School of Public Health.

Fred Hargett, alumnus and member of the Gillings School's Public Health Foundation Board, was named as a "CFO to know" by Becker's Healthcare. Hargett is chief financial officer for Novant Health.

School News

RECOGNITION

In June, **HPM** was among the first departments in the U.S. to achieve membership in the Commission on Accreditation of Healthcare Management Education (CAHME) Mentorship Circle.

The North Carolina General Assembly awarded the **N.C. Policy Collaboratory** more than \$5 million as part of the state's 2018-2019 budget. The funding will support baseline water quality testing for a set of chemicals classified as perfluoroalkyl and polyfluoroalkyl substances (PFAS), including GenX, a potentially toxic industrial compound detected in the Cape Fear River. The Gillings School will manage the study, and **Jason Surratt, PhD**, ESE professor, serves as lead investigator. The Collaboratory will award grants to more than 20 researchers at North Carolina universities to conduct the testing and begin work on related research projects.

UNC-Chapel Hill's new Creativity Hubs initiative awarded two competitive research awards to Gillings School faculty for innovations in the study of obesity and water. **Penny Gordon-Larsen, PhD**, NUTR professor and associate dean for research, will lead a group, including 14 other Gillings School researchers, to examine why people with the same diet experience weight gain and loss differently. **Orlando Coronell, PhD**, associate professor, **Cass Miller, PhD**, Okun Distinguished Professor, and **Jill Stewart, PhD**, associate professor, all of ESE, will develop new filters that make water purification more energy-efficient and affordable.

KEY TO DEPARTMENTS

BIOS	Department of Biostatistics
EPID	Department of Epidemiology
ESE	Department of Environmental Sciences and Engineering
HB	Department of Health Behavior
HPM	Department of Health Policy and Management
MCH	Department of Maternal and Child Health
NUTR	Department of Nutrition
PHLP	Public Health Leadership Program

READ MORE AT [SPH.UNC.EDU/NEWS](https://sph.unc.edu/news)



ADVANCEMENT

Global Powerhouse

Erma Manoncourt



An engaged alumna makes
a difference for herself,
her alma mater and the
students she inspires.



A resident of Paris since 1990, Erma Manoncourt, PhD, runs her own international consulting company dedicated to helping people lead healthier lives. Committed to giving back to UNC-Chapel Hill and the Gillings School, she recently joined the UNC Global Leadership Council and advises aspiring public health practitioners as a Gillings School global health mentor.

“I have always been interested in why people act and believe as they do, and what motivates them to change.”

- DR. ERMA MANONCOURT

You have been a powerful force in global health improvement, but your career started in social work. What changed?

I have always been interested in why people act and believe as they do, and what motivates them to change. As a family therapist early in my career, I became curious about ways to help people make positive changes in their lives. I was living in Atlanta and comparing notes with a friend working in West Africa about the attitudes, values and perceptions we were encountering – and how people act in response to new ideas.

While exploring graduate programs, I discovered the health education department at UNC's public health

school [now the Department of Health Behavior at UNC Gillings School of Global Public Health]. When I applied, faculty members reached out with real enthusiasm and interest.

How did your training and career experiences lead you to establish M & D Consulting?

Over the 16 years I worked with UNICEF in the U.S., India and Egypt, I brought a scientific approach to the job of changing health behavior that had grown out of my training in Chapel Hill. Change often is based on dialogue. You must speak to things people really believe, understand and feel strongly about – and will accept.

After retiring from UNICEF in 2010, I continued to help former colleagues on different projects, which led to consulting, and ultimately, to forming my own company. M & D Consulting engages experts who work globally on issues such as polio, Ebola and other health concerns, child protection and violence against children. Personally, I specialize in social and behavior change programming and organizational behavior change.

In 2017, you were named to the Black Women in Europe Power List. What was that like?

I was quite surprised by the recognition. When on assignment, I focus on how well my work is achieving the desired results; I'm not thinking about how it is perceived by others. What this says to me is that the work of women, including women of color, is being observed even if people never say anything about it. For younger men and women, I try to model being true to who I am. Trust yourself, listen to yourself and don't pursue a course if it doesn't feel right to you.

How important is it for students to have international experience?

I think it's critical – even if students never work outside the U.S. I am pleased that UNC students have opportunities to work both internationally and with

immigrant communities in the U.S. to learn how cultural differences can shape the ways meaning is interpreted. There is a need to understand and navigate these differences even if you don't agree with the interpretations.

You've remained connected with and supportive of the Gillings School, even as your professional career has focused on countries in Africa, Asia, eastern Europe and the Middle East. Why has that been important to you?

When I entered the global health field, an entire world (literally) opened itself to me. I was thirsty to explore and experience other ways of life. At UNC, biostatistics, community engagement and behavioral theory gave me new tools to work with, and close interaction with faculty guided and inspired me. Today, I love interacting directly with Gillings School students as a global health mentor. When alumni engage with students and share experiences, our involvement can help one of the best schools in the U.S. retain its edge.

- BY ANN SIMPSON

UNC'S MINORITY HEALTH CONFERENCE

Celebrating 40 years

As UNC public health students and members of the Minority Student Caucus in 1977, Bill Jenkins, PhD, former director of Morehouse College's Research Center on Health Disparities, and Geni Eng, DrPH, now professor of health behavior at the UNC Gillings School of Global Public Health, had questions that none of their coursework addressed.

For instance, *Why do minority populations tend to have less access to care, more chronic disease and worse health outcomes?*

There was no public forum in which to educate practitioners, people of color or the general public – or to ask the questions that were not being answered in the classroom.

So, Jenkins and Eng spearheaded an event at which that could happen.

Now in its 40th year, the annual Minority Health Conference at the Gillings School is the largest and longest-running student-led public health conference in the United States.

"Considering the legacy of the civil rights movement here in North Carolina, it's fitting that the School is home to this important conference," says Charla Hodges, a 2014 conference co-chair. "The conference remains an amazing way for students to make a difference in the area of health inequities and minority health issues."

- BY LINDA KASTLEMAN



Audiences at the minority health conference in the 1980s (top) and 2018 (bottom).



FOR MORE INFORMATION ABOUT SUPPORTING THE MINORITY HEALTH CONFERENCE, PLEASE CONTACT ADVANCEMENT AT **(919) 966-0198** OR **GIVING.SPH@UNC.EDU**.

DR. WILLIAM ZELMAN

“He encouraged me to aim high.”

“Graduate school changed my life, and Bill Zelman was a big part of that,” says Mark H. Merrill, MSPH, 1984 health policy and management alumnus of the Gillings School.

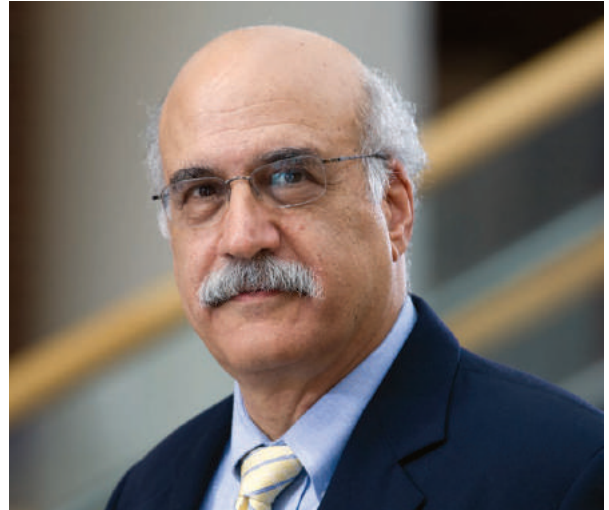
As a way of saying “thank you,” Merrill and his wife Teri established the William N. Zelman Scholarship in Healthcare Administration in 2003.

Zelman, now professor emeritus, retired in 2014 after a distinguished 36-year career in health policy and management, highlighted by awards for teaching excellence, mentorship and innovations in teaching technology. He was part of a national team that helped develop health care financial management into a professional field of study, and his *Introduction to Healthcare Financial Management* still is regarded highly by graduate programs in health administration and management.

Merrill is now president and chief executive officer of Valley Health System, a nonprofit that operates six hospitals and various care centers serving 600,000 residents in Virginia, West Virginia and Maryland.

“Dr. Zelman encouraged me to aim high,” says Merrill. “He respected and inspired students and had a personal touch that resulted in a lasting connection.”

The Zelman Scholarship helps to support a student in each master’s class, placing educational opportunity within reach of the best and brightest, regardless of financial ability.



Dr. William Zelman

The scholarship, Zelman says, was the greatest career tribute he could have received.

“I’m glad if my students see me as having made a mark on their lives,” he says. “Mostly, I was lucky to have enjoyed my work so much. Nothing was more important to me than teaching, and it’s tremendously rewarding for this scholarship to be a lasting legacy from my past students to future students.”

- BY ANN SIMPSON



TO JOIN IN HONORING DR. ZELMAN, PLEASE
CONTACT ADVANCEMENT AT (919) 966-0198
OR [GIVING.SPH@UNC.EDU](mailto:giving.sph@unc.edu).

“Each new gift to the Zelman Scholarship helps the School stay competitive in attracting the highest-caliber students. I like to think of the dedicated student recipients, who will be public health leaders of tomorrow, as being a great return on an investment.” - DR. WILLIAM ZELMAN

FACULTY AND STAFF GIVING

When you work at a place every day and remain passionate about the mission and impact of that place, it means something. Thanks to all faculty and staff members who have given back generously in ways that are meaningful to them.

“It has been a pleasure to mentor and help build the careers of young faculty, particularly those working on healthy eating policy. For that purpose, I have established three endowed professorships – all focused on research related to global and national healthy eating policy – and helped to create a fourth endowed professorship for the Department of Nutrition.

Establishing a charitable remainder trust with the Public Health Foundation has been a rewarding giving option for me. I can provide for my retirement needs while still guaranteeing that the professorships I value will be maintained beyond my lifetime.”



Faculty Support Donor

BARRY POPKIN

*W.R. Kenan Jr. Distinguished Professor,
Department of Nutrition*

“As a student affairs professional, I have an intimate knowledge of the ever-increasing gap between student requests and the availability of funds to meet those requests. It is my hope that any contribution can support efforts on closing that gap.”



First-Time Donor

TRINETTE COOPER

*Coordinator for Diversity Programs and
Recruitment, Office of Student Affairs*

“The greatest joy of a Gillings School faculty member is teaching the talented and dedicated students who come to this school. My small way of giving back is contributing to a scholarship to provide a bit of financial assistance.”



Student Support Donor

SANDRA GREENE

*Professor of the Practice of
Health Policy, Department of
Health Policy and Management*

“Working at the Gillings School allows us to see, in real time, the value of groundbreaking teaching and research. We know tuition and state support don’t cover everything. Our annual gift is an investment in Gillings School students, faculty and staff, and will pay back dividends for future generations.”



10+ Years Consecutive Donors

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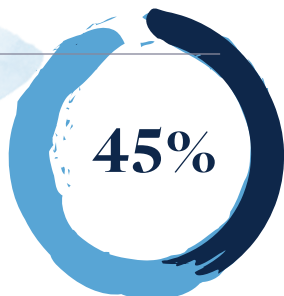
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• the CAMPAIGN for CAROLINA •

GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH

Fundraising Progress Report, as of July 1, 2018

TIME ELAPSED IN
THE CAMPAIGN



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\$133.4
MILLION

GOAL

\$200
MILLION



TOWARD OUR PRIORITIES, WE'VE RAISED:

ACCELERATE

Faculty Impact



\$7.4 MILLION

PREPARE

Future Leaders



\$23.6 MILLION

DELIVER

Proven Solutions Faster



\$102.1 MILLION

Granting a Global Guarantee

The challenge of solving great public health threats requires practitioners who possess global experience, understanding and empathy. Global literacy and competence prepare our students, working in North Carolina and around the world, to develop and implement health solutions that transcend borders.

Residential students pursuing a Master of Public Health – the people who will practice and lead in public health – need field experiences that are local and global.

Funding a Global Experience Award for every residential MPH student is an ambitious goal, one that will raise our program to an unparalleled level and give future practitioners and leaders the knowledge, skills and experiences required to build a healthier world.



FOR MORE INFORMATION ABOUT SUPPORTING GLOBAL EXPERIENCES FOR EVERY RESIDENTIAL MPH STUDENT, PLEASE CONTACT ADVANCEMENT AT (919) 966-0198 OR [GIVING.SPH@UNC.EDU](mailto:giving.sph@unc.edu).

THE HATCH-BARNHILL ENDOWED SCHOLARSHIP

Honoring the legacy of two visionary leaders

The Hatch-Barnhill Scholarship, established in 1997, honors two distinguished former faculty members in the Gillings School's health behavior department.

Dr. John Hatch and the late Howard Barnhill dedicated their careers to community-based public health programs and advocacy on behalf of the poor and underserved in North Carolina, across the country and around the world.

Both took an active interest in mentoring students interested in public health practice, especially students of color.

The annually awarded scholarship aims to advance the ideals exemplified by these two leaders.

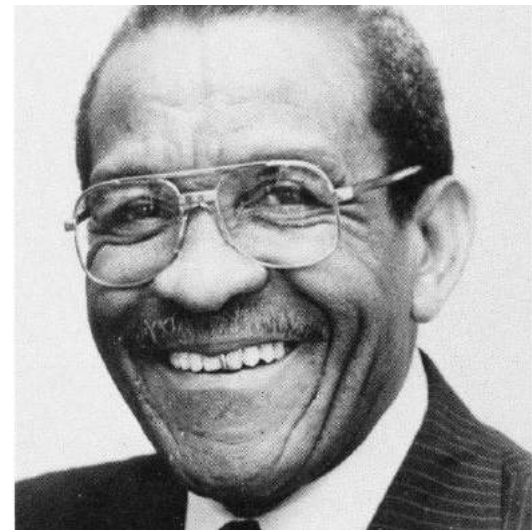
John Hatch, DrPH, is W.R. Kenan Jr. Professor emeritus of health behavior at the Gillings School. His area of expertise is health promotion and disease prevention, especially for African-Americans. His work with Jack Geiger, MD, in the 1960s, at the Delta Health Center, in Mound Bayou, Miss., proved the value of community health centers, especially in black and rural communities.

Howard Barnhill earned a Master of Science in Public Health degree from North Carolina Central University. He was associate professor of health education (now health behavior) at UNC-Chapel Hill and, for a decade, served as a North Carolina state legislator. He died in 1996.

- BY LINDA KASTLEMAN



TO LEARN MORE ABOUT DR. HATCH'S WORK, PLEASE VISIT [TINYURL.COM/NIH-AGAINST-THE-ODDS](https://tinyurl.com/niH-against-the-odds). CONSIDER HONORING MR. BARNHILL AND DR. HATCH WITH A GIFT TODAY. CONTACT ADVANCEMENT AT (919) 966-0198 OR [GIVING.SPH@UNC.EDU](mailto:giving.sph@unc.edu).



Dr. John Hatch (top) and the late Howard Barnhill dedicated their careers to public health practice and advocacy.

The Duke Endowment Invests \$830,000

TO HELP LOCAL HOSPITALS BECOME BABY-FRIENDLY

A new effort in North Carolina and South Carolina aims to improve maternity care and breastfeeding rates in underserved areas – and help babies get the healthy start they need.

Developed at the UNC Gillings School of Global Public Health's Carolina Global Breastfeeding Institute, ENRICH Carolinas (sph.unc.edu/enrich-carolinas) will prepare 20 hospitals to earn a designation confirming they have met standards that promote healthy breastfeeding.

"We have the potential to make an impact on more than 25,000 births in the Carolinas by increasing the number of hospitals that make it easier for new mothers to breastfeed," says Catherine Sullivan, MPH, director of the Carolina Global Breastfeeding Institute and assistant professor of maternal and child health at the Gillings School.

An \$830,000 grant from The Duke Endowment is funding the effort.

Experts agree that breastfeeding is a determinant of long-term health outcomes. The American Academy of Pediatrics supports the "unequivocal evidence" that breastfeeding protects against a variety of diseases in infants, including diarrhea, respiratory tract infection and childhood obesity.

In "The Surgeon General's Call to Action to Support Breastfeeding," the U.S. Department of Health and Human

Services says that breastfeeding exclusively during the first months of a baby's life reduces the risk of:

EAR INFECTIONS (BY 100 PERCENT)

HOSPITALIZATIONS FOR LOWER RESPIRATORY DISEASES (BY 257 PERCENT)

CHILDHOOD OBESITY (BY 32 PERCENT)

TYPE 2 DIABETES (BY 64 PERCENT)

SUDDEN INFANT DEATH SYNDROME (BY 56 PERCENT)

Breastfeeding also benefits the mother, reducing the risk of breast cancer by 4 percent for each year she breastfeeds, and reducing the risk of ovarian cancer by 27 percent.

While breastfeeding rates are rising in the U.S., they are still low, especially among low-income and minority women. The Centers for Disease Control and Prevention says those low rates add more than \$3 billion each year to medical costs for mothers and children. If 90 percent of U.S. families followed guidelines to breastfeed exclusively for six months, the country would save \$13 billion annually in reduced medical and other costs, according to a study published in the journal *Pediatrics*.

- BY LINDA KASTLEMAN / DUKEENDOWMENT.ORG

Based in Charlotte and established in 1924 by industrialist and philanthropist James B. Duke, The Duke Endowment is a private foundation that strengthens communities in North Carolina and South Carolina by nurturing children, promoting health, educating minds and enriching spirits. Since its founding, it has distributed more than \$3.6 billion in grants. The Endowment shares a name with Duke University and Duke Energy, but all are separate organizations.



LEARN MORE ON THE DUKE ENDOWMENT'S WEBSITE AT TINYURL.COM/TDE-BABY-FRIENDLY-HOSPITALS. TO LEARN MORE ABOUT SUPPORTING THE CAROLINA GLOBAL BREASTFEEDING INSTITUTE, PLEASE CONTACT ADVANCEMENT AT (919) 966-0198 OR GIVING.SPH@UNC.EDU.



The Gillings School's Alumni Association

The Alumni Association is a non-dues-based alumni organization serving more than 19,000 public health alumni around the world. We do this by helping the School develop alumni engagement activities – hosting events in the Chapel Hill area and all over the country, finding ways for alumni to connect with students and with each other, and helping to develop programming that fosters alumni connections with the School.

CONNECT WITH A REGIONAL CHAPTER NEAR YOU:

📍 **Boston**

📍 **Atlanta**

📍 **New York City**

📍 **Washington, D.C.**

LEARN MORE AT sph.unc.edu/alumni-association.

STAY INFORMED. STAY CONNECTED.

Update your contact information to make sure you receive event invitations and School communications.

Visit sph.unc.edu/alumni-update.



JESSA NELSON
*Assistant Director of
Alumni Giving and
Engagement*
UNC Gillings School of
Global Public Health
(919) 966.3722
jessa.nelson@unc.edu



Dr. Robert Millikan

DR. ROBERT MILLIKAN – GIVE A LIVING LEGACY

Six years after the untimely passing of Robert Millikan, PhD, the inaugural Barbara Sorenson Hulka Distinguished Professor of Cancer Epidemiology at the Gillings School, the School continues to honor his legacy through The Robert Craft Millikan Cancer Epidemiology Award. Funded by the generous contributions of Dr. Millikan's family, friends, colleagues and students, the award provides support for an epidemiology graduate student in the field of breast cancer epidemiology. Read about Dr. Millikan's life and work at sph.unc.edu/millikan-obit.



TO MAKE A GIFT IN MEMORY OF DR. MILLIKAN OR TO LEARN MORE ABOUT OTHER LEGACY FUNDS, CONTACT ADVANCEMENT AT (919) 966-0198 OR [GIVING.SPH@UNC.EDU](mailto:giving.sph@unc.edu).



For All That's Next

**THE UNC GILLINGS SCHOOL IS THE #1
PUBLIC SCHOOL OF PUBLIC HEALTH
IN THE NATION.**

Our commitment to pioneering scientific advancements has helped the Gillings School maintain its decades-long reputation as a national public health leader.

For instance, our Department of Nutrition, in collaboration with others across campus, developed an automated tool to analyze and integrate large data sets quickly. These analyses can help us learn why some people get nutrition-related diseases and others remain disease-free – even when they eat the same diet.

Such advances are made possible because researchers can account for a wide range of factors – from diet, to social influences, to genetics – that contribute to individual and population health. This research is expected to lead to more personalized treatments.

To see how we're working For All Kind and redefining what's next, visit campaign.unc.edu/gillings and sph.unc.edu/nutr/unc-nutrition.

 Nishita Sheth (BSPH, 2019)



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL



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Join Us for APHA!

Please join us at the Gillings School reception during the 2018 American Public Health Association annual meeting.

Monday, November 12 at 6:30 p.m.

HILTON SAN DIEGO BAYFRONT

To register, please visit **sph.unc.edu/2018-APHA-reception**.