

uncg research

Fall 2019

Research, Scholarship, and Creative Activity

LESSONS LEARNED

Research and practice
meet at Moss Street
Partnership School

pg. 10

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True partnership occurs when collaborators create new value together – sharing vision, expertise, and resources to accomplish mutual goals. In this issue, you'll find stories on just a few of the ways UNC Greensboro faculty, staff, and students are collaborating, both internally and externally, to create that value and a better world for us all.

You'll learn about Guilford County's and UNCG's unique approach to battling the opioid epidemic. Lives are being saved by the translation of research into practice, with efforts informed by those in recovery,

Guilford's Emergency Medical Services and other local health care providers, and UNCG scholars and scholarship. (While social work students gain hands-on experience with this state-of-the-art intervention, ensuring we have a next generation of professionals trained in evidence-based practice.)

On campus, faculty and students are partnering across disciplines, and bringing in the public, to re-envision the humanities. The aim is to improve student success, strengthen our workforce, and seek answers to the big, transformative questions that shape our lives and communities.

And about 30 miles north of campus, faculty, teachers, students, and their families are co-creating the Moss Street Partnership School. From conducting novel research on enhancing literacy to developing innovative ways to tailor existing research to the specific needs of their students, the MSPS team is committed to improving educational outcomes for elementary school students.

It's the collaboration of law enforcement, community leaders, and scholars that successfully deters violence in communities across the state. It's the partnership between a patient and physician that leads to better health outcomes. It's the ties of friendship that join Grateful Dead fans across the world and across time.

At UNCG, we understand that we are truly better together.

TERRI L. SHELTON, PHD
Vice Chancellor for Research and Engagement



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FEATURES



Better Together

UNCG researchers, teachers, students, and families have teamed up to transform a Rockingham County elementary school. At this “lab school,” partnership is the name of the game.



Life Saver

The opioid epidemic has hit nearly every part of the United States. UNCG researchers and local officials are working to turn the tide in our community.



Humanities Now

By highlighting the humanities’ role in shaping our communities and lifting the skills they offer into the spotlight, UNCG researchers are re-tooling the liberal arts for today.

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DEPARTMENTS

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**WALK
THIS
WAY**

Most of us don't appreciate the thousands of steps we take each day without stumbling or falling. Maybe we should.

"You're within an inch of tripping every time you take a step," says Associate Professor of Kinesiology Chris Rhea. "Yet, most of the time we don't."

Since his doctoral studies, which focused on how people use vision to navigate their environment, Rhea has looked for ways to help those whose walking is impaired due to injury or illness.

"We've been studying how we use vision to walk around in the world," he says. "What if we can control someone's vision and use that to control how they walk?"

Virtual reality technology – which has been getting more compact, cheaper, and more user friendly – is allowing Rhea to do just that.

When he joined UNCG in 2011, he started the Virtual Environment for Assessment and Rehabilitation Laboratory, or VEAR Lab. Since then, a string of projects, applications, and research by Rhea and his colleagues has begun to unlock the technology's potential.

One application, which netted Rhea a patent in 2018, uses virtual reality – or VR – to retrain people who have trouble walking.

Studies of how people walk have revealed that each step we take is a little different from the one before. "Initially," says Rhea, "they looked like random variations in our walking patterns."

But, using pattern recognition algorithms, researchers have begun to identify hidden signatures – like fingerprints – within the seemingly random variations.

"We think these hidden patterns relate to a healthy person's ability to adapt their walking behavior," Rhea says. "If you see you are about to step off a curb, you've got to adapt your walking behavior, so you can do it without falling over."

But for someone who's suffered a stroke, a knee injury, or other medical condition that affects their walking ability – "they're going to have a different signature."

In the VEAR Lab, subjects – wearing goggle-like VR headsets or watching a video monitor – are told to match their steps to those of a virtual avatar as they walk on a treadmill.

"You're just playing a game we all played in kindergarten – follow the leader," Rhea says. But concealed within the avatar's virtual steps are subtle cues designed to shift the patient's movement.

"It's the small hidden patterns that we embed in there," he says, "that we think can build up a person's adaptive capacity, lost due to injury, aging, or disease."

Rhea's new patent is for the technology that embeds these adaptive patterns into the software driving the digital avatar.

There are many ways VR could improve rehabilitation.

Rhea's doctoral student Chanel LoJacono is currently working on a VR headset program to bring a virtual obstacle course to life at a patient's location, rather than having a patient travel to a special facility. This could make cutting-edge therapies less expensive and more accessible.

"We're a ways from this, but imagine if you could check out a VR rehab headset. You're with a human therapist every Monday, but you get to take one of these home," Rhea says. "I get to play a game, and the game is fun. The game gets harder as I get better."

By Mark Toszczak

Learn more at go.uncg.edu/rhea

BACK IN ACTION

With \$1 million in funding from the U.S. Department of Defense, Rhea's team has developed a smartphone-based device that can be strapped to someone's thigh to precisely measure their balance, providing objective data to physical therapists and helping them measure a patient's improvement over time.

The military wants the technology to help assess head trauma in people who have been exposed to explosions. But Rhea is also using it to assess the impact of a 12-week rehab program to improve balance in older adults – part of a National Institutes of Health study led by Kinesiology's Dr. Louisa Raisbeck.

Just as Apple Watches can now alert their owners to some types of heart problems, Rhea foresees a day when personal technology could alert us to problems with our movement.



A WAY OUT

WHEN MANY OF US THINK ABOUT HUMAN TRAFFICKING, we imagine a kidnapping at the border. But often that's not the case – in fact, it's just as prevalent in our own communities, says John Weil of UNCG's N.C. Network for Safe Communities.

"People have this vision of somebody loaded into the trunk of a car and moved to another state," he says. "In many cases in our communities, sex trafficking may be a process where a pimp builds a romantic relationship – maybe with a high-school kid they find on social media, someone who appears vulnerable.

"Then it's, 'We need money for rent. Can you do this favor just one time?'" he adds. "Once you cross a threshold into victimization, you feel like you don't have anywhere to go – you're trapped and under the control of the trafficker."



Data analysis. Creating and sustaining partnerships between the community and law enforcement. Changing social norms around violence. The N.C. Network for Safe Communities collaborates with local leaders to improve community safety using evidence-based approaches.

Weil and his colleague Dr. Stacy Sechrist have spent the last 10 years partnering with the three U.S. Attorneys' Offices across North Carolina, using data-driven strategies to crack down on gun, drug, gang, and domestic violence. Now, they are focused on a newer trend: gangs entering into human trafficking, enticed by the difficulty law enforcement has in tracking that activity.

"A gang might use drugs and guns to make money, but those are finite resources that can be seized by police," explains Weil. Pimps rely on the ability to control their victims, a different type of resource that's not so easily confiscated and is, worse yet, reusable.

Thanks to Weil's and Sechrist's reputation for working with communities across the state to deter violence, in 2019 they were awarded a Governor's Crime Commission grant to explore this issue in North Carolina. With the funding, they're gathering and analyzing data from seven eastern counties to better understand what sex and labor trafficking looks like in rural communities.

Sechrist says they've found parallels between domestic violence cases and sex trafficking. "Offenders are difficult to prosecute. Often the victim sees herself as the trafficker's girlfriend and may actually want to protect him. It's not like she flags you down and asks for help."

Victims of sex trafficking also experience repeated trauma, which can prevent them from verbalizing or recalling episodes of abuse in sequential order. "For that reason, it's difficult for prosecutors to get information that makes a good case," Sechrist says.

Eventually, Weil and Sechrist plan to guide local law enforcement officials battling this problem through "focused deterrence" strategies, the crux of their expertise.

Developing strong police-community partnerships is vital. When it comes to the community, says Weil, "You need service and resource providers, as well as people who can make personal connections with victims and offenders." Ideally, they provide a moral voice that hits close to home.

"The messenger is as important as the message. We bring in respected people from faith communities, former offenders, and even those touched by violent crime – like the mother of a murdered child – to share their stories." The hope is they will help victims and offenders better hear the message of deterrence and connect.

Working with partners across North Carolina and nationally, Weil and Sechrist have seen focused deterrence strategies work wonders.



"The commitment and unwavering support from the U.S. Attorneys' Offices have been vital to our work," says Weil (top right). Above, he and Sechrist (second left) meet with U.S. Attorney for the Eastern District of North Carolina Robert J. Higdon Jr. (left) and his team.

FOCUSED DETERRENCE

Analyze police data to zero in on major offenders.

Communicate with offenders face-to-face. Notify them that future violence will not be tolerated, and offer assistance that improves chances of success in a crime-free life.

Follow through. Aggressively prosecute future violence and deliver resources to those who choose to change.

Engage and educate the community.

"In the last 10 years, we've seen change in communities where kids couldn't walk to church or play outside for fear of getting shot," says Weil. "This work has a redemptive quality. If you can break a cycle of violence, you can create a new pathway. By giving people options, and building trust and legitimacy, you see entire communities change."

By Robin Sutton Anders • Learn more at ncnsc.uncg.edu

COLLISION COURSES

Aidan Lytle, undergraduate researcher

Aidan Lytle has been interested in physics – “the purest science,” he says – since he was a kid.

But a less-than-stellar academic record meant, instead of pursuing science, he initially focused on another passion – music.

That talent led him to playing in a battle of the bands at Carnegie Hall at 16, to the UNC School of the Arts, and, finally, to a full scholarship at UNCG.

Circumstances derailed his musical education, though. He ended up working, doing stints as an EMT, bike mechanic, and U.S.

Marine, among other things.

Becoming a Marine Corps avionics technician rekindled his interest in science and math. He was soon teaching himself calculus with the help of YouTube videos.

“I enjoyed it more doing it myself,” he says.

After the Marine Corps, the GI Bill funded a return to his first love – physics. Back at UNCG, he’s applied a laser-like focus to his goal of going to graduate school and becoming a physicist. That includes getting undergraduate research experience.

“I wanted to be contributing to the field.”

In year one, he worked with Professor Anatoly Miroshnichenko to analyze image data from certain types of stars, a project supported by a UNCG Undergraduate Research, Scholarship, and Creativity award. Working with multiple faculty, he learned the coding necessary to process the astronomical data. A year later, he presented his findings at the University’s

undergraduate research expo.

In 2019, Lytle also started working with UNCG’s Dr. Ron Belmont, an expert in high-energy nuclear physics. Lytle is helping write software that analyzes heavy-ion collisions to – ultimately – better understand the fundamental nature of matter.

In heavy-ion collisions, gold atoms – stripped of their electrons and smashed together at nearly the speed of light – melt into a plasma of quarks and gluons, the fundamental particles that form the neutrons and protons in the atom’s nucleus.

“It’s like throwing two balls of springs at each other so hard that they explode outward,” Lytle says.

The quark-gluon plasma behaves like a liquid, and the software Lytle and Belmont are working on will help analyze its shape and flow.

The plasma is the same stuff researchers believe the early universe – less than a second after the Big Bang – was composed of.

“We know how atoms work, more or less,” Lytle says. “We don’t know how this works.”

Lytle, who’s also an officer in UNCG’s Society of Physics Students, is enthusiastic about the opportunities in the physics and astronomy department. “There are all these resources,” he says. “I have a couple of side projects, like working on a fuser – a basic nuclear engineering project.”

“It’s what you make of it,” he adds. “And I have a very broad range of interests.”

By Mark Toszczak

Learn more at ursco.uncg.edu | physics.uncg.edu

In the Marines, Lytle earned certification as a welder, a sheet metal worker, a plumber, an electrician, and an electronics technician. As a civilian, it was EMT and lifeguard training. Another specialized skill the physics major has picked up along the way? Unicycling.

STRENGTH TO GROW

Joy Kelly, graduate researcher

Domestic violence affects one out of three Americans. As a survivor, 2019 doctoral graduate Joy Kelly is on a mission to help others through the recovery process. "It's very personal," Kelly says. "That's what drives me."

Dr. Kelly didn't anticipate her career trajectory when she entered college in 2006 – not even when an abusive relationship contributed to her transferring to UNCG as a third-year undergraduate. Instead, she graduated with dual degrees in dance and business and landed a job with JP Morgan Chase in New York City.

It was only when her toxic relationship finally ended completely and Kelly started her own therapy that she realized she'd found her calling as a counselor. "I've always been the person people go to for advice, and I'm interested in how different types of relationships work," she says.

Thrilled to discover UNCG's Counseling and Educational Development program was ranked third in the nation, Kelly applied. "After completing my master's, I was so in love with what I was learning," she says. "My passion for teaching and research and clinical work grew, and I knew this was the time to earn my doctorate."

In her domestic violence prevention and recovery research, Kelly identified factors that contribute to long-term healing, such as self-love and advocacy. And she developed a strengths-based assessment clinicians can use to determine where patients are in their recovery process.

"Historical research focuses on crisis intervention and getting free from the violence – which is very important because it can be very dangerous and can get very bad very quick," Kelly explains. "But if we expand the conversation to talk about strengths, we can get people to think from the beginning about what they're good at, and they can begin to heal."

"There's this perception that people who have survived trauma are damaged goods," she adds. "In a way, they have been damaged, but the experience doesn't have to define them in their future. To have survived something that traumatic means that person is very strong."

As a graduate student, Kelly also worked with the Healthy Relationships Initiative, a partnership between UNCG and the Phillips Foundation promoting safe and happy relationships in Guilford County. Now, as a visiting professor at UNCG and a couples and family counselor, Kelly educates her students and clients on what makes a healthy relationship.

"In therapy, we're trying to change long-standing and even generational patterns. A lot of people haven't experienced a healthy relationship in their families of origin, and they just repeat what they know," she says. "What we know isn't always healthy. Sometimes an intervention that teaches a couple how to communicate can be life changing."

By Robin Sutton Anders

Learn more at grs.uncg.edu | ced.uncg.edu



Kelly, who won a \$20,000 National Board for Certified Counselors Foundation scholarship for her focus on marginalized populations, employs the purple orchid as a personal and professional motif. Purple, she notes, has a long history as a symbol for women seeking justice and for awareness of domestic violence.

STANDING ON Z

“The end of the jetty is like the end of our language.
Nothing is ahead but the open sea.”

UNCG's 2018 Senior Research Excellence Award winner is nationally recognized poet Stuart Dischell. The first book by the professor of creative writing, "Good Hope Road," garnered a National Poetry Series honor and was reissued, 25 years later, in Carnegie Mellon Press's Classic Contemporary Series. Subsequent books were published by Penguin and the University of Chicago, two of America's most prestigious literary presses.

Dischell's poems have appeared in *The Atlantic*, *The New Republic*, *Slate*, *Ploughshares*, and various anthologies, including *The Pushcart Prize* and collections edited by Garrison Keillor and Robert Pinsky. He has received two National Endowment for the Arts fellowships and a Guggenheim Foundation fellowship, one of the top honors awarded to American artists. Residencies at Lavigny, Valparaíso, and Sainte-Valière and his many readings at American University of Paris and Paris American Academy testify to his international reputation.

POETRY VS. PROSE

"My preference for poetry over prose has to do with personality and temperament, and also personal history. I came to poetry, like many in my generation, through songwriting. I wanted to be a folk singer, like Phil Ochs, Tom Paxton, or Bob Dylan. But I was writing stories and journalism then too.

"Attention Deficit Disorder is probably another reason I wrote more poetry than prose – I was not physically capable, in my teens and twenties, to sit at a desk long enough. It's easy to write poetry. You don't even need a pencil to write it. You can say it in your head. Of course, it is not easy to write poetry well. Both priceless and worthless, it is the most democratic art form."

LA VIE EN ROSE

"Most of my work about Paris is nonfiction, essays on walking the original walls of Paris, although the city has filtered into my poetry over my last two books. I used to resist writing about Paris. I felt I didn't really have a claim on the landscape. But having been there some forty times, that's changed. Paris has always loomed large in my family's story. When my grandparents met in central Europe, my grandmother would only marry my grandfather on the condition that he would take her to live there. They left during the zeppelin attacks on Paris in 1915 to come to America. Growing up, I understood Paris was a place where everything was better. The wind was better, the light was better, the rain was better, and of course the food was, as well.

"In high school, I became enamored with writers of The Lost Generation, and I read – and misread terribly – Hemingway's 'A Moveable Feast' and projected myself into a life like that, among other writers living abroad. I actually taught my first class, at twenty years old, on 'The Lost Generation.' When I'm in Paris, standing on a given street corner, I can almost see the layers of history under my feet."

BEAUTY IN ABSURDITY

"I'm not a very self-conscious writer, but I do come to understand what I've done afterwards. I teach a class called 'Now Look at What You Have Done,' in which poets look at the poems they have written and observe the conscious, unconscious, subconscious choices we make in putting our poems together. I look at that as well when I'm revising and restructuring my work. Poet Stanley Plumly once wrote that I'm hard to pin down, I'm part elegist, but part absurdist. And I think, being an absurdist, my stock-in-trade is a mixture of humor and devastating sorrow. Undercutting humor with sorrow and undercutting sorrow with humor. Trying to build something more human and more tense out of the mixtures. I don't believe people are always one way. Maybe it's just me. I've been at funerals where I feared bursting into laughter – even though I was brokenhearted – thinking of some absurd thing the person had done."

POINTS OF PRIDE

"I've received national fellowships and international grants. I've been asked to read and lead workshops in hundreds of places. But I'm most proud of the students I have taught and the books they have published – like Ansel Elkins, who won the Yale Younger Poets Prize, or Maria Hummel, who won the American Poetry Review's Honickman Prize, or Sarah Rose Nordgren, who won the Agnes Lynch Starrett Poetry Prize. Jennifer Whitaker – now UNCG faculty – won the Brittingham Prize in Poetry for her book "The Blue Hour." I can't help but be pleased by the number of my former students who have won prestigious awards, but they all, to me, are outstanding."

WIDE OPEN SPACES

"My mother was a painter, an intellectual, a great reader, and she loved poetry. Her family was desperately poor; they were bohemians, kind of. My father was a hard-nosed, self-taught guy – an old-school tough guy. His son being a poet was not exactly in the long-term plan.

"I grew up in a little town just outside of Atlantic City. I grew up right on the beach. The ocean has always been an inspiration in my life, although I do love urban places. A good number of my poems are set on the seashore. Having that open space has always been important to me. Lately it's been the mountains. Just not feeling closed in. That's essential to me. That's why I need to travel. You know that quote from Paul Theroux where he says, 'I have seldom heard a train go by and not wished I was on it?'"

Interview by Mike Harris • Learn more at go.uncg.edu/dischell

BETTER

*UNCG and Rockingham County
team up to transform K-5 education*

MOSS STREET PARTNERSHIP SCHOOL – MSPS – isn’t your average “lab school.”

In fact, MSPS avoids that term, though it’s used in the 2016 legislation that created this and similar schools in low-performing districts across the state.

UNC Greensboro faculty and MSPS staff want people to understand this isn’t a scenario in which a university goes into a community, overhauls a school, and then steps back to do its own research.

This is anything but that. What’s happening in Rockingham County is a partnership – among UNCG, the school district, and the community. Researchers, teachers, students, and their families are working together to create an environment of authentic teaching and learning that will ultimately change the trajectory of these students’ lives and transform the community.

With just one year under their belts, researchers and staff will tell you that there’s still a lot to learn. But if the success they saw in the first year – engaged reading, STEM integration, and gains in social and emotional learning – are any indication, there’s a lot to be excited about for the future.

UNPACKAGING THE CURRICULUM

It’s a place with a lot of pride.

MSPS – formerly Moss Street Elementary School – has a strong history and a deep connection to the rural community of Reidsville, North Carolina.

But over the years, it has struggled with high

teacher turnover, lack of resources, and a student population that faces distinct challenges. All students receive free or reduced lunch, and the majority of students come from underserved populations.

Then there’s UNCG, just 35 minutes down the road. It’s the region’s largest public institution with a renowned School of Education and a reputation for strong, community-engaged research and partnerships.

Bringing the two together to transform K-5 education in Rockingham County wasn’t a hard sell. It just made sense.

UNCG School of Education’s Dr. Carl Lashley and Dr. Christina O’Connor serve as co-directors of the school. Tina Chestnut, who attended Moss Street when she was a girl, was hired in the summer of 2018 as the MSPS principal and associate director. Dr. Allison Ormond, a doctoral alum of UNCG’s School of Education and N.C. Teacher of the Year, serves as associate director for curriculum.



UNCG-POWERED Three-fourths of the Moss Street Partnership School leadership team – Chestnut, Ormond, and O'Connor – are UNCG alumni, and many of the school's teachers are currently enrolled in master's programs at UNCG. The School of Education is supporting their efforts by holding graduate classes on site at MSPS.

THEIR



LEGISLATIVE ACTION Moss Street Partnership School is part of the UNC Lab School initiative, which aims to improve student performance in low-performing schools, as well as prepare future teachers and school administrators. UNCG was one of nine campuses selected by the state to participate in the initiative.

What sets MSPS apart? Teacher autonomy, a focus on STEAM – science, technology, engineering, arts, and mathematics – and experiential learning.

Traditional school settings typically utilize pre-packaged curricula, prescriptive lesson plans, and pacing guides. Often, the result is that teachers – and their expertise and experience – get left out of the equation.

That's why if you ask UNCG researchers how to best facilitate teaching and learning, they'll tell you it's anything but pre-packaged curriculums. It's letting teachers do what they do best – teach kids – in experiential, collaborative, and interdisciplinary environments that move the needle for student learning.

This kind of environment is what enticed Chestnut to return to the school she attended as a child, and led as a principal a few years ago, during its Moss Street Elementary School days.

"These kids deserve to have access to education that is relevant to them and that engages them," Chestnut says. "Traditional ways of teaching and learning have not proven effective in Title I schools like Moss Street. Rather than adopting specific programs, we look at the North Carolina standards and then figure out how can we facilitate learning using our guiding principles."

And this is where UNCG researchers come in. Over the past year, UNCG faculty have worked alongside teachers to help bridge theory and practice.

They haven't conducted formal studies, yet. Right now, they're talking to teachers about their needs, sharing their research expertise, and working in classrooms to see what kinds of small interventions may prove successful.

They've been "tinkering," as one faculty member describes it – researchers alongside teachers.

"We really believe in the idea of doing things together," says O'Connor. "The teachers' work informs the faculty's work, and vice versa."

Just how innovative is MSPS? When it comes to experiential learning or STEAM education, the school isn't reinventing the wheel. But the way it's piecing these different components together, in a low-performing, high-needs school in rural North Carolina? That's exciting for O'Connor, even after 25 years working in public education.

"To do it this way, in this context – I haven't seen this before."



“My students went from listening to me read to being fully engaged and requesting books to read. They went from writing one-sentence stories to writing complete stories. They developed a genuine love for books.”

– Nicky Pickard, MSPS kindergarten teacher

READING FOR YOUR OWN REASONS

Perhaps the best example of “tinkering” is the work done by Dr. Gay Ivey, William E. Moran Distinguished Professor in Literacy.

Ivey has spent decades conducting school-based research that seeks to understand children’s motivations to read. Her work has shown that the secret sauce for reading achievement is reading engagement – kids truly investing in reading for their own purposes.

In previous projects, she worked with eighth grade teachers to abandon all assigned reading in favor of student-selected reading with no strings attached. Students could read whatever they wanted and do whatever they wanted with the reading. That was the language arts curriculum.

The results?

“They read like crazy,” she says, noting that time spent reading is directly correlated to reading achievement.

“We do so many things to get kids to read. Principals are promising to color their hair green if students read a certain number of books, and it doesn’t take that. Kids find the process of reading the reward itself.”

Over the past year, Ivey has been working with MSPS teachers across grade levels to help them prioritize reading engagement. The school’s library and individual classroom libraries have been transformed – for example, there are significantly more books with characters of color, so that kids can see themselves in the stories they read.

“Our biggest problem is we’re running out of books because they’ve read so much already,” Ivey says.

It’s not just about “becoming a better reader.” Reading also helps with socioemotional growth.

AVID READER “Children read to understand other people and themselves better,” says Ivey, “to figure out the world, to laugh, to cry, and even to play, much like adults.” Pictured: Ivey (top photo, center), MSPS kindergarten teacher Pickard (left), and fourth-grade teacher Kristen Perkinson (right) facilitate engaged reading time in their classes.

For example, when kids read fiction, they start to live through the characters’ lives, and begin to learn empathy by seeing different perspectives. Reading can help children build relationships, regulate their own emotions and behaviors, and understand issues of morality, explains Ivey.

Additionally, people learn most of their vocabulary through contextual reading – not through studying weekly vocabulary lists.

Ivey is now gearing up to begin a formal study in which she and a team of teachers will design instruction to help students learn the important

“Research suggests that children are most likely to become engaged in reading when the characters and social worlds of books are familiar to them,” says Ivey, “particularly when characters look and talk like them, their friends, and their families.”

skills associated with reading, while experiencing reading as a personally and socially meaningful activity – with books of their own choosing, of course. The effectiveness of instruction will be measured, and modifications will be made based on the data.

The ultimate goal is for the findings to have an impact beyond MSPS.

“We’re trying to innovate locally, knowing that what we learn will be shared with the larger research and practice communities,” she says. “I hope to be publishing and having teachers as co-authors with me. I envision us out on the trail together, sharing our work.”





GROWING STEM Above, Carlone's doctoral student Dearing Blankmann (left) helps a kindergarten class explore the relationship between bees and flowers. Carlone's work at MSPS is part of her larger STEM TLC project – the STEM Teacher Leader Collaborative. Co-founded in 2013 by Carlone and Dr. Jennifer Mangrum, TLC is a network of teachers enacting STEM in high-needs elementary schools in the region. "Teachers working in high-needs schools are under great pressure to raise test scores and feel isolated. Our collaborative supports, connects, and nurtures STEM-capable, imaginative, and motivated elementary teacher leaders," Carlone says. The project is currently funded by the Cemala Foundation, Duke Energy Foundation, and Summit Rotary of Greensboro.

ROOT, STEM, FLOWER

The pressure for elementary schools to focus on literacy and mathematics can mean that science gets lost in the shuffle.

But for Dr. Heidi Carlone, these disciplines don't have to be viewed as separate areas of study. They can be combined in productive ways that are mutually beneficial.

Along with her doctoral students Alison Mercier and Dearing Blankmann, the Hooks Distinguished Professor of STEM Education is working with MSPS teachers to help integrate science and engineering into their curriculum.

The work started in the summer of 2018, when Carlone's team held a workshop for all MSPS teachers with an interest in STEM.

Carlone was floored by the level of interest in the first workshop – nearly all MSPS teachers across grade levels voluntarily attended. Ultimately, the entire school decided to implement an interdisciplinary

"design a windmill" unit in inter-grade groups.

Why is early exposure to STEM so important?

Carlone explains that many MSPS students may not have access to STEM outside of school through summer camps, enrichment programs, or afterschool programs – which are often more readily available to upper-middle-class white students. If students don't have the chance to engage in interesting, robust STEM in elementary school, Carlone says, studies show it is much less likely that they will consider those pathways as they move to middle and high school. That's why excellent school STEM is so high stakes.

Her plan for year two is to integrate STEM into the regular curriculum. And she means good STEM.

"I'm talking about STEM that really engages in disciplinary practices: collaboration, analyzing data, modeling scientific ideas, coming up with alternative solutions, iterating on design, etc.," she explains. "It's rigorous and responsive STEM, versus the traditional 'read the textbook and answer the questions.'"

SOCIAL AND EMOTIONAL LEARNING

The work done in elementary schools goes beyond teaching literacy and STEM, as important as those are. Teachers, counselors, and social workers also work together to help young children build positive relationships, regulate their emotions, and learn to communicate.

These are skills that are often considered part of social and emotional learning, or SEL, an area of research for Ben Dyson, associate professor in the Department of Kinesiology, and for associate professor and MSPS co-director Carl Lashley.

Dr. Dyson's background is in health and physical education and innovative curriculum pedagogy. Recently, he's started to explore SEL, which has become, he says, a buzzword of sorts in many political and education circles.

While different individuals and organizations have tried to define SEL and prescribe how to best foster it in schools, Dyson's perspective is that we should be listening to the teachers, principals, and students.

"It's easy to create a definition of SEL from the literature and the research, but I'm suggesting that we need to know more about what teachers really think about it and then work with them to develop SEL at their schools. We have to tailor it to the specific school context or environment."

Last year, Dyson and Lashley worked with the school social worker, guidance counselor, and a team of teachers to implement restorative practice to help with social and emotional learning – something the MSPS staff had already begun exploring on its own.

Restorative practice involves people coming together for



RESOURCE RICH Dr. Jason Herndon, director of UNCG's Psychology Clinic, and MSPS speech language pathologist Melissa May are part of a multidisciplinary team – made up of licensed faculty, graduate students, and MSPS staff – that provides testing for children at MSPS to help determine if they meet criteria for educational accommodations. "This partnership provides a valuable training opportunity for our graduate student clinicians," says Herndon, "while expanding available services in a resource-limited rural community."



LIFE SKILLS Above, the restorative practice team meets in the MSPS library. Left to right: Lashley, physical education teacher Justin Somers (also pictured right, working with Dyson), fourth-grade teacher Kristen Perkinson, fifth-grade teacher Shellie Cridge, school social worker Johnette Walser, and third-grade teacher Balaun Carter. This fall, Walser and fourth-grade teacher Tayler Engelhardt led the first school-wide restorative practices teacher training.



dialogue, to help resolve problems. At MSPS, students participated in the restorative practice of circle time, in which kids sit in a circle and have a conversation about an issue in class. Teachers help guide the conversation, but it is student-centered.

In today's digital age, facilitating this kind of social interaction is critical for kids.

"We're working on what we call dialogic interactions," Dyson says. "Kids need to learn how to talk to each other and with their teachers appropriately." Children come out of the experience empowered, with new skill sets.

Dyson is now beginning to conduct qualitative research by interviewing MSPS teachers about their perspectives on social and emotional learning and restorative practice. He will then scale up his work to interview teachers across the state. Looking ahead, the goal is to implement programs and interventions that "are really in tune with what's needed."

"I believe that we can learn a lot from teachers and a lot from kids in schools. In their context, they are the experts on social and emotional learning."

By Alyssa Bedrosian • Learn more at mossstreet.uncg.edu
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LIFE SAVER

A local partnership takes on a national epidemic

CHASE HOLLEMAN HAD BEEN PURSUING THE MAN FOR WEEKS WITH PHONE CALLS AND TEXTS.

"We're just here to talk and help however we can," he said.

"Dave" (a pseudonym) needed help. Just a few weeks earlier, in the spring of 2018, he had overdosed on opioids. Paramedics had saved Dave's life with an emergency injection of the drug naloxone and referred him to Holleman, a case manager for GCSTOP – the Guilford County Solution To The Opioid Problem.

Holleman finally convinced Dave to meet, so he could give him naloxone. Some people who use opioids are destined to overdose multiple times; having naloxone at hand could save Dave's or someone else's life.

"He got into the passenger seat of my truck and couldn't talk – was just covered with shame," Holleman says. "He looked on the verge of tears and panic the whole time."

It was a first step, at least. But Holleman hoped his intervention might eventually provide more benefit than naloxone.

FIRST, REDUCE HARM

Arming people who use opioids with the overdose-reversal drug naloxone, which they can use to help others or have a companion use on them, is part of a nontraditional approach to treating drug misuse called harm reduction.

Rather than requesting someone immediately abstain from all drug use, as many treatment programs do, the idea is to chip away at dangers that go along with illegal drug use: deaths from overdoses, infections from dirty needles, risky sex, and more.

Though still outside the mainstream in the United States, harm reduction meets people who use drugs where they are. It helps them take positive steps, even if they're small steps and even if they don't immediately stop using or enter treatment.

"You're trying to get them to make a positive change, any positive change," says Melissa Floyd-Pickard, chair of UNC Greensboro's Department of Social Work. She and Professor Jay Poole oversee the University's work on GCSTOP.



POSITIVE REGARD “Safe and nurturing relationships are what make change possible,” says Tremols, who started with GCSTOP as a social work graduate student intern (pictured left, with Holleman center, in the field). “To connect, we employ a concept called unconditional positive regard. Regardless of a person’s life circumstances, regardless of decisions they have made or behaviors they are engaging in, they are worthy of compassion and respect.”



Some people, Dr. Floyd-Pickard notes, won’t change. But some will, and sometimes even a small positive change, such as taking clean syringes, can lead to further changes and even entering treatment.

The approach is rooted in a core principle of social work – meeting people where they are.

“Meeting a person where they are involves understanding their situation and respecting their perspective on their situation,” says Guillermo Tremols, GCSTOP’s Syringe Exchange Program coordinator. “It involves active listening and authentic engagement. It is not about trying to execute changes that we think they need. It’s about finding out what changes they want to make, and assisting them in achieving those goals.”

In this “judgment-free” zone, GCSTOP supplies people who use drugs with naloxone, clean needles, and safe injection supplies and educates them about handling opioids more safely. GCSTOP recognizes that some aren’t ready to enter treatment. But putting brakes on fatal opioid overdoses, which have skyrocketed in recent years, is a first step.

A DEADLY WEEKEND

Jim Albright, director of Guilford County Emergency Services, remembers when it hit him that something different and alarming was going on with opioids: the last weekend of April 2014.

“One of my supervisors called and said, ‘We need access to the warehouse because we’re running low on naloxone,’” Albright recalls. “I was like, ‘Did they not get enough out in the weekly shipment? What is going on?’”

It wasn’t a logistical error. “We had 24 overdoses, of which

five were deaths, in a 24-hour period,” Albright says. Paramedics were using up their naloxone supplies because of the number of patients needing it.

Misuse has been rising since the late 1990s, when doctors began prescribing powerful opioid-based painkillers more often. Many people start opioids for legitimate reasons, such as treating pain from an injury or surgery.

But some people are more vulnerable to the addictive quality of opioids, with a subset becoming dependent after just a few days. After their prescriptions run out, some turn to heroin.

In the last six or seven years, synthetic opioids, including the powerful prescription drug fentanyl and dozens of chemical variants, have hit the streets. Opioid overdoses are now the leading cause of accidental death in the U.S.

In 2017, according to state statistics, an average of five people died from opioid overdoses every day in North Carolina.

STATE RESPONSE

A little over two years ago, Albright got a call from then-state Senator Trudy Wade. The General Assembly was preparing to allocate funds to communities to battle the opioid crisis, and Wade wanted to know if Guilford County had a need for such funding, and if so, how it would be used.

She needed an answer in 10 minutes.

Albright had been learning about harm reduction for a while, and he had a pretty good idea of how he might use state funds: Provide overdose survivors with harm reduction services and – if they are ready – connect them to addiction treatment and other services.



He could have used the state funding to launch a county program, but he had a bigger idea.

UNCG Chancellor Franklin D. Gilliam, Jr. had given a speech about how important it was for the University to engage with the community. Plus, Guilford County and UNCG were seeking partner projects as new members of MetroLab, a network of 37 university and city or county partnerships working to bring data, analytics, and innovation to local government.

"This to me seemed like the absolutely perfect fit," Albright says. "There is capability within the university community that we felt like we could leverage."

Albright had been going to meetings of CURE Triad, a county

THE RIGHT TOOLS UNCG offered Albright (below) the technical know-how to create a system that takes relevant patient data from Guilford County Emergency Services and makes it securely available to GCSTOP social workers. They handle outreach – by phone, by text, or in person – to people who've been treated for overdoses.



group that was taking on drug misuse by bringing together law enforcement, health care providers, emergency services, addiction treatment providers, and others.

UNCG's Dr. Stephen Sills, director of the University's Center for Housing and Community Studies, had been attending those meetings, too, and had experience conducting data analysis projects focused on substance use.

With Sills' center as a home for the program, Albright launched GCSTOP. Chase Holleman – a social worker and co-founder of CURE Triad – joined as GCSTOP's Rapid Response Team coordinator.

EXPANDING IMPACT

As GCSTOP grew, it moved from the Center for Housing and Community Studies to the UNCG Department of Social Work, where it could expand its reach by tapping into the department's expertise and plugging student interns into the program.

"It just became more and more apparent that social work was such an integral part of what was happening there," explains Dr. Poole. "As we began to see folks, we recognized that they all dealt with so many complex social determinants of health issues."

Social workers, Poole says, are trained to assess people using a model that evaluates physical needs, psychological state, and social connections. Together these form a web of forces that can push people toward – or away from – drug use. "In many cases, people use substances to try to manage other bigger issues in their lives," he says. "On the other hand, if you have the brain disease of addiction, you struggle to stop using even if you've dealt with those issues."

Methods changed too. Holleman had originally focused on mobile outreach, often working out of his truck. But as the effort grew, they set up easier – and safer – "pop-up" clinics at businesses or other sites that would agree to host them.



Above, social work graduate student Bryan Kendrick conducts GCSTOP follow-up visits with Guilford County Sheriff's deputy Harold Farlow.

A High Point gas station and a thrift store parking lot have become regular sites. “We go set up in their parking lot, with their permission, and give out supplies,” Poole says.

Thanks to a grant from Cone Health, GCSTOP also has a clinic hosted at College Park Baptist Church. That site – staffed by a behavioral health nurse, GCSTOP staff, and social work students – provides health screenings and referrals as well as opioid-use focused services.

Floyd-Pickard hopes to expand this side of the program, to connect more clients with healthcare services and get more people into medication-assisted treatment, an addiction approach that uses drugs, under medical supervision, to help people get off illegal opioids.

“This year we launched another clinic with Alcohol and Drug Services, a Triad nonprofit. And we’re bringing mobile Hepatitis C testing into our work, thanks to a \$100,000 contract with the Guilford County Department of Public Health,” she says.

“We’ve also received a \$1.1 million Health Resources and Services Administration opiate workforce expansion grant. It’s a great opportunity for our community – and our students.”

FORCE MULTIPLIER

One of the most powerful resources that UNCG provides to the effort, Albright says, is students.

Students in UNCG’s undergraduate and graduate social work programs are required to do internships to gain practical experience before they graduate. These internships allow GCSTOP to help more people.

Mike Thull, assistant professor of social work and GCSTOP’s clinical director, oversees selection and training of students who work with GCSTOP. The program has six to eight interns – half undergraduate, half master’s – at any given time.

This year, UNCG and NC A&T’s Joint Master of Social Work program received \$1.1 million in funding to increase the number of graduates trained to handle substance use disorders, with an emphasis on opioids. The universities also launched a Joint Doctorate in Social Work.

“As they come in, they go through a pretty intensive training,” Thull says. New interns also spend time – after initial training – shadowing outgoing interns and are equipped with a “decision tree” to clarify when they need to call in someone more senior.

They are taught, Thull says, to be particularly sensitive to those who might be a risk to themselves or others.

“They always go out in teams with someone who has some more senior experience,” he says. “And then we set very specific parameters for them.”

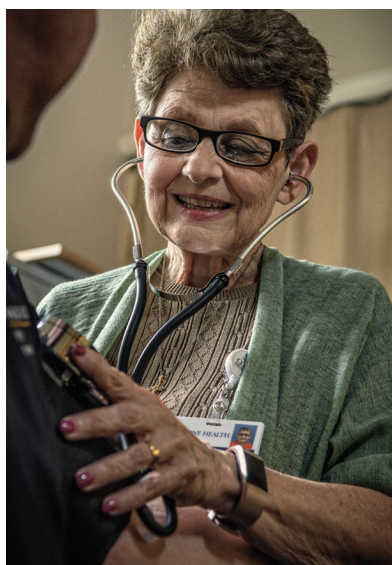
Thull, who directs the entire field program for social work undergraduates, notes that GCSTOP is “definitely more selective” than many other opportunities. It also requires a considerable time commitment. Undergraduates and first-year master’s students work 16 hours a week, while second-year master’s students put in 24 hours per week.

“To me, it feels like it’s been a force multiplier,” Albright says. “We’re paying for some positions, and we’re able to leverage those against students. The students – the ability they have to contribute to the program is unbelievable.”

COLLECTING EVIDENCE

When Albright helped launch GCSTOP, he wanted to be sure that it was truly effective. That requires data collection and rigorous evaluations.

COMMUNITY EFFORT Poole, Floyd-Pickard, and Gruber (right to left) regularly meet at the GCSTOP clinic hosted by College Park Baptist Church. There, Charlotte Evans (left), a nurse with over 30 years of behavioral health experience, provides screening and assessments to participants. Assisting her are social work students from the UNCG and NC A&T Congregational Social Work Education Initiative. The initiative partners with Cone Health’s Congregational Nurse Program to provide services to underserved and vulnerable individuals in accessible, community-based settings.



WHY OPIOIDS KILL

People rarely know exactly how potent street drugs are or what's in them. Someone who thinks they're taking heroin but are actually taking fentanyl, for example, can accidentally overdose.

Tolerance to opioids builds up with use, but can be lost when a person spends time away from drugs, say in jail or a treatment center. Going back to using the same amounts they did previously can leave someone more vulnerable to overdose.



1/3 DROP
in % of overdoses
ending in death
in Guilford from
2016 to 2018



**GCSTOP
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Students learn motivational interviewing, an evidence-based counseling approach that uses questions to identify a person's aspirations. "Rather than trying to influence them to create the change we want, we draw out their own desire for change, so the motivation comes from within," explains Tremols. "It puts the client in the driver's seat, encouraging autonomy and self-reliance."

"He wanted to make sure we had a solid evaluation plan," says Dr. Kenneth Gruber, a research psychologist and expert on evaluation in UNCG's Center for Youth, Family, and Community Partnerships.

Evaluation is important, Gruber and Albright say, to attract funding to keep GCSTOP going and to continue improving the program. Rigorous evaluation and publication of those findings in peer-reviewed journals could also provide the building blocks for turning GCSTOP into a model that could be used across the state and nationally.

Data collection has been challenging. Health care information is federally protected and must be safeguarded. Furthermore, participants are not all willing or able to provide extensive information.

But Gruber has been developing systems to gather information and evaluate the program's impact. Early results are encouraging.

"The people who are helped by Guilford County EMS and then the GCSTOP program, many of them are not repeating overdoses and are getting naloxone. They are avoiding the death sentence, if you will, of overdose."

There are many other questions that Gruber would like to dig into: Is the program successful in getting people who use opioids to adopt safer use patterns, such as using clean needles and testing their drugs for the highly potent fentanyl before injecting it? Are they adopting safer sex practices that could prevent HIV transmission? And is the community benefiting from lower health care costs because of fewer EMS calls and emergency room visits?

Albright says that while the total number of overdoses in Guilford County continues to increase, the percentage of overdoses resulting in death has declined since GCSTOP started its work.

Measures that restrict how many pills doctors can prescribe and close legal loopholes related to lab-brewed fentanyl analogues,

Albright says, haven't – at least as of early summer 2019 – started to tamp down overdose numbers. But in Guilford County, he says, the percentage of suspected overdoses ending in death dropped from 18 percent in 2016 to 11 percent in 2018 – with this year's percentages on track to be even lower.

GCSTOP helps Albright fulfill a commitment he made in 2015 to neighbors whose son died of a heroin overdose.

"I made a promise to their parents, literally at the funeral, that we would do more in this community to try to address this."

MAKE A CHANGE

Holleman, too, has big hopes for GCSTOP.

"My dream is to meet someone after they've overdosed," Holleman says. "See them find some sort of recovery – go back to school, learn how to be a helper – and work for GCSTOP."

That hasn't happened yet, but it could.

After Holleman finally got the High Point man, Dave, naloxone, the two started talking more often.

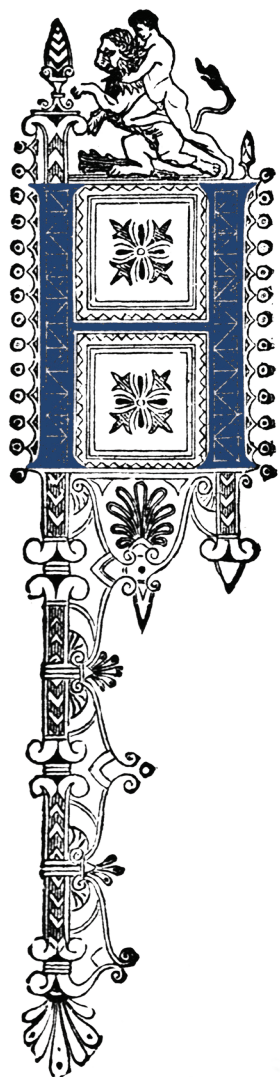
"Eventually he's like, 'I'm ready to do something different,'" Holleman says.

He got the man into a methadone clinic to start weaning himself off opioids. And then Dave told Holleman he wanted to help others struggling with addiction.

He asked for clean needles and safe injection supplies and offered to distribute them at certain motels where he knew people sometimes used drugs. And then Dave went further.

"He said, 'I want to go back to school and be a drug counselor,'" Holleman says. "And then he started back at school."

*By Mark Tosczak • Photography by Martin W. Kane
• Learn more at gcstop.uncg.edu*



HUMANITIES

DISCUSSIONS IN THE HUMANITIES – from philosophy and religion, to history and politics – guide our most crucial decisions, on a global scale and in very personal ways. They determine our understanding of ourselves and others, and how our communities build relationships and make progress. They shape our worlds.

But over recent decades, false narratives have accumulated around the humanities. Many, for example, perceive the study of humanities as a side item, an afterthought, or a luxury in undergraduate education.

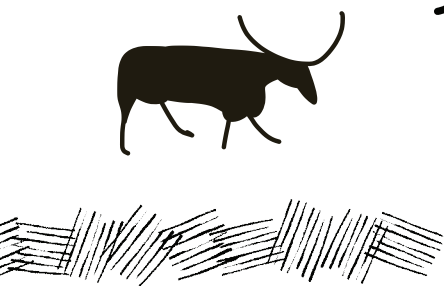
Students hear that career readiness comes from pursuing a major of the moment – whatever is most in demand at the time. Universities serving first-generation and minority students receive particular pressure to funnel students toward professional or STEM fields, regardless of interest, in order to launch careers.

However, studies of career readiness tell a different story.

The National Association of Colleges and Employers has found that critical reasoning, collaboration, and communication are the skills that are the most sought after by employers, with 75 percent of employers rating them in their top three desired skills. They are also the skills that frequently help senior professionals carve pathways to leadership positions. UNC Greensboro's researchers call them "the three Cs." These skills, they say, are best developed through humanities courses.

With that knowledge, UNCG is on the road to changing how the humanities are perceived, in a big way. The University is re-envisioning the role of humanities in undergraduate education and, in the process, doubling down on its commitment to student outcomes.

"We are thrilled to launch an innovative program that will allow us to rethink the humanities across our campus," says UNCG Chancellor Franklin D. Gilliam, Jr. "By transforming undergraduate research and career preparation for students, enhancing curricula, and offering faculty new tools, UNC Greensboro is positioning itself to emerge as a leader in the humanities, across the state and beyond."

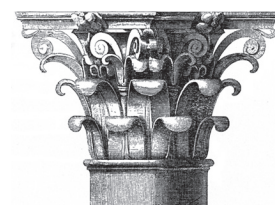
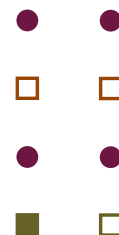
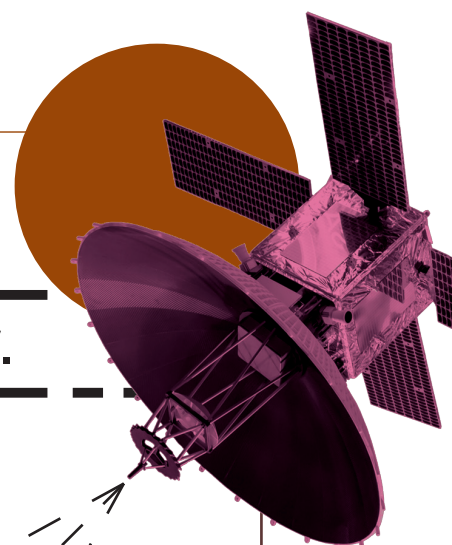


NO^W

Currently at UNCG, undergraduate research experiences are being integrated into a multitude of humanities courses and projects, along with career preparation and professional development components. Last year, the University received a \$200,000 grant from The Andrew W. Mellon Foundation to support those activities.

The program is designed to offer new funded research opportunities for faculty, while improving outcomes for underserved students. The impact will reach beyond the confines of campus – not only through community-engaged research, but through the development of the next generation of active, concerned citizens dedicated to serving and improving their respective communities.

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TRANSFORMATION

Opportunities for research with a faculty mentor strongly correlate to undergraduate academic achievement and positive post-graduate outcomes, such as advancing to graduate school or entering a satisfying career, says Dr. Joanne Murphy.

The associate professor of classical studies and Undergraduate Research, Scholarship, and Creativity faculty fellow serves as principal investigator for the Mellon grant, and she has seen for herself how research experience transforms students.

"There are so many impacts of undergraduate research," she says, "but what I love the most is the confidence. Students become an authority on a thing, and they are more confident when they speak to you, and more articulate in the way they speak. They also have the confidence to know where they can find answers – they can pull arguments together and present their material."

Since 2009, she has guided UNCG students through six-week professional internships at an archaeological field school on the Greek island of Kea (photos left and right). She also scaffolds research skill development into her classes on the

ancient world at UNCG.

She finds that students who have opportunities to engage in research develop the confidence not only to share what they know but also to ask questions about what they don't know – and to seek knowledge on their own.

"That's what employers want," she says. "People who are self-motivated and look for their own answers."

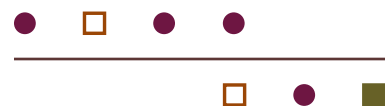
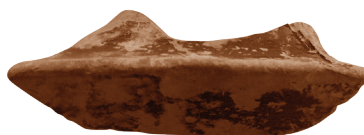
Dr. Lee Phillips, the director of the Undergraduate Research, Scholarship, and Creativity Office, or URSCO, agrees.

"Collect information. Synthesize information. Communicate information. If a student can do those things," says Phillips, "they will be successful in college, after college, and in their professional life."

He says the opportunity to develop a research process – to know how to conduct research and discover knowledge – leads a student to success.

"We begin to see information and knowledge differently. We realize that knowledge is not stagnant, but an ever-changing state, and something we all contribute to."

Phillips understands undergraduate research



Senior classical archaeology major Michael Bell can easily point to how opportunities for undergraduate research have changed the trajectory of his life.

He met Dr. Murphy on his second day of classes as a transfer student at UNCG. During a discussion of ancient graffiti, Bell recounted an instance of Greek mercenaries scrawling their identities and deeds into the stone of Abu Simbel, while fighting on behalf of sixth century BCE Egyptian pharaoh Psamtik II.

Murphy challenged Bell, asking for a short presentation on the subject at the next class. Though he was, he says, "filled with trepidation," he successfully completed the assignment – and learned about the graffiti's connection to "The Iliad" in the process.

Since then, Bell has traveled to Greece three times to conduct research (photo right, with Murphy). As a first-generation college student with financial need, Bell assumed he would not have the opportunity to study abroad, but he applied for and received an award through UNCG's URSCO.

Using data collected by the Kea Archaeological Research

Survey, Bell is analyzing the use of apicultural goods, like honey and beeswax, and metallurgical material on the Cycladic island of Kea – the earliest known site for metal production in the Aegean. He's exploring prestige goods production and how they relate to social organization and economic priorities. Bell has presented his work at the Southern Conference Undergraduate Research Forum, as well as at UNCG's Thomas Undergraduate Research and Creativity Expo.

He plans to apply for graduate programs in classical archaeology this fall, and credits hands-on research and mentorship as experiences that have developed him as a scholar and otherwise.

"The experience I gained in field work, research methods, experimental design, data collection and analysis, and presenting results has been instrumental in preparing me for my future academic endeavors – and in helping me to build confidence in my personal life," says Bell.

"The opportunities undergraduate research has afforded me have allowed me to develop skills that go far outside the bounds of standard coursework."

KNOWING WHAT YOU KNOW

as a high-impact practice that not only enriches the path of individual students, but also enriches communities, both non-academic and academic.

"When a student feels they contribute to a discipline, they have a greater affinity for it and tend to stick with it longer. Expanding access to undergraduate scholarship in a field will expand the demographics of that field."

The engagement of traditionally underrepresented students in research not only improves their academic and professional paths but also ensures those fields of study – and the ways we understand our world – are driven by a diverse set of scholars.

"Diversity," says Murphy, "keeps disciplines relevant."

One of the major challenges humanities graduates face is articulating how the skills they learned in their coursework make them desirable employees. It is that realization that led Nicole Hall in UNCG's Career and Professional Development office and former Associate Professor Emily Levine to develop the Liberal Arts Advantage.

Imagine a student who has examined the major causes of the Holocaust in a history course, or traced the rise of capitalism across the globe for a political science course.

"Those students are presented with information. They have to analyze it, understand its origins – the why and the how," says Hall. "If you translate those skills to the corporate or nonprofit sector, they really work well."

The Liberal Arts Advantage provides training for faculty and students on the translatable value of the skills learned in humanities courses.

Participants can access online modules focused on skill articulation or attend professional development days. So far, more than 500 students have used the modules, while more than 300 students have taken advantage of the in-person opportunities.

The program also connects students with senior professionals who can speak about how their education in the liberal arts propelled them toward career success. Critical thinking and skills in collaboration and communication, says Hall, allow humanities graduates to move fairly easily across careers.

"We've had recruiters come, and these are the types of candidates they want," she says. "They can easily size up a circumstance, a problem, a challenge. They can collaborate with others and communicate an outcome."

"There is a long history of productive tension between two goals in education – learning for learning's sake versus the imperative we have to prepare students for professional success and responsibility and leadership," says Levine.

"In times of economic downturn or when pressures for students to find jobs are the greatest, you often see humanists on the defensive," she observes. "They may feel resistant to learning for its own sake being encroached on by more vocational institutional goals."

But Hall and Levine say the University doesn't have to choose. "We believe it's the mission of the institution – historically, and as well as today – to bring these two sides together."

RESEARCH OPPORTUNITY

Eight Mellon-funded student and faculty research projects are already underway and include 22 faculty members and 23 undergraduate students. Topics range from visualizing voter data to a global study of memory and landscape, civil rights history, and the boundaries of free speech.



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A NEW CONVERSATION

One of the newly funded faculty-student research collaborations will take place through a new course offering this fall: "Africans in the Greco-Roman World."

"Or we could call it Greeks and Romans in the African world," says UNCG Lloyd International Honors College Dean and historian Omar Ali, who will co-teach the course with assistant dean and classicist Rebecca Muich.

The course combines classical studies with history and African diaspora studies. The material counters the common impression that people who lived in and interacted with the Greco-Roman world were only Greek and Roman.

"They'll get a real opportunity to deal with primary sources," says Dr. Muich. "And in working with the classical world, you have to expand your idea of what primary sources are. You have to read for the gaps, as well as what is there. You have to understand your sources as containing biases and preconceived notions and read for that."

The course's primary sources will be curated by undergraduate research assistants Janelle Crubaugh and Denaisha Wortham – and made available online for wider use. Crubaugh is a history and international and global studies double major, while Wortham is double majoring in African American and African diaspora studies and sociology.

Some activities will spin off into community events. For a photography exhibition, the researchers will enlist the help of UNCG's costume studio to construct their own Minerva helmet, which they will invite students and members of the community to try on.

"We want to bring the community into conversations that academics are having, and we want to generate the idea that we're all Minerva," says Dr. Ali (photo, front). "When people think about classical studies, they think about people who are white, and they separate it from Africa. But it's a disservice to see the Greeks and Romans as separate from the rest of the Mediterranean world."

Dr. Cerise Glenn, director of UNCG's African American and African Diaspora Studies Program, is one of several notable guest speakers for the project.

"We train for how to open up and begin a new conversation," she says (photo, rear). "When we examine the African identity in the Greco-Roman world, we learn things from the myths and the narratives – who gets framed in and out? It opens up a conversation about race and identity. The way we re-tell stories, particularly

in popular culture and media, shows us how we are still grappling with what we were in the past."

Muich and Ali will guide students in learning about African figures from that world, such as Candace Amanirenas, a female Nubian warrior-queen who fought the Roman empire, and Septimius Severus, who worked his way up through to the army to become emperor of Rome, and St. Augustine of Hippo, who had a profound impact on Christianity.

"The Greco-Roman world was an incredibly diverse place. It's very expansive geographically, extending from Iberia sometimes as far as India and very far south into northern Africa. Our work opens the conversation from Romans and Greeks to people around them," says Muich (photo, middle).

"How did they participate in or challenge those institutions and how were they represented – there's so much about representation and it begins in antiquity."



HUMANITIES FOR ALL

Public resource allocation, infrastructure – these are humanities questions, says Associate Professor of English Jen Feather.

“The humanities offer us the tools to think critically about where we put resources and how we make decisions about the communities we live in,” adds Women’s and Gender Studies Program Director and Associate Professor of History Lisa Levenstein. “Those are questions that determine what happens in our universities, in all disciplines, and in our world.”

Together, Dr. Feather and Dr. Levenstein are the co-founders of UNCG’s Humanities Network and Consortium, or HNAC, which they launched to connect humanities scholars, students, and the public. It’s about starting conversations that bridge gaps, they say, between individual fields of scholarship and between scholarship and public life.

Last year, HNAC worked with the New York-based Humanities Action Lab, to bring the “States of Incarceration” exhibition to Greensboro. UNCG scholars from multiple departments contributed to the exhibition, which focused on the United States prison system and its flaws and even included letters from 1920s chain-gang inmates in North Carolina.

UNCG students not only generated material for the exhibition – which took place at the International Civil Rights Center and Museum – but also organized public programs for the community about mass incarceration.

In the fall of 2020, HNAC will focus on issues of civic engagement, democracy, and voting rights, in honor of the 100th anniversary of the 19th Amendment.

The consortium’s slogan is “humanities for everyone.”

“We are countering the idea that the humanities are the province of the elite,” Levenstein explains. “We believe that everyone deserves and benefits from a strong engagement with the humanities. Those conversations are vital to our students, the public, and a flourishing democracy.”

HNAC sponsors and takes part in many events on campus and in the community, such as the Greensboro Bound literary festival and FrameWorks,

HUMANITIES CORRIDOR

North Carolina Central University and UNCG recently partnered to launch a Humanities Corridor that facilitates cross-institution research among students and faculty.

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OVERHAUL

UNCG faculty have redesigned 42 courses in 13 different subject areas for undergraduate research skill development, which will impact 1,200 students in the fall semester. Courses range from “Write for your Life! Reading and Writing Diverse Lives” to “The Emergence of Capitalism from the Atlantic World.”

which provides scholarly programming around UNCG theater productions. (Below, Levenstein and Feather, left to right, discuss a Greensboro Bound panel on writing from a feminist perspective.) For each event, HNAC facilitators emphasize connecting the public with scholars and providing a forum where students can participate – and lead.

“Our students are thought leaders and change-makers, and as the next generation, they need to know how to have those conversations, how to participate in those conversations,” says Feather.

“We want to nurture the change-making skills of a broad range of students. And we’ll see them changing the world.”

By Susan Kirby-Smith • Photography by Jiyoung Park,
Kea photos courtesy Joanne Murphy • Learn more at
cpd.uncg.edu | hnac.uncg.edu | honorscollege.uncg.edu
transformingthehumanities.uncg.edu | ursco.uncg.edu



OFF THE CHART



STORY LISTENING The narrative method illuminates how patients experience communication gaps – empowering them, their loved ones, and health care providers to build connections and advocate for change. Kellett's work grew out of his own experience with a rare diagnosis. Here, he and his wife attend a checkup with his ophthalmologist Dr. Rajiv Shah.

Imagine you're sitting alone in an exam room, struggling to catch what your doctor is saying.

Because you are hearing impaired, you ask the doctor to repeat himself, but he seems irritated. Eventually, you stop asking. You agree to a medical test without understanding what it's about. And you leave, unsure of your diagnosis.

All of this happened to Alexis Johnson, one of several patients who shares her health care journey in 2019's "Narrating Patienthood: Engaging Diverse Voices on Health, Communication, and the Patient Experience," edited by Professor of Communication Studies Peter M. Kellett.

Through compelling first-hand accounts and interviews with researchers, patients share a variety of stories – often exposing how stereotypes and discrimination have impacted their care.

"Numbers can really count in medical research, but I don't talk to thousands of people," Dr. Kellett says. "For me it's about getting into a few people's lives in a really deep way. This helps us learn how humans talk about, live with, and care for others with diseases and illnesses. The approach gives us a valuable understanding of patient experience that huge medical studies can't offer."

While Kellett has published extensively on narrative approaches to conflict communication, his interest in health communication only began when he was a



patient himself. In 2011, he was diagnosed with macular telangiectasia, which leads to loss of vision.

“At that moment,” Kellett recalls, “I wished I had a coach who could explain what was happening, what to do, and how my life story would be impacted by this condition. We’re narrative creatures. We want the full story, and we rarely have that.”

Kellett wrote a book on his own experience, published in 2017. But he wanted to explore how patients different from him – in race, class, gender, age, sexual identity, or disability – encountered health care communication and the impact that had

A FACE TO THE NUMBERS “Narrative medicine utilizes patient narratives to improve understanding and empathy,” says Kellett. “It promotes more personally sensitive and culturally responsive care, and thus better health outcomes.”

in shaping their health care experiences. That led to “Narrating Patienthood.”

A personal story in one chapter, for instance, encourages readers to examine why African Americans use hospice care at a much lower rate. Another account follows a young mother of limited means, misdiagnosed by more than five physicians until she finally finds a practitioner who discovers she has Stage 4 breast cancer. “Can you please direct me to a doctor that has a heart?” she asks at one point in her journey.

The publication is part of the “Lexington Studies in Health Communication” series. While the series mostly targets academic audiences, Kellett says this entry will also resonate with patients, family members, care providers, health system administrators, and medical schools teaching narrative approaches to medicine.

“Stories have a way of lifting the lid off the interpersonal world,” Kellett says. “You recognize: That’s another human being like me. He or she is different from me also, but there’s something in their story that I can relate to, and that creates a powerful connection.”

By Dawn Martin • Learn more at go.uncg.edu/kellett

HER STORY

Maya Angelou once said, “There is no greater agony than bearing an untold story within you.”

Conversely, Kellett and his co-editor Dr. Jennifer M. Hawkins hope the telling of personal stories in their newly released book can promote healing and transformation.

“Women’s Narratives of Health Disruption and Illness” shares women’s firsthand accounts of significant health experiences across the lifespan – from childhood to motherhood, from caring for aging parents to letting go at the end of life.

“Readers will learn how women – as they care and advocate for themselves and their loved ones during illness – communicatively create strength and balance in their life stories,” says Kellett.

Across his work, Kellett has found that sharing narratives profoundly influences storytellers themselves.

“When we communicate about health,” he says, “we can more effectively integrate these experiences into our broader ongoing life stories, leading to long-term positive impacts.”



A LONG, WONDERFUL TRIP



YOU COULD SAY that Dr. Rebecca Adams' research on Deadhead culture is alumnus Matthew Russ' fault. While majoring in sociology at UNCG in 1987, he spotted the professor at a Grateful Dead concert. Afterward he convinced her to study the band's fans as a serious line of inquiry.



In 1989, Dr. Adams created one of the first sociology courses in the country dedicated to the subject.

Adams, 21 students, a film crew, and two graduate assistants traveled with the Grateful Dead and their fans across the northeastern U.S. to study Deadheads within concert venues, a pedagogical approach that had to be defended by then UNCG Chancellor Moran to UNC System president Spangler. The course was even ridiculed in a local newspaper.

But Adams' research – on how Deadheads form and maintain identities and communities – eventually gained her national and international recognition.

In the spring, three decades of work came home for Adams at the "UNCG Dead Scholars Unite!" symposium, which she co-organized with Assistant Professor Justin Harmon and alumna Kristen Huff as part of the University's "The 60s: Exploring the Limits" year-long series of events. The symposium brought together Dead scholars and Deadheads, and reunited Adams with her summer of '89 students, marking the 30th anniversary of what they now fondly refer to as "The Class" (photos from 1989 and 2019 on left).

"Another Year of the Dead" events included showings of "Long Strange Trip: The Untold Story of the Grateful Dead," art and photo exhibits, a semester-long online course, and performances by UNCG cover band Spartans Play Dead.

Over the years, Adams has seen Deadheads age, as well as newer generations of fans enter the scene. In the process, her work on Deadheads has increasingly aligned with her other primary research area – aging and friendship.

"I was studying Deadheads long enough for the things to come together," the gerontology professor says.

From the beginning of her academic career, Adams was interested in how aging adults form and maintain friendships across geographic distance. The topic of friendship was not popular in her field at the time, but Adams followed her instinct and forged her own path. Since then, she says, studies have found that friendships in old age are as critical to wellbeing as family connections.

"I was willing to study things that were difficult to fund," she says. "Things which were not necessarily the topics everybody thought I should be studying, but in the long run turned out to be important."

At UNCG, she has helped develop GROWTH, a hub of faculty and community partners who support transdisciplinary aging-related research, education, and outreach across the campus and community. "I want to help develop the aging network infrastructure in Greensboro," she says.

Lately, the mission has become more personal. "This is in some ways about planning for my own retirement and making Greensboro the kind of place I want to be old in. I'm kind of planning my own exit."

Adams says a key Deadhead community belief is "what goes around comes around," meaning that good karma will come back to you. For Adams, the fruits of her life's work and community-building are finally coming around.



"This is my effort to bring all of the Deadheads affiliated with UNCG or who live around this area together into an intergenerational community," Adams says. The symposium wrapped with a celebration at Matthew Russ' Tate Street Coffee House (top photo, with Russ, Adams, and her daughter, Hadley Adams Iliff) as well as an encore by Spartans Play Dead at the Van Dyke Performance Space (bottom photo) in downtown Greensboro.

By Matthew Bryant • Primary photography by Martin W. Kane • Summer 1989 photo of Adams and students courtesy © Lloyd Wolf | www.lloydwolf.com | All rights reserved • "Another Year of the Dead" logo by Lena Rodriguez-Gillette • Learn more at gerontology.wp.uncg.edu | www.facebook.com/UNCGDead

3rd Floor Groove

A grand piano. Shelves of CDs, hockey art, and children's drawings. And the deep "thung" of a big double bass.

Welcome to Steve Haines' office. He's just finished mentoring a bass player and is about to start a practice session for himself. "The bass is a jealous instrument. You can't turn your back, or there's a problem."

The music professor leans the big bass carefully against the wall and pulls out his new album – "Steve Haines and the Third Floor Orchestra."

It's a departure from his earlier works. It's not quite jazz, not quite folk, not quite singer-songwriter, he notes. He had certain songs in mind – and wanted to complement Brooklyn-based artist Becca Stevens' voice and UNCG faculty Chad Eby's saxophone with a full symphony orchestra.

The album sold 5,000 copies in its first month. Reviews were glowing. Japan's most popular jazz magazine called it "a masterpiece."

Selections range from Neil Young to Chopin to folk. Imagine the centuries-old "Fair and Tender Ladies" turned upside down, with an ethereal vocal, a lush, sometimes-syncopated string section, and saxophone break. Haines even wrote lyrics for two songs.

Sales plus funding from the Canada Council of the Arts, ArtsGreensboro, and UNCG supported the effort.

Haines has played across the globe, from China to the Czech Republic. He's conducted at Lincoln Center and performed at Lenox Lounge. And he's brought UNCG's Miles Davis Jazz Studies Program to a high spot. Up to 90 students audition each year. The chosen six to eight receive intensive mentoring.

He knows how inspiring moments can take students to another level. A jazz track on a friend's mixtape is what first hooked him, in high school. Oscar Peterson's "The Honeydripper."

"I just played along. I could not stop dancing." A year later, he sat in with the Duke Ellington rhythm section. Another inspiration.

Now he's a composer and a teacher. "My main identity is as a performer."

In 2012, that nearly ended.

Haines had a tumor in his right shoulder. After the mass was removed, he could barely move his arm. He thought he'd have to change careers, but a specialist believed he could transplant a key nerve in Haines' arm. Several months after that surgery, he started playing again. A thousand hours of practice brought him back.

The bass felt beautiful. "I fell in love with it again."

Artistically, he was transformed. "I learned less is more. The sound of one long note is more beautiful than I had known before."

His next two projects are a Tom Waits big band-type album and a swinging holiday album with UNCG jazz pianist Ariel Pocock.

A musician's life is improvisation, he explains. There are always new ways to approach those four strings.

By Mike Harris

Learn more at go.uncg.edu/haines

WHY THE "THIRD FLOOR ORCHESTRA"?

In the quiet days after the December 2017 exams, 41 performers gathered in UNCG Auditorium to record Haines' new album. Many were faculty, whose offices are on the third floor of the Music Building.



NANO TECH, BIG IMPACT

They're a million times smaller than a hair follicle on your head.

But they can be used to solve some of our biggest problems.

Dr. Sherine Obare has spent her career studying nanomaterials – natural and manmade substances that can be measured in nanometers – and their real-world applications.

The new dean of the Joint School of Nanoscience and Nanoengineering leads a research team that explores how nanomaterials can be used to address some of society's most pressing issues: antibiotic resistance, food safety, and environmental pollution, to name a few.

Over the last decade, Obare has secured more than \$5 million in federal grants to advance the emerging field of nanotechnology.

"Nanotech has the ability to change the way we address different types of problems because it brings an integrated approach," Obare explains. "When you're making a nanomaterial, you start with the fundamentals of chemistry. When you're trying to understand how a nanomaterial behaves, physics comes into play. We use these materials to address health and environmental challenges."

In one project, Obare is applying this integration of the sciences to search for innovative solutions to antibiotic resistance.

A common approach to combating antibiotic resistance is to create new drugs. However, it takes approximately 10 years for a drug to go through the development and FDA approval process. When it's a matter of life or death, that's too long to wait.

Nanomaterials could offer a faster, cheaper solution. Combining

non-toxic nanomaterials with antibiotics, Obare says, can create new delivery methods for life-saving drugs that overcome the processes bacteria use to become resistant.

"We're using the same old drugs, but in ways that trick the bacteria – we're bypassing their usual resistance methods," she says.

Another project is the development of nanomaterials to detect organophosphorus pesticides.

Recent studies have shown that pesticides can linger on farms for extended periods of time after they are sprayed. As a result, pesticides have been found in the meat of farm animals and in milk.

Why is this a problem? Pesticide-laden food can affect our neurological systems.

Obare's team has spent years perfecting sensors to detect pesticides and is now developing a device farmers could use to test their products. Ultimately, consumers could use it to test their own food at home.

It's this kind of work – research that bridges disciplines to impact human lives – that excites Obare.

"One of the things I love about UNCG's strategic plan is the focus on community," she says. "We have an opportunity to really think about the big problems that communities are facing right now. How can we, as scientists and engineers, use our knowledge and the integration of the sciences through nanotechnology to address these issues?"

By Alyssa Bedrosian • Learn more at go.uncg.edu/obare

Obare is a recipient of NSF's CAREER award and its American Competitiveness and Innovation Fellowship, among others. This year, the new dean of UNCG and NC A&T's Joint School of Nanoscience and Nanoengineering was named a fellow of the American Chemical Society, in recognition of her outstanding contributions to science.





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STELLAR COLLABORATION The newly renovated Three College Observatory features one of the largest reflecting telescopes in the southeastern United States. Situated in a dark-sky location in central North Carolina, the observatory is operated jointly by UNC Greensboro, NC A&T, and Guilford College to help researchers, students, and the public reach for the stars.

