Our new normal

Virtual greetings from the first-ever virtual issue of Carolina Arts & Sciences magazine. We’ve made a number of changes in the College of Arts & Sciences since last spring to cope with COVID-19 and the changes it has necessitated throughout the world. Moving our publication to an online format was one small move, although we plan to return to print in the spring. More important are the adjustments our students and faculty have had to make as we learn how to operate in this new environment. I’m enormously proud of how our instructors have pivoted to remote instruction, striving to make their classes more inclusive as well as more compelling and engaging. I’m also gratified that most of the College’s research operations are continuing uninterrupted, with many of our scientists contributing to the knowledge base of the coronavirus. And I’m ever-inspired by how much our talented students are accomplishing — in their online classes and through extracurricular activities such as service projects and remote internships.

This is our new normal. We are still teaching, advancing knowledge through research and serving the state, nation and world. This is what a great university does — adapts to changing circumstances and rises to address the challenges before us. The stories in this issue provide example after example of our College community continuing its mission unabated. I’m confident that Carolina will continue to lead the way.

Sincerely,

Terry Ellen Rhodes

Masks are required on campus now as part of our new normal.

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FROM THE DEAN
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### Cover Photo

A rainy night in downtown Chapel Hill, near the intersection of East Franklin and South Columbia streets. (Photo by Donn Young)

### Stay Connected

Stay Connected to the College via web, social media

Magazine: magazine.college.unc.edu  News: college.unc.edu  Social media: @unccollege

Dean Terry Rhodes on Twitter: @TerryERhodes
Southern Futures is a new campuswide initiative that supports cutting-edge scholarship, creative endeavors and thoughtful conversations across disciplines, in partnership with the Center for the Study of the American South, the College of Arts & Sciences, Carolina Performing Arts, University Libraries and Southern communities. Its mission is to “Reimagine the American South.”

We chatted about the initiative with co-directors Malinda Maynor Lowery, history professor and director of CSAS, and Elizabeth Engelhardt, senior associate dean for fine arts and humanities and John Shelton Reed Distinguished Professor of Southern Studies. The scholars say they are guided by three foundational goals: Develop future Southern leaders. Focus on art, music and storytelling. Gather and share Carolina’s resources.

Read more stories about the work that Carolina students, faculty and alumni are doing as part of Southern Futures, and visit southernfutures.unc.edu.

continued
Tell us about Southern Futures and its mission to “Reimagine the American South.”

Lowery: Southern Futures is meaningful because of UNC’s relationship to the region and our mission as a public university. There is no better institution in the country to tell the complex stories of the South and to be a resource and partner for communities in finding solutions to their unique challenges. We knew this effort had to be multidisciplinary, and it had to involve emerging scholars. Those three pillars, or goals, emerged out of concrete conversations over what we could do that would have a lasting impact on the South.

Engelhardt: One of the things that’s so important to me is we know the South has been an amazing engine for creativity — art, food, music and new forms of expression for people finding a voice when everything around them encourages them not to have a voice. Yet we haven’t been so good at using that incredible engine to try and solve problems or have conversations around some of the persistent challenges of the South. Southern Futures is trying to do both of those things. We have the energy and commitment here at UNC to do that, and to do it in a way that is community-focused and community-driven.

“Southern Futures is meaningful because of UNC’s relationship to the region and our mission as a public university. There is no better institution in the country to tell the complex stories of the South and to be a resource and partner for communities in finding solutions to their unique challenges.”

Why is the “futures” part of Southern Futures so important?

Lowery: When you get away from categorizing the South as a bad place or a good place, you quickly begin to understand that the creativity that people have used to move this place forward is a model for what people all over the world need. In particular, our climate change work (see related story, page 7, on a new Mellon-funded project in Robeson County) has spoken to me about the need for relationships to one another and to the planet. In the South, there’s a willingness to deal with and reckon with each other without fleeing. We have solutions for the future and not just a way of understanding the past.

Engelhardt: For me it is important that “Futures” is plural — Futures in the plural carries an ethical imperative.

It’s a project to make space for many people who have been here all along, who continue to be here and who see each other.

The initiative provides financial support for students doing publicly engaged work on issues facing the South. Why is this key?

Lowery: It has to do with nurturing and amplifying individuals who reflect the diverse and changing nature of the region. These young scholars are really going to make the future what it will be, and they have the ability to enact positive change.

Engelhardt: Students come here with stories, and one of the things the College of Arts & Sciences does so profoundly is to say “You are an original researcher from the moment you come here.” Students blow me away with the questions they ask, the research they do and the stories they can tell. We want to support them in doing that work.

“The South has been an amazing engine for creativity — art, food, music and new forms of expression for people finding a voice when everything around them encourages them not to have a voice.”

You are both from North Carolina; how do your roots inform your scholarly interests? (Lowery was born in Lumberton and raised in Durham; Engelhardt was raised in Hendersonville).

Lowery: My ancestors have been in North Carolina for 13,000 years. Yet, while that speaks to a certain significance about the past, one of the things I’ve learned by doing Native
American history is that Native people are not people of the past. They live in the present and are thinking about the future. There’s an intuitive way that I’ve learned over the years of expressing why the past matters. It’s about your roots, understanding your own root system. If your community is the tree, those roots have everything to do with how you’re going to keep growing. We have to nurture those roots.

Engelhardt: Two of the smartest people I knew growing up were my godmother, Imogene Eaker, and the father of my best friend, Earl Norwood. Mr. Norwood received his GED and had an incredibly successful career. He was part of the vision that would ultimately become Blue Ridge Community College. Imogene got her GED when her daughter began high school, and then she and her daughter started Brevard College together. Both of these people from my hometown insisted that knowledge is important, the world is important, words are important — but it’s also important that you are able to talk about these things in plain language. I care about not locking those stories behind the walls of a university.

Lowery: This really speaks to me of the organic intellectuals that are present in communities. One of the things we wanted to do with Southern Futures is make sure organic intellectuals are always in the conversations, and often at the very center of the conversations.

Engelhardt: It’s an idea that has transformative power not just in North Carolina or the South but all over the globe.

Southern Futures launched a podcast this past summer, where the host talks about creating a place for “distinctive storytelling and humble listening.”

What are your goals in reaching listeners through this medium?

Engelhardt: We had wanted to do something like a podcast from the very early days of Southern Futures. This is the place to talk about that “humble listening.” One of the most important conversations we had was: Can we create a podcast with some silences? It’s not about a speech or a finished published work; it’s about coming together and thinking things through together and having a conversation. Doing a podcast in the moment of COVID-19 is a way for us to remember and help strengthen those connections between communities.

Lowery: One of the very first, possibly the first, sensory experiences we have other than touch is hearing and sound. So being able to elevate a medium that emphasized listening — it felt like the most authentic way we could talk about the initiative.

Why are the partnerships with University Libraries, Carolina Performing Arts and other campus units critical to the work?

Engelhardt: The partnerships are important because we make each other better. What we are proposing with Southern Futures is that we make each other better if we begin the partnership early on. This is not the arts-as-translational at the very end of the research project. It’s actually about how we can help define the project, and that comes from the humble listening.

“One of the things we wanted to do with Southern Futures is make sure organic intellectuals are always in the conversations, and often at the very center of the conversations.”

How is COVID-19 affecting your work?

Lowery: The COVID-19 crisis has focused attention on core questions about the future of our state and our region — questions that Southern Futures is designed to explore. We want people to see communities as having the resources and the assets to solve their own problems.

We will be working with The Graduate School at UNC through funding from the N.C. Policy Collaboratory on a new project — building out a National Science Foundation framework to train students to be “boundary spanners.” Boundary Spanner Scholars will use humanistic and data analysis tools to support teams addressing COVID-19-related concerns in North Carolina communities. Southern Futures’ approaches are essential to this collaboration.
EXPLORING INTERSECTIONS OF CLASS AND RACE IN GREEN VALLEY

Graduate student Moriah James was attending the 2019 Black Communities Conference co-chaired by her faculty adviser, Karla Slocum, when she met a panelist who was presenting on a neighborhood in Arlington, Virginia, called “Nauck” or Green Valley. (See profile on Karla Slocum on page 26).

That name rang a bell. James texted her dad and asked: “Do we have family in Green Valley?”

His “yes” answer would lead James, a Ph.D. student in anthropology, to pursue a new research project on this historically Black community and the ingenuity and perseverance of its people, including its local entrepreneurs.

“It was an economically stratified community, which is why I want to study it; I’m interested in the intersections of class and race,” James said. “Hearing stories of prosperity, how people have built and maintained wealth in this all-Black enclave is exciting to me.”

James received a Southern Futures Award to pursue her research, which will involve interviews with some of her family members. Although COVID-19 prohibited her from returning to Green Valley this past summer, she is conducting interviews remotely with residents.

“Since some of Green Valley’s business owners are older and have passed away, I’m also talking to the next generation and getting stories through them and asking them what values their parents instilled in them,” she said. “What have they learned?”

James pairs her interests in historically Black communities with work that helps “decolonize” museums in their portrayals of heritage and history. She was an intern in 2018 at the Smithsonian’s National Museum of African American History and Culture, and also attended the Association of African American Museums conference that same year.

“I learned so much from people of different backgrounds, and I got to see what goes into exhibit planning and writing museum research,” said James, who published a piece on entrepreneur Madam C.J. Walker and her line of cosmetics and hair care products for Black women on the Smithsonian museum’s website. “Sizzle” features Annie Turnbo Malone, Madam C.J. Walker and “the complicated history of the hot comb.”

James has always loved studying different cultures; as an undergraduate at the University of Maryland she spent time cataloguing artifacts in archaeology labs and worked on an oral history project for the College Park City Council on two historic neighborhoods.

“My interest in material culture and the past led me
to my love of archival research. Instead of uncovering buttons or glass pieces [through archaeological fieldwork], I enjoy uncovering accounts in the archives from people who never realized their stories would become a part of history," she said.

James said her work fits squarely with the mission of Southern Futures to “Reimagine the American South.” It’s a South that must focus on the strengths of different communities, she added.

“I want to uncover the stories about African Americans that have not always been told, a future that includes a narrative that talks about Blackness in a positive light,” James said. “I’m hoping my Green Valley project will contribute to stories of African Americans not just surviving but thriving.”

“We must remember where we came from, but we must also look forward.”

Diamond Holloman is fascinated with what she calls the “sister concepts of vulnerability and resilience” that she has witnessed firsthand among the people of Robeson County, North Carolina.

Hurricanes Matthew in 2016 and Florence two years later brought devastating flooding to the community, located about 90 miles inland from the coast; the Lumber River runs through the city of Lumberton, the county seat. Home to the Lumbee Tribe of North Carolina, it is one of the most racially diverse rural counties in the United States. People are still recovering from those natural disasters and are facing newfound challenges in light of COVID-19.

Diamond Holloman, a Ph.D. candidate in the College of Arts & Sciences’ Environment, Ecology and Energy Program, leads an interdisciplinary research project, “Voices of Resilience and Recovery in Robeson County,” as part of a consortium of universities that are examining the impact of climate change through the lens of environmental humanities. Her collaborators include faculty members Jacqueline Lawton in the department of dramatic art and Dylan Clark in archaeology and anthropology.

“I hope this project will further amplify the voices of racially marginalized folks in Robeson County,” said Holloman, who has been doing community-engaged work in the area for several years. Before coming to UNC, she continued
majored in environmental studies and journalism at New York University and experienced Hurricane Sandy. “These people are not subjects to be researched, but multidimensional, multifaceted people who are taking the time and energy to advocate for their communities.”

Because of COVID-19, the research group had to pivot its in-person summer research plans. Members are using PhotoVoice, a photography-based humanities research tool that helps participants define issues important to their communities. Community members were mailed cameras and instructed to take pictures inspired by the prompt, “How are natural disasters impacting your lives currently?” Holloman then held Zoom sessions with the community photographers to discuss the photos.

“These PhotoVoice conversations often highlight systemic issues that are happening and allow community members to make connections with others around these shared issues,” Holloman said.

Lawton will work with interested community members to develop a creative response to the PhotoVoice project — a song, a poem, a play, a piece of art or an exhibit, for example. She’s also working with the Robeson County Public Library to bring to light local historical accounts from voices who previously had not been allowed to tell the community’s story.

As a playwright and dramaturg for PlayMakers Repertory Company, Lawton finds this familiar work. Her play *Freedom Hill* focused on the resilience of the people of Princeville, North Carolina, a historically Black town that has also struggled with devastating flooding after hurricanes.

“Artists illuminate the human condition,” Lawton said. “The humanities can raise awareness about important issues and create a space for empathy and change. That change can show up in, for example, new laws, environmental protections and equitable distribution of resources.”

Both Lawton and Malinda Maynor Lowery, Southern Futures co-director, agree that for scholars, humble listening must be a part of the process.

“Black and Indigenous people in Robeson County who have been impacted by flooding don’t see history as a burden, they see it as a necessary tool, a gift that we can use to address the circumstances before us,” Lowery, a historian and member of the Lumbee Tribe of North Carolina, shared in a video talk among consortium members. “We are not hopeless victims in the face of this. Being able to participate and observe that in these communities is powerful.”

*The Coasts, Climates, the Humanities and the Environment Consortium*, funded by a grant from the Andrew W. Mellon Foundation, is a partnership of Louisiana State University, the University of Florida, the University of Georgia and the University of North Carolina at Chapel Hill, as well as an alliance of regional stakeholders. In addition to leading Southern Futures, Lowery and Elizabeth Engelhardt, senior associate dean for fine arts and humanities, are UNC co-PIs of the consortium.

**VULNERABLE LIVES ON THE MATANZAS RIVER**

The landscapes in graduate student Anna Hamilton’s hometown of St. Augustine in northern Florida are changing in a very visceral way. She shared an example from a fishing trip with her dad on the Matanzas River this past summer.

“You usually walk out onto the mudflats, surrounded by spiky estuarine flora and fauna, but in the last 10 to 15 years, we’ve seen an influx of mangroves, which are a southern Florida phenomenon,” she said. “With all these physical transformations in the landscape, we couldn’t find our way to our usual fishing spot that we know so well. Things are changing quickly.”
Hamilton, a Ph.D. student in American studies, is an oral historian whose work centers on the ideas of home and place and loss amid climate change. Her multimedia project, Matanzas Voices, documents the lives of the commercial fishermen, photojournalists, restaurant owners, scientists, park rangers and others who care about the 23-mile-long estuary system that runs through St. Augustine. The Matanzas is part of the Intracoastal Waterway.

Longtime oysterman Hugh Mercer told Hamilton in an interview: 

“What we're really saying here: We've got a little treasure on our hands with this Matanzas. And we've got to be awful careful with it or we’re going to lose it.”

Hamilton had completed an interview with a longtime restaurant owner when Hurricane Matthew wreaked havoc in 2016 and flooded the restaurant, a staple in St. Johns County. The family had to tear it down.

“There’s a sense of urgency in getting those stories down for places that are vulnerable,” she said. “We don’t know if things will be there tomorrow.”

Hamilton received a Southern Futures Award to support her work in the region. Founded in September 1565 by Don Pedro Menéndez de Avilés of Spain, St. Augustine bills itself as the nation’s oldest city. With development, tourism and the impact of hurricanes and climate change, it’s become a coastal town whose character is changing right before her eyes, she said. Because of warmer temperatures, her dad is now able to grow papayas, which used to be a staple only in the southern part of the state.

“With sea level rise, it’s possible I may not be able to move back to my hometown in my lifetime,” she said. “Through my research, I’ll be diving into this idea of anticipatory mourning; in other words, we have been living in this place for generations yet we know we won’t have it forever. So we simultaneously experience love and appreciation and trauma. How can we use oral history as a place for people to grieve?”

Although COVID-19 put a halt to her summer in-person fieldwork, Hamilton was able to continue to update the project website as well as do some work with the Florida Folklife Program, which conducted a survey centered on people’s connections to water and waterways. This fall, she is serving as a field scholar with the Southern Oral History Program in the Center for the Study of the American South.

Hamilton said she has always been interested in the intersection of science and the humanities. She values being able to tap into a Southern Futures community of scholars that includes musicologists, archaeologists, anthropologists, public health scholars and other experts.

“I’m very interested in public-facing, community-building work and how storytelling in general can impact communities, often for the good,” she said. “I see the value of applied work, being able to communicate across boundaries, ask new questions and answer them in innovative ways.”

CULTURAL ACTIVISM AND THE FATE OF JOHNS ISLAND

Madd Heartley turned her interest in folk music into a project that explores the impact of civil rights activists and folk musicians Guy and Candie Carawan on the development of Johns Island, South Carolina.

Johns Island is part of the Sea Islands, a chain of about 100 low-lying islands off the Atlantic Ocean that stretch from South Carolina to Georgia to Florida. The resort communities of Kiawah, Hilton Head and Seabrook are among the more well-known South Carolina Sea Islands. Before the Civil War, many of these islands featured enormous cotton and rice plantations. The junior American studies major from Charlotte, who also plans to go to nursing school, received a Southern Futures Award to support her undergraduate research. She relied heavily on the Guy and Candie Carawan Collection, part of the Southern Folklife Collection in Wilson Library.

At the 1964 Newport Folk Music Festival in Rhode Island, the gospel singers of Moving Star Hall Church of Johns Island performed alongside Bob Dylan, Pete Seeger and Joan Baez. The Moving Star Hall singers’ appearance with the festival’s all-star lineup was arranged by the Carawans, who worked to document the African American heritage of the South Carolina low country. The Carawans wrote a book, Ain't You Got a Right to the Tree of Life?: The People of Johns Island, South Carolina — Their Faces, Their Words and Their Songs.

As the gospel group performed religious hymns and shared stories of Johns Island’s Gullah culture, they and the continued
Caravans brought newfound attention to the region. But years later, the island would struggle to maintain its unique culture as it became a popular beach destination and a hot spot for developers.

Heartley’s case study raises significant historical questions about the attempt to preserve and commodify Black culture within the context of free market capitalism. She is working to finalize her research paper, under the guidance of associate professor of history Erik Gellman, with the hope of submitting it to an academic journal.

“I wanted to contextualize how much did the Carawans’ perspective as white middle class activists help or harm the people of Johns Island?” Heartley said. “Their intent was good, but it begs the question that if you don’t focus on economic stability and job and wealth equity of the local community, are you being exploitive? Are you doing the best with the resources you have?”

“With cultural preservation, we need to think about how can we preserve culture in a way that’s organic and that also ensures we’re protecting the economic rights and lives of the local people?”

Today, the Gullah Geechee Cultural Heritage Corridor Commission makes its home on Johns Island and works to protect the culture of the African-descended people of the Sea Islands.

Heartley said she has always been interested in folk music and how it can be used as a tool for conversation and cultural change.

“Music gives you a window into the culture of the times,” she said, citing as an example the unofficial civil rights anthem “We Shall Overcome,” which the Carawans helped to popularize.

Heartley calls her first foray into doing in-depth undergraduate research “an awesome experience.”

“Having the tools to do research is a valuable skill set,” she said. “It helped me to understand more about my own history with the South and how much there is still for me to know and learn. Understanding the past has a lasting impact on how we see the world today.”

As a young boy growing up in the small community of Bynum, North Carolina, William J. “Bill” Bynum recalls his grandmother taking him to a credit union that was based in a school vice principal’s garage. Years later, his grandmother would withdraw savings from that credit union to pay for the suit Bynum wore when he took the oath of office as chair of the Black Student Movement at Carolina.

Bynum has continued to live and breathe that ethos of neighbor-helping-neighbor throughout his career since graduating in 1982 with a degree in political science and psychology.

“My mother, grandmother and neighbors showed me that when people pool together their resources to help their neighbors, good things can happen,” Bynum said.
As BSM chair, Bynum learned valuable skills in leadership and negotiation as he worked to foster increased sensitivity to the needs of students and faculty of color.

“On my first day of office, we marched on South Building to express concerns that Dr. Sonja Haynes Stone had been denied tenure. I found myself on television as a young, wide-eyed undergrad,” he said. “I’m proud to say that ultimately that tenure decision was reversed. And today, the Stone Center on campus is named in her honor. It shows that action and commitment can make a difference.”

Bynum is chief executive officer of HOPE (Hope Enterprise Corporation, Hope Credit Union and Hope Policy Institute), a family of organizations that works to strengthen communities, build assets and improve lives in economically distressed parts of Alabama, Arkansas, Louisiana, Mississippi and Tennessee.

Bynum won a UNC Distinguished Alumnus Award in 2008. He returned to campus last year for the Southern Summit on Philanthropy and the Academy, a Southern Futures-sponsored event, where he told attendees that “people in these Mississippi Delta communities may be poor, but they are resourceful and resilient.”

“The more we listen to residents of these communities, the more we can target our services in a way that is most impactful,” he said. “People in the deep South have done more with less than almost anyone in the country. We are very intentional in asking them: ‘What would it take to improve conditions in your community?’”

When he first graduated from Carolina, Bynum helped to found Self-Help Credit Union in Durham, today one of the nation’s pre-eminent community development financial institutions. It all started, Bynum recalled, with a $77 deposit from a bake sale held by manufacturing workers.

After a stint at the North Carolina Rural Center, Bynum was recruited to help start the Enterprise Corporation of the Delta in Mississippi. By day, he was starting a $1.5 million loan fund to transform the region’s economy, and by night — well, the next part of the story took him back to the idea of that garage-based credit union in his North Carolina hometown.

“I joined a church in Jackson, and when I was talking to the pastor, he said he had been trying to start a credit union for some time as a way to provide an alternative to payday lenders, pawn shops and check cashers that dominated the neighborhood. And so Hope Community Credit Union was born.”

Eventually the two organizations merged and would prove critical to rebuilding efforts after Hurricane Katrina ravaged the Gulf Coast in 2005.

“We built some of the first homes on the Mississippi coast after Hurricane Katrina. That served as a model for the state that resulted in more than 10,000 families receiving $600 million to help rebuild their homes and lives. It was quite stressful on our staff, but we were well positioned to take on these challenges.”

In the years after Katrina, HOPE would weather the financial crisis of 2007-2008, and today the organization is tackling head on the financial challenges of COVID-19.

“Since the pandemic, we’ve rolled up our sleeves as we did after Katrina and the financial crisis, and focused on where we can be most helpful and add value,” he said.

For instance, HOPE is working with the Black Belt Community Foundation in Selma, Alabama, to extend bridge loans to municipalities so they can access federal funds to help their local economies recover.

A transformational $10 million deposit from Netflix will allow the credit union to invest capital in communities like Itta Bena, a town in the heart of the Mississippi Delta that is home to Mississippi Valley State University, a public, historically Black university.

HOPE is the only financial institution in Itta Bena. To support small businesses, housing, educational and healthcare facilities, home ownership and more, HOPE needs to import wealth into the region’s capital-starved communities, Bynum said.

Over the course of his career, Bynum has advised U.S. presidents on community development matters, but when he thinks of why he is passionate about his job, he turns to the future he is trying to build for his daughter, a chief obstetrics resident at VCU Medical Center in Richmond, Virginia.

“She’s delivered babies to moms affected by COVID-19, and at the same time she’s out there protesting for economic justice,” he said. “Today we are still fighting many of the same battles that Dr. King and John Lewis fought many years ago. I don’t have the time or the right to not be passionate about this work.”
JJ Bauer teaches her remote “Modern Architecture” course from her Hanes Art Center office.

BY PATTY COURTRIGHT (B.A. ’75, M.A. ’83)
Brian Hogan, teaching professor in the department of chemistry, says a successful remote course is highly structured, with pre- and post-class assignments in addition to class time.

That’s something Hogan found takes significant time to develop. But his experience last spring, when all classes had to move abruptly to remote instruction laid the groundwork for teaching “Introduction to Biochemistry” in both summer sessions.

Those experiences, plus brainstorming with colleagues and the summer students’ largely positive responses, helped hone the format he is using this semester. The 250 students in the course this fall are interacting with him remotely through Sakai, the educational software platform used by UNC.

“I've structured my classes so students know exactly what they're going to get and what they need to do every day,” said Hogan, who is also chemistry's vice chair of education.

By creating a personal time with Hogan or his teaching assistants via Zoom.

“Now that I know I’m giving the students a good learning experience, I can use these online teaching tools every semester in perpetuity,” he said.

“I've structured my classes so students know exactly what they're going to get and what they need to do every day.” — BRIAN HOGAN

Creating meaningful remote global experiences

Ways to provide a global experience are also changing during the pandemic. International travel restrictions mean that connecting online has become even more crucial.

Michele Rivkin-Fish saw that as an opportunity to introduce her anthropology students to Russian culture and history on a personal level. Although she has taught “Health and Gender After Socialism” many times, this is the first time her students will be able to talk directly with their Russian peers via Zoom. The Center for Slavic, Eurasian and East European Studies is supporting her course connections with Russian faculty and students.

Four joint discussion sessions with her Russian faculty counterparts will focus on daily life during COVID-19, transitions to adulthood, family planning and adult children’s interactions with their parents. The 31 upper-class UNC students will then be placed in small groups with students from the Higher School of Economics in Moscow for Zoom breakout sessions to delve into their distinct experiences.

For example, each group will talk with people from other cultures when we find that we don’t understand them or they don’t appreciate us. These are both the challenges and the rewards of global connections.”

“As a cultural anthropologist, I try to help people see that there's a rich culture and history of thoughtful, complicated people who can't be equated with their government,” Rivkin-Fish said.

“And it is important to learn how to talk with people from other cultures when we find that we don’t understand them or they don’t appreciate us. These are both the challenges and the rewards of global connections.”

— MICHELE RIVKIN-FISH

Teaching art with creative learning options

JJ Bauer’s “Modern Architecture” course is a combination of lecture and small-group discussion, all through Zoom. The students will work in groups throughout the semester to
focus on a particular aspect of a work of modern architecture and report back to the class. They also will work together to expand the extensive online Google map that highlights works by architects since 1900, adding a layer on endangered or lost modernist buildings.

Their final paper will examine a particular work, ultimately analyzing its relation to other works by the same architect, works of the same period and the relationship to surrounding buildings. Or students can choose to focus their final paper on the way modern architects respond to pandemics, either historically or by examining what current architects are proposing in light of the coronavirus.

“People don’t realize that diseases have played a role in architecture itself by shifting thinking about the design of buildings, cities and spaces,” said Bauer, teaching assistant professor of art and art history and visual resources curator. For example, urban public parks like New York City’s Central Park were created in part to increase access to fresh air in cities crowded with tenements and sooty from industrial pollution, while the clean lines of 20th century design were partially a response to the 1918 flu, the tuberculosis epidemic and, later, the polio outbreak.

“People don’t realize that diseases have played a role in architecture itself by shifting thinking about the design of buildings, cities and spaces.”
— JJ BAUER

“‘One of the things I try to make clear is that architecture is an art form, but it’s also unique because it has an effect on everyone’s life,’ Bauer said.

Exercising for physical and mental health

Lifetime Fitness, or LFIT, classes, are designed to help students engage in healthy physical activity; all students are required to take one to graduate. Through physical activity and online instruction, students learn the importance of developing and maintaining a healthy lifestyle, something that’s incredibly timely during a pandemic.

Because of the experience with the shift to all online learning last semester, the five labs in which students track their overall health and fitness during the semester were easy to transition to virtual this fall, said Becca Battaglini, LFIT director and teaching assistant professor in the department of exercise and sport science.

But the physical activities, which range from yoga to weight training to jogging, have required some creativity. Just as in the spring, the 45 teaching assistants are instructing the students through Zoom — sometimes working out together, other times preparing lessons that the students do on their own. In those cases, the students submit commentary about what they did, along with a photo of themselves working out or a screenshot of their exercise tracking app.

The various adaptations faculty and students have had to make for the fall are actually life lessons, Battaglini said.

“You have to be able to roll with the punches and learn to adapt quickly,” she explained. “This might not be exactly what we had originally planned, but we are doing everything we can to help our students succeed.”

“Because of the experience with the shift to all online learning last semester, the five labs in which students track their overall health and fitness were easy to transition to virtual this fall.”
— BECCA BATTAGLINI
Developing technical infrastructure for teaching success

The College’s Office of Arts & Sciences Information Services, or OASIS, has worked with faculty and other technical staff since the spring to help devise creative technology solutions to adapting classes.

“From discussions that took place all summer with each of our departments about their general instructional plans for the fall, we’ve been able to surface opportunities to help with specific instructional needs,” said Andy Lang, associate dean of IT and data analytics.

OASIS, along with the Center for Faculty Excellence, is part of a key network of support behind Keep Teaching, a website that provides strategies and tools for remote instruction.

Examples of fall innovations include:

- The English and comparative literature department is piloting Google’s G Suite for Education as part of its innovation in teaching first-year writing courses. The suite includes tools for organizing and managing class assignments and collaboration, including online forums and small group discussions, as well as providing a host of shareable Google-based documents and forms.

- Students in the departments of city and regional planning and geography are accessing their computer labs remotely to use ArcGIS, a popular web-mapping platform for data analysis and visualizations. OASIS devised a way to make this possible and then partnered with ITS to make the lab computers remotely accessible so that students can access this software while the instructor leads the class via Zoom. As an added benefit, and using Zoom’s screen-sharing capability, this configuration enables students who are using these lab computers to share their work with the rest of the class in a way that is perhaps easier than if it were done in person. This solution was piloted in the spring and is being used more widely this fall.

- OASIS is partnering with the Study Abroad Office for students to have virtual global experiences through Connecting Carolina Classrooms with the World, which was launched in May.

- Students in the Carolina Away program can examine the pandemic from different perspectives in its 11 online courses that make up “COVID Investigations.”

Although the abrupt shift again this fall is sure to provide new challenges, departments and faculty members are much better prepared than they were last spring, Lang said. The summer provided more lead time to adapt courses, and, moreover, faculty who taught during the spring or over the summer now have much more experience with remote instruction.

“I think the greatest story in this is how the University community has really come together to address these issues,” Lang said. “In the spring, people saw what needed to get done, they rolled up their sleeves and got to work. We all knew what we were good at and how to partner with one another. That was a key ingredient in how classes were able to pivot in the spring, and it’s something we’ve carried forward to make fall instruction possible.”
A POET’S SOUTHERN ATLAS

BY KIM WEAVER SPURR ’88
Haunting images, childhood memories, and both the joy and pain of growing up in the rural South fill the pages of award-winning poet Tyree Daye’s work. The teaching assistant professor of creative writing’s newest collection, Cardinal, explores themes of the Great Migration through his lens as a Black man navigating away from — and returning to — the place he calls home.
Tyree Daye has been thinking a lot lately about how complicated the idea of home is—what memories to hold on to and what to let go.

“It’s something that’s always going to be difficult,” said Daye, who grew up in Youngsville, North Carolina. Themes of substance abuse, death and racism are interwoven with images of family, childhood innocence and Southern landscape in his work. “I think it’s my duty as a writer to find those places of love that are connected to home while not ignoring the trauma. With the newest poems in Cardinal, I’m exploring this idea of traveling and trying to find a safe place to be and to live.”

Daye discusses that duality further in a Southern Futures podcast episode, “The Push and Pull of the South,” sharing, “I can’t hate a place where my grandmother’s buried.”

That sense of place, that connection to his ancestry and to his grandmother’s Gullah/Geechee culture, also opens the 2017 poetry collection, River Hymns. He begins “Dirt Cakes” this way:

My Grandmother’s body
lives under an ash tree
on an old church ground, her spirit
can be seen making
a maple tree’s shadow jealous.

Daye said “Dirt Cakes” is still his favorite poem in that inaugural collection, which won the American Poetry Review/Honickman First Book Prize. He is only the second African American poet to win the prize since it was first awarded in 1998.

“It feels like an opener to me. If it’s a movie, it’s a wide shot over the town, there in the graveyard,” he said. “Everything starts with my grandmother. It feels high up.”

Poet Gabrielle Calvocoressi, associate professor of English and comparative literature and Walker Percy Fellow at UNC, wrote in the introduction to River Hymns that through Daye’s poetry she was able to see landscapes that were very familiar and personal to her in a new way.

“This seems to me to be important now more than ever: the ability of the poet to show us a world we thought we knew and then expand our understanding,” she said.

BECOMING A POET

When he was in high school, his mother gave him a copy of The Collected Poems of Langston Hughes. Daye said he came from a family of storytellers, but it wasn’t until his junior year at NC State University that he became serious about writing poetry.

As an undergraduate creative writing major, he discovered the poems of Lucille Clifton and Etheridge Knight. A quote from Clifton is on the front page of his website: “In the bigger scheme of things the universe is not asking us to do something, the universe is asking us to be something. And that’s a whole different thing.”

That quote still speaks to him today, both as a poet and an educator.

Daye said after he received his bachelor’s degree in English, he thought about moving to New York City to pursue a master’s degree. Now, he laughs at that, saying, “I would have missed the trees in North Carolina.” He went on to receive an MFA from NC State with a concentration in poetry.

“I think about it now — what would have happened to my poems? I was always trained to write about what you
“Have they revealed something about themselves they didn’t necessarily know?” he said. “I’m pretty tough on them when it comes to that. The big thing is students want to write the universal ‘you’ in a poem. I try to push them to write the ‘I’ and why that’s important.”

They talk about imitating their favorite poets but filtering that through their own narrative. Daye weaves music into his poetry courses, using examples of Bob Dylan singing “The Times They Are A-Changin’” — then Nina Simone making the song a whole new thing.

“I try to get them to think about the images that evoke something in them. I enjoy that UNC students are not afraid to challenge the way they think about something,” he said.

MAPPING MEANING IN THE WORLD

Society has often turned to poets to make meaning of the world. Does Daye feel a heightened sense of urgency to make art that matters amid a global pandemic and renewed attention to the long-term injustices faced by people of color?

“This idea of trying to move somewhere safely in the world has been happening forever. Yet it’s wild to me that the poems in Cardinal seem so necessary right now,” he said. “What you’re making and how it speaks to the world, there’s pain that may come with that.”

From “Carry Me, after Langston Hughes”:

I followed the shimmer far down a road I still haven’t found the ending to. I picked up my life my mother sewn a map to the back of— so one day I’d lay it out and travel back to the flat land of eastern North Carolina. A map to land where my body will die, where my ghost won’t ride the trains all night, count steps from liberty to home.

Daye has never written a “poem of the day” in response to what’s making front-page news. (He’s also never been a poet who writes in a coffee shop — it’s the outside world that beckons him: porches, birds flying, a neighbor’s car playing music.)

“Iif you are an artist in the world, and you are looking at the world and trying to make meaning of it, these things can’t help but show up if you’re looking and paying attention,” he said.

It’s about listening and learning to walk in somebody else’s shoes. It’s about showing humanity and not shying away from the good and the bad.

“Art, all art, teaches us empathy,” Daye said.

Read Daye’s “By Land” from Cardinal (Copper Canyon Press) in our Finale feature on the inside back cover.
A PANDEMIC SHAPES A MODELER’S RESEARCH VISION

Professor Serhan Ziya is applying his expertise in operations research to help hospitals and emergency departments allocate limited resources most efficiently.

From the early days of COVID-19’s arrival in the United States to the pandemic’s lasting effects on the state of North Carolina, Serhan Ziya has showcased the critical value of math and modeling in allocating needed health care resources.

Ziya, a professor of statistics and operations research in UNC’s College of Arts & Sciences, has spent the past decade developing mathematical models to solve health care delivery problems. His work helps hospitals and emergency departments determine how to distribute limited resources efficiently and how to triage patients in mass casualty events.

“I am motivated by real-life events,” Ziya said. “I look for problems to study that have relevance to people’s lives, and health care makes an obvious choice. The central theme in almost all of my work is the optimization of some system-level objective, such as minimizing deaths or patient wait times, under resource constraints.”

In the span of a few months last spring, modeling became meaningful to the general public and was commonly used in mainstream media stories about COVID-19. People were hungry for information about how the disease was spreading and what the future may hold. But unlike modelers who use epidemiological tools to estimate the disease’s trajectory, Ziya has a background in industrial and systems engineering, which means he is uniquely trained to analyze complex problems that involve multiple systems or levels of operation.

“When the pandemic started, some of the first big questions were about how to make the best use of intensive care units and how to prioritize patients,” Ziya said. He had previously published a paper evaluating how ICUs could make best use of their resources. “But this work was born of a pre-pandemic world, when patient flow predictions were entirely different. I soon realized that what we were missing was a prediction of the future demand of patients coming to the emergency department or hospital.”

Ziya called contacts at UNC Hospitals’ emergency department and consulted with collaborators at Wake Forest University to glean information about new patient patterns and how hospitals were responding. Then he took his work in a new direction.

• HOSPITAL CAPACITY AND TRIAGING PATIENTS

Along with UNC STOR doctoral student Qian Cheng, Ziya and his STOR colleagues have developed software called COVID-CAT, short for COVID-19 capacity analysis tool, to help hospitals analyze their capacity for a large influx of new patients.

The program uses predictions of COVID-19 patient arrivals and then extrapolates demands for beds in the...
emergency department, main hospital and ICU. The central thrust is to identify if there will be a surge — and if there is, when the need for beds will be affected, what the magnitude may be and what daily bed capacity would meet patient demands.

About three in 10 people admitted to an emergency room typically end up being moved to the main hospital. But the process, called boarding, can leave the patient in the ER while waiting for a hospital bed elsewhere.

“If it’s a busy night, that creates a significant bottleneck, and it consumes ER resources unnecessarily,” Ziya said.

The model estimates the probability that a patient will be admitted to the main hospital and provides a metric that hospital staff can use to decide whether to begin securing a bed at the same time that the patient is admitted to the ER. This tool could prove valuable to managing emergency department resources long after the pandemic abates.

• OPTIMIZING TESTING

Global shortages of lab supplies and chemical reagents early in the pandemic left health care providers and public health experts scrambling for ways to optimize limited resources. Although supplies have rebounded, questions remain concerning testing strategies.

“In the early days, they were prioritizing testing people who were almost surely positive, and who would almost surely be hospitalized,” Ziya said. “Which is perhaps not the best use of resources.”

In a paper submitted to Management Science, Ziya examined the question of who should receive a test to optimize limited resources. The paper evaluated strategies within the context of pooled testing — a technique where multiple specimens are analyzed in large batches, which turns around results faster and consumes fewer lab resources — and individual testing. Ziya cautions that the findings are relevant whether pooled or individual testing is used.

When considering individual tests, the model suggests that either those most or least likely to be infected should be tested. But when pooled tests were considered, the model suggests it might be optimal to focus on two groups of people with a moderate degree of uncertainty surrounding their infection status: those somewhat likely, or somewhat unlikely, to have been exposed. In this case, it would be best to not waste testing resources on those who are extremely likely or extremely unlikely to be ill, where the outcome is almost certain.

• LOOKING TO THE FUTURE

Ziya said that while the pandemic has changed his research trajectory, it has also accentuated the importance of gathering accurate real-world data to inform his models and the need for acknowledging when assumptions have changed, as hospitals and health care adapt to rapidly evolving events.

“As a modeler, you sit in your office and make assumptions about how different things work. But the real world can be different,” he said. “In order for our research to really help, we must go out in the world and meet with people, to better inform our models and ultimately benefit them.”
and history much richer. Any time you’re attuned to the story, the process is much more engaging.”

His experiences include returning to Colombia through a Burch Fellowship his junior year, studying how rural migrants shaped the economic dynamics of certain neighborhoods. They also include work with geography associate professor Javier Arce-Nazario and the Carolina Cartography Collective on an interdisciplinary project to create geovisualizations that bring attention to the complicated history of U.S. naval occupation of Vieques, Puerto Rico.

Mayr will explore how audio storytelling can contribute to the mix of disciplines and methodologies behind Visualizing Vieques, a physical exhibit the team will create to share the community’s story.

This year, through C-START (Carolina Students Taking Academic Responsibility through Teaching), Mayr is working with Arce-Nazario to design and teach a course about different approaches to urban environmental history. It will draw on the backgrounds of students to create a collective project on the socio-ecological history of Chapel Hill.

Looking ahead, Mayr plans to combine his interests and experiences in geography and history and his newfound passion for audio storytelling to pursue a career in journalism. “Interdisciplinary work is where I’m the happiest,” he said. “Audio storytelling, geography and history are where I can do that the best.”

Learn more about Mayr’s Burch Fellowship experience in Bogotá, Colombia, and watch a video.

Listening in
A senior in geography and history uses audio storytelling to enlighten and engage.

BY CYNDY FALGOUT

NASA’s Perseverance rover blasted off from Cape Canaveral Air Force Station on July 30, headed for Mars. Its multi-year mission: Look for signs of ancient life, collect rock and soil samples, and test technologies that can enable human exploration on the planet.

Klaus Mayr, a senior majoring in geography and history, helped chronicle the story last summer as an intern working on NASA’s first agencywide podcast series sharing the stories behind the missions.

The NASA podcast is one of the latest examples of how Mayr uses audio storytelling to engage listeners intimately with a topic through the words of the people involved.

“I think it transports you into the room better than video or the written word. With a podcast, you actually hear their voice. You hear about the ideas and experiences that drive them to do what they do,” Mayr said. “It has become something I believe in so deeply that it’s now what I want to do with my life.”

Mayr has been interested in storytelling for as long as he can remember. Growing up in Charlotte, North Carolina, he imagined becoming a National Geographic photographer or a newspaper reporter. But as he prepared to enter college, he began exploring other interests he thought might provide a more stable career path.

A Campus Y-sponsored UNC Global Gap Year took Mayr to Colombia for six months to work with a social enterprise startup and to South Africa for six months to serve as a research assistant to a socio-ecologist.

Once he began classes at UNC, Mayr said anthropology professor Arturo Escobar “pushed me to approach my studies in an interdisciplinary way, looking for the connections between my interests.”

That search ultimately led him to geography: “I’ve found it to be the best place to study just about anything you want.”

In February of Mayr’s sophomore year, a friend pointed him to a job with a podcast team forming at the Chapel Hill Public Library. He began work that spring, helping the library share stories of the town’s history and narrative through voices past and present.

The search for stories enriches all of his other experiences, Mayr said. “It has made my experiences in geography and history much richer. Any time you’re attuned to the story, the process is much more engaging.”

Klaus Mayr’s Top 5 Podcast Listens
• This American Life
• Radiolab
• Nice White Parents
• Reveal
• Radio Diaries
A MythBusters approach to life
For up-and-coming astrophysicist Ben Kaiser, a desire to figure things out for himself has led to a career investigating the far reaches of our universe.
BY MARY LIDE PARKER ’10

As a kid, Ben Kaiser never owned a telescope, but that didn’t stop him from developing an intense fascination with outer space. “It was actually TV,” he said with a chuckle. Kaiser spent much of his adolescence watching the History Channel, the Discovery Channel and National Geographic documentaries. But his all-time favorite was MythBusters.

“As a kid you hear people say all this stuff, but no one checks to see what is true. MythBusters was like a way of checking,” Kaiser said of the Australian-American science show. “And I realized you can do that in everyday life — that’s what led me to science.”

That innate curiosity eventually led him to the department of physics and astronomy at Carolina, where he is currently pursuing a Ph.D. in astrophysics. Using imagery collected by the SOAR telescope in Chile, Kaiser examines dim light emitted by the remnants of very old stars, known as white dwarfs.

Every star will eventually exhaust its fuel, including our sun (in roughly 5 billion years). When a star burns out, it loses mass and sheds its outer layers, which can knock nearby planets out of orbit. “White dwarf” is the name given to the hot core that remains once a star finishes expelling its outer material.

Kaiser and his colleagues use spectroscopy to measure elements in the atmosphere of a white dwarf. A unique spectrograph designed by Chris Clemens, astrophysicist and senior associate dean for research and innovation in the College of Arts & Sciences, measures how much light is emitted by a white dwarf at different wavelengths.

The universe did not always contain all the elements it has today. When it formed 13.8 billion years ago, only hydrogen, helium and lithium were present. When light is missing from certain wavelengths of the spectrograph, Kaiser can discern the composition of exoplanets, or planets outside of our solar system.

“By 9 billion years ago there were many different elements, but in different relative amounts compared to those in our solar system,” Kaiser said. “The amounts of stuff in rocks and other things in the solar system should be dependent on how much of each element is around to make those rocks. It is possible there are very different worlds around older things, and it’s largely unexplored what those are made of.”

To figure out the composition of nearby planetary bodies, like Mars or the moon, NASA sends astronauts or rovers. “They can go there and scoop up material from the surface, but that’s not really an option for exoplanets, given that the nearest one is several light years away,” Kaiser explained. “Looking at white dwarfs is our best bet to figure out what the exoplanets are made of. It’s also a lot cheaper.”

Kaiser says the joint nature of the physics and astronomy department is what drew him to UNC. “Most of the powerhouse astronomy programs in the U.S. are just astronomy, but you need physics,” he said.

Math also plays a critical role in astrophysics — a reality that Kaiser often tries to impress upon the undergraduate students he teaches. “We need to convince them that paying attention to math is a long-term investment in understanding,” he said. “Having telescopes is cool but seeing a star in a telescope doesn’t tell you anything. Math tells you something about it.”

But perhaps the most important attribute, at least for Kaiser, is the confidence to question assumptions and engage in critical thinking. “There are complex things around you that you can figure out. You don’t have to be intimidated by them, and you don’t have to just take someone else’s word for it,” he said. “You can apply analytical reasoning to them — it’s like a MythBusters approach to life.”
Supporting ‘strivers’
Philosopher Jennifer Morton focuses on grit, resilience and effective ways to support disadvantaged college students.

On the first day of class each semester, associate professor of philosophy Jennifer Morton tells her students that she is the first person in her family to graduate from college. In doing so, Morton makes a connection with the students she defines as “strivers,” students seeking upward mobility through education.

Education is what led Morton, now a core faculty member in UNC’s Philosophy, Politics and Economics Program, from her native Peru to Princeton University for her bachelor’s degree.

At Princeton, in addition to gaining academic knowledge, Morton learned about U.S. culture through the lens of an Ivy League school.

“Even though I had access to the many resources offered by Princeton, I had the feeling of being an outsider, having to make decisions on my own, since my family hadn’t attended college and couldn’t guide me,” she said.

After earning her doctorate at Stanford University, Morton became interested in the philosophy of education, particularly the ways in which class and race shape educational opportunities.

“That helped me start to think differently about my own college experience,” Morton said. “I had the language and ability to reconceive my undergraduate years through a new lens, seeing that mine was a common experience for first-generation college students.”

She brought that understanding to her book, Moving Up without Losing Your Way (Princeton University Press, 2019).

“For strivers, seeking opportunity through education often comes at a cost in terms of remaining connected to friends, families and communities,” said Morton, whose research focuses on grit, resilience, higher education upward mobility and disadvantaged college students. “For the book, I interviewed people who were professionals who had ‘succeeded’ but felt regret, guilt and complicated feelings about what they had to give up in the process.”

Before joining Carolina in January 2020, Morton saw these challenges firsthand in her students at City University of New York, where she taught for 10 years after two years teaching at Swarthmore College.

“The CUNY student body tends to be mostly minority with a significant percentage coming from families that earn less than $20,000, which for NYC is very low,” Morton said. “Many of the students are immigrants or children of immigrants who come from all parts of the world.”

At UNC, Morton uses the lessons she has learned about inclusive teaching to ensure she reaches all students. Her research convinced her that if she replicated the kind of teaching that she received, in which the professor merely lectured, she would exacerbate the inequities that students bring into the classroom.

“I try to create a classroom community because students are quite responsive when they see their professor is committed to reaching as many students as possible,” she said.

Last spring, before the pandemic hit, she took her students to see the film Little Women. “They were excited to be out at night with their professor and that created an experience we could bond over.”

She targeted last spring’s First Year Seminar, “Self: Transformation and Aspiration,” to first-generation and low-income students who are strivers.

“My goal was to help the students think about what kind of transformation they were expecting to undergo and what that would mean for them,” she said.

Morton was drawn to Carolina because of the caliber of the philosophy department, her commitment to public education and her interest in learning more about rural first-generation students.

“Because of the Carolina Covenant, there is a significant proportion of low-income and first-generation students at Carolina, which appeals to me because I am committed to the transformative mission of public education,” she said.
Resilient mindsets

Finding answers to big questions about evolution requires a particular mindset. For biologist Daniel Matute, that mindset includes a trait often found in our planet’s hardiest organisms: resiliency.

BY MARY LIDE PARKER ’10

How do genomes differ? Why do some species go extinct while others flourish? How do things change over time? The field of evolutionary genetics is packed with big questions.

“It sometimes feels like we’re working in the realm of philosophy more than science,” said Daniel Matute, an associate professor of biology in UNC’s College of Arts & Sciences.

With the advent of genomic sequencing, Matute and other evolutionary geneticists are beginning to find answers to extraordinary questions.

“It’s only in the last 10 years or so that we’ve developed the tools to begin answering these questions,” Matute said. “We just need to get the data.”

The Matute Lab is committed to doing that. By examining hybrid zones (areas where species interbreed in nature) around the world, Matute and his team hope to better understand the frequency and evolutionary consequences of gene exchange. For example, the hybrid zones for the grizzly bear and polar bear would be the geographic regions where the two are coming into contact.

“Many of the current hybrid zones — although not all of them — are influenced by human activity,” Matute said. “It’s quite common on islands where endemic flora and fauna exist, and then humans bring in an invasive species.”

In his lab at UNC, Matute and his students often crossbreed fruit flies, but the results vary. “It depends on the species,” he said. “When you cross fruit flies, usually the females are fertile, but the males are infertile.”

They also examine hybridization between pathogens — an area of study that could provide vital information in a world wracked by a pandemic.

Whether it’s plants, animals or viruses, geneticists conduct sequencing using similar techniques. “The more we do genomic analysis, the easier it will become to answer some of the big questions,” Matute said.

Big questions have intrigued Matute since he was a teenager. Looking back, he can’t pinpoint exactly what inspired him, but he decided when he was about 15 that he wanted to pursue a career in genetics. With limited options in his native country of Colombia, he came to the United States for graduate school — a choice that proved to be more challenging than Matute expected.

In addition to adjusting to a new language and different social norms, Matute recalls a sentiment common among graduate students: “The day before we start grad school, we think we are the smartest people in the world,” he said. “The day after we start grad school, we feel like the dumbest people.”

Despite the challenges, Matute completed his Ph.D. and postdoc at the University of Chicago. He joined the biology department at UNC-Chapel Hill in 2014.

As a professor, Matute recognizes the value of challenging his students. In his “Idea of Race” course, which he co-teaches with a linguist and an ethnomusicologist, students learn why race is not a viable human biological concept.

Much of the class revolves around writing and critical thinking. “Developing those skills now is more critical than ever,” Matute said. “More people should be able to approach data with a critical eye.”

Matute recognizes that many of the students in his population genetics course may not use the complex mathematical formulas after they complete their degrees. But memorizing formulas isn’t the point — it’s about developing and strengthening their mindsets.

“In science, it’s really important to be resilient,” he said. “Papers are rejected a lot. You’re going to be told ‘no’ all the time. You just have to keep going.”
**Black Towns, Black Futures**

*Anthropologist Karla Slocum focuses on the historic and contemporary significance of Black communities. Her latest book highlights Oklahoma, which has one of the largest concentrations of Black towns in the United States.*

**BY MICHELE LYNN**

Karla Slocum is fascinated with the idea of race and place.

Slocum, the Thomas Willis Lambeth Distinguished Professor in the department of anthropology at UNC, is a scholar of African diaspora communities, particularly rural ones. In her most recent book, *Black Towns, Black Futures: The Enduring Allure of a Black Place in the American West* (UNC Press, 2019), Slocum explores what it means to be a “Black-identified, racially defined small town in the 21st century.”

The book focuses on Oklahoma, largely considered to have had the largest concentration of Black towns, with over 50 of the hundreds that span across the United States.

“Historically, Black people formed these communities, especially in the late 19th- and early 20th century, to be self-sufficient, forge their freedom and ensure their survival and security,” Slocum said. “I want people to know about that history, but as an anthropologist, I am especially interested in people understanding the way historically Black small towns engage with their identity and why that identity matters to them.

“There is a continuing attraction and allure of Black towns in the 21st century for the story they represent about Black greatness — communities where people survived and thrived.”

Slocum has a family connection to several Oklahoma communities through her mother, who spent part of her childhood in Langston, a historically Black small Oklahoma town — and her grandfather, a sociologist who taught at a historically Black university in rural Oklahoma and studied these communities for his doctoral work.

“I came late to learning those family stories, but once I did and saw the resonance to my other scholarly interests, I decided to pursue this research,” she said.

Slocum’s University of Florida doctoral research in the Caribbean examined the ways that people organized to protect their economic way of life in small, largely African-descended communities.

“People don’t think about a connection between Oklahoma and the Caribbean,” she said. “But all around the Americas, we have these communities made up of people of African descent, communities that people invest in for their own survival, freedom and well-being.”

As director of UNC’s Institute of African American Research, Slocum was instrumental in the recent launch of Student Learning to Advance Truth and Equity (SLATE), the institute’s newest initiative.

“SLATE is the reinvigoration of the College’s Reckoning initiative, which was a response to the aftermath of the removal of the Confederate monument known as Silent Sam,” Slocum said. “SLATE is designed to bolster undergraduate learning and understanding as it concerns race, racism and racial equity.”

Using an interdisciplinary and evidence-based approach, the program engages students through three program components: connection to community leaders in residence at UNC; research outside of the classroom; and enrollment in one of more than two dozen courses where students have assignments and activities exploring racism and racial equity.

“We don’t want students to just learn about race and racial inequality in a sociology course, but also have an opportunity to explore these issues collectively in classes connected throughout the university,” she said. “Students in our classes will discuss issues and participate in activities that allow them to grasp how race and racism operate and what racial equity can look like.”

Slocum expects that having students engage with other students in different disciplines will bring a diversity of perspectives and experiences into the learning environment.

In conjunction with Mark Little, executive director of CREATE — a global initiative at UNC’s Kenan Institute of Private Enterprise — Slocum has co-chaired Black Communities: A Conference for Collaboration since 2018. This annual event convenes scholars, community leaders, activists and leaders from across the African diaspora.

“We hope that the conferences will foster collaborations, leading to research and community productivity that supports Black communities’ capacity to thrive,” she said.

*Read a Q&A feature on Slocum’s new book on the College’s website.*
Mission always, people first
Alumna Lindsey Jefferies levels her wings, both in the cockpit and out.

BY KRISTEN CHAVEZ ’13

It doesn’t matter if it’s in the cockpit of a Black Hawk helicopter or at home conducting a teletherapy session, Lindsey Jefferies is dedicated to helping people.

When she graduated from Carolina in 2012 with degrees in psychology and sociology, she told us in a College of Art & Sciences feature profile that she hoped to become the first female African American Black Hawk pilot for the North Carolina Army National Guard. Mission accomplished. Not only has she achieved her dream of wanting to fly helicopters, she’s expanded her skill set, currently training on the Lakota helicopter, which is smaller than the Black Hawk. Every week, she trains to maintain proficiency in flying, in the event that she is needed for war zone medevac operations or recovery in disaster response missions.

But for Jefferies, her drive to serve isn’t limited to her experience in the armed forces. With the National Guard, she has the flexibility to pilot aircraft part time while also working as a counselor, primarily with couples.

After 15 months of flight school, Jefferies wanted to earn a graduate degree, and realized that counseling was her calling. She graduated with a master’s degree from UNC-Greensboro in 2018 and has continued to balance her duties with the National Guard with providing therapy and becoming a licensed clinical mental health counselor associate.

The two jobs aren’t as diverse as they appear. She sees parallels between navigating the skies and navigating relationships. If a pilot finds herself in an “unusual altitude,” when it’s hard to find the horizon, the first step is to level the wings of the aircraft to avoid a crash.

For Jefferies, this directive to “level your wings” is important for other aspects of life. It’s also the title of a brand she has launched, Level Your Wings LLC. This includes her couples counseling practice and fitness apparel line launching in 2021 and, most recently, a book on managing healthy relationships.

The healthy relationships described in the book aren’t limited to romantic ones but extend to family, friendships and workplace colleagues.

She enjoys support from fellow Guardsmen, some of whom have known her since she enlisted at 17. When she came to Carolina and participated in the Army ROTC program, which is based in the College, Jefferies graduated as a commissioned officer. Now as a captain, she outranks many of the people she flies with but has advised them as part of the job.

“It definitely shaped the way I lead now because I make it a point to focus on my soldiers’ needs and get them what’s not in their reach,” said Jefferies.

Jefferies makes it a priority to build rapport with her team, recognizing the importance of putting the people she serves alongside first.

“I think that’s super important to have at the higher-level leadership positions. If you have people who are empathetic, who are people centered, then they’re soldier-centered.”

For Jefferies, it’s “mission always, but people first.”

“The mission will always get done. But we know we can’t get the mission done without people. So we have to put them first.”
Seeds for the business were planted when Puccio spent seven hours planning his schedule to register for classes. “I got into only one of the five classes,” Puccio recalled. “I was so distraught that I had to ask the orientation leaders to show me where to click to continue going through things. The logic part of my brain just completely shut off.”

That night in his dorm, Puccio thought there had to be a better way and began writing code. A few months later, he and his girlfriend, Tara Aida, whom he met at a 10th-grade summer science and math camp (they’re still together), began working to develop Coursicle while she was at Harvard University. An earlier iteration of Coursicle, which Puccio started as a hobby and called Class Checker, was available the first three years only to Carolina students free of charge.

Coursicle’s iOS and Android app costs $4.99 per semester, although students can track one class a semester for free. Professors, academic advisers and even some parents have bought the app. Coursicle also has a website where students can plan schedules prior to registration. It slices and dices data to show various scenarios with the student’s ideal classes and time blocks — say you want to avoid 8 a.m. classes — and minimizes the hit-or-miss aspects of planning a class schedule manually.

Coursicle has three full- and two part-time employees and has had Carolina graduates or students as interns. An important part of Coursicle’s mission is to hire and retain female engineers and managers. And Puccio said it’s important to him that right now the company run entirely on its own revenue, without raising money from investors.

Puccio enjoys flying drones, dabbling in virtual reality and devoting time to Italian cooking (including a passed-down Sicilian pizza family recipe). He logs about 100 hours a week programming and troubleshooting issues with colleagues. He personally answers every support query — about 30 emails a day. The reason? This makes the company better equipped to understand customer support issues. And happy customers also tell advisers and friends about the app.

In February, Puccio spoke to students in a class taught by Paul Jones of the UNC School of Information and Library Science about the history of Coursicle, stressing the importance of gender equality in tech.

As his company continues to grow, Puccio plans to keep finding ways to use his tech skills to solve problems. When a friend complains about how something works — or doesn’t — or he runs into glitchy tech, Puccio records the issue in a log that he has kept since middle school.

After all, perseverance is key and when it comes to finding ways technology can make things better, “I’m very much not going to accept the way things are done right now,” Puccio said.
Unvarnished truth

Alumnus Elijah Heyward is guiding plans for the new International African American Museum on the site of the largest point of entry for enslaved people into the United States.

BY PAMELA BABCOCK

When Elijah Heyward III (Ph.D. American studies ’18) enrolled at Yale Divinity School for his master’s degree, most assumed he’d become a pastor. But that wasn’t ever his goal. Instead, Heyward said he followed the wisdom of Martin Luther King Jr., paraphrasing a quote attributed to the late civil rights leader: “Faith is taking the first step believing that God will build the staircase.”

“I was on a journey, and what was really important to me was allowing that journey to unfold,” Heyward said. Today, Heyward is living out his faith in a way that can impact people who never set foot in a place of worship: “It’s through education. It’s through cultural institutions. It’s through knowledge. It’s through values and ethics — all these things.”

Heyward, a native of Beaufort, South Carolina, is chief operating officer of the International African American Museum in Charleston. Scheduled to open in 2022, the approximately $100 million, 42,000-square foot waterfront museum and memorial garden will tell a part of the city’s history often overlooked — that it was once the largest point of entry for enslaved people into the United States.

An estimated 150,000 West African captives were brought to Charleston, many at Gadsden’s Wharf, between 1783 and 1808 during the height of the international trade. Those awaiting sale were kept in holding areas and many died there. The fact that so few Americans know this story “makes what we do so powerful,” Heyward said.

Exhibitions will cover the African diaspora, the spread of African American culture and influence, movements for justice and equality and other topics. The Center for Family History will enable visitors to trace their genealogy and connect the dots “for a community dispersed in ways that are really hard to bring together,” Heyward said.

Heyward first heard about the planned museum while serving on a panel with Charleston Mayor Joe Riley shortly after nine African Americans were killed in 2015 at Emanuel AME Church. Riley shared his vision for the project, which has been in the making for two decades.

Heyward said he was impressed by how the museum intended to tell the story of the diaspora. Too often, he said, the narrative “kind of starts with slavery and stays there.”

The museum plans to share stories predating slavery by focusing on innovators and entrepreneurs. It will also show that despite the horrific conditions, “there were amazing achievements that continue to impact America and the world.”

A permanent exhibit on the Gullah and Geechee communities — descendants of enslaved Africans who settled along coastal areas of the southeastern United States — has personal significance for Heyward. He was raised in such a community and focused his doctoral research at Carolina on Gullah and Geechee identity.

Of his time at Carolina, Heyward is grateful for resources including a Royster Fellowship that enabled him and other students “to become the best they could be.” He received a Center for the Study of the American South research grant to buy a camera for documentary work, which led to a photography exhibition at his dissertation defense. Through the Initiative for Minority Excellence, he received funds to attend conferences, such as one in South Africa.

Heyward’s temporary office overlooks the museum site. He considers it a sacred place for contemplation and visits daily. There’s always something new to take in. Best of all, it’s coming to life just 90 minutes from where he grew up.

The nationwide reckoning over race makes this a critical time for the museum, he said.

“For us, it’s important that we allow our history to be instructive in a way that we don’t repeat it, and a big part of that is sharing an unvarnished truth that not only inspires and captivates, but moves people to action.”
The **UNC Program for Public Discourse** in the College of Arts & Sciences includes faculty from across the University. We work to encourage a **culture of debate and deliberation** through curricular and extracurricular programs, enabling our students to be **better citizens, leaders and stewards for our democracy**.

Learn more and support the UNC Program for Public Discourse at:

[publicdiscourse.web.unc.edu](http://publicdiscourse.web.unc.edu)
Leon Livingston ‘91, a pediatrician in Memphis, Tennessee, credits a UNC program called Summer Bridge with helping him jumpstart his academic career.

After growing up in Durham and attending the North Carolina School of Science and Mathematics, Livingston learned about Summer Bridge, a six-week intensive program designed to help incoming first-year students from underrepresented communities adjust to college life away from home and begin coursework at Carolina. Students take two courses during the program, and all participants receive a full scholarship. They also get $750 in donor-supported stipends to help cover the cost of books and living expenses.

Livingston said Summer Bridge gave him the most important thing you can have during college: a support system. He continued to help out in the following summers as a Summer Bridge math tutor, and today, it’s one of the entities at Carolina he chooses to support.

“If I hadn’t gone to Summer Bridge, I wouldn’t have succeeded like I did at Carolina,” he said. “I want to make sure that program is available to others so they can also succeed. It introduced me to a group of people I’m still friends with.”

To illustrate that bond, he said that when his mother died a few years ago and he posted about the funeral on Facebook, several familiar faces showed up at the ceremony — friends he made that first summer before college and whom he had not seen in years.

“If I hadn’t gone to Summer Bridge, I wouldn’t have succeeded like I did at Carolina. I want to make sure that program is available to others so they can also succeed. It introduced me to a group of people I’m still friends with.”

― LEON LIVINGSTON

One of his best friends from the program wound up going to the same medical school — Johns Hopkins University, where Livingston got a master’s degree in public health in addition to his M.D.

“Leon’s support means so much to Summer Bridge and the Minority Advising Program. He is a great example to our current Summer Bridge students and his backing — as a former “Bridgee” — is a tremendous vote of confidence in them and the type of support our program provides,” said Marcus Collins, director of Summer Bridge and associate dean for the Center for Student Success and Academic Counseling.

Livingston grew up around medical professionals, but he was the first in his family to get a four-year degree. His mother was a registered nurse who trained at Harlem Hospital, and his father was a radiologic technologist after serving in the military. So naturally, he ended up studying biology at Carolina. He also served as co-president of the Black Pre-Professional Health Society and arranged study groups to help his fellow pre-med students succeed.

Livingston credits his biology degree for giving him the foundation for his life’s work as a pediatrician. For the past 10 years, he’s given back to that department with unrestricted gifts that provide vital support. He also has supported programs dedicated to empowering first-generation and/or underrepresented students on campus, such as the Minority Advisory Program and the Chancellor’s Science Scholars Program in addition to Summer Bridge.

As a member of the College’s Arts and Sciences Foundation board of directors, Livingston said he understands the value of a diverse arts and sciences education, so he likes to support areas that provide a broad reach.

He said he loves learning about new classes and hearing student presentations, from study abroad returnees recounting their experiences to a team of students sharing their research findings from a course led by history professor James Leloudis about the University’s financial ties to slavery.

“Being on the board gives me an interesting way to connect back to Carolina,” Livingston said.
New initiative will study technology and the adolescent brain

BY SAMANTHA WEBER

When Jim Winston Jr. (’B.A. history ’81, Ph.D. psychology ’92) walks his kids into school, he passes through throngs of older students — heads down, glued to their cell phones.

Winston said the obliviousness bothered him. After doing some research about how technology affects developing brains, his feelings about the rampant phone use shifted from annoyance to alarm.

“Neurobiologically, kids are incapable of managing the hyperstimulation that phones induce,” Winston said. “I really do believe technology and in particular, cell phones, are powerfully addictive.”

As a psychologist with extensive experience in addiction treatment, Winston understands dependence. That’s why he has funded the Winston Family Initiative in Adolescent Brain Development and Technology. A decrease in empathy, heightened depression and anxiety, impulse control disorders and more have been linked to early tech use, he said, and something needs to be done to help people learn how to interact with technology in a healthier way.

“I believe this is an existential crisis,” Winston said.

The Winston Family Initiative is a three-pronged effort that will put Carolina’s department of psychology and neuroscience at the forefront of brain development and technology research over the next three years. It will be led by Mitch Prinstein, John Van Seters Distinguished Professor, and associate professor Eva Telzer.

“I don’t think we can really understand kids’ social experiences anymore unless we’re trying to understand them as embedded in technology,” Prinstein said. “It’s pretty important that we understand this, because it’s truly defining a generation.”

Prinstein and Telzer are co-teaching a new class this fall, “Social Media, Technology and Adolescent Development.” Students will explore evidence, theory and controversies surrounding technology use by young people. Initiative funding has also enabled the hiring of Rosa Li, a new teaching faculty member for the course, two graduate students and two post-doc researchers. Beyond the Carolina course, they are developing a curriculum for middle school-age kids to help them become wiser tech consumers.

The second part of the initiative is a longitudinal study of teens to see how technology is affecting their development. Before the pandemic began, the plan was to use MRIs of participants. Prinstein said they’ve shifted to remote data collection for now and will return to the original MRI plan when it’s permissible.

The final prong of the project is to make the research widely available to the public, in part through a short informational film and a website. Parent engagement is crucial, said Winston. There will also be conferences to spread awareness about the research among scholars.

“Jim’s commitment to the project is amazing,” Prinstein said. “I think this partnership coupled with this kind of commitment is pretty exciting — it provides us with the resources to take on something that’s really quite grand in scale.”

Winston’s family has supported a wide variety of ventures at UNC for generations — perhaps not quite as long as they’ve been attending the university, though. That can be traced back more than 150 years, and the next generation is already geared up. Winston said his young kids say they want to be Tar Heels, too.

“Carolina is where I found intellectual curiosity and stimulation,” Winston said. “As a result, I’ll forever have huge affection for the university.”

To learn more about the Winston Family Initiative in Adolescent Brain Development and Technology, visit www.wifi-initiative.org.
#Throwback

30 ISSUES, 15 YEARS

Pablo Durana ’06 at Mount Bute in British Columbia works on a National Geographic documentary. Durana was featured on our first magazine cover in fall 2005 (see PDF), when a Burch Fellowship led him to bicycle across China. We caught up with Durana in fall 2013 for a 20-year retrospective story on the Burch Fellows. The freelance cinematographer (on Instagram, @Pablo_Durana) told us in that story he’s always had a love of “lore and storytelling.” Do you have a favorite story we’ve shared over the past 15 years? Email us with an update at college-news@unc.edu.

What will be your legacy?

Since the launch of the Campaign for Carolina, the College of Arts & Sciences has received more than $15.5 million from 49 alumni and friends who had previously documented their intentions to support the College through a deferred gift. Their collective generosity has provided critical support for students, faculty, departments and programs.

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‘Your only limitation is your own imagination’
INTERVIEW BY ANN TAYLOR SHAW

Richard Watkins, program coordinator for Chancellor’s Science Scholars (CSS), shares how UNC helped shape his career path and why he invests in the next generation of STEM talent. Watkins earned his Ph.D. in microbiology and immunology, with a specialty in virology, in 2014 from Carolina.

CSS supports exceptional STEM students from every background through merit-based scholarships, cutting-edge research opportunities and intensive mentoring.

Q: What inspired your love of science?
A: I actually started college at Fayetteville State University as a business major because that was the popular thing. Then I took a psychology course and decided I’d be better off doing something I’m interested in. Trying to understand the way people think and behave fascinates me. I got to present some neuroscience research at the Annual Biomedical Research Conference for Minority Students, and it was so much fun — almost like a scientific spring break trip. That was when I first saw science as a much larger community and a field where I could really make an impact.

Q: What did your path to graduate school look like?
A: During college, I got to know some faculty who encouraged me to pursue graduate school. I was interested in studying HIV, so I started applying to virology and immunology programs. I didn’t have much luck at first, but someone connected me with Dr. Patricia Phelps, who was in the early stages of developing what would become the UNC Postbaccalaureate Research Education Program (UNC PREP). I spent a year in the program studying cystic fibrosis before entering Carolina’s Ph.D. program. The UNC PREP Program is still helping students prepare for success in top biomedical graduate programs.

Q: How did you get involved with science policy?
A: Research has an impact beyond the bench, and I wanted to be part of that greater scientific enterprise. In grad school, I learned about a whole new world called science policy, and I helped develop a student organization called the Science Policy Advocacy Group to give students the opportunity to learn and appreciate how science affects policy and how policy affects science.

Q: How did you create the Science Policy Action Network (SPAN)?
A: The general idea was to expand the student organization into a nonprofit, and a lot of credit goes to UNC’s entrepreneurial environment. I got input from the Campus Y; I was sending business proposals over to Kenan-Flagler Business School for feedback; we were invited to a big pitching event at the Blue Zone; and I had a great mentor who taught me how to put together a board of directors.

Q: What type of work does SPAN do?
A: SPAN is staffed almost entirely by volunteers, and every aspect of our work is centered on science policy in North Carolina. Our research arm gives volunteers a chance to tackle timely projects, like an analysis of climate change policy. We also offer consulting and work with the community to address a variety of issues. Our high school internship program helps develop the talent pool for college STEM programs like CSS.

Q: Why are programs like Chancellor’s Science Scholars so vital?
A: My ultimate goal is to improve, extend and save lives, and the only way to do that is to have talent at all levels of science. The talent of these future scientists is nurtured in programs like CSS, which connect them with opportunities they would not have had otherwise and teach them how to apply their talents to the problems we face as a society. Anything is possible, and everything is possible. Your only limitation is your own imagination.
Overcoming Zoom fatigue

Eight months into the coronavirus pandemic, “Zoom fatigue” is a growing problem. Now, more than ever, physical and mental health are important.

Abbie Smith-Ryan, an associate professor in the department of exercise and sport science, says exercise is the best medicine. Particularly important these days, exercise strengthens your immune system. And regular exercise reduces illness frequency and severity, she said.

Working from home takes a toll on daily movement, with the majority of people not getting enough exercise. Smith-Ryan recommends aiming for about 30 minutes a day and a minimum of 10,000 steps a day. When sitting in a chair all day, that minimum can be hard to reach.

The idea of exercise can be overwhelming, Smith-Ryan said. But a workout doesn’t have to be some huge routine. Her advice? Break things up. Start slow. Keep it manageable.

Instead of exercising 30 minutes a day at one time, try three 10-minute sessions. During work hours, Smith-Ryan recommends going for short walks between Zoom calls or turning off your camera and walking during some meetings.

Other tips include body weight squats at your chair, wrist curls, stretching your arms behind your back and rolling your neck, all to stimulate blood flow and keep joints mobile.

Two take on new humanities roles

Seth Kotch, associate professor of digital humanities in American studies, has been named director of the Southern Oral History Program. Ashley Melzer, a writer, filmmaker and longtime contributor of editorial and digital content to Southern Cultures and the Center for the Study of the American South, has been tapped to lead the College’s Humanities for the Public Good initiative.

Kotch, who earned his master’s and Ph.D. in history from UNC, has developed several major digital projects in recent years, including A Red Record, which documents lynchings in the South, and Media and the Movement, a digital archive of broadcasts from Black activist radio stations from the 1960s and ’70s.

One of the first projects he would like SOHP to embark on is to interview people who remember growing up before the polio vaccine was widely available — a project likely to have resonance as the human race seeks to adapt to living with COVID-19.

As SOHP director, Kotch succeeds Rachel Seidman, who has relocated with her family to Washington, D.C.

Melzer, who received an M.A. in UNC’s American studies folklore program in 2009, will oversee the Humanities for the Public Good initiative. This four-year effort, funded in 2018 through a $1.5 million grant from the Andrew W. Mellon Foundation, seeks to bridge the silos between academic research and teaching and the surrounding communities that can both inform and benefit from such scholarship.

Melzer succeeds Robyn Schroeder, who recently took a position at the College of William & Mary.
Reactivating the Galapagos economy

The UNC Center for Galapagos Studies and its partners are helping island communities recover from the pandemic’s impact.

Since COVID-19, the Galapagos Islands of Ecuador and its communities have been especially impacted through the complete loss of the tourism industry. With nearly 80% of the Galapagos population involved in tourism, the economic impacts are severe and very likely long-lasting.

The UNC Center for Galapagos Studies will allocate much of its recently received donations from GiveUNC to partner with Universidad San Francisco de Quito as well as the Galapagos Science Center located in San Cristóbal Island, Galapagos, to launch a community outreach and engagement program to assist the people and institutions of the Galapagos Islands and advance the studies carried out by Carolina and USFQ scientists.

The UNC Center for Galapagos Studies is led by Steve Walsh, the Lyle V. Jones Distinguished Professor of Geography. This program — Reactivating the Galapagos Economy Through Science, Community and Work — is meant to contribute to the reactivation of the Galapagos economy through science, community engagement and programmatic work activities.

Study abroad goes virtual

This fall, a group of students in the College are experiencing study abroad virtually with the Universidad San Francisco de Quito in Ecuador, which began a partnership with Carolina in 2006. More than a dozen students are enrolled in the online classes with USFQ, and three of them are participating in virtual research projects with the school.

They’re taking classes in Ecuadorian Quichua, a language not offered at Carolina; learning about climate change, ecology and conservation; and developing artistic skills in drawing and watercolor.

Heather Ward, associate dean for study abroad and international exchanges, said that while the pandemic has so many activities feeling painfully limited, the affordability and prevalence of online technology combined with the strength of Carolina’s longtime partnerships with global universities can actually bring the outside world closer than ever before.

“We saw quickly that we needed to be creative and look for other ways to deliver a global education to our students,” said Ward. “A lot of the benefit you get from traditional study abroad is to learn from international faculty, scholars and students who you might not encounter on campus at Carolina. Through our strong global partnerships, we can still deliver that benefit through remote courses with faculty and students at those institutions.”

In addition to the USFQ program, 10 students are taking Vietnamese language courses through SOAS University of London this fall, a partnership formed by the Carolina Asia Center.
new artificial photosynthesis research projects, including a $40 million award to the North Carolina-based Center for Hybrid Approaches in Solar Energy to Liquid Fuels (CHASE) to accelerate fundamental research of the production of fuels from sunlight.

The University of North Carolina at Chapel Hill leads the CHASE partnership, which will work to develop hybrid photoelectrodes for fuel production that combine semiconductors for light absorption with molecular catalysts for conversion and fuel production.

CHASE will blend experiment with theory to understand and establish new design principles for fuels-from-sunlight systems. The CHASE group will work to evolve solar energy technology to meet the world’s increasing energy needs.

Investigators at six institutions — Brookhaven National Laboratory, Emory University, NC State University, the University of Pennsylvania, UNC-Chapel Hill and Yale University — are partners in the CHASE effort.

“We have assembled a very strong team to set brand-new directions in this field,” said Gerald Meyer, director of the CHASE Hub and professor in the chemistry department in the College of Arts & Sciences. “Our focus is to use the sun’s energy to directly generate storable liquid fuels.”

CHASE researchers will investigate the conversion of sunlight to storable liquid fuels.

U.S. Department of Energy funds solar energy research

The U.S. Department of Energy will provide $100 million in funding to
Grad certificate preps students to innovate for public good

A new nine-credit-hour program will launch in spring 2021, teaching design thinking skills for solving complex problems across diverse fields of research and practice.

The Carolina Graduate Certificate in Innovation for the Public Good will help students practice the skills they need to collaborate with others, partner with governments and communities, and tackle challenges in new ways.

Innovate Carolina, UNC’s campuswide initiative for innovation and entrepreneurship, worked to develop the certificate in partnership with three sponsoring academic units that will administer the certificate on a rotating basis. It will be administered by the Gillings School of Global Public Health for the first four years. It will then rotate to the College of Arts & Sciences’ public policy department for four years, followed by a rotation at the School of Education.

Open to masters and doctoral students in any of the University’s graduate programs, the program will give students experience with methods that they can apply immediately to their thesis or dissertation work. The certificate also equips students with career-ready skills they can use when working on multidisciplinary teams in businesses, nonprofits and government agencies that increasingly demand the ability to apply cross-sector, community-engaged practices.

The certificate’s courses offered across departments and schools will resonate strongly with students enrolled in a variety of programs who are interested in making a positive public impact, said Dan Gitterman, Duncan MacRae ’09 and Rebecca Kyle MacRae Professor and chair of the public policy department.

“UNC public policy faculty and students are all about the public good. They and many of our colleagues and peers in other graduate programs in the College are focused on researching and addressing our most pressing national and global challenges,” Gitterman said.

Asian American Center opens at UNC

Heidi Kim, associate professor in the department of English and comparative literature, will lead the new Asian American Center at Carolina.

Due to COVID-19, the Center opened virtually this fall, kicking off with several events, including a livestream conversation about the documentary *I’m Not Racist ... Am I?* The conversation featured Barb Lee ’88, founder and president of Point Made Films, and Michelle Robinson, associate professor of American studies. That event was part of this year’s programmatic focus called “Anti-Blackness and Alliance: A Series on Asian-Black Race Relations,” co-sponsored with the Carolina Asia Center.

“With the surge of anti-Asian racism that has come with the coronavirus, and with the heightened consciousness and self-scrutiny about race that has come with the Black Lives Matter protests, a lot of Asian Americans have been re-examining their place in the American racial hierarchy,” Kim said.

Despite the pandemic, the time is right for establishing a center for Asian Americans at Carolina, supporters say. The Asian American population of the state has grown exponentially in recent decades, Kim said. At Carolina, 17% of all students as of fall 2019 and 18% of the current first-year class identify as Asian/Asian American — as do about 10% of staff, 11% of faculty and 30% of postdoctoral fellows.

In a drive that began last summer, the student-led Asian American Center Campaign team has raised more than half of its $1.2 million goal for 2020. The amount needed to fully endow the center is $5 million.

While the center is a virtual one so far, the goal is to one day have a place on campus, Kim added.
Sarah Treul and Kevin Marinelli have been tapped to lead the UNC Program for Public Discourse.

The program was launched in 2019 to bring together UNC-Chapel Hill faculty and students to build a stronger community by offering every student the opportunity to become a more informed, engaged and skilled citizen.

Treul, Bowman and Gordon Gray Distinguished Term Professor of Political Science, is faculty director of the program, and Marinelli, who taught rhetoric at the Massachusetts Institute of Technology, is executive director.

As faculty director, Treul will define the strategic priorities and objectives of the program, working in coordination with the College of Arts & Sciences Dean’s Office, relevant department chairs and program faculty.

She has been on the Carolina faculty since 2009. Her research interests are American political institutions, specifically congressional primary elections and decision-making in the U.S. Senate.

As executive director, Marinelli will be responsible for managing programming. This includes mentoring the Polis Fellows, undergraduates who produce a periodical, Polis, that debates contemporary topics of wide interest; recruiting speakers for campus events; and working with the Center for Faculty Excellence and other campus entities to support civic engagement and the wider use of structured advocacy, rhetoric and debate in the classroom.

Marinelli is a rhetorical scholar who previously served as director of the Speaking Center at Davidson College for three years before joining MIT in 2019. He will also teach courses in the department of communication.

PPD seeks to build a culture of robust debate and civic engagement at Carolina while upholding the core principles of academic freedom of expression and academic inquiry.

Ronit Freeman holds a 3D printed model of the coronavirus.

Ronit Freeman, an associate professor of applied physical sciences and biomedical engineering, is working with two interdisciplinary teams and received a total of $275,000 through the Research Corporation for Science Advancement’s COVID-19 Initiative: Detecting and Mitigating Epidemics.

The main focus of her research is the crown of spikes decorating the virus as they are the key components that unlock viral entry to host cells. How coronaviruses enter cells is an important determinant of viral infectivity and a major target for host immune surveillance and human intervention strategies. The team will employ computational models of different spike structures along the infection pathway and develop “molecular cages” that will effectively lock the spike conformations in place. These new capture agents have the potential to block virus entry and effectively stop it at the gate. Freeman will work with Rommie Amaro, professor of chemistry and biochemistry at UC San Diego, and Carlos Simmerling, a chemistry professor at Stony Brook University.

Freeman will also partner with Zachary Schultz, professor of chemistry and biochemistry at Ohio State University, to establish swift, sensitive and selective technologies to detect COVID-19.

“There is severe urgency for accurate point-of-care detection of COVID-19,” said Freeman. Their goal is to have a working COVID-19 handheld sensor in a few months. By simplifying testing, Freeman hopes to be able to put diagnostics into the hands of people everywhere — without the need for expensive laboratories or expertise.
Historian James Leloudis says although his new book focuses on North Carolina, “what we’re talking about here is the story of race in American politics.”

A cyclic history
North Carolina’s voting rights battles are America’s struggles in microcosm, a new book says
BY GENEVA COLLINS

Election fraud. Gerrymandering. Disinformation campaigns. Voter suppression. A public disillusioned with the political process. A new book by two historians reminds us that some of the battles over the ballot box now playing out in North Carolina are echoing events that have occurred with alarming regularity since Reconstruction.

“This is a bad movie that runs again and again,” said James Leloudis, professor of history, Peter T. Grauer Associate Dean for Honors Carolina and co-chair of the UNC Commission on History, Race and a Way Forward. He is the author, with Robert Korstad, of Fragile Democracy: The Struggle Over Race and Voting Rights in North Carolina. Korstad is professor emeritus of public policy and history at Duke University’s Sanford School of Public Policy.

Their book (UNC Press, September 2020) opens with an overview of post-Civil War North Carolina, which bore a “Herculean share of hardship and depravation” from the conflict. Two biracial coalitions formed in the period between Emancipation and 1900. The first was in the mid-1860s and resulted in the crafting of a radically democratic state constitution. Ku Klux Klan vigilante violence followed. A second alliance, known as Fusion, emerged from the economic depression of the 1890s. It revised election law to accommodate illiterate voters, among other advancements. These reforms were met with a horrific backlash, including such incidents as the Wilmington insurrection of 1898, in which a white mob overthrew democratically elected city officials. The only coup d’etat in U.S. history left more than 60 people dead.

The pattern of progress and backlash continues for another 100 years, through the passage of the landmark Voting Rights Act of 1965 and the protections it afforded, followed by court rulings and legislation in recent years that have impeded progress.

In fact, Fragile Democracy had its origins in expert witness reports that Leloudis prepared for two voting rights lawsuits: In 2013, a U.S. Supreme Court decision significantly weakened two provisions of the Voting Rights Act. Shortly after that court ruling, then-North Carolina Gov. Pat McCrory signed into law H.B. 589, which included a voter ID requirement and other changes that disproportionately affected minority voters. Leloudis compiled research for the NAACP in suits filed in both state and federal courts. Challenges to the voter ID provision and other restrictions are wending their way through the legal system.

Leloudis said the undergraduates he teaches are mostly unfamiliar with this cyclic history: “They know a little of the Civil War, they know a little of Reconstruction. … They have some familiarity with the civil rights movement of the late 1950s and 1960s. But all the stuff in between, they know very little about. And many of them get angry when they learn about it. They’ll catch me after class and say, ‘I had a very good high school education. How is it that I and so many others know so little of this story?’”

Leloudis is quick to point out that although his book focuses on North Carolina’s struggle over race and voting rights, similar events were unfolding across the nation. “The specifics are particular to North Carolina, but what we’re talking about here is the story of race in American politics.”

If he were asked in 20 years to provide an update for this book, what would Leloudis like for it to say?

“When I spend time with students and the kinds of questions they raise, I am encouraged. Twenty years from now, it would be gratifying to write a new introduction that says we’ve reckoned with the legacies of slavery and Jim Crow. We’ve come to terms with that history. And in the process, we’ve recognized that racial injustice is injustice to all.”

Learn more in a digital exhibit about the book.
I’ve lived on dirt roads that bent and ended
at a gate of pines,
the dust skipped up didn’t make my mother
look like a dream. I’ve lived
on roads that dragged through America,
I’ve paced only them to the next town.

The road we kissed on is gone,
rich folks buying up all the city in which we make do.
I miss when Sonny could do a wheelie
all the way down Person Street
and no one would call the police
because he was a part of the neighborhood like the honeysuckle
bush between two yards, and he was beautiful,
not like a horse standing alone in a yellow field,
but like a man is beautiful.

Most of the little towns have a road nicknamed Devil’s Turn,
where someone’s brother died on a Saturday night
while Nina sang *Tell Me More and More and Then Some*
on the Caddy’s radio,
the moon the color of the oldest cardinal.

Every road isn’t a way out, some circle
back like wolves, you can’t get lost on them
and they won’t lose you, others wait
for you to run out of gas then come alive
with what your mother said would take you.

Every road promises something like a father does,
but when you arrive the town is empty, and you wait
like a child questioning everything, the road itself
laughing like a drunk man falling into a roadside ditch.

The road I’m walking now is howling and full of moon,
hopefully it’ll lead to myself,
hopefully they’ll take me home.

“By Land” is from Cardinal, the latest collection by Tyree Daye, teaching assistant professor of creative writing at UNC.
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