CAROLINA

ARTS & SCIENCES

SPRING • 2024

EMBRACING AI AT UNC

ALSO INSIDE:

- Art writ large for music
- A humanist at heart
- Jenny Han talks Carolina

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

New faces, new programs at Carolina

• *With Interim Chancellor Lee Roberts at the Institute for the Arts and Humanities' Fellows celebration this spring.*

This semester we welcomed Lee Roberts to campus as interim chancellor of UNC-Chapel Hill, following the departure of Kevin Guskiewicz to take over the helm of Michigan State University. I am looking forward to working with Lee, a finance executive with deep ties to the state, who has thrown himself into learning everything there is about this historic campus and the wonderfully committed people who make it special. In his first few months at Carolina, he has attended numerous lectures, talks, concerts and other events sponsored by College units, and he is as impressed with our talented students, staff and faculty as I am.

We also welcomed the inaugural director and dean of the College's new School of Civic Life and Leadership last month. Jed Atkins comes to Carolina from Duke University, and he joins SCiLL just as it prepares to launch a new minor in civic life and leadership this fall. (Read more about him and the minor on page 33.)

The SCiLL minor isn't the only academic program the College has announced this semester. This fall we will be offering a new B.S. in applied sciences and a B.A. in data science. What these new degrees and the minor have in common is that they were developed to respond to students' needs and interests. At Carolina, we are never content with the status quo; we are always raising the bar in defining excellence. After all, we are preparing today's students to be the leaders and innovators of tomorrow.

Sincerely, Jim White

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Cover illustration:

For our feature on AI in teaching and research, we thought it fitting to use AI-generated artwork.

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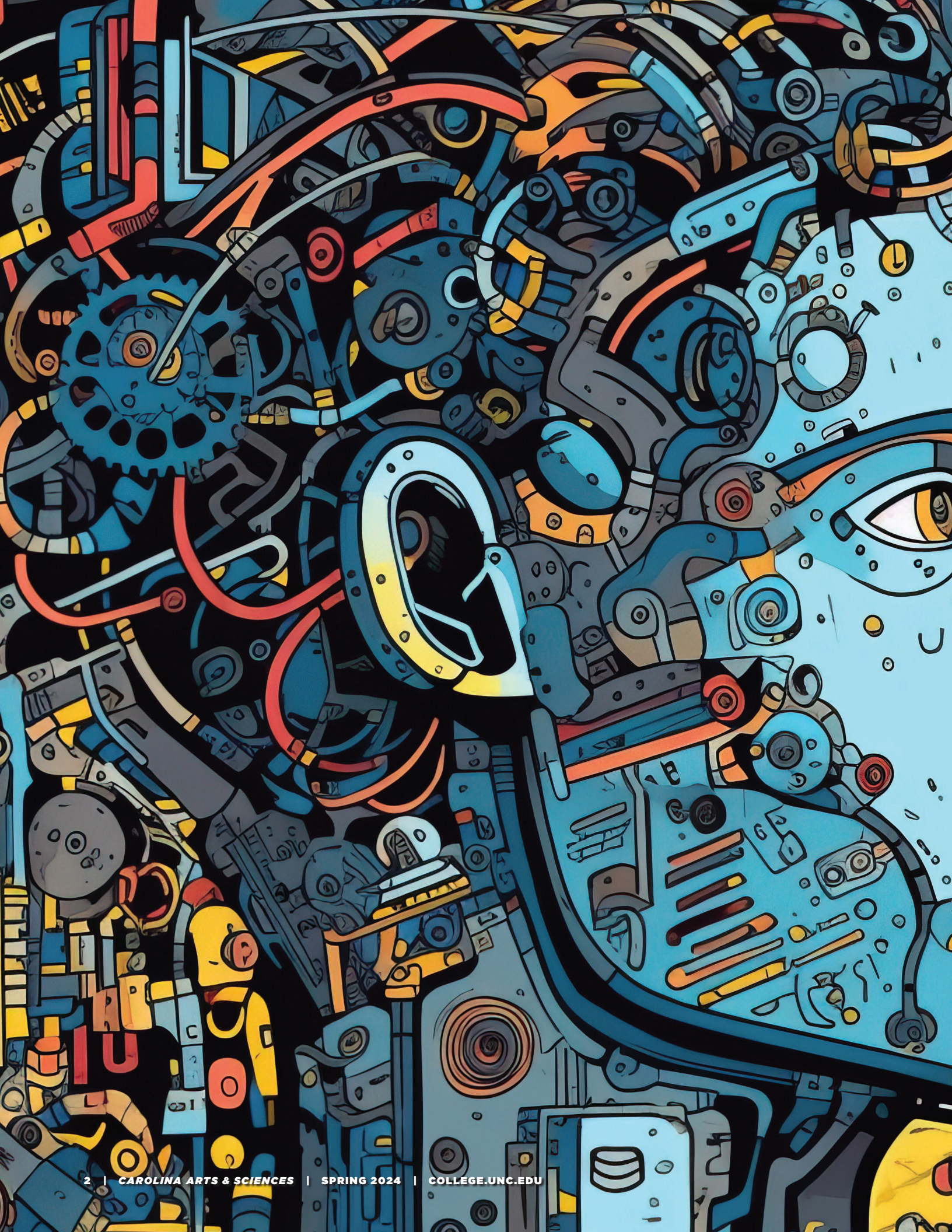
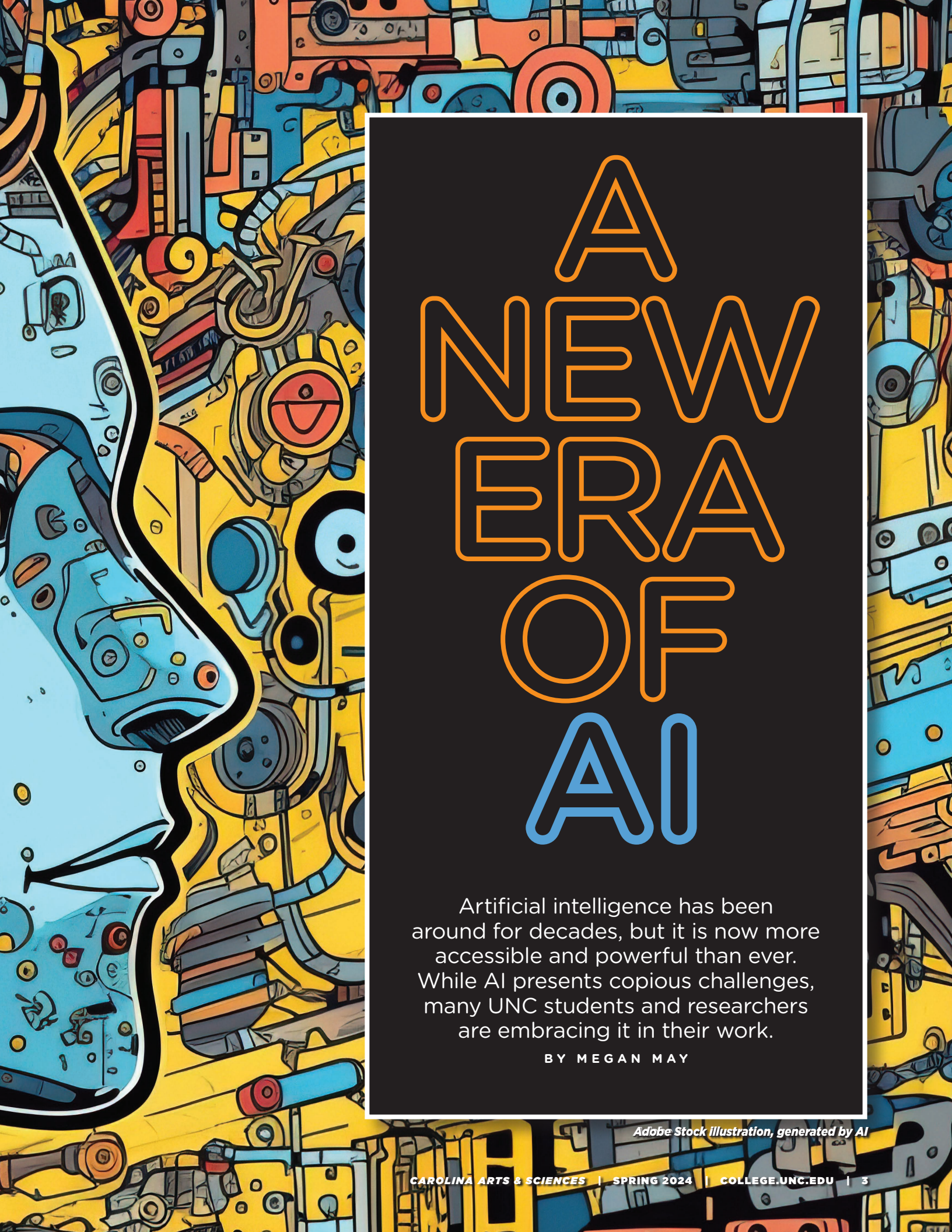




A NEW ERA OF AI

Artificial intelligence has been around for decades, but it is now more accessible and powerful than ever. While AI presents copious challenges, many UNC students and researchers are embracing it in their work.

BY MEGAN MAY

Adobe Stock illustration, generated by AI

ABOVE: *Daniel Anderson, professor of English and comparative literature, developed training modules as part of the Carolina AI Literacy initiative platforms responsibly and effectively. His goal is to ensure that all UNC students become AI literate.*

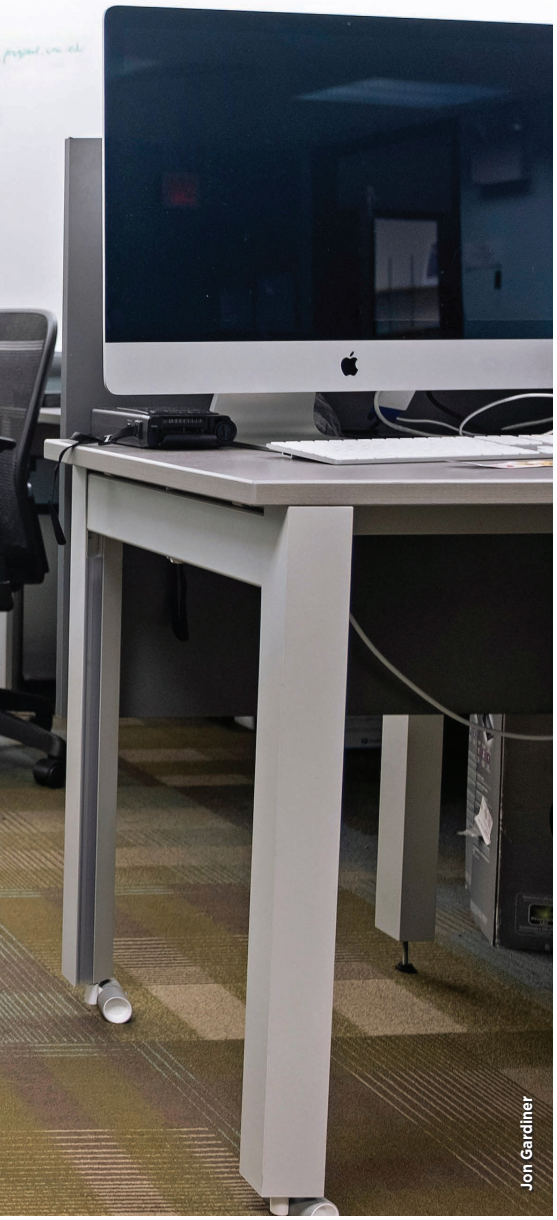
While smartphones, smartwatches, smart appliances — even smart pillows — are a product of the 21st century, the concept of artificial intelligence has been around since antiquity.

In Greek mythology, the bronze giant Talos was an autonomous defender of the island of Crete — circling the perimeter three times a day and throwing boulders at invaders. An ancient Buddhist tale tells the story of a seductive female robot known as *yantraputraka*, meaning "mechanical girl." Sacred statues in Egypt were believed to be imbued with real minds and could answer any questions put to them.

These days, we have Google.

From smart home devices and editing software to fraud detection and search engines, artificial intelligence has proven pervasive in everyday life.

Streaming services, businesses and social media platforms use it to track user behavior to provide personalized content and advertisements. Health apps analyze biometric data to give insights for a fit lifestyle. Navigation systems use real-time



to help students learn how to use generative AI

and historical traffic patterns and predictive analytics to provide route recommendations.

What *is* different than in years past is the surge in the amount of data, computational power and the public release of generative AI platforms like ChatGPT or Microsoft Copilot. In the world of artificial intelligence, the more data, the more robust these models and algorithms become.

"Obviously inventions like the printing press or computer were huge. But even look at the pencil eraser — that created lots of kerfuffle because writing was no longer permanent. People thought we were going to get stupid because we can make mistakes and erase." — DANIEL ANDERSON

This has led to an exponential increase in the ways in which this technology could be used. For some, ethical issues loom just as large — problems with data privacy, structural bias, copyright, plagiarism and disinformation are all hot topics in the AI ethical debate.

While some view the rise of AI as a threat, others see its potential in learning. **Daniel Anderson**, professor in the department of English and comparative literature and director of **Carolina Digital Humanities/Digital Innovation Lab** and the **UNC Writing Program**, is of the latter. In his research, Anderson studies the intersection of computers and writing.

Throughout history, technology has constantly changed the ways in which we view communication and the world around us.

"Obviously inventions like the printing press or computer were huge," Anderson said. "But even look at the pencil eraser — that created lots of kerfuffle because writing was no longer permanent. People thought we were going to get stupid because we can make mistakes and erase."

But each time technology caused a disruption, society learned to adapt, said Anderson.

"I think one thing that's changed is the pace of artificial intelligence, and maybe that's scarier," he said.

Every first-year UNC student is required to take "English Composition and Rhetoric" as an introduction to collegiate-level writing. Last summer, Anderson saw this as an opportunity to explore ways students can incorporate artificial intelligence into their writing. Students used generative AI platforms throughout the course and found mixed results. When brainstorming topic ideas, identifying key words or summarizing verified documents, AI was helpful. Past that, things got messy. For example, when looking for a literature review with the best 10 sources on a topic, the chatbot would generate false references. Inaccurate information presented as fact is called an AI hallucination.

These hallucinations, sometimes humorous, taught students a valuable lesson in verification.

"A lot of what I hoped to see, as a teacher, happened," said Anderson. "By spending time with these activities, students were able to have the lightbulb go off for themselves."

Based on this experience, and with funding from the **UNC School of Data Science and Society**, Anderson built training modules as part of the **Carolina AI Literacy initiative** to help students learn how to use these platforms responsibly and effectively.

Anderson's goal is to ensure that all UNC students become AI literate.

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"Not all students need a deep understanding of AI, but they should know it's trained on data and that data can come with limitations and affordances," he said. "Your bank is going to be using AI; your doctor is going to be using it. It's useful to have a sense of how this technology is mediating your life."

FILLING IN THE GAPS

Some are just beginning their AI journey, but others have been traveling this road for years, like **Junier Oliva**, an assistant professor with appointments in both the College's department of computer science and the School of Data Science and Society.

Oliva's research focuses on improving machine learning models, a type of AI that learns from data in order to make predictions. Machine learning is effective when using data that follows the same patterns seen during training. But when a model confronts categorically different or missing data, inaccuracies can occur.

A project with **Alexander Tropsha**, a professor in the UNC Eshelman School of Pharmacy with an adjunct appointment in computer science, aims to improve machine learning capabilities beyond the scope of training datasets. One application for this is in drug discovery.

"When we think about 'discovery,' we're thinking about characterizing things that are different than what's been previously characterized," Oliva said. "But since machine learning models aren't very good at characterizing data that's very different than what's been previously seen, these two things are at odds."

Currently, machine learning is used to flag molecules with potential in drug development. This is followed by experimentation, but if the models are inaccurate, lots of time and money is wasted on testing.

The duo's three-year National Science Foundation project is developing methods that can better recognize these machine-learning limitations. By creating trials to assess how well a model can extrapolate beyond the scope of its training, they can then use this information to flag predictions that are likely unreliable. They are also building methods that will tell researchers what additional data would improve the model's training.

Another of Oliva's projects is with **Sean Sylvia** at the Gillings School of Global Public Health. It develops models to assist human reasoning — what can be described as human-AI collaboration.

"There are many sensitive application areas where we still want a human in the loop," Oliva said. "For example, health care: We still want the doctor or clinical provider to ultimately be responsible for treatment. Ideally, we want to create a system where the human plus AI are working together better than either could in isolation."

Think of patient records. In an ideal world, doctors can read these histories before the patient appointment. In reality, records can be long and complex, and doctors' time is limited.

Focusing on colorectal cancer screening and treatment, Oliva and Sylvia are creating a system that can review patient records and distill core components. This can then be combined with machine-learning predictions and explanations drawn from ancillary data to make recommendations.

LEFT: *Junier Oliva.* **ABOVE:** *Corbin Jones speaks at the World Summit on Island Sustainability in July 2022 to celebrate the 10th anniversary of the Galapagos Science Center. He is working to better understand the genetic characteristics of Ecuadorian grasses.*

Although both projects are rooted in health, that's just one application for Oliva's work. Ideally, it could be used in a variety of time-sensitive situations or where data is incomplete, like defense, search and rescue, interactive retrieval, autonomous vehicle development and public policy, just to name a few.

"We want these models to work across a broad range of potential areas," he said. "This gives us a lot of opportunities to help solve really interesting and important problems."

ANSWERING THE "WHY"

Looking at **Corbin Jones**' bio, it may be difficult to nail down his research interests. Ecuadorian grasses, the

continued

coronavirus, microbes and fruit flies have all been subjects in his lab.

"But you can link them all," Jones said. "The big question I'm interested in is the evolution of novelty — how do little differences in DNA make us distinct, and how do new genes form?"

As a professor in both the College's department of biology and the department of genetics and Integrative Program for Biological and Genome Sciences in the UNC School of Medicine, Jones investigates histones and their role in gene expression.

DNA is a huge molecule: If the DNA in all your cells were unwound and strung together it would be twice the diameter of the solar system. Histones are proteins that help package this massive amount of DNA into a highly compact form.

"Your DNA is all wrapped up and packaged, but you can't get in there to use it unless it's opened. This histone code determines how accessible your DNA is to be used as that genetic blueprint," he explained.

A deeper understanding of this process would give a fuller picture of how human genetics work and advance research surrounding genetic engineering and genetic-based diseases, like cancer.

In 2022, Jones — with collaborators from biology, the Renaissance Computing Institute and the schools of Data Science and Society, Medicine and Pharmacy — won the Vice Chancellor for Research's **Creativity Hub Award** and are using AI to crack this code.

Artificial neural networks are a common form of machine learning, based on the principles of brain development — new connections are made among neurons from new experiences and learning. Typically used in filtering and categorizing large amounts of data and making predictions, artificial neural networks are less useful in explaining why those conclusions were reached.

"AI is basically a black box," Jones said. "You shove a bunch of stuff in there and it makes a prediction. But one of the biggest problems with AI is you don't know *why* it's making that prediction, and that's where it can get into problems of bias."

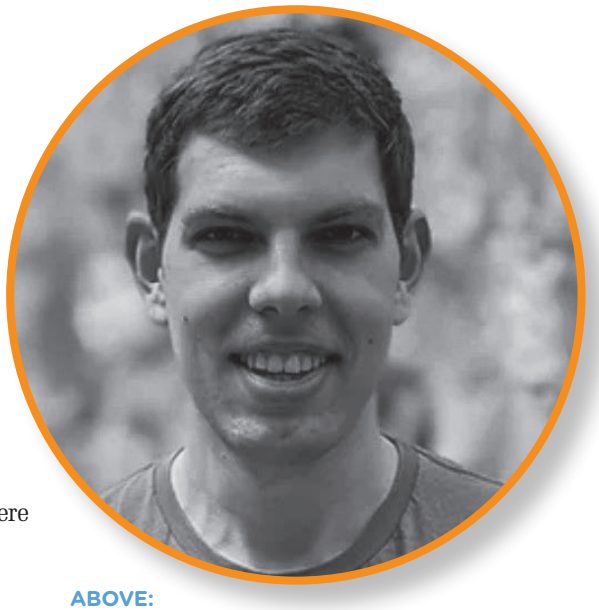
By developing *visible* neural networks, researchers can better understand the path taken to those outcomes. They can then use that information to design experiments investigating how the molecular mechanism actually works.

"We are interested in how biology stores and manipulates information to inspire new ways of building AI tools," he said. "To me, AI is the next wave of tools that we can apply to our work."

ALL IN ON VIDEO

In 2023, internet users dedicated an average of 17 hours per week to online video consumption. Every day, 720,000 hours of video are uploaded to YouTube — the equivalent of 82 years. TikTok alone has just under 2 billion users. Now more than ever, we see the world through a camera.

"Video plays a really significant role



ABOVE:
Gedas Bertasius

in our lives," said **Gedas Bertasius**, assistant professor in the department of computer science. His work is focused on video understanding and computer vision technologies.

Video understanding is the process in which AI is trained to comprehend video through its visual, audio and textual elements — something we as humans take for granted.

"This is something we don't even need to think about when we watch a video," Bertasius said. "But when AI is given a video, what it sees is just a bunch of pixels or waveforms — and it has to make sense of these."

Improving the ways in which AI understands video advances its video retrieval and generative capabilities. It also helps lay the foundation for first-person vision technologies. A subfield of computer vision, first-person vision uses wearable cameras — installed in eyeglasses, for example — to record and analyze video throughout a task.

"Most of our research is about machine learning, but I'm very interested in

human learning as well," he said. "So how can we use machine learning to make human learning more effective? The long-term vision is to develop some sort of personalized AI assistant."

One concept is people could wear augmented reality glasses to help with daily tasks or acquire skills. Cooking a new dish? The AI assistant could remind you to use olive oil instead of butter. Learning to play tennis? The AI coach could give advice on adjusting hand positioning.

A project that is a collaboration among 14 universities and the Meta Fundamental Artificial Intelligence Research team is examining the perception side of this technology and analyzing skilled tasks to translate expert knowledge to beginners. With over 800 participants, the Ego-Exo4D project combined data analysis from wearable and bystander camera views with feedback from skilled experts for a variety of activities like sports, music and dance.

BELOW: *Adam Kiefer*

This approach teaches AI how to understand complex activities in a way similar to our natural perception.

"I'm excited to see this technology make people's lives better in a lot of different ways," Bertasius said.

Another researcher harnessing AI video analysis is **Adam Kiefer**, assistant professor in the department of exercise and sport science, core faculty member in the **Matthew Gfeller Center** and co-director of the STAR Heel Performance Lab.

Kiefer's research uses AI to predict athlete performance, injury prevention and recovery.

One project, funded by the National Institutes of Health, built an extended reality assessment platform to analyze athlete behavior and customize training for prevention of musculoskeletal injuries.

During trials, an athlete is fitted with a wireless virtual reality headset that can simulate a sport-like scenario. The athlete then runs though a drill, like running toward a goal while avoiding a virtual defender. Using this platform, body-worn sensors and cameras on the sideline, researchers gather a slew of movement pattern data, including muscle activation and eye tracking.

"We can feed that data into our virtual defenders in real-time so they know, for example, there's an 80% chance that this athlete is going to go to the right of the defender, so shift over and take that away," Kiefer said.

Thus far, the team has been focused on building the platform, called Automated Digital Assessment and Training (ADAPT). The next phase includes follow up studies with patient populations to test its effectiveness as an intervention in injury recovery.

A spinoff of this project dives deeper into what may seem like science fiction. Inspired by ways to improve virtual defenders, Kiefer's team is working on creating "digital twins" — digital models of people to be used in simulations and training. By building an in-depth library of data about an individual, paired with predictive analytics and genetic algorithms, they hope to create digital twins that could be used to predict performance of not only athletes, but also service members, students or workers learning a new skill, for example.

"If we can predict performance, then we can also do a better job of preparing them to be more adaptable and resilient," he said.

For Kiefer, AI's ability to code and analyze vast amounts of data frees up time for innovative endeavors like this.

"I think we're in a really unique period where — with the right theoretical approach and data — AI can help us better understand some of these long-standing questions," Kiefer said. "If we were to have this conversation three years from now, I think it's going to look completely different, too, and I'm looking forward to going on that journey."

Donn Young

If these walls could sing

SCOTT NURKIN CELEBRATES NORTH CAROLINA'S CONTRIBUTIONS TO THE AMERICAN SONGBOOK BY PAINTING MURALS OF LEGENDARY MUSICIANS IN THEIR HOMETOWNS.

By Kim Weaver Spurr '88

Scott Nurkin at a Carrboro mural he painted honoring folk and blues musician Elizabeth Cotten.

The idea started small, born out of love for great pizza and great music.

In 2006, when Pepper's Pizza moved to a larger location on Franklin Street, owner David "Pepper" Harvey reached out to his friend Scott Nurkin and asked him to create art for the new location.

The artistic inspiration hit Nurkin, a 2000 UNC art graduate and longtime musician, when he was driving across the James Taylor Bridge on U.S. 15-501.

Nurkin painted about 20 small portraits of North Carolina-born musicians like Thelonious Monk, John Coltrane and Randy Travis and hung them in thrift store frames on a state map he drew on the eatery's walls.

The pizza had a loyal following, but so did the paintings, and when Pepper's closed its doors for good in 2013, fans wondered — what will happen to the portraits?

Enter Mark Katz, a professor and then-chair of the department of music. After heading to Pepper's for a final slice on the restaurant's last day, Katz called Nurkin and offered to buy the paintings for permanent display in the music department's Hill Hall.

SCHOOLED IN ART

Nurkin, a Charlotte native, remembers the UNC art history class that cemented his decision to make painting his life.

"They read the announcements at the beginning of class, and then the professor asked, 'Who wants to be a professional artist?'" Nurkin said. "I was the only one who raised my hand.

"Then I was like, 'Oh, that isn't good!' But I really couldn't imagine any other alternative."

When Nurkin found out that Chapel Hill muralist and alumnus Michael Brown '77 was looking for interns, he jumped at the chance.

RIGHT: *This Durham mural honors Betty Davis, a pioneering American funk, soul and rock singer-songwriter.*
BELOW: *Country music legend Randy Travis grew up in Marshville.*

Jared Caldwell

Composer Thelonius Monk, recognized as one of the most inventive pianists of any genre, is featured in this Rocky Mount mural.

"Being outdoors, climbing a ladder — it was so different from sitting in a studio, which is fun, too," Nurkin said. "Michael was a delight to work for and taught me everything I needed to know."

After the internship was over, Nurkin talked Brown into keeping him on as an apprentice.

"Scott was eager to learn. One of our first projects was painting the antique signs at Southpoint Mall," Brown said. "He learned skills like 'how to drive a bucket lift 101.' The quality of his work is excellent. And as techniques have changed, Scott has been quick to pick up on technological innovations."

Nurkin said he became enamored with the size and scale of mural painting.

"Over time, I became better at figuring out some of the tricks, like how do you solve a project on whatever wall you're given? How do you work around windows and air conditioning units and pipes? How do you make it fit? That was interesting to me."

A LARGER-THAN-LIFE IDEA

As he concluded the apprenticeship, Nurkin started to grow his own business, The Mural Shop, and continued to pursue his second passion — playing drums with his band, the Dynamite Brothers.

He was also dreaming up a new vision of how to bring the Pepper's Pizza paintings to a larger audience.

"I kept thinking, 'How cool would it be if I could go to towns across the state and paint outdoor murals of these North Carolina musicians in their hometowns?'" he said. "These are people — like blues guitarist and singer 'Blind Boy Fuller' from Wadesboro — that we never heard about in fourth grade history class, yet these people have had an impact on my life."

"When I found out that trailblazers like Roberta Flack, Randy Travis, Nina Simone and Earl Scruggs are all from the same state, I had to tell everybody I knew."

When COVID-19 hit and towns were canceling music festivals, that freed up some arts funding. An idea that Nurkin and fellow Tar Heel Greg Lowenhagen (American studies '99) had pitched to the city of Hamlet to paint a mural of jazz saxophonist John Coltrane finally came to fruition. (Coltrane was born in Hamlet but grew up in High Point.) With the completion of that first mural in June 2020, the N.C. Musician Murals Project was born.

"It's a six-story mural on the back of the Hamlet Theatre, which has its own legendary history," Nurkin said. "Black people were not allowed in that building for the better part of the 20th century, and now you have this 60-foot portrait of Hamlet's most famous musician."

Nurkin's website for the project describes Coltrane as a "composer who helped define jazz as an American art form."

continued

Nurkin painted his first mural — of jazz saxophonist John Coltrane — in Hamlet. Coltrane received two Grammy Awards.

A DRUMMER'S DREAM

In January, Nurkin completed his 22nd mural in the N.C. Musician Murals Project in Elizabeth City.

This latest one was special.

Nurkin had idolized jazz drummer Max Roach for years. Roach is considered one of the most important drummers in history and among the most widely recorded modern percussionists — having worked with jazz legends like Dizzy Gillespie, Duke Ellington and Miles Davis. He was born in the township of Newland, near Elizabeth City.

"Since I was a boy, I've looked at Max Roach as a hero, a larger-than-life icon," Nurkin wrote on Instagram. "I remember very distinctly an issue of *Modern Drummer* that had him on the cover with the caption, 'The man who changed the way you play drums.'"

Roach, who died in 2007, would have been 100 this year. Not only did Elizabeth City commission a mural of Roach downtown on Water Street, city and cultural officials have planned multiple centennial celebrations this year in Roach's honor.

Deborah Malenfant, executive director of Elizabeth City Downtown Inc., said Nurkin's murals "make you stop in your tracks to admire them from a distance, and then again close up to check out the details. They have a 'wow' factor."

Malenfant calls each mural in the N.C. Musician Murals Project "a destination piece." She believes the Roach mural will have a positive impact on tourism, and she said it has already received quite a bit of attention.

"I love the dialogue it has started," she said. "Many people did not realize Max Roach was from here. It's been a great opportunity to engage people in learning about our local cultural history. It not only connects people to Max Roach's story, but our community stories."

Nurkin has more murals in the works this year, including one of Kinston native Maceo Parker, a funk and soul jazz saxophonist who played with James Brown and Prince.

HIS CREATIVE INSPIRATION

It is a blustery 35-degree day in mid-January when Nurkin agrees to meet in Carrboro for a photo session at one of his murals.

This brings to mind a question about what it is like to work as a muralist in extreme weather.

"I typically stop at 45 degrees if I can, but if it's freezing cold or wet, I don't do it because it can affect the work," he said.

Behind Nurkin, painted on the side of an old barber shop at 111 N. Merritt Mill Road, is a mural honoring folk and blues musician Elizabeth Cotten, who wrote her most famous

song, "Freight Train," at age 11. She learned to play guitar upside down, an adaptation by a left-handed guitar player with a right-handed guitar. Cotten won a Grammy at the age of 91 in 1984 and was posthumously inducted into the Rock & Roll Hall of Fame in 2022.

Katz walks by that mural in Carrboro regularly, and the music professor said it always brightens his day.

"I love to see Elizabeth Cotten recognized so boldly in her hometown," Katz said. "These murals are a great recognition of and contribution to our state's cultural heritage."

When asked about his creative inspiration, Nurkin doesn't hesitate: "My 12-year-old daughter, Finch."

Finch, who is also an artist, is with her dad on this particular day, hanging out after school. The two enjoy painting together, and Finch said she loves bragging about her dad to her friends.

In the summer, she sometimes accompanies Nurkin as he heads to another North Carolina town for an assignment. The two enjoy seeing new places and chatting with locals.

"I love it when we're doing a painting and someone will stop by and say, 'I really love that you're highlighting this particular person,'" Finch said. "'And I love that you're doing it *here*.'"

Learn more about Nurkin's project and where to find the murals on Instagram, ***@ncmusicianmurals****, or at* ***musicianmuralsproject.com****.*

Jared Caldwell

Jared Caldwell

LEFT: *Fulton Allen, known as "Blind Boy Fuller," was a pioneering Piedmont blues guitarist and singer; his mural is in Wadesboro.* **BELOW:** *Chapel Hill-born Floyd Council and fellow blues musician Pink Anderson were the inspiration for rock band Pink Floyd's name.*

BY PATTY COURTRIGHT (B.A. '75, M.A. '83)

THE CAROLINA HISTORY PROFESSOR HAS SPENT NEARLY FOUR DECADES SHARING THE ENDURING VALUE OF THE HUMANITIES WITH AUDIENCES INSIDE AND OUTSIDE THE CLASSROOM.

A Heart for the

When students question Lloyd Kramer about the value of a humanities degree, the veteran professor of history responds succinctly: It prepares you for life.


Donn Young

Fields within the humanities and social sciences help people understand the shared human experience, and that is empowering, Kramer said. Some knowledge of history, literature, philosophy, languages, religion or other disciplines that shed light on the world gives people a perspective and framework for dealing with problems, both personal and societal.

"Problems in life are inevitable, and we know from history that other human beings have struggled with issues that are similar to ours," Kramer said. "Whether it's the loss of a job, feelings of disenfranchisement, political polarization, warfare, economic depression or any other crisis, if we understand how the issues we face have also been addressed by generations of people around the world, we have a way to make sense of what's going on today."

For the past 10 years, Kramer has shared a passion for the humanities with people across the state as the first full-time faculty director of Carolina Public Humanities, based in the College of Arts and Sciences. Its programs create a multi-layered cultural bridge, forging deeper connections and sparking curiosity and civic dialogue between faculty and the citizens of North Carolina.

Kramer will step down at the end of June after completing two terms of leading Carolina Public Humanities.

He has long been a devotee of the humanities. With a specialty in modern European history and a focus on 19th-century France, Kramer came to Carolina in 1986 and has worn many hats through the years. In addition to being a favorite professor, he has served as chair of the department of history, interim Faculty Council chair and associate director of the Institute for the Arts and Humanities. He is a recipient of the institute's George Johnson Prize as well as the University's prestigious Thomas Jefferson Award.

OF THE PUBLIC, FOR THE PUBLIC

Service to the state of North Carolina is an intrinsic part of UNC-Chapel Hill's mission, with "lux, libertas" — light and liberty — as the

Humanities

Donn Young

ABOVE AND LEFT: *UNC historian Lloyd Kramer is teaching his last class this semester — "Modern European Intellectual History," which covers the evolution of ideas in Europe from the 18th century to the beginning of the 21st century.*

University's founding principles.

Carolina Public Humanities has been involved with the civic life of the state since its inception in 1979.

"We have the expression in our strategic plan that we are 'of the public, for the public,'" Kramer said.

For people to be truly engaged with fundamental institutions like voting and public education, Kramer said, they need a broad perspective and the means to tap into the enormous resources of human experience. It is analogous to a person who has no memory or understanding of what happened in their life last week trying to make sense of their current circumstances, Kramer explained.

He is concerned that today's emphasis on quick, often superficial communication through social media, television sound bites and the like is diminishing the knowledge of history, civic life and political institutions.

"That makes the work of Carolina Public Humanities even more important. Its programs, which include work with public educators across the state, weekend seminars for lifelong learners and collaborations with community colleges, are designed to make people better prepared to engage with civic life as well-informed human beings," Kramer said.

Some offerings, such as the traditional weekend seminars featuring topics such as the protest music of the '60s or a deep dive into the conflict in Ukraine, have been woven into the fabric of Carolina Public Humanities from the beginning. Under Kramer's tenure, others have expanded or evolved in creative ways to meet a growing need.

Carolina K-12 brings the University's vast resources to teachers in every corner of the state. The name and scope of the program changed several years ago with support from the nonprofit North Caroliniana Society, which promotes knowledge of the state's history, culture, literature and environment.

Carolina K-12 provides teachers with a treasure trove of free curriculum materials, lesson plans and activities, all available for download on its website. It also offers a broad range of professional development programs in the humanities for public school teachers.

In 2017, a new position for state outreach was created with support from private philanthropy. That led to

continued

the expansion of Carolina K-12 as well as a host of other new collaborations with community colleges, libraries, bookstores and theaters — all located outside Chapel Hill. Earlier this spring, for example, Pitt Community College hosted an exhibit of student photographs depicting climate change in the American South alongside others featured in the Center for the Study of the American South's quarterly journal *Southern Cultures*.

In Chapel Hill, Carolina Public Humanities has expanded its partnership with Flyleaf Books to offer two programs: The **Great Books Program** features faculty members leading robust explorations of diverse, classic texts with both in-person and online participants. It is a two-way discussion, not a lecture, akin to an ancient symposium or 18th-century salon, Kramer said. **Humanities in Action** highlights a faculty member talking about a specific theme, such as U.S.-China relations or transitions in Latin America.

Other programs are designed specifically to engage the next generation of civic-minded citizens.

With funding from Miriam '83 and Tom Zietlow (MBA '01), Carolina Public Humanities launched the **Zietlow Project for Civic Engagement**, which aims to strengthen U.S. democracy by fostering young people's informed participation in civic life. Students apply a humanities perspective to pressing issues and are encouraged to communicate their understanding to the wider community.

In honor of longtime philosophy professor Maynard Adams, Carolina Public Humanities launched the **Adams Graduate Fellows Program in Public Humanities** and the **Adams Symposium**. Adams, a staunch advocate for the importance of the humanities in public life and education, was the founder of Carolina Public Humanities.

Each year, 10 graduate students from different disciplines are chosen to explore effective ways to interpret the humanities outside the University environment. In addition, the annual symposium features a public discussion of key issues — the environment or anger and forgiveness, for example. This year's symposium focuses on the nature of democracy and how to help it flourish.

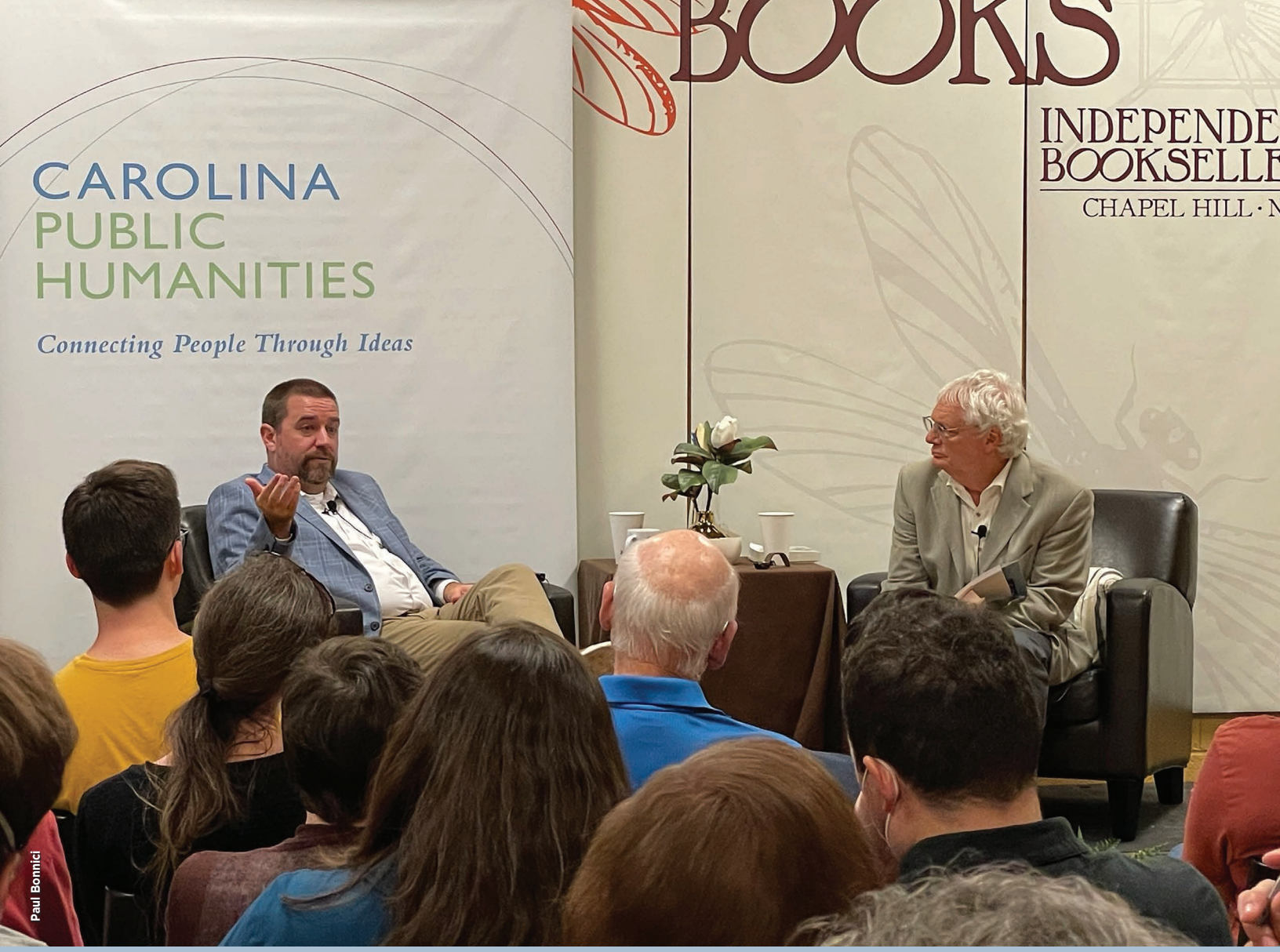
MEETING EVOLVING NEEDS

Over the years, Kramer has helped Carolina Public Humanities create a diverse, expansive portfolio of activities and public programming.

His openness to the staff's innovative ideas and the nurturing way he turns those ideas into action are unrivaled, said Max Owre, executive director. Kramer blends good cheer, gravitas in his field, earnestness in validating other people's stakes in the program and knowing how to get

BELOW: *Kramer with, from left, UNC philosophy professor emeritus Susan Wolf and 2023 Adams Symposium keynote speaker Miranda Fricker of the New York Institute for Philosophy. Fricker spoke on "The Art of Blaming and Forgiving."*

Lindsay Metivier



ABOVE: *Kramer chats with history podcaster and author Mike Duncan as part of a 2022 event at Flyleaf Books in Chapel Hill. Kramer's work on Lafayette is cited in Duncan's book,* Hero of Two Worlds: The Marquis de Lafayette in the Age of Revolution.

things done, Owre said.

Owre has known Kramer since 2002, when Owre came to Carolina for his doctoral work. Kramer was his adviser and the primary reason he chose UNC's history department over other options.

"I can't stress enough how collaborative, creative and fun Lloyd is to work with, and he is the hardest-working person I know," said Owre, who has been an integral part of Carolina Public Humanities since 2009.

Kramer gives full credit to the collaborative spirit of the program's staff and its broad community of supporters.

"It has been incredibly valuable to work with the colleagues on this team who believe in our mission," he said.

THE JOY OF TEACHING

Kramer is hanging up his classroom lecture hat soon as well, as he teaches his final history course at UNC this semester.

"Modern European Intellectual History" covers the evolution of ideas in Europe from the 18th century to the beginning of the 21st century. Kramer wants his students to understand the traditions that have shaped the world and how the past informs the present.

When Kramer retires at the end of the academic year, he hopes to write and possibly to lead a few humanities seminars. He has a firm commitment with McGraw-Hill to update a textbook he first published in 2002, *A History of Europe in the Modern World*. The text is often used in high school AP European History courses and its wide usage helped reinforce to Kramer the importance of the Carolina K-12 program.

As he reflects on almost four decades at Carolina, Kramer is thankful to his students at UNC and the generations of faculty members whose vision influenced him as well as the people he has met all over the state.

"The quality of the people on our campus and their commitment to the public make this one of the great universities," he said. "We conscientiously show people outside Carolina the desire we have to make the world a better place."

Stephen H. Israel ’66 invests **$10 million** in the O.B. Hardison Scholarship for the Humanities, igniting a **‘Humanities Renaissance’** at Carolina.

This new and exciting initiative for UNC-Chapel Hill provides support for full Honors Carolina scholarships. Join Steve Israel, alumni and the University in matching this commitment to the humanities.

Recognizing the importance of the humanities in leading a successful and meaningful life, Stephen H. Israel (B.A., English ’66), Vice Chairman Emeritus, Korn Ferry, established the scholarship in honor of the late Professor O.B. Hardison ’50, whose literature courses changed his life. Hardison was a Renaissance scholar in the department of English who later became director of the Folger Shakespeare Library in Washington, D.C.

The O.B. Hardison Scholarship serves as the first step toward the ambitious goal of raising $100 million for the humanities. This includes support for distinguished professorships, graduate student fellowships and curriculum development grants, as well as additional funding for the Hardison Scholarship.

Join Steve Israel and other Carolina alumni and friends who recognize the critical role that the humanities play in our lives. Your support for this exciting initiative will help Carolina lead the way in the resurgence of the humanities.

“Long after graduation, a classical liberal arts education will serve as an intellectual bedrock no matter one’s career choice, should it be in science, medicine, technology, the arts, academics, business, law or government service; and, of course in the fulfillment of meaningful lives.”

—STEPHEN H. ISRAEL

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UNC COLLEGE OF ARTS AND SCIENCES

honors CAROLINA

Fighting for rural health care access

From Appalachia to the Research Triangle, Caroline Hoover is striving to improve rural health care access, particularly birth and pregnancy services.

BY ANDY LITTLE '24

• *Growing up in a small town instilled in Caroline Hoover how important it is to invest in your community, a value that has shaped her Carolina experience.*

Growing up in Blowing Rock, North Carolina, senior Caroline Hoover saw firsthand how social issues like health care access disproportionately affected her community.

After personally experiencing the impact of these health care disparities at the beginning of her college career, Hoover started seeking answers about the limitations of rural health care through an internship with the **Office for Rural Health** in the North Carolina Department of Health and Human Services.

Those experiences led her to a medical anthropology major at UNC-Chapel Hill, where she is working on a thesis that will examine what factors impact birthing choices and pregnancy experiences in rural Appalachia.

So far, Hoover's interviewees have presented reservations about both hospital births, given the limited resources, and home births, given North Carolina's many legal barriers to having one.

"A lot of the commonalities come back to people wishing that they had more choices," Hoover said.

Hoover has been inspired to see how much her interviewees are willing to share their stories; she even had one ask her to put a copy of her finished thesis on the desk of a hospital CEO.

With a desire to study health care access and experiences from different perspectives, Hoover added a peace, war and defense major and a minor in Slavic and East European languages and cultures. She was delighted to find that the Russian authors she's studied through her minor wrote stories with prominent themes of public health. Her second major has allowed her to examine the world from a global perspective, to dig into issues of legal ethics and to discuss people's experiences with human rights struggles.

"Health is so personal and intimate, but it's also global," she said.

"Social justice and public health needs don't live in a vacuum," she added. "They connect back to the lived experiences we focus on in medical anthropology and the systemic and legal forces we talk about in peace, war and defense."

After graduation, Hoover will continue her studies at Harvard Law School, with plans to become a rural health lawyer and help protect and improve birthing care at hospitals. She also hopes to go abroad in the near future and gain experience in public health outside of the U.S.

While she plans to eventually return to Appalachia, Hoover has cultivated a strong community at Carolina. She has volunteered with **Carolina Mock Trial** for all four years of her undergraduate career and with the **Carolina International Relations Association** as well as the **Compass Center for Women and Families** in the larger Chapel Hill community. She has taken leadership positions in both campus organizations, which has helped her develop a personal mentorship style.

Through CIRA, Hoover acted as the secretary general of the **Model United Nations Chapel Hill**, the largest high school model UN conference in the Southeastern United States. Model UN was an important part of Hoover's high school experience, and she credits it with helping her build both her public speaking skills and self-confidence. However, she saw how many rural students' opportunities to participate were restricted by financial limitations. As secretary general, Hoover designed a comprehensive financial aid program to cover travel and accommodations costs.

"I think that my favorite part of all the organizations I've been a part of is wanting to make things more financially accessible for students of low-income backgrounds and making spaces that maybe they don't think are built for them more accessible to them," Hoover said.

In reflecting on her leadership positions, she added, "I think having a leadership style that's warm and empathetic and friendly is sometimes undervalued, but at UNC I've been affirmed that's the right way to be — as a person and as a leader."

Mentors, matter

Ph.D. student Zack Hall has made an impact at Carolina through his research of subatomic particles and by supporting undergraduate physicists.

BY JESS ABEL '19

"From a very early age, I had questions about everything," Zack Hall remembered.

Those questions were often rooted in the natural world. *Why is the sky blue? What is electricity? How do we understand the movement of objects?*

But it wasn't until a high school science class that he realized all his questions could be studied through the lens of a singular field.

"I was like, 'This is *physics*?'" Hall said with a laugh. His curiosity had found a home.

His studies led him to the Georgia Institute of Technology for a B.S. in physics and mechanical engineering and to California State University, Long Beach, for an M.S. in physics. His research at both universities focused on different aspects of astrophysics — black holes and neutron stars, respectively — and he planned to continue that trajectory when he began his Ph.D. at Carolina in 2017.

"But when I got to UNC, the professor I wanted to work with wasn't taking on any students," Hall said.

That twist of fate led Hall to the "completely opposite side" of physics, from studying some of the largest objects in the universe to researching subatomic particles in UNC physicist Amy Nicholson's research group.

Nicholson's focus is on quantum chromodynamics, or QCD, a subject in theoretical physics that delves into the interactions of the fundamental building blocks of matter: quarks and gluons.

"The question is, how do the interactions between these quarks and gluons come together to form protons and neutrons?" explained Hall.

To help answer this question, the Nicholson group uses a technique called lattice QCD, which rewrites equations that are impossible to solve by hand so that they are interpretable by computational techniques. Supercomputers are then able to run simulations that can be compared to experimental results from the lab.

Hall's proposal to research how lattice QCD might be able to integrate electromagnetic interactions into simulations of the nucleon axial coupling — which has yet to be accomplished by anyone in his field — earned him a 2022 U.S. Department of Energy Office of Science Graduate Student Research award. He spent 2023 working at the Lawrence Berkeley National Laboratory in California.

Donn Young

• *Zack Hall's research uses a computational method to help answer questions about the basic building blocks of matter.*

At that facility, Hall was grateful for the opportunity to learn from visiting scholars and to work side-by-side with his collaborator and mentor, staff scientist André Walker-Loud. After graduation this spring, Hall will return in a postdoctoral position.

At Carolina, he is helping undergraduate students in physics establish their voices and place in the discipline through the Graduate-to-Undergraduate (G2U) Mentoring Program he co-founded. For Hall, a Black scientist, the idea began in the summer of 2020.

"The death of George Floyd resonated with me in such an unexpected way," he said. "Amidst the racial reckoning the country was undergoing, I briefly thought about leaving my Ph.D."

Hall wondered if the only way to make a difference was to find a new field. But a fellow UNC physicist changed his mind.

"I reached out to Professor Sheila Kannappan, and she reminded me, 'You're still needed here in academia, and there are things that you can do,'" he said.

Together, Hall, Kannappan and teaching associate professor Jennifer Weinberg-Wolf created a program that was backed by findings from the American Institute of Physics and supported with funding from the College of Arts and Sciences.

The findings emphasized the importance of creating a sense of belongingness and instilling a sense of "physics identity" in all of its undergraduate students.

After graduation, Hall plans to stay involved in an advisory role. He's proud of the support the program has provided to undergraduate students, but emphasizes that growth happens for the graduate mentors, too.

"Having these interactions with the mentees allows me to broaden my own perspective," he said. He'll take that with him to Berkeley and beyond.

‘Making and unmaking’

Artist Annette Lawrence emphasizes the process of creating and teaching students to embrace unexpected discoveries during the artistic process.

BY JESS ABEL ’19

• *Annette Lawrence’s work can be found in museums including the Dallas Museum of Art and the Museum of Fine Arts, Houston.*

Annette Lawrence was walking to her childhood dance class in Queens, New York, when she first spotted the easels and art supplies through a door down the hallway at the Long Island School of Music, Dance and Art.

Eventually, she followed her curiosity past the dance studio to the drawing class.

“As soon as I looked in, I thought, ‘This is what I want to do,’” she said.

While earning a BFA in sculpture at the Hartford Art School and an MFA in painting at the Maryland Institute College of Art, Lawrence began to explore the elements that would shape her work throughout her career: text and time, data and music, handwritten messages and found materials.

Learning about sculptor Gordon Matta-Clark’s *Conical Intersect*, a critique of urban gentrification in 1970s Paris, made a lasting impression on Lawrence that continues to this day. As an undergraduate, she meticulously assembled paper sculptures out of scrap pieces of cardboard salvaged from the framing shop next to her home. She was left with both the cutouts and their negative space and was fascinated by that relationship.

Lawrence said she avoided addressing social or political elements in her work until graduate school, when she realized that it was “impossible to go forward without acknowledging glaring omissions in my formal education.” A desire to explore race and power dynamics in her art led her to study writers and artists that would become her inspirations: Langston Hughes, James Baldwin, Audre Lorde, June Jordan and more.

Lawrence’s canon of work includes pieces in over 20 solo and 30 group exhibitions in museums and private collections across the country that examine “what counts, how it is counted and who is counting.”

In her 2009 work *Free Paper*, Lawrence used the unsolicited mail she received after she moved homes to investigate personal environmental impact.

In *Standard Time*, a 2016 solo exhibition, she codified and transcribed 25 years of personal journaling into 12 graphite drawings and a dynamic, translucent suspended installation that resembles a circular maze. The exhibit allows others to peer into Lawrence’s life story while maintaining the privacy of her thoughts.

Lawrence encourages that same personal investigation in the classroom and studio at Carolina.

She began her role as the Edna J. Koury Distinguished Professor of Studio Art and chair of UNC’s department of art and art history last August. She brings with her 24 years of teaching and leadership experience from the University of North Texas College of Visual Arts and Design.

“I’m committed to facilitating the experience of making and unmaking, looking and waiting and finding or recognizing what is in front of us by paying attention,” said Lawrence.

This semester, her MFA studio critique class is home to eight student artists of differing disciplines, including photography, sculpture, painting, mixed media and performance art. She is deeply grateful for the time she has with her students and for the support of her UNC art colleagues.

“I have an amazing team,” she said, “and I do not take that for granted.”

Lawrence is currently at work on a project honoring her nephew, Lawrence Wade Kimbrough, who died tragically at the age of 20 in 2021.

“He was with us physically for 7,444 days,” she said. “I had a walking practice while he was alive and committed to walking a mile for every day of his life.” She plans to represent the miles through drawings and paintings in a color palette “that reflects his sensibilities.”

Lawrence is also in the early stages of starting an artist residency in Georgia, West Orchid, with her sister, Jo-ann. The chance to give fellow artists a space to create without boundaries fuels her mission to provide “the gift of time and space to work in a beautiful location supported by other artists.”

Captivated by chemistry

Organic chemist Sidney Wilkerson-Hill is using a Sloan Research Fellowship to develop new small-molecule pesticides to combat mosquitoes that cause malaria.

BY MICHELE LYNN

• *"Science is critical to how society functions," said chemist Sidney Wilkerson-Hill, who has won awards for both his teaching and research.*

Sidney Wilkerson-Hill uses chemistry to transform lives, both those of his Carolina students and people throughout the world who benefit from pharmaceuticals inspired by nature and refined through molecular innovations.

Wilkerson-Hill joined the UNC faculty in 2018. His lab explores ways to make synthetic cyclopropanes, the smallest molecular rings, which contain only carbon atoms.

"There's something special about being able to manipulate naturally occurring molecules to create drugs and pharmaceuticals that we use on a day-to-day basis," said the assistant professor of chemistry.

A key focus of his research is developing new pyrethroids — small-molecule pesticides used to combat malaria-causing mosquitos — since overuse of current pyrethroids has led to resistance among disease-causing pests. He received a 2024 prestigious early-career Sloan Research Fellowship to continue to pursue this work. [See more on UNC's two Sloan winners, both in chemistry, on page 34].

"Given the steady increase in global temperatures, researchers have predicted that insect vectors for malaria will continually become more challenging to combat," Wilkerson-Hill shared in his Sloan research statement.

Growing up in Kinston, North Carolina, Wilkerson-Hill planned to follow the military path blazed by his large family: His dad served as a career Marine, and seven uncles enlisted in different branches of the service. Wilkerson-Hill's trajectory toward science was facilitated by a fortuitous meeting at a regional Science Olympiad with Philip Dail, then director of the statewide North Carolina Science Olympiad. Dail, who also taught chemistry part time at NC State University and ran the program for first-year students at the NC State Wilson College of Textiles, watched as Wilkerson-Hill won all the chemistry events.

After the awards ceremony, Dail asked Wilkerson-Hill about his post-secondary plans. "I told him, 'I'm thinking about going into the military,'" said Wilkerson-Hill. "He said, 'No; here's my card so you can keep in touch. When you're ready to graduate, I will make sure you have a spot at NC State.'" Fast forward to 2010 when Wilkerson-Hill graduated from NC State with honors and two undergraduate degrees. He went on to the University of California, Berkeley, for his doctorate in chemistry and a post-doctoral fellowship at Emory University.

While at Carolina, Wilkerson-Hill has been lauded both for his teaching and research. One of his most meaningful accolades is the 2023 Tanner Award for Excellence in Undergraduate Teaching.

"To receive that and to be nominated and recommended by students for teaching organic chemistry, everybody's least favorite class, is really an honor," said Wilkerson-Hill. He said that his job as a professor is to empower students because when he helps students take control of their own learning, they will become successful.

Wilkerson-Hill was also recently awarded the FMC Corporation's New Investigator Award, which recognizes outstanding early-career professors whose science and research will lead to future breakthroughs. Last year, he was recognized with the Junior Scientists Participation Fellowship for the Bürgenstock Conference, awarded by the Division of Fundamental Research of the Swiss Chemical Society to promising young scientists who are at the beginning of their academic careers. In addition, he is the recipient of a highly regarded NSF CAREER Award. Committed to broadening the field, Wilkerson-Hill is active in programs to address disparities facing people of color pursuing careers in the physical sciences.

He is a fierce advocate for the power of science.

"We are in an interesting time where folks are unsure of the role of science in their day-to-day lives," Wilkerson-Hill said. "I like to remind the public that science is critical to how society functions."

Exploring the special challenges of youth caregivers

Betsy Olson raises the profile of the overlooked and vulnerable by cultivating a culture of collaboration through a geography lens.

BY GENEVA COLLINS

• *Betsy Olson is a social geographer whose most recent research has examined the lives of tweens and teens who spend significant time caring for their parents and other adult relatives.*

"I consider myself a care ethicist, a feminist theorist and a childhood and youth geographer," said Elizabeth "Betsy" Olson, who holds joint faculty appointments in geography and environment and global studies.

For those who associate geography with mapmaking and studying spatial dimensions, that statement might need a little parsing. Olson explains what geography means today:

"Geography is ultimately about the relationship between people and their environments," she said. At UNC, the department is divided into numerous subspecialties, including spatial geography, health geography and cultural geography.

"My work covers an area of social geography, which is concerned with the ways in which people interact — how we create space, how we engage with institutions, policies, practices and economies," she said.

Olson chaired the department from 2018 to 2023, and one of her last actions as chair was to change the department's name from simply "geography" to "geography and environment" to better reflect its broad scope.

In her own research, she focuses on youth caregivers, an overlooked and understudied group. These are the tweens and teens who care for parents and grandparents — helping them get out of bed and take their medicines, for example, while also fixing breakfast for younger siblings and getting everyone off to school. Their own education may be suffering because they are too tired or stressed in class to complete schoolwork; they may miss extracurricular activities because they must rush home to resume their duties.

Olson is finishing up a National Science Foundation-funded project that examined what she describes as the "everyday geographies" of young caregivers. Along with home visits and other types of data collection on the young people, "we gave them GPS units and asked them, 'what does your everyday look like? What is your experience as a caregiver and a student, a friend, an athlete?' We've learned that there are really different experiences of caregiving," she said.

Among the lessons learned from the research: It's important to the youth that their caregiving roles be acknowledged. This group may need more flexibility from teachers due to the demands on them at home, Olson said.

Olson came to Carolina in 2012 after teaching at the universities of Lancaster and Edinburgh. At UNC, she helped found the Caregiving Youth Research Collaborative and used her startup funding to organize the first formal meeting of the group in Chapel Hill in 2015. The connections forged in that group have led to many important collaborations and raised the profile of the field.

Olson also enjoys teaching. In spring 2023, she taught a course she developed, "Social Geography," which was a collaboration with performing arts laboratory Culture Mill, Southern Futures, Carolina Performing Arts and the Marion Cheek Jackson Center. The class focused on the built environment of the campus and culminated in a public "sound walk" around the Old Well and a facilitated listening circle practice.

"My goal was to help students understand collaboration, and what it means to be an academic who partners with the community. Collaboration is messy. You have miscommunications. You have points where you think you're in agreement, and then you find out that you're not," Olson said. "I wanted to teach them the importance of patience, taking time to build trust across differences."

In 2024, the American Association of Geographers recognized Olson with the 2024 Diversity and Inclusion Award, citing her work to foster inclusivity and care, her mentorship of young scholars and her recruitment and retention efforts in the department.

"I think our department has proven that people can have really different views, and that's a good thing," she said. "We can build a better foundation for learning and communicating and engaging when we expand what we think of as the canons of geography."

The sustainability entrepreneur

David Rosenberg credits his Carolina education for honing the analytical and people skills that have contributed to his success in diverse industries.

BY GENEVA COLLINS

Thirty years after graduating from Carolina, David Rosenberg has launched or led an array of companies — in industries as varied as nanotechnology in concrete, vertical farming, insect agriculture and animal-free egg protein.

The threads that weave them together are their focus on sustainability and his entrepreneurial eye for spotting what he calls "supply chains ripe for disruption."

Take his first company, Hycrete, which he launched in 2002. The company used a hydrophobic material that he put into concrete as an admixture to make all of the concrete hydrophobic. He then created a system that made concrete construction water- and corrosion-resistant. The company became a world leader in waterproofing concrete construction.

Rosenberg '94 sold Hycrete in 2012 and was ready for his next entrepreneurial enterprise. Enter AeroFarms, a revolutionary indoor vertical farming company he co-founded. He innovated and integrated technologies to grow leafy green vegetables and microgreens. The growing method is more efficient than traditional agriculture and uses 95% less water and no pesticides.

Rosenberg then spun Inspired Growing out of AeroFarms. The new company takes that indoor growing technology to schools and classrooms. Students grow salad greens and veggies indoors on a setup about the size of a pool table to eat healthier while also learning the science behind the care and feeding of plants.

He is also CEO of Aspire, a pioneer in the insect agriculture industry. Rosenberg has been helping to build the company for the last seven years as a board member. The company uses advanced technology to grow crickets — which are high in protein and fiber — as a pet food additive. In 2023, Aspire opened what is believed to be the world's largest cricket processing factory. The 150,000-square-foot facility in Ontario is highly automated and robotized.

He's also on the board of Every, a company that makes animal-free "eggs." The company genetically sequenced an egg and uses precision fermentation to produce egg whites. And he is a partner in a $400 million venture fund, TAU Capital, that invests in deep tech.

Asked to explain the leap from concrete to microgreens to insects, he said, "I had learned from working at Hycrete how much water goes toward agriculture. As I researched the issue, I realized that to solve water, we need to solve agriculture."

• *David Rosenberg '94, shown speaking at a technology conference, has led numerous businesses that rethink traditional agriculture and food production.*

More research led him to discover efficiencies in growing plants indoors and how operations could be scaled up using technology. The vertical farming lessons — robotic arms, computer-controlled environments — transferred to growing crickets on a commercial scale.

"As an entrepreneur, it's often easier to figure out what is a pain for the industry and how to fix it," Rosenberg said.

As a UNC student, Rosenberg majored in political science, supplemented by a healthy dose of philosophy courses. He credits these classes for honing his analytical skills, which have proven valuable to him as a serial entrepreneur.

"I was very interested in courses that explored the societal construct — what is the ideal way in which people interact?" he said. "I apply a lot of my thinking and problem-solving foundationally. … We have to be not just business leaders, but societal leaders, to create an atmosphere where people can express themselves in a comfortable way."

After graduating from Carolina and a brief stint at an investment firm, Rosenberg eventually went to work for an incubator that developed startups in Israel. This experience taught Rosenberg two key essentials in "disruptive entrepreneurship": challenging assumptions and encouraging healthy debate.

"With a startup, you need to make many decisions with imperfect information; we owe it to ourselves to debate assumptions to get to the truth," he said.

Along the way he earned an MBA at Columbia University.

At Carolina, Rosenberg has shared his experience managing startups by speaking to classes in the College's **Shuford Program in Entrepreneurship**.

"I think entrepreneurship is such a valuable skill," said Rosenberg. "The world needs people who don't just accept the status quo."

XO, Jenny Han

Fans love the bestselling YA author's novels and TV shows. Do they know her heart bleeds Carolina blue?

BY LAURA J. TOLER '76

• *"UNC lives large in my life and my writing to this day," said popular YA novelist Jenny Han. "I'll always be rooting for Carolina."*

Jenny Han's best-selling teen and young adult novels have been published in more than 30 languages.

Her *The Summer I Turned Pretty* trilogy was adapted for Prime Video (and filmed in Wilmington, North Carolina), with Han as creator and co-showrunner. Han was executive producer on Netflix adaptations of her *To All the Boys I've Loved Before* trilogy and is creator and executive producer for *XO, Kitty* on Netflix. She also started her own production company, Jenny Kissed Me.

When some 200 students and alumni heard Han (psychology '02) speak at a UNC Asian American Center talk in 2021, Han was warm, open and funny, said Heidi Kim, center director and a professor of English and comparative literature.

"It was amazing to see students leaning forward and hanging on her every word and laughing at her jokes," said Kim, who nominated Han for the UNC Distinguished Alumna Award she received last fall. "I met more than one student who said they came to UNC because of Jenny Han."

Han answered several questions for the College.

How do you use your Carolina psychology major in your work?

Good storytelling is all about empathy and putting yourself in a character's shoes, even when they're very different from you. As you construct a story, you are constantly asking yourself why a character is doing something, what is driving them — I think having a background in psychology is helpful in that way.

You've enjoyed connections with UNC's Asian American Center. How do you hope your work has been an inspiration to writers and filmmakers of color?

I felt so happy to know that there was a dedicated space on campus for Asian American students, because I knew I would have really appreciated that when I was a student. For me, the top priority when it comes to writing and filmmaking will always be telling the best story, and representation is a natural part of that. I believe that stories should reflect the moment that we are living in, and I think we have seen some real movement in the past couple of years toward better representation, both in front of and behind the camera.

Describe your creative process.

It depends on whether I'm writing for a novel or TV. In my novel-writing life, I tend not to outline and feel my way through a story intuitively. I often say that I picture myself going through a forest blindfolded and feeling my way through. I know where the finish point is but don't always know how I'm going to get there. When I'm writing a book, I have to sink into the story and cast a sort of spell over myself.

When writing for TV, I am also producing the season in my head, so it's much more pragmatic. You are constantly thinking about practical constraints like budget, time, what's creatively possible. TV is also much more structured and requires more outlining and collaboration.

What excites you most when you are adapting your work for the screen?

I'm excited to continue bringing these stories that are so close to my heart to the fans who have loved them from the beginning, as well as telling new stories.

We understand you are a big Tar Heel basketball fan.

UNC lives large in my life and my writing to this day. In *The Summer I Turned Pretty* books, Conrad Fisher is a passionate UNC basketball fan. Also, when I was on set in Korea for the first season of *XO, Kitty* [in 2022], I remember sitting by the monitors, listening to the radio for updates on the NCAA championship and rejoicing when I found out that we had beat Duke. I'll always be rooting for Carolina.

Lives guided by great books

BY MEREDITH TUNNEY

Rarely do students have the chance to recreate their favorite class and have their beloved professor join them more than 40 years later. Thanks to close ties formed during English Professor Weldon E. Thornton's "Great Books Seminar" in 1981, several of those students — now in their early 60s — have done just that.

Inspired by Thornton's teaching and humanistic approach to learning, they have reconvened to reread most of the books from the original syllabus as well as more contemporary complements to the traditional canon.

Thornton taught for 44 years at Carolina before retiring in 2005. During that time, he received five teaching awards, including the Board of Governors' Award for Excellence in Teaching.

Dubbed the "Great Books 40+" book club, Barbara Hyde '83, Kim Kleman '83, Anne and Bob Royalty '83 and others from the original class have met twice a month for the past three years.

"We thought: Wouldn't it be amazing to reconstruct this very formative experience we had as students, this time with the benefit of decades of life experience?" Hyde said. "Grappling with extraordinary works of literature with engaged classmates and an inspiring teacher was an experience that I always hoped a college class would be. The reading schedule was grueling, but something we were secretly proud of."

Today, the class meets over Zoom and in person to reexamine texts, which have included Plato's *The Republic* and Dante's *The Divine Comedy*.

"We're able to have these rich conversations because of that grounding with the class in 1981," said Kleman.

In addition to the yearlong "Great Books Seminar" that met twice a week, Anne Royalty recalls being invited to Thornton's house weekly. "He created a space for really engaging with intellectual and personal questions outside of the classroom," she said. Bob Royalty cites Thornton as the reason he became a professor of history and religion.

During the reading group's first meeting, via Zoom, in January 2021, Thornton, who was in the advanced stages of Parkinson's disease, was able to join.

"We thought: Wouldn't it be amazing to reconstruct this very formative experience we had as students, this time with the benefit of decades of life experience?" — BARBARA HYDE

More notable than their professional accomplishments was "all the good they've gone on to do in the world," said Barbara Thornton, Weldon's wife of 65 years, who also joined that first meeting. "Weldon was so pleased by that."

Book club members agreed that their professional and personal accomplishments are a byproduct of the commitment to vigorous intellectual pursuit and an appreciation for life that Thornton modeled and taught. He encouraged his students as they explored the enduring life questions found in the books they read together.

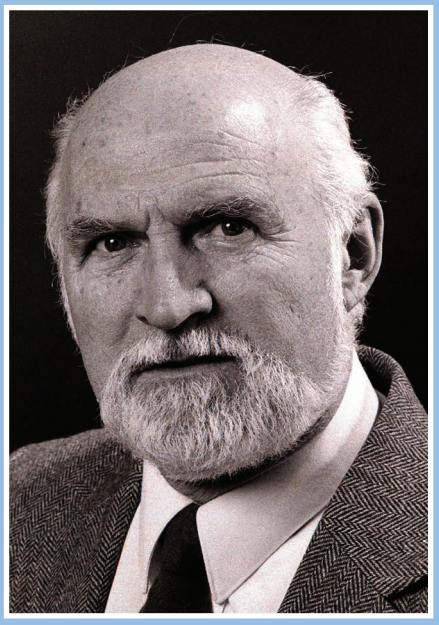
"He treated us as equals learning alongside him," Kleman recalled. "I remember thinking, 'what can I say about Virgil's *Aeneid* or Homer's the *Iliad* at age 19,' but the confidence I gained from being his student has stuck with me throughout my life."

Thornton passed away at age 86, about six months after the group's first meeting.

THE WELDON E. THORNTON HONORS DISTINGUISHED TEACHING AWARD AND SOCIETY

John McGowan, a Carolina teaching legend and prominent scholar, stepped in to facilitate the group's discussions. McGowan and Hyde are leading the fundraising effort to establish the Weldon Thornton Teaching Award and Society in Thornton's honor.

The award will recognize outstanding teaching in the humanities and be presented to a professor who demonstrates many of Thornton's qualities.



• *Weldon Thornton's faculty portrait in 1997.*

Award recipients will become a part of the Weldon Thornton Society, composed of alumni, faculty, students and friends of the Carolina community and founded on the idea that humanistic inquiry fuels a lifetime of ongoing reflection, discovery and community.

"The new Weldon Thornton Society and Teaching Award affirm the central place of the humanities in the arts and sciences tradition that has long defined a Carolina education," said Jim Leloudis, the Peter T. Grauer Associate Dean for Honors Carolina. "Today, more than ever, we need humanistic study to clarify our values, guide our engagement with the great issues of our time and help us shape purposeful lives."

When asked about what her late husband would think about the teaching award and society created in his honor, Barbara Thornton said, "He'd be so thrilled."

To learn more, visit: **go.unc.edu/thornton**. *To make a gift to the Weldon E. Thornton Honors Distinguished Teaching Award, contact Anne Collins at anne.collins@unc.edu or (919) 962-0108.*

Gift to support philanthropy fellow is a fitting legacy for devoted Tar Heel

BY ASHLYN COELHO-ALLEN '16

The late Charles Milton Shaffer Jr. '64 had deep roots at Carolina, coming from a long line of Carolina alumni. He was a Morehead scholar who played and started on Coach Dean Smith's first three basketball teams, played varsity tennis for four years and was elected class president in 1963 and 1964. He would go on to graduate from the UNC School of Law in 1967 before beginning an illustrious 35-year career as an attorney at King & Spalding in Atlanta, Georgia.

Shaffer was a lover of sports, a lover of Carolina, and most of all, a believer in the power of philanthropy. He learned the importance of altruism and fundraising from his father, Charles M. Shaffer Sr., who worked as UNC's first director of development for 25 years.

• *From left, Harriet Houston Shaffer and Charles Milton Shaffer Jr. with their children, Emi Shaffer Gragnani, Caroline Shaffer Vroon and Charles Shaffer III, attending a major league baseball game together.*

"There's an old saying that Dad taught us by the way he lived. 'We make a living by what we get, but we make a life by what we give.' This fellowship will hopefully help to inspire UNC students for generations ahead."

— CAROLINE SHAFFER VROON

"Dad taught us all at an early age the importance of giving back to our communities in whatever way we could. From teaching a literary class at Sunday School to volunteering at a local homeless shelter to co-chairing the Carolina First Campaign, he led by example," said Shaffer's daughter, Caroline Shaffer Vroon '91.

To carry on the philanthropic legacy of Shaffer, who died in 2021, his wife of 56 years, Harriet Shaffer, and the couple's children, Emi Shaffer Gragnani '99, Vroon and Charles Shaffer III, have created a fund for the Philosophy, Politics and Economics (PPE) Program, a popular minor housed in the department of philosophy, in his honor.

The Charles M. Shaffer Jr. Distinguished Fellow in Philanthropy Fund will enable the College of Arts and Sciences and the PPE Program to appoint annually a fellow with extensive knowledge of philanthropy. The Shaffer Distinguished Fellow will play a central role in teaching a PPE course that helps students think about the social, political and moral role of giving back in today's world.

Geoff Sayre-McCord, director of the PPE Program and Morehead-Cain Alumni Distinguished Professor, noted that the program "gives students the analytical tools they need to understand the role, impact and significance of the formal and informal social and political institutions that shape the world in which we live — which crucially include philanthropy and charity."

Beyond his generosity to Carolina, Shaffer gave back in other ways. He was a member of the Atlanta 9, a group that brought the 1996 Olympics to Atlanta. Following his career as an attorney, he was named president and CEO of the Marcus Institute, which supports children with developmental disabilities, and later joined the Westminster School as vice president for institutional advancement in retirement to help them exceed their $100 million campaign goal.

Gragnani said her father encouraged others to not just focus on their careers, but to use their skills to give back to their communities. The new fund is a great way of continuing her father's legacy by expanding his impact, she said.

The Shaffer family hopes that others are inspired by his passion to address important needs in their communities, and they hope to secure additional funds to endow this new initiative.

"Carolina is already full of such passionate students," Gragnani added. "We're excited to see how this fellowship opens their minds about the impact of philanthropy."

"Carolina students, alumni, faculty and staff already have a strong culture of giving back, and it is rewarding to see a gift that will bring an expert on philanthropy to campus to continue to cultivate this mindset in the next generation of leaders," said Jim White, Craver Family Dean of the College of Arts and Sciences.

Vroon said, "There's an old saying that Dad taught us by the way he lived. 'We make a living by what we get, but we make a life by what we give.' This fellowship will hopefully help to inspire UNC students for generations ahead."

If you would like to make a gift to the Charles M. Shaffer Jr. Distinguished Fellow in Philanthropy Fund, visit **go.unc.edu/shaffer**.

THE TREE KEEPER

Kimmy Hansen, a certified arborist and master's student in city and regional planning, is analyzing the impact of future development on the tree canopy of Bald Head Island. The North Carolina barrier island boasts the second-largest maritime forest in the state. Carolina celebrated Graduate and Professional Student Appreciation Week in early April. Journey with Hansen to Bald Head Island by reading more of her story at go.unc.edu/tree-keeper.

Life-changing lessons from a beloved professor

BY DREW GUITERAS

From the late 1960s to the early 2000s, in the weeks leading up to class registration at Carolina, a piece of advice was whispered through generations of Tar Heels, like the quiet sharing of a family's secret recipe. To the student planning the upcoming semester, this advice may have come from a friend or older sibling — or in the later years, even from a parent.

• **ABOVE:** *Kimball King led summer trips to London for 25 years, helping more than 1,000 students discover the power of live theater.* • **LEFT:** *King leads a class discussion in 1967.*

It went something like this: Find out what class English professor Kimball King will teach next semester and enroll in it.

For John Preyer '90, it was a friend who shared the "take the class" advice. Preyer initially resisted, protesting that he was a political science major with no use for 20th-century British theater.

"I said, 'I don't want to read a bunch of British plays,'" Preyer recalled. "My friend said, 'Just trust me, you're going to love him.' The class was full by the time I registered, but Kimball ended up making a spot for me — and that changed my life."

CULTIVATING A LOVE OF LITERATURE

Arriving at Greenlaw Hall each morning dressed neatly in a jacket and tie, King carried himself with a look and manner that suggested the Ivy League style of his hometown of Princeton, New Jersey. A student wandering into his class for the first time might mistakenly expect a more traditional approach to teaching, a professor intent on imparting his own considerable knowledge while spending no time cultivating enjoyment of or connection with the material.

But King's teaching style was precisely the opposite of that. For King, personal responses to art and literature were all that mattered. Students adored King for his approachability, for his interest in their literary tastes and for his insistence that great works of literature were created to fill human beings just like them with feelings that were worthy of deep exploration.

A group of former students are now fundraising to create an endowed professorship in honor of King, who died in 2019. With more gifts, the **Dr. J. Kimball King Distinguished Professorship** will support a faculty member whose teaching and scholarship cultivate appreciation of and deeper connection with literature.

King also led summer trips to London for 25 years, helping more than 1,000 students discover the power of productions at the city's many world-class theaters. The list of plays ranged from Shakespeare classics to avant-garde productions by contemporary playwrights.

King was well-known and respected among many luminaries of modern theater. On one London trip, Brandon Lowery '99 recalled seeing a production of Tom Stoppard's *Rosencrantz and Guildenstern are Dead* soon after the film *Shakespeare in Love* had catapulted Stoppard to a new level of fame. Stoppard was there that night and came over to greet King, who insisted on an impromptu discussion with his students. Other students remembered meetings and discussions with writers and actors including Sam Shepard, David Mamet and John Malkovich.

'HE WOULD BE VERY PROUD'

King's son Scott said that the movement to create an endowed professorship is the ideal way to honor his father.

"We would love to see his name live on in association with the University he devoted his life to, and he would be very proud of that as well," he said. "He was very committed to teaching, and his hope was always that he could help people appreciate the range of great writing and drama and art out there in the world."

To support King's legacy of teaching excellence, make a gift to the Dr. J. Kimball King Distinguished Professorship Fund at go.unc.edu/KimballKing.

CAROLINA ASIA CENTER TRAINS FORT LIBERTY SOLDIERS

The Carolina Asia Center has been providing training and education opportunities for soldiers from Fort Liberty, one of the world's largest military bases, located in eastern North Carolina, to better understand Asia.

The center's relationship with Fort Liberty goes back for several years, including training opportunities offered in 2022 to civil affairs units engaging with Asia. In 2023, this work broadened to include training for language students at Fort Liberty, lectures on the base in Cumberland County and more visits from soldiers to the UNC campus. Additionally, the center is underwriting classes that are helping military staff enrolled as students at UNC to prepare for their work in national security after graduation.

The center has also worked with soldiers who are from the U.S. Army John F. Kennedy Special Warfare Center and School, are members of special operations forces and are learning the Indonesian language. Last June, several of these soldiers and their language instructors came to Chapel Hill to play on the Indonesian gamelan and angklung instruments. They also practiced speaking the language with Indonesian UNC graduate students and heard a lecture from one of Carolina's experts about religion in the country.

Center associate director Kevin Fogg traveled to Fort Liberty last July and lectured on Indonesian regionalism to soldiers enrolled in the language program and lectured on Chinese policy toward Muslims for a civil affairs unit training on Asia.

• *"The chance to speak to graduates is a huge honor and humbling," said Commencement speaker Zena Cardman.*

ASTRONAUT ZENA CARDMAN TO DELIVER SPRING COMMENCEMENT ADDRESS

NASA astronaut and alumna Zena Cardman will deliver the keynote address at the University's Spring Commencement May 11 in Kenan Stadium.

The double Tar Heel is preparing for her first spaceflight. She is the commander of NASA's Crew-9 mission, a recently announced four-person crew that will launch on a SpaceX Dragon to the International Space Station later this year. The group will join an international crew onboard the ISS. They will conduct a wide range of operational and research activities during their long-duration mission. Cardman was selected as a NASA astronaut in 2017. Since completing initial training, she has supported real-time station operations and development for lunar surface exploration.

Cardman earned a bachelor's in biology in 2010, with minors in marine sciences, creative writing and chemistry, and a master's in marine sciences in 2014 from UNC. During her time at Carolina, Cardman was heavily involved in research of microbial systems, particularly in extreme environments like hydrothermal vents and hydrocarbon steeps. Her research took her all over the world, including the Arctic and Antarctic. The people she met and relationships she formed stick with her today, she said.

"The people of Carolina are what I took away … and what I've carried with me through my career," Cardman said. "Service-oriented, creative, genuine, interdisciplinary — these are words I use to describe my former classmates and current students. These are the values and attributes I strive for as an astronaut."

Inaugural leader and new minor for School of Civic Life and Leadership


Donn Young


Jon Gardiner

• *LEFT: Jed Atkins will lead the College's new School of Civic Life and Leadership.*

The College of Arts and Sciences' School of Civic Life and Leadership, launched last fall with the appointment of nine faculty, has an inaugural director and dean in place and has created a new minor in civic life and leadership.

Jed Atkins began his new position in late March as director and dean. The school, which goes by the acronym SCiLL, is housed within the College and its classes are part of the general education curriculum.

"By having a very wide-based audience, you bring people together to investigate deeply human questions about liberty, justice and equality," Atkins said. "And wrestling with these questions helps us transcend the very different places from which we start."

Atkins comes to Carolina from Duke University, where he was the E. Blake Byrne Associate Professor of Classical Studies. He is a scholar of Greek and Roman political and moral philosophy, the history of political thought and contemporary debates on tolerance, civility and civil discourse. Before joining the Duke faculty in 2009, he earned his M. Phil. in political thought and intellectual history and Ph.D. in classics, both from the University of Cambridge.

At Duke, Atkins directed the Civil Discourse Project, which sponsors scholarly activities that promote engaged discourse to create intellectually diverse communities. He also oversaw the Transformative Ideas Program for sophomores, which includes an initiative on civic life and thought.

SCiLL is designed to foster a culture of reflection and intellectual curiosity that helps democracy thrive. The minor in civic life and leadership is set to launch in fall 2024. The minor was created to appeal to students of all majors, providing them with interdisciplinary training in the humanities and civic and scientific literacy.

The civic life and leadership minor will consist of three core courses and two electives. The core courses will teach the foundations and practice of civic life and leadership, and a culminating capstone will involve a service-learning or original project that will allow students to put the interdisciplinary skills they have developed into practice.

The two required elective courses can be chosen from more than 30 offerings grouped into three categories: scientific evidence and engagement, intellectual history and humanities, and civics and political institutions. The two electives must come from different categories.

One new elective created especially for the minor is "Science and Society." This course explores the role of the sciences in the polity in general and in American democracy specifically.

"One of the strengths of this minor is that it draws from a multitude of disciplines across campus, exposing students to a range of courses that will help them to understand the historical roots and future repercussions of contemporary debates," said Matthew Kotzen, a faculty member in the school and chair of the philosophy department.

In all, nine academic departments spanning the arts, humanities, social sciences and natural sciences will offer courses that meet the elective requirements.

"We are predicting strong student interest in the civic life and leadership minor. It speaks to the polarization of our times," said Jim White, Craver Family Dean of the College. "A strong democracy depends on engaged citizens who are committed to open inquiry and working with others to embrace challenging topics. This new minor will equip them with these skills."

Learn more at **civiclife.unc.edu**.

SLOAN FELLOWSHIPS AWARDED TO TWO CAROLINA CHEMISTS

Abigail Knight and Sidney Wilkerson-Hill, assistant professors in the department of chemistry, were awarded 2024 Alfred P. Sloan Research Fellowships, among the most prestigious awards given to early-career scientists.

A total of 126 early-career researchers were awarded the fellowships, given to extraordinary U.S. and Canadian scientists whose creativity, innovation and research accomplishments make them stand out as the next generation of leaders.

Knight's research is at the intersection of bioinspired materials, chemical biology and polymer chemistry. Her lab focuses on designing novel macromolecular materials with functions inspired by biological systems.

She is the previous recipient of an NSF CAREER Award and a W.M. Keck Foundation Award. Knight received an undergraduate degree from UNC in 2010 and a Ph.D. from the University of California, Berkeley in 2015.

• *Abigail Knight and Sidney Wilkerson-Hill are Sloan Fellows — among the most prestigious awards given to early-career researchers.*

Wilkerson-Hill is an organic chemist whose lab focuses on developing pyrethroids, small molecule pesticides used to combat mosquitoes and other insects. These synthetic materials function by mimicking naturally occurring compounds found in plants and can be used in vector control programs to combat malaria.

He is the recipient of the 2024 FMC New Investigator Award, which also recognizes the contributions of outstanding early-career scientists, and the previous recipient of an NSF CAREER Award. Wilkerson-Hill received undergraduate degrees from NC State in 2010 and a Ph.D. from the University of California, Berkeley in 2015.

TWO NEW DEGREES OFFERED IN APPLIED SCIENCES, DATA SCIENCE

Two new academic degrees will be offered in the College beginning this fall.

The department of applied physical sciences will offer a B.S. in applied sciences that connects engineering to the liberal arts. The undergraduate degree is a first for the decade-old department, which offered a Ph.D. when it launched in 2013, and introduced a popular minor in applied sciences and engineering in 2020.

The new major will initially offer tracks in materials engineering and environmental engineering.

In the materials engineering track, students will work with materials and technologies that are the building blocks of industry, such as next-generation energy storage, polymer membranes for clean water, green plastics and medical devices, to design new products and improve existing ones. These upper-level courses will be taught by faculty in applied physical sciences.

In the environmental engineering track, students will learn how to use scientific and engineering methods to protect people from pollution and other negative effects of environmental degradation and to design solutions for sustainable resources, human health and environmental restoration. Faculty in the department of environmental sciences and engineering in the Gillings School of Global Public Health will teach these upper-level courses.

UNC will offer two new undergraduate degree programs in data science this fall. The B.S. in data science will be in the new School of Data Science and Society, while the B.A. in data science will be in the College. The B.S. degree is the first undergraduate degree for the School of Data Science and Society.

The B.A. degree program will be based in the College's department of statistics and operations research, or STOR. This degree has an emphasis on applied data science training for students pursuing a variety of career paths. A minor in data science, launched in 2021, is also offered through the College and housed in STOR.

• *The applied sciences degree will offer undergraduates two tracks: one in materials engineering and one in environmental engineering.*

PARKER RECEIVES JEFFERSON AWARD, ONE OF UNC'S HIGHEST HONORS

Patricia Parker, the Ruel W. Tyson Jr. Distinguished Professor and director of the Institute for the Arts and Humanities, was awarded the Thomas Jefferson Award, one of UNC's highest faculty honors, last fall.

The Jefferson Award is awarded annually to a faculty member who has "best exemplified the ideals and objectives of Thomas Jefferson," whose complex legacy includes the values of democracy, public service and the pursuit of knowledge.

Two weeks before Parker received the award, she visited Monticello, Jefferson's estate in Virginia, and took the "From Slavery to Freedom" tour.

As a Black woman and a descendant of enslaved ancestors, Parker wanted a glimpse of what life was like for the nearly 400 Black men, women and children Jefferson enslaved there, including Sally Hemings, the mother of four Jefferson children.

Still thinking about her trip when she returned to Chapel Hill, Parker accepted the Jefferson Award in honor of Hemings and of civil rights trailblazer Ella Baker.

Parker has long been influenced by the leadership of Baker, a North Carolinian and early architect of the civil rights movement who used a grassroots approach to empower people. Throughout her academic career, Parker, former chair of the department of communication, has studied and written books about the late Baker's method of "servant leadership," and she founded the Ella Baker Women's Center for Leadership and Community Activism in 2007.

• *Mark Katz in the UNC Beat Lab. He is the founding director of an international hip-hop diplomacy initiative.*

CELEBRATING 10 YEARS OF HIP-HOP CULTURAL DIPLOMACY PROGRAM

When asked about the way hip-hop can create bonds between people across geopolitical divides, Mark Katz said that he once asked a Serbian break dancer if there were challenges in performing with dancers from other Balkan countries.

"He looked at me and said, 'You can't fight when you're dancing together,'" Katz said. "'If you have a shared goal, you set aside your differences because collaboration is more important than your ego.'"

Katz, the John P. Barker Distinguished Professor of Music, has seen many of those examples as the founding director of **Next Level**, an international hip-hop cultural diplomacy initiative of the U.S. State Department's Bureau of Educational and Cultural Affairs, UNC-Chapel Hill and the Meridian International Center.

Katz stressed that even though he launched the program, its success is due to a robust creative community of hip-hop artists from the around the world, artists who have helped to fulfill Next Level's goal of building a global community through hip-hop culture.

The program, which has now been to more than 50 countries, engaged with over 100 hip-hop artist educators and reached thousands of people, celebrates 10 years in 2024.

"It has been a way for people with a common love of hip-hop to connect across vast differences of language, religion, culture, race, gender and more," Katz said. "What I value the most is that people often say, unsolicited, that this was a life-changing experience."

Katz, a classically trained violinist, has been studying and writing about hip-hop music for almost 25 years. He wrote about Next Level's impact in a 2019 book *Build: The Power of Hip Hop Diplomacy in a Divided World*.

To mark the program's major milestone, Carolina Performing Arts convened global hip-hop artists in the spring for a series of master classes, workshops, jam sessions, talks and performances.

Read more at **go.unc.edu/hip-hop**.

WONDERS NEVER CEASE

By Ross White

All day bees built honeycombs
around the sleepers,

weaving wax
into hexagons, laying in honey,
sealing the walls.

Work which might
have taken months,
all in an afternoon.

The sleepers dreamed of corn cobs
and race cars,
of Egyptian burial rituals.

The dreams were fitful, but the sleepers
hardly shifted
as thin wings sputtered
around them, larva maturing in minutes.

The sleepers slept peacefully,
their arms crossed
as though
they had been laid,
lifeless,
in a pharoah's tomb.

Each of us has only minutes left to live.

Ruin lies in rushing through.

"Wonders Never Cease" is from Charm Offensive, *the debut poetry collection by Ross White, teaching assistant professor and director of the creative writing program in the department of English and comparative literature. White is winner of the Sexton Poetry Prize and the director of Bull City Press, an independent publisher of poetry, fiction and creative nonfiction.*

My semester in Japan

BY XENIA WEAKLY '24

When I told my friends and family I was studying abroad in Asia, their first response was often "why?" It was so far away and foreign that it seemed strange for me, a Black girl from the tiny town of Clayton, North Carolina, to want to travel there.

I had no personal connection to Asia. I was simply fascinated by the culture and customs of Japan.

I certainly got my fair share of cultural exposure while abroad. The trains were as fast as they were punctual. The food was as delicious as it was inexpensive. Fun was everywhere all the time: Karaoke, arcades, temples, themed cafes, amusement parks. There were some aspects that admittedly took some adjustment. For such a technologically advanced country, Japan sure loves its paperwork. Political talk suddenly became taboo.

Expectations within the classroom were high, and I missed the prioritization of mental health in America.

My biggest help in navigating this unfamiliar territory? The Japanese people themselves.

Although often private, they were extremely thoughtful, considerate and hospitable. While studying at Nanzan University in Nagoya (a modest city close to Kyoto and Osaka), I took a Japanese culture class. My *sensei* (teacher) shed light on key aspects of the society that I struggled to understand.

During a lecture, she explained that Japan's high population and limited land mass meant that empathy became a cultural practice. From childhood, Japanese citizens are raised to always be considerate — interactions are intended to cause the least amount of inconvenience for both people. This allowed for unspoken understanding, mutual connection and smooth communication. A reflexive sensitivity to others.

I was continually fascinated by interactions with my Japanese peers and how different they were from what I was used to. Before I went abroad, I didn't think of myself as much of an American. Sure, I was a citizen, but I just happened to be born here. However, my national identity became quite clear when put into sharp contrast with others. I was a Black American, descendant of Jamaican ancestors. The way I thought, talked and interacted with the world was far from accidental. Going abroad made it clear to me just how much we are shaped by our national identities. This makes it all the more essential for us to learn about those who are different from ourselves.

This was further reinforced upon my return in speaking with the fellow Phillips Ambassadors in my cohort. Although we went to a variety of countries, something we all returned with was a deeper appreciation of our differences. There is a unique beauty in taking the time and effort to understand something beyond your bubble. Our willingness to engage with people of other cultures resulted in treasured bonds and rich relationships — its own reward.

• *Xenia Weakly, pictured in Akihabara, Japan, learned through her study abroad experience that it is "all the more essential for us to learn about those who are different from ourselves."*

My time abroad made me realize that I didn't need a special reason to want to go to Japan. Curiosity and a willingness to learn is more than enough. In a rapidly changing world, the only thing that remains constant are people. Reaching out — across seas, across continents, across borders — is as necessary as it is fulfilling. So the next time you find yourself asking why step outside of your comfort zone, instead ask yourself, why not? If your experience is anything like mine, you will have found it well worth the risk.

Xenia Weakly is a senior double majoring in English and comparative literature and communication studies. She was one of seven fall 2023 Phillips Ambassadors. Upon graduation, she plans to pursue a career in publishing. She hopes to return to Japan soon to continue honing her language skills.

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