Fall/Winter 2025

"We have a story to tell."

Clark

Our Planet. Our Clark.

A SPECIAL ISSUE

Ava Soch '28 is a finance major, a lacrosse player ... and a citizen of the world. She acknowledges "a lot of work needs to be done" to secure an ecologically sustainable future for her generation, but says Clarkies are driven by the desire to improve people's lives—then take action to accomplish it. "It's powerful what they're doing," Soch says. Please turn to page 28, where Clark students share more of their thoughts on the state of our planet and their hopes for the future.

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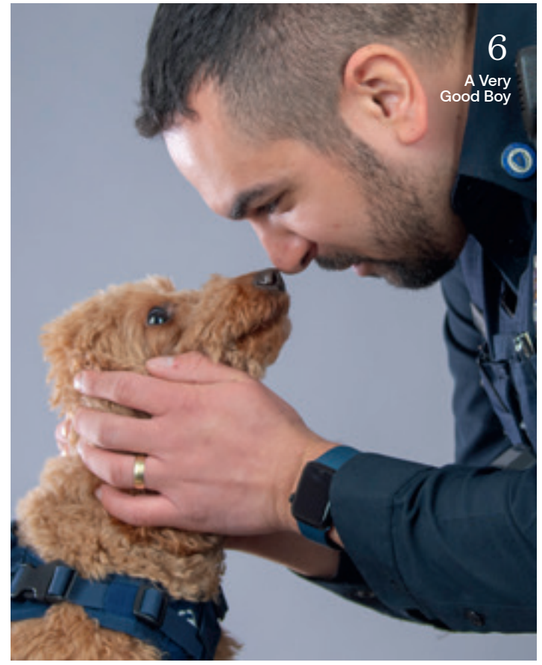
"THIS IS A TODAY PROBLEM."

OPPOSITE: STEVE KING



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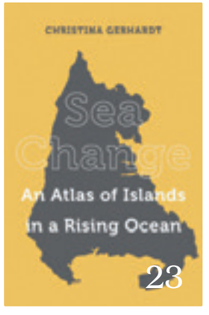
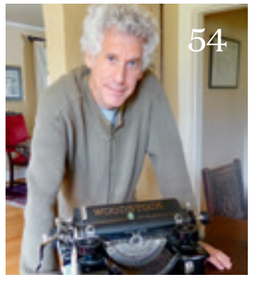


"The planet needs this, and students are hungry for it."

"I was only after the truth."



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President's Message
David B. Fithian '87

We are energized. We are united.

IN THIS SPECIAL EDITION of Clark magazine, on pages 28 and 29, we bring forward the voices of our students—representing the next generation of leaders who will tackle our world's most intractable challenge. They eloquently express their thoughts about the increasingly fragile state of our planet. While words like "pressure," "anger," and "late" (as in: Is too late to fix?) crop up in their quotes, other words and phrases supply a heartening counterbalance. Among them are "hope," "energy," and, my favorite, "revolutionary optimism."

In establishing the School of Climate, Environment, and Society, we give Clark students, and our world, more reasons for revolutionary optimism.

For many decades, Clark has raised awareness of, and pursued solutions for, the most imposing threats to our planet. Clark researchers have sought answers in every corner of the globe; they've trekked the ice of Antarctica, descended into mines in South America, and peered from the sky using GIS technology—some of it developed here—to assess the health of the Earth. Our history is filled with examples of faculty, students, staff, and alumni who have built a better world through policy-making, community development, and scientific discovery.

Our new School of Climate, Environment, and Society signals an amplification of our efforts to find human-centered solutions to our climate challenges. The school represents the very best of Clark's approach: removing barriers between disciplines to promote collaborative and creative thinking, and inspire focused and decisive action.

At a kickoff event in September, we gathered outside the Shaich Family Alumni and Student Engagement Center to plant one of nearly 80 trees Clark has added to our campus and Main South neighborhood in the past two years. The Shaich Center is a LEED Gold-certified building, as is the Lasry Center, and our Center for Media Arts, Computing, and Design. It's a reminder that shaping a stronger, healthier, more sustainable climate, environment, and society—at Clark and beyond—is a work-in-progress and we are focused, with determination, on keeping the momentum and impact going.

I am very proud that we have reestablished the Sustainability and Climate Committee, who will help guide the University's efforts to achieve sustainability goals through its operations, academics, and community engagement. We are also reestablishing the full-time position of director of sustainability to oversee University initiatives toward a greener campus. All of this is inspired in large part by our students, particularly the Clark Environmental Action group, who continually challenge us as an institution to "walk the talk" here at home.

This is an important moment for Clark and the world. We are determined, we are energized, we are united, and we are ready to be the force for change that always has been, and always will be, the hallmark of Clark University.

Clark

Fall/Winter 2025

EXECUTIVE EDITOR
Jill Friedman

EDITOR-IN-CHIEF
Jim Keogh

MANAGING EDITOR
Melissa Lynch '95, MSPC '15

—

DESIGN
MO–D
Patrick Mitchell
André Mora

—

EDITORIAL STAFF
Angela Bazydlo
Melissa Hanson
Meredith Woodward King

—

UNIVERSITY PHOTOGRAPHER
Steven King

—

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ADDRESS CORRESPONDENCE TO:
Jkeogh@Clarku.edu

OR MAIL TO:
Jim Keogh
Marketing And Communications
138 Woodland St.
Worcester, MA 01610

—

Visit clarku.edu/alumni, the online community for Clark alumni, family, and friends.

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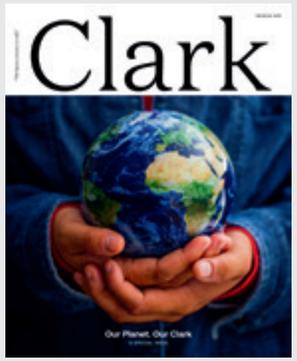


On the cover: Ava Soch '28 photographed by Steve King

Editor's Note
Jim Keogh

Well in Hand

IT WAS ESPECIALLY HOT and humid on the Clark campus, and getting hotter—the kind of day we beg for in the winter and complain about in the summer. August in Worcester is like that.

Melissa Hoffer, the chief climate officer for Massachusetts, was unbothered by the rising temperature when I met her by the library for a quick walk to the Shaich Family Alumni and Student Engagement Center. She'd graciously accepted our irresistible offer to make the drive to Clark to have her photo taken as accompaniment to an interview I'd done with her weeks earlier (you can read the story on page 46).

Hoffer was fully comfortable during the photo shoot in the consummate Clark setting—the view from the ASEC plaza to Jonas Clark Hall is one of our most striking—but she truly became animated during her conversation with Clark students Nate Kidd '26, Aidan Humphreys '26, and Jamie Young '27, who told her about their research this past summer as fellows in the Human-Environment Regional Observatory program.

Her curiosity and respect for their work were genuine, and at conversation's end, our students readily agreed to speak to the Youth Climate Council, a statewide coalition of high school students who advise the governor on climate policy and actions. A hot day turned out to be a very good day.

Fast forward to late September, where in the basement photo studio of the Marketing and Communications building, Ava Soch '28 had the whole world in her hands. You can see Ava's fingers on the cover of this magazine, cradling a small glass globe. In the image, you'll spot Africa, Europe, and the Middle East as it disappears around the horizon's curve. Brazil peeks out from beneath her right thumb.

What you don't see is Cranston, Rhode Island. That's my hometown, and Ava's, too. While this issue is dedicated to the citizens living in all corners of a changing planet, it's also an homage to the places we know so well, that in our mind's eye never change.

The world is a big place, until it feels small. We can't let it slip from our grasp.

Help Us Turn the Page

Your insights are invaluable in helping us tailor *Clark University Magazine* to better serve your interests and needs. We invite you to participate in our brief readership survey to provide the feedback that will help us produce an even better publication for you.

Here's what your input will help us do:

- **Understand how you use and engage with our magazine.**
- **Improve the content and quality of our articles and features.**
- **Enhance the overall reader experience.**
- **Determine the most useful and efficient platforms for delivering great Clark content to you.**

Your participation is very much desired—and your responses are confidential.

Please visit clarku.edu/survey and share your thoughts with us.

Clark

The *Sacro* and the Profane

ART HISTORIAN JOHN GARTON'S WORK TO DOCUMENT ITALY'S *SACRO BUSCO*, ALSO KNOWN AS THE GARDEN OF MONSTERS, EARNS THE MAGAZINE COVER TREATMENT. SEE PAGE 7

RED SQUARE

News from Clark's Campus Gathering Place

STEVE KING

Campus Heroes

Walking the Beat with Mango

CLARK UNIVERSITY'S new police recruit wants you to know that he's happy to see you.

In fact, if you stop to say hi, he might even let you scratch him behind the ears.

Mango is a 2-year-old miniature goldendoodle who travels around campus with his handler, Detective Evan Gaylord of the Clark University Police Department. Earlier this year, Mango completed his training to become a certified therapy dog—and joined the department as its first official comfort dog. He even has a bio on the website. (Favorite activities outside of work? Going on long walks, kayaking, playing with other dogs, and taking naps.)

Gaylord and his wife, Nicole, adopted Mango in March 2023. "I had wanted a big dog," he laughs, "but we picked out Mango"—who is about a foot tall and weighs 12 pounds.

Mango and Gaylord are a certified Therapy Dog Team.

Mango's training began with "puppy kindergarten" for socialization, followed by intermediate obedience and "Canine Good Citizen" training, where he learned to interact with people and other dogs and to behave in situations with busy crowds.

After successfully completing Therapy Dog Team Training—an in-depth program that exposed Mango and Gaylord to different types of real-world situations they may encounter—Mango earned his therapy dog certification. He will be recertified every two years.

Mango's primary role as police comfort dog is "to say hi to everybody and just make people feel good," Gaylord says. "People are welcome to stop by the department to see him if they're having a bad day. Everyone could use some comfort now and then."

At Clark, Mango doesn't attend every call with Gaylord, but he eventually may start accompanying the detective on less urgent mental health calls to provide support. "If it will help someone to just sit and hang out with Mango, we'll do that."

Gaylord says for the most part, Clark students have been thrilled to meet Mango. "I bring him all around campus. He goes into different buildings and brings smiles to people. Students want to pet him, talk to him, learn about him."

While Mango is mainly on campus with Gaylord, he occasionally visits other places, such as local schools or health care settings, and is a frequent visitor to AdCare Hospital in Worcester.

"A lot of people laugh when they see him riding in the cruiser with me and realize he's a police dog," Gaylord says. "They picture a German shepherd or a bloodhound. But he has his vest with his name, department, and badge. And he's fully trained for the job.

"He's a good boy."

Media

Mostro Mash

Nestled between Rome and Florence, the hillside town of Bomarzo appears calm and unassuming. But down the hill, just below a Renaissance palace, appear the monsters—*i mostri*. More than 400 years ago, artists carved beasts and mythological figures into Pier Francesco "Vicino" Orsini's land, a 29-acre park where mystery and wonder emerge from boulders and outcroppings of Tufo stone.

This summer, those statues appeared on the cover of *Archaeology Magazine* for a story highlighting the research of Art History Professor John Garton. The glossy cover photo was taken by Garton, who is working on an international project to preserve the site. With scholar Luke Morgan of Monash University in Melbourne, Australia, Garton is co-editing a forthcoming two-volume book and leading the Digital Bomarzo Project, which uses modern imaging technology to thoroughly document the site and better identify what the original park may have been like.

It's not the first time Garton's Bomarzo research and photos have earned a magazine feature. *Smithsonian* magazine covered the project last fall and explored the mysteries of the *Sacro Bosco*—"a rambling woods filled with surprises," Garton says, "frightful beasts and ancient ruins."

RD SQ

Student Success

Unlocking the Brain's Mysteries

WHEN SHE ARRIVED at Clark University from the Kenyan capital of Nairobi, Krishna Gajjar '25 vowed she would take advantage of every opportunity presented to her.

By the time she graduated this past May with her bachelor's in biochemistry and molecular biology, she had more than fulfilled that pledge.

Gajjar is newly enrolled in the doctoral cell and molecular biology program at the University of Pennsylvania, with an eye toward a career in biomedical research. It's an impressive journey that was made possible by the robust research experiences she enjoyed as a Clark undergrad, which took her from the University's labs to Mass General Hospital/Harvard Medical School and a prestigious institute in Switzerland.

Her earliest days at Clark were an adjustment—not only to the University, but to the United States, a country she hadn't previously visited.

"It was my first time in America," Gajjar recalls. "It was a big change for me, but it wasn't too hard to acclimate to my new environment."

A Presidential Scholar, Gajjar arrived as a pre-med student with a desire to immerse herself in a research endeavor right away. She found that opportunity in the lab of Néva Meyer, professor of biology, whose research seeks to produce a deeper understanding of the central nervous system and its development.

In her first year, Gajjar was the inaugural recipient of the Plave Family Research Fellowship, established by Clark Trustee Lee Plave '80 in memory of his wife, Ilene, who passed away from amyotrophic lateral sclerosis (ALS) in 2017. The fellowship supports neuroscience research conducted in Meyer's lab. Specifically, Gajjar studied how new neurons grow in the annelid worm *Capitella teleta*. "Many discoveries have been driven by fundamental, curiosity-driven research like this," she says.

"I was offered my own independent project, and it wasn't until later that I realized how big a deal it is to be able to do a fully independent project as an undergrad," Gajjar says. "I learned how to read scientific papers, design experiments, learn and execute techniques, and analyze and interpret results. I completely fell in love with research."

During her time at Clark, Gajjar earned research funding from the Steinbrecher Fellowship Program, the Lisa Anne and Leo E. Beavers II Fellowship, and additional support from the Office of Identity, Student Engagement, and Access, and the Office of the Dean of the College.

"Clark really supported me in my endeavors," Gajjar says, "and helped offset the financial costs so that I could concentrate on the research."

The University's twice-yearly academic showcase, ClarkFEST, gave her a platform to present and interpret her technical findings for a general audience of students, faculty, and staff. She presented six times at the event.

"Science communication is one of the most important things we do," Gajjar says.

Some of her work has been done at Massachusetts General Hospital, in partnership with Harvard Medical School. There, Gajjar has worked as a research intern, studying the "gut-brain axis"—"specifically how all of the trillions of bacteria in the gut communicate with the brain and how this could be implicated in neurodevelopmental disorders like autism."

Gajjar continues to analyze behavioral data and DNA sequencing for the project, working remotely. Among her collaborators is Dr. Marcy Kingsbury in the Lurie Center for Autism at MGH, which is funded by Jeffrey Lurie, a 1973 Clark alumnus and owner of the Philadelphia Eagles.

During the summer after her sophomore year, Gajjar was one of only 20 fellows from a global field of 800 applicants at the Swiss Federal Technology Institute of Lausanne.

"I worked in a lab that studied neurodegenerative disease; my project was focused on visualizing neurons," using a specialized technique to label and manipulate individual neurons in the nervous system of fruit flies. "People from 19 countries came together to work in the summer fellowship program," she remembers. "It was an amazing, life-changing experience."

As she completed her undergraduate studies, Gajjar was honored with the Howard Bonar Jefferson Award as well as the American Chemical Society Biochemistry Undergraduate Award. Her robust undergraduate research portfolio, as well as strong mentorship and unwavering advocacy from Meyer and other professors in the Biology and Chemistry departments, helped earn Gajjar admission to the highly competitive UPenn program. The intense and productive research environments that both embraced and inspired her have begun preparing her for a career in biotech, where a new field of opportunities awaits.

JIM KEOGH

"I completely fell in love with research."

STEVE KING

COURTESY OF ELLA CHRISTIE

Student Success

Polar Research Blooms Inside the Hot Spots

New Englanders know the summer is painfully brief, so by the time July rolls around they make sure to head to the water. That could mean surfing in Narragansett, Rhode Island, boating on Lake Winnipesaukee, New Hampshire, or kayaking down the Connecticut River.

Or, in the case of South Portland, Maine, native Ella Christie '27, it would mean traveling farther afield, collecting water samples in the Northern Bering Strait and the Southern Chukchi Sea to better understand how climate change is impacting fragile marine ecosystems.

From July 17 to 29, Christie joined Geography Professor Karen Frey's Polar Science Research Laboratory team aboard the Sir Wilfrid Laurier, a Canadian Coast Guard icebreaker, to conduct studies of the water for the Distributed Biological Observatory, a multidisciplinary Arctic Ocean-sampling program. The observatory has designated eight "hot spots" across the Bering, Chukchi, and Beaufort seas, chosen because of their high concentrations of ecosystem productivity, biodiversity, and overall rates of change.

Christie, an environmental science major with an interest in polar research, knew she wanted to study with Frey before she even arrived at Clark. During her sophomore year, she approached the professor looking for summer internship recommendations.

"Professor Frey said, 'I'll do you one better,' " Christie recalls. "She told me she had an opportunity aboard a research cruise if I wanted to join, and I said, 'Absolutely.' "

In addition to Christie, Frey's team included Clark doctoral students Morgan Lehman and Anna Zhu. Also on board were research teams from the University of Maryland Center for Environmental Science; the Canadian Institute of Ocean Sciences, Fisheries and Oceans; the University of Victoria, British Columbia, Canada; a marine birder from the U.S. Fish and Wildlife Services, and crew members from the Canadian Coast Guard.

Off the coast of Alaska, Christie pulled up water samples at 10-meter increments; the samples were then taken to a lab on board and processed, later to be analyzed for numerous biogeochemical components, including chlorophyll, suspended particulate matter, dissolved organic matter, and algal assemblages. Hundreds of samples were brought back to Frey's Clark lab for these analyses. Christie is assisting with the research this semester.

"We started in Nome and sampled at places near St. Lawrence Island and the Diomede Islands," Christie says. "Visiting Utqiagvik, Alaska, which is the northernmost point in the U.S., was very cool, just to be able to say that I've been there."

A critical component of the project is monitoring changes in algae in the water. Significant increases in algae have been caused by the rapid retreat of sea ice, and those algal "blooms" can sometimes be disruptive, even deadly, to marine life, she says.

The experience of sailing and working aboard the Sir Wilfrid Laurier was memorable for the Clark junior. Christie notes that Lehman and Zhu were exceptionally welcoming and patient, "and broke down certain things for me, which I found very helpful."

"You have a bunch of people who don't have a whole lot of sleep under their belt because they're always working," she says with a laugh. "There were stretches where we'd do sampling, then go to sleep for an hour, and just repeat that cycle until we were done."

Whatever time remained for socializing was usually spent in the mess hall, where the researchers and crew members gathered for meals and conversation. During rare downtime they played a bit of cribbage, a game Christie was taught by the crew.

The Arctic is warming at a rate four times faster than the rest of the world, a phenomenon known as Arctic amplification. Extreme warming is also occurring in her home state: The Gulf of Maine is experiencing rapid warming that threatens marine ecosystems and challenges coastal communities.

Christie is driven to make a difference. She is treasurer of Clark Environmental Action, a student organization that advocates for a more sustainable University and conducts outreach and education efforts for fellow students through initiatives like the annual Green on the Green event. Clark Environmental Action was instrumental in Clark's recent recommitment to more sustainable campus operations.

Climate science is almost certainly in her future, she insists.

"I want to work toward solving problems," Christie says. "We don't have to keep going the way we're going. The tools are there to fix climate change, but getting on the right track has been the difficult part. That's something I'd like to help out with."

JIM KEOGH

> "We don't have to keep going the way we're going."

The Big Picture

Boggy Nights

Prowling a lonely swamp at twilight? It's just another night for students in the lab of Biology Professor Javier Tabima Restrepo, who venture into the wild to conduct research that aims to understand the diversity, genomics, evolution, and ecology of microfungal species associated with multiple hosts and ecosystems. On this night, the students were collecting frogs for an extended study.

Steven King

RD SQ

Clark E

The Clark Experience: Classroom, Career, and Connection

Undergraduate students attending Clark University arrive on campus with the promise of an education that will challenge them, inspire them, and propel them. To that end, they have something working in their favor.

They have The Clark Experience.

The Clark Experience, or Clark E, is Clark's pledge to every undergraduate that they will graduate with the confidence, creativity, and tenacity to succeed and lead a life of consequence, on whatever path they choose. Clark E brings together an exceptional classroom education with a thoughtfully integrated system of career preparation, skill-building, hands-on learning, wellness resources, and community connections.

How? With academic excellence at its core, through The Clark Experience, every Clark undergraduate:

▸ **Develops knowledge and skills through interdisciplinary studies.** Students learn across different fields and deepen their critical thinking. They are inspired to pursue interests and discover new passions, and be exposed to areas of study they've not even thought of. And students have a highly personalized academic experience—learning and working closely with professors through coursework, in the lab, and in the field.

▸ **Finds their place and their people, in the Clark community and beyond.** Students develop networks of mentors and future employers, including Clark faculty or alumni. They make connections and lifelong friends, bound together by common interests and aspirations. And they collaborate, engage, share, and create in new and meaningful ways.

▸ **Discovers and demonstrates their purpose.** Students transform their entire Clark experience—in and outside the classroom—into deeper understanding and curiosity. They reflect and bring cohesion to all they've done from their first year to their last, and craft their personal story. They set personal and professional goals and build a virtual portfolio of the entirety of their Clark Experience that they can share with anyone, anywhere in the world.

▸ **Prepares for meaningful careers through experiential, hands-on learning.** As a Clarkie, career-readiness starts on day one. Students will have extensive experiential learning opportunities—here and abroad—with access to funded research, internships, and student leadership opportunities. They will analyze, synthesize, and tackle complex, real-world challenges. And they will gain a broader view of the world ... to take with them on their journey after Clark.

"A GPA can only tell you so much. There are different ways to be intelligent; there are different ways to be curious."

BIANCA BREZINSKY '26

SOME CLARK E HIGHLIGHTS

▸ **Clark Core**

Literally, the core of every undergraduate student's academic experience. Taken across diverse disciplines, these courses allow students to develop critical-thinking skills and respect for other cultures and perspectives, and introduce students to new ways of seeing, thinking, and knowing humans and the natural world. Clark Core classes encompass First-Year Intensive courses, Problems of Practice courses that offer real-world learning experiences, and the capstone, which can be an honors thesis, research project, or original work.

▸ **The Honors Program**

Through academic excellence, ingenuity, interdisciplinarity, and community—both in and out of the classroom—students unleash their intellectual curiosity. When they graduate with the honors accolade, they are stand-out candidates for potential employers and graduate schools.

▸ **Sophomore Summit**

The Sophomore Summit is an annual conference that empowers second-year students to explore their career interests, develop professional skills, and build connections with alumni and campus resources. Through a combination of interactive sessions, an alumni panel, and networking opportunities, students gain valuable tools to guide their academic and professional journey.

▸ **ePortfolio**

The virtual and personal ePortfolio makes sense of a student's entire Clark Experience—through their academics, experiential learning, cocurricular activities, and reflections—and packages their own unique story. It is a powerful and impressive tool for networking with future employers, graduate programs, or any other engagement after Clark.

Kekoa McArdle

Sports

Kekoa McArdle Stands Tall as NEWMAC Student-Athlete of the Year

Standing at a rugged 6-foot-8 with a signature headband to keep his wavy black hair in check, Kekoa McArdle '25 has never been shy about making his presence known on the basketball court. The center/forward, a bruising rebounder with a passel of get-out-of-my-way power moves inside the paint, scored over 1,000 career points and helped lead Clark to the New England Women's and Men's Athletic Conference championship in his senior year.

This spring, McArdle was one of four athletes named NEWMAC Student-Athlete of the Year. He was the only basketball player from the conference's 12 schools chosen for the award, which is based on academic achievement, athletic excellence, and service and leadership.

"Kekoa truly set the standard for what it means to be a student-athlete, first and foremost in the classroom," said men's basketball head coach Tyler Simms. "On the court, he led and mentored our younger forwards, which will continue to help our program for years to come."

Trish Cronin, director of athletics and recreation, agreed. "Kekoa's relentless work ethic and humility have made a lasting impact on our department, and this recognition by the NEWMAC is a testament to the kind of student-athlete and person he is."

McArdle, a Pittsfield, Massachusetts, native with a degree in psychology and a minor in management, transferred to Clark after playing at the University of Rochester in his first year. He was essential to the team's year-to-year improvement over the past three seasons, culminating in a dominant 80–65 victory over WPI to take the NEWMAC title and earn Clark men's basketball its first NCAA tournament berth since 2010.

He describes his teammates as a "second family."

"We'd walk to classes together, hang out together," he says. "Even in practices when things could get a little gritty and we'd go at it on the court, all that would get dropped when practice was over. At the end of the day, we were all friends."

And he's not done playing. McArdle competed in several summer leagues across the state and has done intensive physical training to increase his chances of playing professionally overseas. He's signed with an agency to pursue playing opportunities, including one in Britain, where he's also interested in studying for a master's degree.

His choice to major in psychology at Clark was deliberate.

"The idea of dealing with how the mind works—the different paths you can take, and the different ways people think and operate—really grabbed me," he says. "All my professors are so invested, and they pull everything into their teaching."

McArdle and Clark teammate Chris Clarke '27, with guidance from team mentor Nadia Ward, director of the Mosakowski Institute for Public Enterprise, last year created a campus group where students could gather to meet new friends and have conversations about what's going on in their lives—"the good and the bad," McArdle says. The goal of the meetings, he notes, is to foster an open and welcoming forum for students to connect with one another on their terms.

As he considers his next moves, on and off the court, McArdle is eyeing a possible career as a sports psychologist, noting that many pro sports teams retain a therapist for their players.

For now, he carries his love for the game onto the courts of Massachusetts, and perhaps, one day, he'll be posting up against professional players in a European league. But wherever McArdle winds up, he insists, "Clark will always be home."

STEVE KING

THE KEKOA SNAPSHOT

- Named to the First Team All-NEWMAC in 2024–25 and Second Team honors in 2023–24
- Averaged 11.7 points and a league-leading 9.1 rebounds per game and ranked second in the league with a 55.2% field goal percentage
- Recognized with two NEWMAC Defensive Athlete of the Week nods in his senior year, 2024–25
- Joined the ranks of Clark's 1,000-point scorers
- Graduated *magna cum laude*
- Named to the NEWMAC Academic All-Conference team from 2022 through 2024
- Awarded the National Association of Basketball Coaches Academic Honors in 2023–24
- Volunteered for numerous community organizations and taught basketball skills to youths in the community
- Received the 2025 Russ Granger Award, given to a male student-athlete who has combined academic excellence with athletic achievement

CLARKIES FAR AFIELD

THE CLARK FIELD HOCKEY team's trip to Costa Rica this summer involved the typical activities of a trip abroad: swimming and snorkeling; a ziplining adventure; lessons on cooking local delicacies; hiking in a national park; and plenty of shared meals and laughter.

But other aspects of the trip were less typical, like bringing much-needed supplies to Cerros Elementary School and teaching the students the fundamentals of field hockey. Or cleaning up the sands at Playa Hermosa-Punta Mala Wildlife Refuge—an activity the players describe as a "give-back."

Finally, there were the games. Clark emerged with a split record, defeating the Costa Rica national team 3–0 and losing 2–1 to El Salvador.

According to third-year coach Laura-Ann Lane, the trip—which took place June 25 to July 1—paid clear dividends. "We really bonded in Costa Rica," she said.

The games were played in a Hockey 5s format, which involves a smaller pitch (field) ringed by boards. The pace is fast and relentless over the course of two 15-minute halves.

It was a nice tuneup for the fall.

"The pieces are coming together," Lane said in a pre-season interview. "We're learning to be a strong passing team; moving down the field as all 10 players."

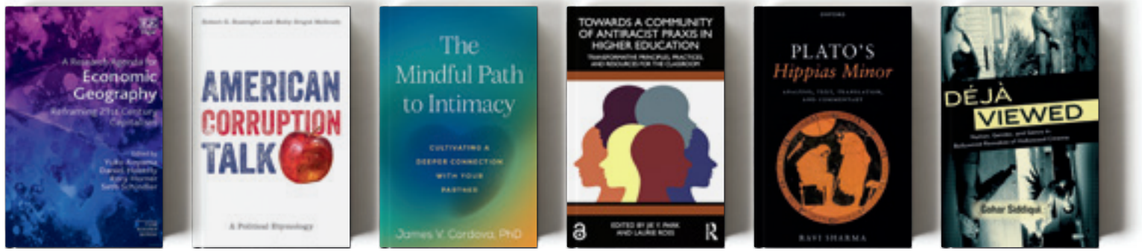
Lane said the team's efforts on behalf of the children at Cerros Elementary were especially indicative of their sense of purpose. "It means we're getting the right type of student and the right type of person to wear Clark on their uniform," Lane said. "When people see us on campus, we want them to know about us and what we stand for."

Clark goalkeepers Rachel Reiter '27 and Loren Root '26.

Bookshelf

Selections from Our Scholars

CLARK UNIVERSITY FACULTY HAVE PUBLISHED WORKS ON SUBJECTS RANGING FROM INTIMACY AND RELATIONSHIPS TO THE DIALOGUES OF PLATO AND THE FILMS OF BOLLYWOOD.



▸ GEOGRAPHY

A Research Agenda for Economic Geography: Reframing 21st Century Capitalism

Yuko Aoyama, Dan Haberly, Ph.D. '12, Rory Horner, M.A. '11, Ph.D. '13, and Seth Schindler, Ph.D. '13

This forward-thinking volume addresses contemporary issues in globalization, platformization, climate change, and geopolitics, featuring chapters that explore micro- and macroeconomic processes, the role of social inequalities in rising labor precarity, and the crucial intersection between public health, geopolitics, and global production.

▸ POLITICAL SCIENCE

American Corruption Talk: A Political Etymology

Robert Boatright and Molly Brigid McGrath

Focusing on the role corruption talk plays in American political discourse, this book compares modes of contemporary corruption talk in different areas of public life. The authors aim to resolve confusion and partisan disagreements about what constitutes corruption and to discourage the tendency to label actions, events, and ideas with which we merely disagree as corrupt while seeking a deeper understand of claims and concerns.

▸ PSYCHOLOGY

The Mindful Path of True Intimacy: Cultivating a Deeper Connection with Your Partner

James Córdova

In a world filled with distractions and busy schedules, many couples struggle to maintain genuine closeness and understanding. In this empathic guide, which includes guided exercises, journaling prompts, and heartfelt stories, Córdova reveals how the transformative power of mindfulness can support stronger, more vibrant intimate relationships, resolve conflicts, and foster connection on a deeper level, both physically and emotionally.

▸ EDUCATION

Towards a Community of Antiracist Praxis in Higher Education: Transformative Principles, Practices, and Resources for the Classroom

Jie Park and Laurie Ross

Weaving together theory, research, and practice, this volume offers accounts from Clark faculty who participated in a community of antiracist praxis—a cycle of action and reflection on pedagogy. The chapters highlight how faculty can transform classrooms and colorblind discourses in higher education and urges practitioners to act.

▸ PHILOSOPHY

Plato's Hippias Minor: Analysis, Text, Translation, and Commentary

Ravi Sharma

Plato's *Hippias Minor* has long been considered puzzling in its purpose, characterization of Socrates, and design. Sharma offers a fresh translation and a comprehensive reevaluation, arguing that *Hippias Minor* makes a significant contribution to our understanding of Plato's concept of intentional action and that the dialogue's ideas form the basis for his reflections on moral psychology. The volume also offers a case study of relevant Socratic authors.

▸ SCREEN STUDIES

Déjà-Viewed: Gender, Genre, and Nation in Bollywood Remakes of Hollywood Cinema

Gohar Siddiqui

Focused on post-1990 Bollywood remakes of Hollywood films, *Déjà Viewed* tells a larger story of the rapidly changing Indian film industry in the wake of globalization and corporatization. It situates the remake as a gendered response to these changes, drawing on approaches from film theory, gender studies, and cultural studies. The book closely examines a number of films from a variety of genres and modes.

STEVE KING

NO BUSINESS LIKE SHOE BUSINESS

Stuart Weitzman—acclaimed designer and founder of the luxury shoe brand that bears his name—visited Clark in February, meeting with faculty, students, and staff, and capping the day with a lively presentation titled "A Designer's Entrepreneurial Journey on the Road Less Traveled" inside a packed Tilton Hall.

Eschewing the stage, Weitzman roamed the floor, sharing stories of his adventures in the shoe trade, which included designing eye-catching footwear for luminaries like Taylor Swift, Jennifer Aniston, and Catherine, Princess of Wales (there's a reason he's known as the "Shoemaker to the Stars"). Early in his career, he invested a third of his own money in a small factory and began producing luxury shoes that he initially gave away as a ploy to build his reputation among the Hollywood elite. "'Risk' is not a four-letter word," he insisted. "It's your best friend."

In 2002, Weitzman designed a diamond-studded pair of sandals that retailed for $1 million and were worn by actress Laura Harring at the Academy Awards ceremony, a move that proved to be "a tipping point for our company" both in sales and notoriety, he said.

A highlight of the evening occurred when Weitzman called out three Clark students (shown with Weitzman above) to model his signature shoes, which ranged from chunky platforms to spike-heeled sandals (including a version of the famous bejeweled pair worn by Harring). All three managed to execute a graceful walk down the center aisle, teetering a bit on five-inch heels while earning compliments from the designer for their poise.

Read more about Weitzman's Clark visit at clarku.edu/magazine.

Short Stories

To a Happy 25th!

The Department of Sustainability and Social Justice (formerly International Development, Community, and Environment) will mark its 25th anniversary next May with a two-day event celebrating the department's impact on countless lives across the world. Among the highlights will be a keynote address from Laura Hammond, professor in the Department of Development Studies and vice chancellor at SOAS University of London, and a former assistant professor at Clark.

The event will also feature panels, breakout sessions, and a round robin, centered on topics like the power of community collaborations, local and global changemakers, and—under the title "Another World is Still Possible"—striving for sustainability, responsibility, and justice. A tribute to the late Dick Ford (pictured), longtime Clark professor and an internationally recognized pioneer in the field of community development, is also planned.

Professor Yuko Aoyama with presenters Beverley Mullings, professor of political economy at the University of Toronto, and Ron Boschma, professor of regional economics at Utrecht University in the Netherlands.

STEVE KING AND NATALIE HOANG '25, MBA '26

ON A PILGRIMAGE TO CLARK

Clark University can lay claim to be the first place in America to host the Global Conference on Economic Geography, which has been held in far-flung cities, from Singapore to Dublin, every several years since 2000.

More than 400 economic geographers from around the world gathered on campus in June to present papers, attend roundtables, and network with colleagues for the seventh global event. Roundtable topics included the societal impacts of artificial intelligence, Indigenous self-determination, U.S.-China technology competition, sustainable futures, economic injustice and the law, and more.

Conference organizer Professor Yuko Aoyama said that participants regarded the Clark campus as a "pilgrimage site," with its century-old Graduate School of Geography, and as the place where President Wallace Atwood, in 1925, founded the esteemed *Economic Geography* journal. This year's conference marked the celebration of the centennial anniversary of the journal, which is still owned by Clark.

Aoyama chose historic Mechanics Hall for the conference's keynote lectures. The downtown venue was built by Worcester's Mechanics Association in 1857 to provide cultural and educational activities for members and harkens to Worcester's legacy as a key player in America's 19th-century Industrial Revolution, which was of great interest to many of the geographers.

"Economic geography is all about networks," Aoyama explained. Scholars study where economic activities are occurring "because we need to understand where the future jobs will be located and where regional development will occur. And where the future jobs are located will determine where the people will be."

HONORING THE BEST

Last spring, Clark celebrated three retiring faculty members who collectively gave more than a century of service to the University: Patrick Derr (philosophy, 49 years), Wayne Gray (economics, 41 years), and Will O'Brien (School of Business, 16 years).

The celebration featured testimonials from some of Derr's former students, including one who noted that his classes "fundamentally challenged, shaped, and grew my thinking." O'Brien was lauded for bringing a global and green perspective to Clark's business school, grounding the curriculum in the principles of environmental sustainability and social responsibility.

And prior to the campus retirement party, Gray—praised by colleagues as an example of "the best we can be"—was the subject of a daylong symposium honoring his career as teacher and scholar. At the symposium, attended by economists from across academia as well as former students who have gone on to impressive careers, some astounding numbers were shared, including the fact that over his Clark career it's estimated Gray helped guide 85 percent of economics Ph.D. students' most significant bodies of work, including their dissertations. (Above, l. to r.: Patrick Derr, Wayne Gray, and Will O'Brien.)

THE COALITION BUILDER

Pronita Gupta '91, special assistant to the president for labor and workers under President Biden and deputy director of the Department of Labor Women's Bureau in the Obama administration, visited this past spring with graduate students in the Department of Sustainability and Social Justice. She discussed her work in Washington, D.C., including the development of policies that promote workers' rights, paid family and medical leave, and sick leave, and encouraged students "to persevere, to build coalitions, and to follow their hearts in their work as change makers," said Professor Margaret Post, who coordinated the visit.

CARE TO TANGO?

Salsa Encendida, a 22-member student dance team and club that hosts high-powered dance shows and workshops featuring salsa, bachata, merengue and tango, has experienced a surge in interest for its shows and workshops. In April, the team performed in a special event at Worcester's Mechanics Hall in collaboration with the College of the Holy Cross Latin American Student Association. "Anything that relates to the Latin culture, Hispanic culture, we try to incorporate it," said co-captain Natalia Caicedo '25, a native of Colombia. "If people are willing to learn and choreograph, we are willing to do it."

Syllabus

“The planet needs this, and students are hungry for it.”

COURSE

Introduction to Environmental Humanities

TEACHER

Christina Gerhardt

Christina Gerhardt, the Henry J. Leir Endowed Chair of Comparative Literature, designed the course, but she is quick to note that Introduction to the Environmental Humanities represents a gateway to the newly launched environmental humanities concentration she co-founded and co-directs with English Professor Stephen Levin. “We often get the question, ‘What is the environmental humanities?’ My response is: It’s how disciplines in the humanities, such as literature, art, film, history, and philosophy, engage with and respond to the climate crisis.”

What are the aims of the course?

I am trying to do two things: give students an introduction to important theoretical foundations for the environmental humanities and apply some of the lessons that we have learned from the theoretical texts to actual literary texts.

Last week, we read a text by Rob Nixon, a professor of English at Princeton. Next week we’ll read one by Donna Haraway, a theoretician of feminist science technology, and we have other texts coming up by scientists and geographers about dating the Anthropocene. The environmental humanities pulls down the barriers between disciplines within the humanities, and each of these texts is pulling down the barriers between the humanities, the social sciences, and the natural sciences.

How do students approach the subject of our climate future?

Students today are facing what historian Adam Tooze has popularized as a “polycrisis”—that includes everything from rising costs, to student debt, to whether they’ll be able to get a job. The climate crisis is another example. I tell students when we start the class that if they’re feeling overwhelmed, they don’t need to solve all the problems. They can focus on what meshes with their interests and goals, by topic, by approach, etc., so they can figure out what their “beat” is.

I try to end every class session with a discussion about solutions: How do we need to rethink history in light of the climate crisis and consider past missteps? The way we’ve been doing things is what got us into this climate situation, so this same structure of thinking is not going to be what gets us out of it. So history is very important here, but so is rethinking how we create solutions.

What is the humanities’ role in grappling with climate challenges?

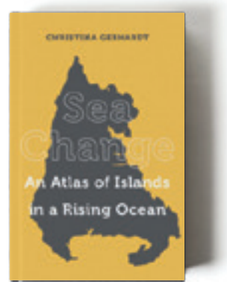
The humanities bring to the table history, questions of ethics, the imaginative through art. The speculative is important because it allows you to imagine a future, and imagining a future is incredibly important for thinking about how to do things differently. I’m seeing it in the digital space with the Becker School; others at Clark are teaching climate narratives and environmental storytelling.

Are Clark students primed to take on this work?

The cross-pollination going on with the climate school is precisely what needs to happen. So many of our students already take a science class and a humanities class—they’re just so balanced, more so than I’ve seen at other places. With environmental humanities, we focus on the people. And I am thrilled that climate is one of the main foci of the reimagining of Clark, because the planet needs this, and the students are hungry for it.

“Every island has a story. There are, of course, many more stories than there are islands. Spanning the globe. Which is another way of saying: (Narrative) vantage point is everything.”

CHRISTINA GERHARDT, FROM “SEA CHANGE”



STEVE KING

Our Planet.

Our Clark.

Clark students in the Hadwen Arboretum.

‘We’re Playing the Long Game on This’

The newly launched School of Climate, Environment, and Society is Clark’s response to a planet in crisis

BY JIM KEOGH

A moment is upon us. Perhaps *the* moment.

The Earth continues to spin, as always, but it’s shuddering. We have entered an epoch of profound global change stressing the world’s natural and human systems in ways that, left unchallenged, are not sustainable.

With the consumption of resources threatening to exceed our ability to produce them, the exploitation of land and water is reaching the point where the suggestion of one day migrating humanity to distant planets—the stuff of science fiction—isn’t dismissed as readily as it once had been.

This all can feel so beyond our capacity to absorb. Paralysis can creep in—surrendering to despair seemingly far easier than fighting for hard solutions. Here is where an urgent and bold response is needed.

And Clark has responded.

This fall, the University launched the School of Climate, Environment, and Society, which builds on Clark’s legacy of probing for solutions to the most pernicious threats to our shared environment. The school advances integrative research, education, and engagement to understand and sustain the Earth’s systems, and seeks equitable and just solutions to those threats through intensive academics and deep collaborations with communities and organizations on the frontlines of change.

“We are in the age of climate crisis. This isn’t a future problem—this is a today problem,” says Lou Leonard, the D.J.A. Spencer Dean of the School of Climate, Environment, and Society. “And we need to have the heart and the grit to realize that we’re playing the long game on this. It’s not going to feel like we’re winning every day. But all of it matters.”

The School of Climate, Environment, and Society emerged as a signature recommendation from the planning and development of Clark’s strategic framework, Clark Inspired. The proposal for the school was shaped over two years by working groups, subcommittees, and an implementation team, all composed of faculty across various disciplines as well as several staff members. The implementation team presented its formal proposal on July 3, 2023.

Crucial to its elevation from concept to reality was a $10 million gift in 2024 made by philanthropist and former trustee Vickie Riccardo and her daughters, Alyssa ’17 and Jocelyn Spencer. The cornerstone gift established the D.J.A. Spencer Dean position and facilitated the creation of the Vickie Riccardo Climate Catalyst Fund to help support the school’s development and growth.

Housed within the School are the departments of Geography, Sustainability and Social Justice (formerly International Development, Community, and Environment), and Economics, as well as the George Perkins Marsh Institute, and the Clark Center for Geospatial Analytics. The Biology Department and the Environmental Humanities Research Collaborative are founding partners in the school. Within this structure, scholars and practitioners from these departments and centers, and from disciplines across the University, strategically and deliberately come together to advance research and applied community projects.

Students now have an opportunity to enroll in a new undergraduate major in climate, environment, and society, or pursue a master’s degree in climate and society, while Clark also is expanding and amplifying course offerings related to climate science, environmental studies and policy, biodiversity, and sustainability, among other critically important areas. All students, regardless of their major, can register for courses within the school.

Leonard noted that the School of Climate, Environment, and Society will provide a forum for the deep exploration of issues and the accommodation of multiple perspectives in the search for solutions.

“The world can feel like it’s chaotic and unfixable, but that’s only because we’ve been looking at it in a traditional way,” Leonard says. “In the School of Climate, Environment, and Society, we’re seeking to understand the world from a physical science perspective, from an economic perspective, from a policy perspective, and from a culture and justice perspective.

Planet, People, Policy, Economy

Positive impact in the world is our guiding mission. The School of Climate, Environment, and Society prioritizes adaptable, problem-centered outward engagement, challenging business-as-usual and preparing next-generation leaders to address complex 21st-century problems.

At the core of the school’s identity are five interconnected imperatives that reflect a problem-focused integration of diverse perspectives to better serve our planet and its people through sensible policy and a just economy.

Realizing Sustainable Development
How can we improve the quality of life of people around the world in ways that protect our planet’s future, recognizing the ways that people make decisions in their daily lives?

Advancing Environmental Justice
How can global, national, and local policies and institutions ensure that the most vulnerable communities will not bear the greatest cost of our changing Earth system?

Fostering Community Resilience
How can we plan and build green, resilient, and livable cities to ensure the flourishing of humans and nature in urban spaces?

Transitioning Toward Sustainability
What are the social and economic transformations necessary to slow climate change and adapt to a changing Earth system, and what is necessary to promote widespread adoption of new perspectives and behaviors?

Conserving and Valuing Nature
How are human actions endangering planetary systems including climate? How is human welfare connected to ecosystem health and conservation, and what alternative pathways conserve natural systems and sustain valued ecosystem services?

“This isn’t a future problem. This is a today problem.”

“This kind of transdisciplinary education is vital to actually making sense of the world in these times and being prepared to effectively deliver change.”

Leonard, an environmental lawyer, came to Clark after serving as dean of the Falk School of Sustainability and Environment at Chatham University in Pittsburgh, where he also led operations of the Eden Hall Campus, a sustainability-focused living-learning laboratory. Before that, he was a visiting scholar at the Environmental Law Institute in Washington, D.C., and, for over a decade, senior vice president for climate and energy at the World Wildlife Fund, where he participated in negotiations leading to the Paris Climate Change Agreement and helped launch initiatives such as the We Are Still In coalition and the Clean Energy Buyers Alliance.

Leonard has practiced and taught international and domestic energy and conservation law in both the government and private sectors for over 25 years. He served as special counsel to the secretary of the interior, where he specialized in water law and Native American rights and was chief U.S. negotiator for agreements bringing new water supplies and funding for tribal reservations. *(Read the full interview with Lou Leonard at clarku.edu/magazine.)*

With the School of Climate, Environment, and Society, Leonard envisions new possibilities for leveraging Clark University expertise to prepare next-generation leaders to address complex 21st-century problems and secure jobs in an evolving economy.

“We are in the midst of the largest transformation of global and local economies, perhaps in human history,” Leonard says. “There are over a million climate-related jobs in the United States right now, with a hundred thousand new jobs a year being added in fields related to climate, environment, and society. But because this is all so dynamic, we need to not only prepare students for the jobs of today, but also develop the kinds of skills and critical thinking that will position them for the jobs of the future.”

The school’s human-centered approach asserts that the best technical solutions in the world can’t alone address the problem of climate change. Ultimately, human use, adoption, and adaptation are essential, especially given how vulnerable technology is to changing political and economic headwinds.

“We’re in the midst of times where so much seems at risk, under attack, and lost. But when I step back, I see many trend lines pointed in the right direction—in terms of renewable energy deployment and the reduction in use of the dirtiest fuels, but as importantly in terms of how much people *care* about these issues, particularly Gen Z. If you had told me 10 or 15 years ago how much we’d accomplished by 2025, I wouldn’t have believed you,” Leonard says.

“But that doesn’t mean we are on the right track—absolutely not. Many of the severe impacts of climate change that we anticipated for 2050 or beyond are here today. It’s way past time to assume everything is going to be okay.

“We have work to do.” ●

Learn more about the School of Climate, Environment, and Society at clarku.edu/ces.

I can remember being in middle school and hearing scientists sounding the alarm about the extreme effects of climate change and thinking, "I hope this won't happen in my generation." Well, it's here, and it's my generation.

Voices of the Future

The current generation of students has come of age knowing two things: The world is precious, and the forces that would do it harm must not be abided. In these pages, our students share their thoughts about the climate, the environment, and the kind of future that they want to embrace.

I worked with kids at a lake this summer, and I loved to see their energy and joy and the way they cared for the environment. And watching the loons on the lake, doing their thing, always gives me hope. The world is so remarkable.

It's really important to step out of the classroom and put what you learn into action.

My generation is turning the climate conversation on its head a little bit by recognizing that some people, like those in small developing island states, need priority treatment because they're being disproportionately impacted.

WITH THANKS TO NOURHAN BESHIR AMIN ATTIA, M.S.-ES&P '26, ZACH BARANOWSKI '25, M.S.-ES&P '26, ELLA CHRISTIE '27, ALI CIVILIKAS '26, JULIA HEAD '26, AIDAN HUMPHREYS '26, JACK KEANE '25, M.S.-GIS '26, NATE KIDD '26, JULIANA REYNOLDS '26, ANA SANCHEZ '27, AVA SOCH '28, CHIP TOBIN, M.S.-ES&P '25, JENNA WARD '25, M.S.-ES&P '26.

I'm approaching climate change with **revolutionary optimism**.

Even though I'm skeptical about how much we can combat climate change as a global force, I do think we can make positive improvements in the local community. It's much more manageable to get something done in your hometown.

Good efforts exist, but they're not meeting the damage that's been done. We're just putting a bandage on a wound that needs cleaning and stitching.

My junior year I did a study abroad in Ecuador with an organization that works with Indigenous communities who were doing really cool work on reforesting the Amazon. Just seeing the breadth of what can be done on a local scale is very empowering.

I'm from Egypt, where you can see the impact of climate change. Here, people don't see it; they don't care if it's three or four degrees warmer.

The systems and products that have thrilled us with their innovation and accessibility have also gotten us to a place where we start wars and have people living in poverty. Climate-friendly solutions are needed, but they need to be accessible to everyone.

I've heard older people say, "Well, I'll be gone, so you'll have to fix this." That's pressure.

Because of our rate of consumption, many scientists have concluded that death is the most environmentally friendly thing we can do. By the end of my undergraduate years, **I decided that dying will not be the most environmentally friendly thing I will do in my life.**

There's so much bad news about climate that you really have to search for any good news. But I believe good things are coming.

Yes, there is anger with how the world is operating, but you have to use that anger to unite people in the most productive way. If I'm angry, I need to do something with that anger.

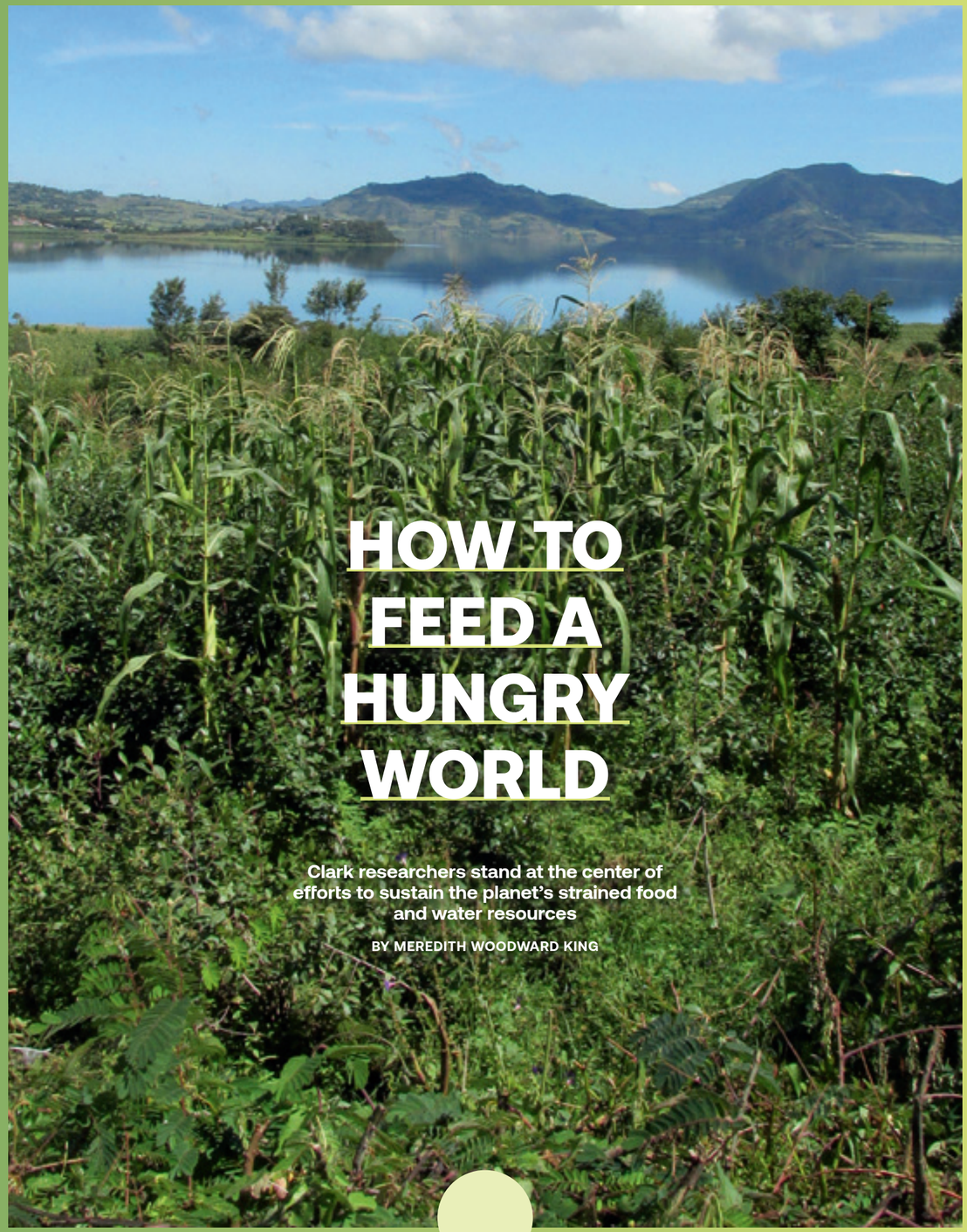
DEAN LOU LEONARD AND PRESIDENT DAVID FITHIAN, WITH RUBY LICHTMAN ’27 AND ZACH RUTHERFORD ’27, PLANT A RED MAPLE BY THE SHAICH FAMILY ALUMNI AND STUDENT ENGAGEMENT CENTER.

Climate Environment Society

Clark held a full day of events on Sept. 15 to celebrate the launch of the School of Climate, Environment, and Society and announce plans to enhance campus sustainability and stewardship efforts. The day began with a guided tour of Clark’s 26-acre Hadwen Arboretum, moved onto campus with student-oriented activities and information sessions, and concluded with a bat observation walk at nearby Coes Pond. Read more at clarku.edu/magazine.

CLARKIES TOURED THE CLARK COMMUNITY GARDEN; STUDENTS MADE NATURE ART; PROFEESSOR MORGAN RUELLE (ABOVE LEFT) LED THE BAT OBSERVATION WALK.

MARSHALL FREDERICKSEN, M.S.-ES&P '26, CHECKS SOIL QUALITY IN ETHIOPIA.



HOW TO FEED A HUNGRY WORLD

Clark researchers stand at the center of efforts to sustain the planet's strained food and water resources

BY MEREDITH WOODWARD KING

With 673 million people

starving and 2.3 billion experiencing food insecurity, U.N. Secretary General António Guterres issued an urgent message at a recent United Nations food summit in Ethiopia. "The future of food is the future of humanity," he said, imploring the world to work faster to develop food systems that are "inclusive, sustainable, equitable, resilient, and rooted in human rights."

As Guterres spoke in Addis Ababa, Marshall Fredericksen, M.S.-ES&P '26, was wrapping up nearly three months of visiting and conducting interviews at 90 farms in the country's Wollo zone, which has experienced cycles of drought, conflict, and famine over the decades.

The government encourages farmers to plant a single variety of each crop for export. But many adhere to a centuries-old practice of sowing and harvesting multiple species and varieties of grains together to produce a steady, nutrient-rich source of food for their families. The mixtures commonly include wheat and barley, field peas and fava beans, or several sorghum varieties.

"Farmers notice that mixing them provides an added benefit compared to planting them individually as monocrops," says Fredericksen, whose research is part of an international project with Professor Morgan Ruelle of Clark's Department of Sustainability and Social Justice.

Funded by The Rockefeller Foundation, the researchers believe the farmers' traditional practice of growing grain mixtures could offer a climate-resilient solution to Africa's food insecurity. They are partnering with Professor Zemede Asfaw, known as the father of Ethiopian ethnobotany, and Ph.D. students at Addis Ababa University, as well as researchers and practitioners with the New York Botanical Garden, Lehman College, and Wollo University.

"The varieties compensate for each other depending on the climate and weather conditions in a particular year," Ruelle says. "If it's really dry one season, the varieties that do better under dry conditions take over, and if it's really wet, others become dominant."

Archaeological evidence suggests that people in northern Africa and Eurasia have been cultivating grain mixtures for thousands of years. In Ethiopia, farmers use mixtures for *injera*, a staple bread, as well as many other traditional foods and beverages.

"In some cases, the farmers are planting five to seven different varieties of two different species in a single field," Ruelle says. "They're planted together, harvested together, used together, saved together, and then planted again the next year."

The research team has now expanded its project to Kenya, where farmers have begun growing mixtures of maize and sorghum for breakfast and lunch programs in public schools. The project connects Ethiopia's ethnobotanists, agronomists, and nutritionists with Kenya's Cereal Growers Association, which will be traveling to speak with farmers in Wollo this October.

Next fall, The Rockefeller Foundation will support fellows from Kenya as master's students in Clark's Sustainable Food Systems program. They will work with Ruelle to investigate the outcomes of the grain mixtures project for farmers and students in Kenya's schools.

"I'm really interested in solutions that build on what farmers already know how to do," Ruelle says.

Ruelle and Fredericksen are just two of the researchers affiliated with Clark's new School of Climate, Environment, and Society who are rising to Guterres' challenge to address hunger and food insecurity.

From Africa to Asia to the Americas, Clark faculty and staff are partnering with communities and governments seeking to improve agricultural practices and food systems. They are learning from Indigenous communities' age-old practices, as well as sharing geospatial technology (see GIS story, page 38). And they are studying beneficial microbes and insects that could help farmers promote soil and plant health to increase crop yields—sustainably.

FARMERS IN ETHIOPIA'S WOLLO ZONE HAVE LONG GROWN NUTRIENT-RICH, DROUGHT-TOLERANT MIXTURES OF GRAINS.

COURTESY OF MARSHALL FREDERICKSEN

'NOT ENOUGH HANDS, RATHER THAN TOO MANY MOUTHS'

Food insecurity commonly—and mistakenly—has become linked to population growth, according to Geography Professor Gustavo Oliveira.

"People still rely on 20th-century thinking about overpopulation and the need to increase food production," says Oliveira, an expert in global agro-industrial trade and food-supply issues. "But that way of thinking doesn't accurately reflect our current reality, which is about urbanization, industrialization, and market forces."

GEOGRAPHY PH.D. STUDENT ANTONIO FONSECA STUDIES IRRIGATION METHODS IN BRAZIL'S CERRADO SAVANNA.

COURTESY OF GUSTAVO OLIVEIRA

Across the world—and especially in Africa, Asia, and Latin America—foreign investors have snatched up millions of acres of farmland in a "global land grab" since 2010, Oliveira points out. The land has been turned over to expansive farm operations, resource extraction, energy production, and development.

Led by growth in Africa, the global population is expected to increase from 8.2 billion people in 2024 to as many as 10.4 billion in the mid-2080s, then start to decline, according to the United Nations. But today, much of the world—including traditional economic powerhouses like China, Brazil, the United States, Germany, and Japan—already is seeing lower fertility rates, aging populations, and slower or decreasing growth rates.

Meanwhile, young people are bypassing village life and farming for what they perceive as more promising, lucrative work in the city, according to Oliveira. The U.N. projects that by 2050, almost seven in 10 people across the globe will be urban residents.

"Not enough hands, rather than too many mouths, is the bigger challenge to food security in the future," he says.

Oliveira has experienced these demographic changes firsthand. He and his wife, a professor at Amherst College, have traveled back to her native China to help her elderly parents transplant rice. No one else is available to work the farm.

'FOOD AND WATER ARE DEEPLY INTERCONNECTED'

China has become the world's biggest pork consumer and producer, with rippling effects. To feed its hogs, many of which are confined to high-rise factories, China imports 80 percent of Brazil's soybean crops. Having passed the U.S. as No. 1 soybean grower, Brazil has cleared at least 11 percent of the 789,000-square-mile Cerrado, the most biologically rich savanna in the world, to plant 52.9 million acres of commercially farmed monoculture crops. As part of a NASA-funded project, Oliveira and fellow Clark Geography Professor Robert "Gil" Pontius are modeling future competing scenarios of this expansion, given climate change.

Deemed a significant carbon sink due to extensive plant root systems, the Cerrado harbors the earth's second-largest underground water reservoir.

Yet, the area is threatened by agricultural deforestation and declining water tables, made worse by climate change. In addition to dealing with the impacts of planting water-intensive soybeans and cotton—the latter of which China imports for its busy textile mills—the region has seen a 12 percent decrease in rainfall since 1980.

Across the world, agriculture uses 70 percent of the world's freshwater resources, and nearly 2.2 billion people lack safe drinking water.

"Food and water are deeply interconnected," Oliveira concurs. "We are facing more water shortages than land scarcity. And with climate change, we have increased reliance upon irrigation to produce food, but we also have reduced capacity to sustain that irrigation.

"It's a Catch-22 that comes down particularly forcefully in industrial food systems," he adds, "which are chemical- and capital-intensive and drive further

climate change."

Like Oliveira, other Clark faculty and student researchers are investigating the issue of water scarcity.

In Central Mexico, a team led by Professor Tim Downs of the Department of Sustainability and Social Justice focused on how climate change impacts water, agriculture, and health—affecting 28 million people in 200 communities in and around Mexico City—and how to anticipate and mitigate those impacts. Funded by an NSF grant, the Clark team, including both undergraduate and graduate students, worked closely with three local communities, academics at the National Autonomous University of Mexico, and the Mexico City government. Geography Ph.D. student Kwabena Antwi, spent a month working alongside farmers, and will continue his fieldwork in 2026 to understand how climate change affects agriculture. Professor Yelena Ogneva-Himmelberger and a team of graduate students are co-creating an online atlas so that communities can better visualize climate impacts and ways to respond.

A GREENHOUSE FOR GREENER SOLUTIONS

Back in the United States, two Clark biologists—professors Chandra Jack and Kaitlyn Mathis—are conducting research that has implications for advancing sustainable farming, food security, and conservation practices.

"Agricultural intensification indirectly pushes climate change," Mathis explains. "By managing agriculture more sustainably, we could reduce the impacts of climate change."

The two professors and their students run controlled experiments in Clark's greenhouse, the Experimental Plant Investigation Center (EPIC).

BIOLOGY PROFESSOR CHANDRA JACK LEADS PLANT STUDIES IN CLARK'S EPIC LAB.

Jack studies how microbe interactions affect plant traits—research that could help lead to the development of more sustainable, less invasive ways to grow food.

"We are interested in how microbes in the soil could combat some of the stress that plants are facing due to climate change," she says.

Microbes—including bacteria, fungi, and viruses—help break down organic matter, fix nitrogen, improve roots, ward off pests and pathogens, and mitigate environmental stressors.

In one experiment, Jack's research team inoculated sterilized soil with microbes to grow Ryan soft white spring wheat, which has great potential as a high-yield cereal crop in areas with variable rainfall. The researchers compared that sample with wheat grown in "regular," nutrient-rich soil from fields in Washington state, where Jack has worked with farmers seeking to reduce their reliance on synthetic fertilizers.

Under simulated drought conditions in Clark's greenhouse, the wheat planted in the microbe-inoculated soil grew taller, compared to those in the regular soil from Washington, according to Jack, whose research is funded by the NSF and the U.S. Department of Agriculture.

With her Washington State University collaborators, she is investigating the differences in microbial biodiversity found in wheat planted in long-tended agricultural sites versus natural prairie areas.

"We want to know if the microbes that we find function differently," Jack explains. "Prairies haven't been disturbed much, whereas agricultural areas have faced constant displacement, fertilizers, and pesticides. We're thinking about what makes a healthy soil and what are the implications for food production."

STEVE KING

CAN ANTS HELP OUR FARMERS?

Meanwhile, Mathis and her students are researching how ants and other beneficial insects can be used by farmers to produce food crops without heavy use of pesticides.

Deploying ants as agricultural "workers" goes back centuries, according to Mathis. In 304 A.D., Chinese farmers first transported nests of green tree ants to protect citrus crops, one of the oldest recorded biological controls to ward off pests.

Over the years, Mathis has studied the interactions between Azteca ants, phorid flies, and beetles in Southern Mexico's coffee plantations, and how native Argentine ants protect Asian citrus psyllid pests that threaten California's $2 billion citrus industry.

Now, she is mentoring Joseph Nelsen, a Ph.D. candidate, and undergraduate students who are studying how ants interact with other insects on zucchini and cucumber plants containing extrafloral nectaries—tiny "bowls" found on the underside or base of leaves.

ANTS MAY HELP US FIND HEALTHY, ECO-FRIENDLY WAYS TO FARM

"Information gained from studies like mine will build on our understanding of the plant-protecting activities that abundant omnivorous insects like ants provide," Nelsen says, "which may be a useful tool for farmers dedicated to sustainably growing food."

Pests like caterpillars, striped cucumber beetles, and aphids flourish near the extrafloral nectaries, drinking the nectar and eating the plants, Mathis says. But the nectaries also attract beneficial insects like ants and parasitoid wasps, which typically consume or drive away the pests.

"Managing these smaller agricultural ecosystems to promote these beneficial predator insects could reduce the amounts of pesticides that farmers need to use," Mathis says. "That would be good for everybody. It's good for farmers, who wouldn't have that exposure. It's good for consumers who eat the produce. And it's good for the planet."

'I'M TRYING TO MAKE MY OWN PATH'

Like Nelsen, Marshall Fredericksen also hopes to encourage more sustainable agricultural practices. Besides his research in Ethiopia, he will draw from an intimate knowledge of farming in Africa.

Fredericksen was raised in Tanzania, where his mother grew up in a farming family. His father, Michael Frederickson, M.S. '98, was born in Massachusetts and earned his master's degree from Clark's international development program.

The elder Fredericksen was a student of the late Dick Ford, the Clark professor whose pioneering Participatory Rural Appraisal approach to community development emphasized collaboration and partnership. Traveling throughout Sub-Saharan Africa, Michael met with local farmers to discuss their needs and ways to improve crop yields.

"I have many childhood memories of holding a seedling while we drove to visit farmers who would learn planting and grafting techniques from my father," Fredericksen says. "He would lead focus groups with farmers, village leaders, and chiefs."

Since then, the younger Fredericksen has also become interested in agriculture, noting that everything starts from the ground up—with the soil.

"I'm trying to make my own path," he says. "I'm a firm believer that diversification is the agroecological approach that can best improve soil health and optimize farm yields."

Yet, he still learns from the farmers in his family, many of whom "struggle with the variability of weather and climate. It's something that hits home for me when I speak with the elders and realize that climate variability has been an issue the past five, 10, 15 years, and it's slowly becoming more intensified, uncontrollable, and unpredictable."

Drawing on his experiences in Tanzania and America, Fredericksen hopes to continue working in Africa, promoting the best practices of agroecology, international development, and climate science to combat hunger and food insecurity.

"I think I can be a big asset working in this part of the world," he says.

Besides, "I would be doing myself and the rest of my family a disservice if I didn't take a stance on what I believe in and contributed to what I think is important." ●

Land, Sea, Sky … and AI

A pioneer in geospatial technology, Clark offers a revealing view of our world and the work needed to save it

BY MEREDITH WOODWARD KING

In classes on environmental change in the Arctic, Geography Professor Karen Frey often shares the photos she has taken over the past two decades on polar research expeditions: a lonely walrus atop a patch of shrinking ice and stark coastlands spotted by thawing permafrost. The images capture the findings of a tectonic scientific study several years ago reporting that since 1979 the Arctic has warmed nearly four times faster than the rest of the Earth.

"The year I started at Clark, in 2007, there was a huge drop in sea-ice extent, and even though we've had a lot of variability, we have never gone back to where we were prior to 2007," says Frey, a lead chapter author of NOAA's annual Arctic Report Card. "Many scientists predict that by 2040, the Arctic could experience nearly no sea ice during summer months."

Before 1978, there was no practical way to measure vast amounts of sea ice from the ground, and no reliable way to do so from above. But on Oct. 24, 1978, NASA and NOAA launched the Nimbus-7 satellite carrying the Scanning Multichannel Microwave Radiometer. Unlike earlier satellite technology, the remote sensing instrument could gather data on sea surface temperature, wind speed, and other ocean dynamics in all types of weather.

Like many of her colleagues studying global environmental and climate change, Frey's research relies on remote sensing data collected by Earth observation satellites.

"I'm also interested in how algae, the base of the food chain, is going to change with climate warming and sea-ice decline in the Arctic and in the Arctic Ocean," says Frey, who regularly brings students to the Arctic on research trips (see page 10).

A five-year National Science Foundation grant is funding her research as part of an international science collaboration seeking to understand such ecological changes in the Pacific Arctic region, and how that will have rippling effects across the world.

"A huge part of my research is linking what we measure in the field with what we see from space with satellites," Frey says.

CLARK'S LEGACY—AND FUTURE—OF GEOSPATIAL RESEARCH

Frey joins a long line of earth, environmental, and sustainability researchers at Clark who have deployed geospatial analytics in their work. In the 1980s, Graduate School of Geography Professor Ron Eastman launched Clark Labs and developed what became TerrSet, a geospatial software system for monitoring and modeling the Earth, which became widely used by academic and nonprofit researchers.

Today, that legacy of pioneering geospatial software and technology continues with the Clark Center for Geospatial Analytics (CGA), led by Professor Hamed Alemohammad within the School of Climate, Environment, and Society.

In 2023, the MIT-educated Alemohammad founded Clark CGA, which partners with geospatial experts on campus and enables collaboration with outside scientists, policymakers, and industry leaders like the GIS mapping software giant, Esri.

Alemohammad leads the center's team of geospatial researchers, including students in the GIS and geography graduate programs who assist with research projects. Recently, the center named its first faculty fellows—geography professors Robert "Gil" Pontius, an expert at applying mathematical models in geospatial and environmental research, and Florencia Sangermano, M.A. '08, Ph.D. '09, who integrates spatial analysis, remote sensing, and soundscape ecology to assess ecosystem health.

The center plays a pivotal role in helping Clark faculty "empower students with the latest and best geospatial tools and knowledge so they can work hand in hand with stakeholders to solve real-world problems," Alemohammad says, "and provide them with the experience to land positions after graduation."

(P. 38) A CLARK-PRODUCED FOREST "RISK MAP." (BELOW) PROF. FLORENCIA SANGERMANO CONDUCTING RESEARCH IN THE AMAZON.

GETTING TO 30 BY 30

Clark faculty already involve students in remote sensing and GIS research projects, both in and outside of the classroom.

For instance, Professor Abby Frazier, who studies the impacts of climate variability on Hawai'i and Pacific Islands, is tapping into the programming and GIS skills of Kaylene Criollo '26, an honors student in environmental science. The two are creating maps of a new, statewide drought index to add to Hawai'i's climate data portal, which is used by policymakers, farmers, disaster managers, and the public. The project seeks to inform wildfire-prevention efforts to avoid fires like the one that struck Maui in 2023, killing at least 102 people and destroying historic Lahaina.

Meanwhile, over the past 13 years, Sangermano and her geography colleague, Professor John Rogan, have built career experience into their Wildlife Conservation GIS Research Seminar. Operating as Clark GIS Consulting, a cohort of graduate students works for the Wildlife Conservation Society (WCS) to investigate and address biodiversity challenges across the world, aiming to protect wildlife such as elephants roaming Tanzania, whales swimming off the shores of Argentina, and bears living in the Adirondacks.

Also partnering with the WCS are Alemohammad and his graduate students and researchers at Clark CGA. The team is supporting the Democratic Republic of Congo in meeting the goals of the "30 by 30" initiative by using existing databases on deforestation, protected and Indigenous lands, population areas, and other information from Earth-orbiting satellites to build multi-layered maps. The global project was introduced to protect biodiversity and mitigate climate change by conserving 30 percent of the Earth's land and oceans by 2030.

"We are providing data to help inform their decisions on where to invest to protect new land," Alemohammad says.

AI IS HERE TO STAY

Clark CGA already is focused on the next frontier in geospatial science: AI, which Alemohammad

Mapping for Good

When a deadly earthquake devastated parts of Turkey and Syria on Feb. 6, 2023, Clark students leapt into action. Working deep into the night, they staged a "mapathon" in the Jefferson GIS lab, using GIS technology to convert satellite imagery into maps showing the location of roads, buildings, bridges, and other features in the earthquake-impacted areas to aid relief organizations in their search-and-recovery efforts. The mapping response was coordinated worldwide through Humanitarian Open Street Maps, an ongoing project to make digitized, high-resolution maps available for public use, including by relief agencies who use them to plan disaster-response strategies. Thanks to Clark students, they have a high-tech tool to aid them with their life-saving efforts.

“AI is opening a lot of doors to solving problems we couldn’t solve in the past.”

RISHI SINGH (STANDING) LEADS A TEAM RESEARCHING THE IMPACTS OF COASTAL AQUACULTURE FARMING.

believes will expand research and career opportunities for Clark geospatial scientists and students.

“AI is a disruptor in many fields, including geospatial analytics,” he says. “We have a lot of challenges to solve across the world, and it’s not like AI is going to solve everything overnight, but it’s opening a lot of doors to solving problems that we couldn’t solve in the past.”

To create maps for analyzing planetary change, geospatial scientists traditionally have developed customized models that integrate remote sensing and on-the-ground data over diverse locations and time periods. Attributes might include land-cover type, crop variables, soil moisture, temperature, precipitation, wind speed, and wildfire and drought indicators in addition to drone and satellite images.

But such models can require significant time, programming, and mathematical calculations, and be limited to certain applications and geographies. So how might geospatial scientists speed up the development phase of their research?

Clark CGA has been working with NASA IMPACT and IBM on a solution: the world’s first geospatial AI foundation model, which they already have launched and are continuing to advance.

Think of it as a ready-made concrete slab, Alemohammad explains. Once it’s laid, you can build many different kinds of structures with custom floor plans, designs, and finishings on top of it. Trained to recognize patterns and relationships among massive amounts of Earth-observation data, this geospatial AI foundation model can be used as a base from which to build customized AI models. They can perform a wide variety of tasks, from mapping flooded areas and droughts to assessing land change due to housing, commercial, and agricultural development.

“By training massive models—ranging from 600 million to over a billion parameters—on extensive satellite data, we can capture patterns and spatial meaning across the globe,” Alemohammad says. “These models are able to interpret seasonal shifts and extreme events alike, enabling informed decision-making in virtually any location.”

Clark researchers are applying the foundation model in other projects, too.

Rishi Singh ’17, M.S.-GIS ’18, a research scientist and principial investigator at Clark CGA, is managing a team of students developing maps that reflect land changes due to coastal aquaculture farming in Indonesia, Thailand, Vietnam, Myanmar, and Ecuador. Having already used GIS, satellite imagery, and machine learning technology to improve the maps, the team is now working with Sam Khallaghi, Ph.D. ’24, postdoctoral researcher at Clark CGA, to employ AI foundation models to finetune them. The maps have been used by nonprofit organizations to help consumers and businesses such as Costco, Whole Foods, and The Cheesecake Factory better understand global land-use practices and the ecological footprints underlying the aquaculture industry.

For over 15 years, environmental scientist and Geography Professor Christopher Williams, working with his Biogeosciences Research Group, has deployed remote sensing and GIS to develop National Forest Carbon Monitoring System datasets, which support conservation organizations and state and federal agencies in targeting forest conservation for the greatest climate benefits. Working with Williams and Alemohammad, postdoctoral researcher Varun Tiwari is using AI to enhance the spatial granularity of maps used for identifying conservation pathways.

Meanwhile, geography Ph.D. student Rahebe Abedi is building an AI-informed model to monitor organic carbon stored in the soil to better understand how, where, and when it mitigates the effects of climate change.

AS GOES AFRICA, SO GOES THE WORLD

Geography Professor Lyndon Estes is deploying AI for research with graduate students in his Agricultural Impacts Research Group. They are using neural networks—computational models in AI that “train” on vast amounts of satellite images—in order to create more accurate, high-resolution maps of agricultural lands in countries in Sub-Saharan Africa. Sitian Xiong, Ph.D. ’25, conducted much of this research for his dissertation.

According to U.N. projections, Africa’s population could reach 2.5 billion by 2050, or 25 percent of the world’s population, before starting to decline at the end of the century.

In two decades, a third of Africans will be under age 18, and most will abandon rural villages for the cities. That means fewer farmers growing food for their families on small plots.

As a result, the continent will see “some of the world’s most dramatic socioeconomic changes this century” including rapidly growing economies, a rising middle class, changing diets that favor more meat, and surging food demand, according to Estes.

“If you take all that, plus the fact that Africa is the most rapidly urbanizing continent on the planet,” he says, “you are going to have major changes in land use.”

Africa is home to the largest share of the world’s remaining potential rainfed farmland, Estes says. “Many areas that are currently rangelands or not used for agriculture are going to be converted into croplands. This transformation is already happening now.”

Funded by external grants, including a NASA grant alongside Alemohammad, Estes’ team is using improved AI models to generate detailed, annual maps of crop field boundaries to analyze agricultural change in Ghana, Tanzania, and Zambia. The maps can help governments, farmers, and the public better predict land changes, and “the dynamics of how the food system reacts to climate variability, particularly rainfall and temperature,” Estes says.

The maps also could be used to indicate expansion of fields by investors, who might plant non-food crops like trees, sell land, or consolidate their holdings into larger parcels. Many urban Africans are investing their growing incomes in farmland, which is “changing how farmland is produced,” Estes says.

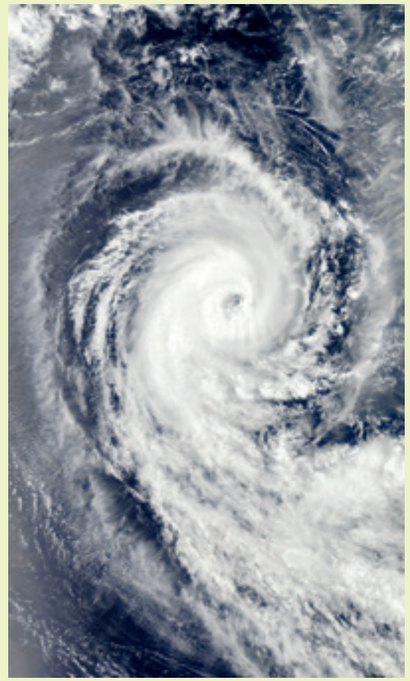
“If you want to understand commodity markets in the future,” he says, “you’re going to want to understand what’s going on with agriculture in Africa.”

From Africa to the Arctic, it seems, the reach of Clark’s geospatial research knows no borders. ●

New Wave of AI

Beyond geospatial science, researchers affiliated with Clark’s School of Climate, Environment, and Society are finding other ways to apply AI in their research. Environmental economist Robert Johnston, director of the George Perkins Marsh Institute, is co-leading a study applying machine learning to understand the types of community engagement and capacity-building activities that best support hazard resilience within inland and coastal communities throughout New England.

Funded by the Adaptation Sciences Program, part of NOAA’s Climate Program Office, the ongoing project supports the efforts of communities to protect themselves from extreme-weather and climate disasters that, according to NOAA’s Office for Coastal Management, have cost the United States $2.9 trillion since 1980.



A Greener Worcester? Imagine That.

The city is an inspiration, and partner, in Clark's efforts to empower a sustainable community

BY JIM KEOGH

"If I were a young person looking at schools to apply to in this particular moment, I would find what Clark is offering extremely attractive."

CALEIGH MCLAREN '22, M.S. '23, ASSISTED WITH THE MIYAWAKI FOREST PLANTINGS.

On a steamy night in August, fireworks exploded over Polar Park. The Worcester Red Sox had just won their game, and the club was continuing its Friday tradition of celebrating with lights in the sky.

A mother and father, along with their two young boys, were heading to their car in the parking lot of the Worcester Public Library when they stopped to watch the display, peering between the extended branches of young willows and oaks. They hadn't anticipated the fireworks, or they likely would have stayed in the ballpark. Nor, almost surely, did they understand why they were observing the show through a grove of trees growing within the confines of a city parking lot.

This urban microforest—known as a Miyawaki forest, after the Japanese botanist who developed the concept—was planted on 6,500 square feet as one in an arsenal of tools to cool the city, particularly in neighborhoods where the prevalence of brick and asphalt, combined with a lack of vegetation, has resulted in the phenomenon known as the urban heat island effect.

Sixty canopy trees, 700 shrubs and flowering trees, and 2,500 understory plants were transplanted from Clark's Hadwen Arboretum by an army of volunteers and planted in nutrient-rich soil that also was dug and transported from the Arboretum, resulting in a strip of land that is more than 10 degrees cooler than the surrounding asphalt.

The library-lot forest and a second Miyawaki forest, planted at the Plumley Village apartment complex, are rooted in collaborations among the city, state, and Clark and were generated through a proposal developed by Worcester environmentalist (and former Clark professor) Evelyn Herwitz. Students in the HERO (Human-Environment Regional Observatory) program, run by geography professors Deborah Martin and John Rogan, have been key not only in establishing the forest but also in locating and monitoring Worcester's heat islands as part of a citywide strategy to counteract the most serious impacts of temperature rise.

The family in the parking lot—indeed, most Worcester residents and visitors to the city—may be unaware of the steps being undertaken to cool their world at the hyper-local level, but those efforts are very much woven into the fabric of Clark. The launch of the School of Climate, Environment, and Society is emblematic of the opportunities that abound for Clark students to study, intern, advise, and help the city catch its breath.

PREVIOUS PAGE: THE MIYAWAKI FOREST NEAR THE WORCESTER PUBLIC LIBRARY.

* * *

Melissa Hoffer is well acquainted with Clark University.

She's collaborated with the Council on the Uncertain Human Future, whose origins are at Clark, and this past spring she participated in a kickoff conference for the School of Climate, Environment, and Society. Recently, she chatted with HERO students on campus about the work they do to help green "gateway" cities like Worcester, Leominster, and Lowell.

And as the chief climate officer for Massachusetts, she appreciates how Clark's efforts to promote and practice sustainability synergize with state-run climate initiatives in Worcester and beyond. Hoffer notes that Clark's interdisciplinary approach to these important issues is analogous to Gov. Maura Healey's insistence that climate action be a driver for all the agencies under her purview, what's called a whole-of-government approach. That means climate-sensitive strategizing rests not only within the jurisdiction of the energy and environment departments, but also with agencies overseeing economic development, public safety, transportation, and health and human services, among others.

MELISSA HOFFER, CHIEF CLIMATE OFFICER FOR MASSACHUSETTS, CHATS WITH STUDENTS FROM CLARK'S HERO PROGRAM.

"I love that you're integrating climate in this very interdisciplinary way with the new school," Hoffer says of Clark. "You are the academic analog of what Governor Healey is trying to do."

Students attending college in Massachusetts are part of a thriving climate-response ecosystem that is unique, says Hoffer, who is the only cabinet-level state climate officer in the country. She notes Massachusetts' legacy of leadership in areas such as cap-and-trade and the regulation of greenhouse gas emissions, which has established a roadmap for federal policy.

Hoffer points to the intellectual capital within the state's strong academic institutions, which, in concert with the research-and-development profile of private industry and support and investment from the state, have created burgeoning opportunities in areas like climate technology, where the start-up culture is particularly robust.

She sees intensive and deliberative action as an antidote to "climate anxiety," the feeling of being helpless and ineffectual in the face of climate and environmental transformation.

"It's a very hopeful space to be in, because we're actually working to deal with the problems that are so terrifying to many of us," Hoffer says. "Believe me, I feel angry, too,

KASKA YAWO, EXECUTIVE DIRECTOR OF ACE, DISCUSSES THE PARTNERSHIP WITH CLARK.

STEVE KING

sometimes. But if you can take that raw emotion and translate it into constructive action, that can be a powerful thing.

"People feel better when they're working toward a solution, and it's exciting to think about students at Clark who are taking a constructive approach to help solve this problem."

During the recent meeting with three HERO students—Nate Kidd '26, Aidan Humphreys '26, and Jamie Young '27, Hoffer was so impressed with the Clark group's work that she extended them an invitation to speak to the Youth Climate Council, a statewide coalition of high school students who advise the governor and the Office of Climate Innovation and Resilience on climate policy and actions.

With the School of Climate, Environment, and Society, Clark is a fit "for students who are looking for some concrete, pragmatic orientation on how to deal with this problem in the world," Hoffer says. "They're going to want to come where there's a faculty that's sophisticated about it, where they see that the institution is making a real commitment to it and lifting it up as a priority. When I was at Clark for the conference and had a chance to talk with some professors, I just thought, 'Yeah, this is it.'

"There are going to be all kinds of ways that people can take this knowledge and experience out into the real world. If I were a young person looking at schools to apply to in this particular moment, I would find what Clark is offering extremely attractive."

* * *

"Imagine" is a powerful word. Dreamy and boundless; the essence of possibility.

Imagine 2050, an initiative of the Central Massachusetts Regional Planning Commission, transforms the possibilities into a policy roadmap to promote a sustainable and equitable future for Worcester and 39 surrounding communities. "It's a sweeping vision that spans from the urban core of Main South to post-industrial mill towns in the Blackstone Valley to farmers in the region's rural hills," says Dominique DuTremble '13, M.A. '15, director of regional planning and special projects at the commission.

"This work matters deeply," DuTremble explains. "We're planning in the face of climate disruption, accelerating technology, and economic uncertainty. It's inspiring, but it's also a responsibility. These changes are real, and they're happening now."

Through Imagine 2050 visioning sessions, table events, surveys, and stakeholder interviews, the planning commission arrived at a series of core principles around themes that include mobility and connectivity, responsive governance, equitable economic growth, strengthened climate resilience, and improved quality of life. Scenario planning based on these principles, in combination with collected data, helped CMRPC formulate potential recommendations.

The organization is also working on a comprehensive climate action plan and collaborating with communities to reduce municipal energy use.

"Our job is to meet communities where they are and help them move toward the future they want," DuTremble says. "That means balancing long-term ecological goals with day-to-day realities like affordable housing, transportation access, and livable wages. It's not theoretical—these are people's lives."

DuTremble, who earned her undergraduate degree in political science and her master's in community development and planning, is proud of the pipeline between her alma mater and the agency.

"Clark has been a perpetual source of talent for CMRPC," she says. Student interns regularly support planning work in food systems, transportation, housing, and more. It's no surprise, then, that the organization has attracted many Clarkies to its ranks. Currently, the organization boasts 14 Clark alums, according to Anthony Senesi, communications and civic engagement coordinator, and himself a Clarkie (Class of 2017).

"Regional planning is a holistic discipline—it's systems-level thinking with real-world impact," DuTremble says. "It's not paperwork. It's creative, collaborative, and community-rooted. There's tremendous opportunity in Central Massachusetts for the next generation of planners."

She adds that Clark interns have played a vital role in Imagine 2050, especially in data collection and community engagement—whether through stakeholder interviews, workshop facilitation, or listening sessions.

"Being at CMRPC feels a lot like being at Clark," DuTremble reflects. "Both places draw people who are smart, values-driven, and deeply committed to making the world better. That's the energy we need more of in regional planning."

"Our job is to meet communities where they are and help them move forward. It's not theoretical. These are people's lives."

* * *

"Clark is not a stranger to us, and we are not a stranger to Clark."

With this simple declaration, Kaska Yawo, executive director of the African Community Center in Worcester, announced a formal partnership with Clark that would amplify the University's efforts to help African and Haitian immigrants navigate economic and cultural challenges while preserving their most precious traditions. The effort further strengthened the bond between ACE and Clark: The University's faculty and students frequently collaborate on research and wellness efforts, and Clark alumni have been a consistent presence as employees and leaders at the organization over the years.

Students in Sustainability and Social Justice Professor Anita Fábos' Cultures of Exile course collaborated with members of the Haitian and African communities, some of whom had been forcibly displaced from their home countries, on projects surrounding themes of food traditions and identity. Using ArcGIS software, one group of student researchers built upon a previous project by Lia Tang '23, M.A. '24, to create an online map that provides a list of essential resources, foodways, and informational hubs for Worcester's immigrant communities.

Fábos notes that the paradigm is shifting away from commonly held categories like "migrant" and toward the concept of "mobility" to describe how people are "being in the world."

"It's more expansive and includes many more of us," Fábos says. "In the context of climate and the transformations that urban and non-urban spaces are experiencing, I think that's something that will affect us all. So the idea of mobility rather than migration helps us consider how we're going to transform together."

In her classes, Fábos takes what she describes as a "person-centered approach" to refugee studies, which joins the many threads of an individual's experience. She explains that the refugee system is divided into discrete compartments (emergency, humanitarian, relief, resettlement, and integration), each with distinct personnel and policies. Clark's approach "focuses on the person who has interacted with most or all of these compartments—as a whole person and not as 'a fleeing person' or 'a person needing aid.'

"We have found that belonging manifests in all kinds of new and different ways when you are forcibly displaced," she continues. " 'Place' is always important, and our ties and connections to our heritage are essential. Forced migrants weave their heritage identities into their ongoing efforts to 'belong' in new places. They are often expected to drop their heritage and assimilate, but strong communities are built on transforming together." ●

Gifts that always matter

For Larry Franks, M.A. '73, it wasn't the technical training gleaned from his graduate education that mattered most, but other, less concrete skills that truly made the difference.

"It was the ability to think, the ability to not only assemble data but to understand it, and then, most importantly, communicate it," he says. A student of international relations, he was well-equipped to conduct surveys of Saigon households during the Vietnam War, in neighborhoods that had never seen an American.

Larry and his wife, Ellen Berelson, want to help ensure the opportunities for a unique and deeply felt educational experience will continue to be offered by Clark. To that end, they've made the University a beneficiary in their planned-giving profile.

The couple has also long supported Clark students with meaningful paid internships through the Theodore H. Barth Foundation, which funds more than 50 arts, education, and social service organizations. Ellen is the foundation president; Larry, the secretary-treasurer.

"We were lucky that when we went to college, you could graduate without crushing debt," says Ellen, who previously worked for the State Department's Bureau of Educational and Cultural Affairs. "Cost should not be a bar to people getting themselves equipped for a better life. There's no substitute for a good education."

Larry, a Clark trustee, enjoyed a long career that included a stint in the Peace Corps in Africa, ownership of a video-production company, and ending his career with Vertex Solutions/Adayana Inc., implementing learning management systems for a number of federal and international agencies.

Why give to Clark? The answer is clear, Larry says.

"If science matters, if learning matters, if international understanding matters, then it matters that universities like Clark be nurtured and supported."

To learn more about making Clark part of your giving intentions, contact Kate Rafey '08, MPA '09, director of gift planning, at 508-793-7719 or krafey@clarku.edu.

PHOTO COURTESY OF PHILIP KARP

Alma Mater

Celebrating Clark's Alumni Community

WITH A CAMERA AND COLLABORATION, PHILIP KARP '77 WORKS TO SAVE THE CORAL

SEE PAGE 56

Cousteau's Ripples

Protecting the Wealth Beneath the Waves

With a camera and collaboration, PHILIP KARP '77 works to save the coral

By Jim Keogh

Philip Karp '77 grew up watching Jacques Cousteau on his family television and dreamed of one day embarking on his own undersea adventures. What he didn't understand at the time was that the famed French explorer was doing more than enchanting the TV masses: Cousteau also recognized the power of the camera to heighten awareness about the precarious state of our seas and move the public to take action to protect them.

Years later, that lesson truly landed with Karp. He's merging his passion for ocean conservation with the medium of film as producer of *Wealth Untold,* a documentary detailing the efforts of the Caribbean nation of Belize to protect coastal ecosystems against a host of challenges—from the predatory lionfish, an invasive species that decimates native fish populations, to the destruction of natural habitats by overdevelopment and tourism.

Karp first got involved with Belize in 2013 when he worked with local nongovernmental organizations to devise a plan to combat the lionfish. His recommendation of using market-based solutions to deal with the fish has been successful, with a number of local women launching their own businesses by designing popular jewelry from the animal's ornate fins, and local restaurant chefs incorporating lionfish into their cuisine.

The Clark alumnus was enjoying his career as a lead knowledge management specialist with the World Bank, working with communities around the world to help them manage the development of their rural, urban, and social spaces and build climate and disaster resilience. He advocated for nature-based solutions to ecological threats, like cultivating oyster beds to prevent storm surge and growing mangroves to sequester carbon, and lectured across the globe about the incipient dangers of plastics littering the ocean. When he retired in 2019, Karp turned his full attention to volunteer work on ocean conservation, and to Belize.

Wealth Untold, directed by Eladio Arvelo, centers the stories of a dynamic group of Belizean women—scientists, community leaders, artists, entrepreneurs, and policymakers—who have spearheaded efforts to protect the country's distinctive barrier reef (the longest in the Western Hemisphere), guard against overfishing, and fend off offshore oil drilling, all while delicately balancing economic survival—represented by tourism dollars—with the real dangers to Belize's fragile ecosystem posed by a mass influx of visitors. Largely because of their efforts, the Belize Barrier Reef was designated a UNESCO World Heritage site.

"We were committed to telling a balanced story," Karp says of the film, which took four and a half years to make. "One of the biggest decisions we made was to have no narrator; we wanted the story told entirely through the voices of the women. It was more difficult than I realized it would be, but it worked."

Among those interviewed in the documentary is Dr. Sylvia Earle, a renowned oceanographer and NOAA's first female chief scientist. Karp recalls the on-camera conversation with Earle as very similar to a lunch he and a small group of World Bank colleagues once shared with noted primatologist Jane Goodall.

"When you ask them a question that's familiar to them, they respond immediately with a sound bite that is absolutely brilliant," he says. "And if you ask a question outside of that, they reflect for about thirty seconds, then give you an answer. And it's equally brilliant."

Wealth Untold premiered, appropriately, at the Belize International Film Festival last November. It has since been shown at conferences, including the U.N. Ocean Conference in Nice, France, this past June. The film also has been accepted into the Newport Beach Film Festival at the end of October and will be screened on the festival circuit and at conferences for about the next 18 months. Karp's hope is to have *Wealth Untold* broadcast on PBS.

When he was at Clark, Karp, an international relations major, challenged some of his friends in the sciences to take a political science course, and in return, he would take a marine biology class. He scored the highest grade on the midterm and, to the chagrin of his science-major classmates, managed to throw off the grading curve.

So, this self-described "citizen scientist" is heartened by some of the innovative ideas being brought forward to aid in ocean preservation at every level. His optimism is tempered, however, by the lack of progress on the U.N. Plastics Treaty, especially the resistance to it shown by the United States.

The people of Belize, Karp suggests, are exhibiting leadership in the conservation realm through local efforts that can serve as a model for thoughtful, collaborative, and creative stewardship globally. As of this writing, he is excited to return to Belize, where he serves on the board of an NGO that is proposing alternatives to single-use plastic water bottles in the schools.

He also produced a music video in Belize to accompany the theme song to *Wealth Untold.* Who knows? Maybe it will go viral—surely even Cousteau couldn't have imagined that.

▸ **Information about upcoming screenings of *Wealth Untold* can be found on Facebook (@Wealth Untold Film) and at wealthuntoldfilm.com. Karp is shown bottom center. Other images include conch harvesting and seaweed farming in Belize.**

Photographs courtesy of Philip Karp

Fact-Finder

Jeff Kisseloff's Crusade

Clarkie completes a 50-year odyssey to solve the mystery of the Alger Hiss case

By Jim Keogh

Jeff Kisseloff '77 was doing what he loved most: burrowing into the arcana of old newspapers and magazines inside the Goddard Library's microfilm room. On this particular day, the Clark junior was hunting down the August 1948 obituary of Babe Ruth in *The New York Times* when he noticed an article from a few days before about a House Un-American Activities Committee hearing into the case of Alger Hiss, the State Department official who was accused of spying for the Soviet Union in the 1930s and who later served 44 months in prison for perjury.

Kisseloff was so fascinated by the Hiss story that he convinced the head of Clark's History Department, Robert Campbell, to allow him to do an independent study of the case. The year was 1976.

"I had all the hubris in the world that I could solve this," he recalls. "I proceeded to read everything that was ever written about the case, but only about three or four weeks into it I was sure Hiss was innocent."

Nearly five decades later, Kisseloff, a journalist and historian, not only hasn't wavered from his original conviction, but has written a book filled with detailed evidence to support his assertion that Hiss was the victim of one of the most egregious and unjust character assassinations in U.S. political history. In April, the University Press of Kansas published *Rewriting Hisstory: A Fifty-Year Journey to Uncover the Truth About Alger Hiss,* which is both a deep analysis of the Hiss case and a memoir of his longtime quest to exonerate the man at the center of it.

Kisseloff came by his obsession honestly. While still a Clark student, he asked the head of the Government Department, John Blydenburgh, to let him spend a semester working for Hiss in New York City. "Think about it—if Clark didn't encourage independent study, who knows what history would be saying about the most important political trial of the 20th century," says Kisseloff.

Already, he had managed to talk his way onto a New York-based legal team that, if a bit rag-tag, was also singularly devoted to proving Hiss' innocence years after he'd been branded a traitor in the public square. Hiss, aging yet courtly and sharp-witted, was a presence in the office, and Kisseloff came to know him well. "He was a very decent man," he says. "I'd never worked with or for anybody else who I respected so much, or anybody else I enjoyed so much."

Hiss needed all the help he could muster. While some talented lawyers and researchers entered his orbit to sort through boxes of files and compose briefs, there were other times when the personnel pool was exceedingly thin. "In those moments, I was the best that he had, and that wasn't a good thing," Kisseloff recalls with a laugh. "The pressure was on me to be better than I was, or at least as good as possible."

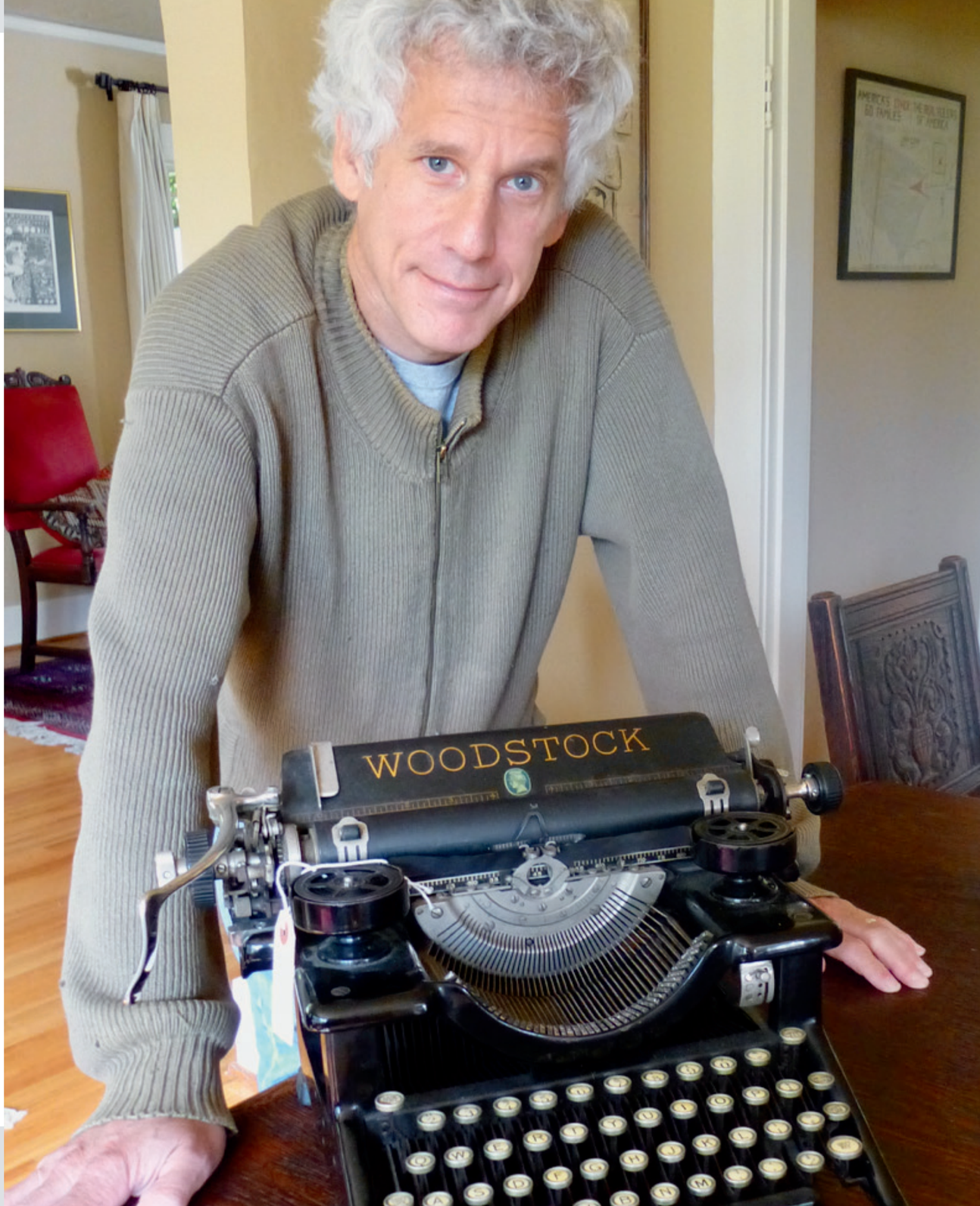
In his book, Kisseloff contends Hiss was targeted in plain sight by a cabal of political and government operatives, including then-congressman Richard Nixon, who were aided by J. Edgar Hoover's FBI in an effort to dismantle New Deal liberalism. An army of accusers—whose mendacity Kisseloff picks apart with sniper-like precision—was fronted by star witness Whittaker Chambers, a journalist and self-confessed former agent with the Soviet intelligence services, who alleged Hiss was himself a Soviet spy. Through exhaustive connect-the-dots research, Kisseloff exposes Whittaker as almost pathologically incapable of delivering a truthful narrative, and as someone so intent on bringing down Hiss that he resorted to embellished "facts" and outright fabrications.

"Chambers was extremely malleable, and he was fixated on being the guy who was going to save Western democracy," Kisseloff says. The conspirators against Hiss had found someone "who suited their purpose, so they had to believe him, because if they didn't, their whole narrative goes out the window."

Rewriting Hisstory and algerhiss.com are the culmination of Kisseloff's crusade on behalf of Alger Hiss. To get there, he secured documents from collections across the country, and successfully sued the FBI for files related to the case—for which he was rewarded with 120,000 pages of unredacted documents, three times the number of files that Hiss had obtained in the 1970s. The files are clear on the FBI's role in the case, he notes.

"They intimidated witnesses; they hid exculpatory evidence," Kisseloff says of the FBI. There was also a theory, which Kisseloff disputes, that the agency forged the Woodstock typewriter on which Hiss' then-wife, Priscilla, was said to have typed out classified communications

"I WAS ONLY AFTER THE TRUTH."



Photograph courtesy of Jeff Kisseloff

to the Russians. Kisseloff secured the typewriter (he's pictured with it on the preceding page) from the Hiss family and conducted a forensic analysis of the keys, showing it couldn't have been the machine in question (Kisseloff presents copious additional evidence exonerating Priscilla). "But the FBI didn't do it; others did. The FBI lab wasn't that good."

While in the thick of researching and writing the book, Kisseloff regularly logged 14- and 15-hour days, seven days a week and his body bore the brunt of it. He suffered two heart attacks and a series of small strokes, the worst of them occurring when he was on the verge of completing the last chapter.

"I was sitting at my desk and things started jumping up and down," he recalls. "I have this little test where I name the presidents in order, and I got stuck after five. It was then I knew I was in trouble, but I had to finish that chapter, so I sent it in—and it was all gibberish. I had to redo it all."

The Long Island native who began his journalism career as sports editor of *The Scarlet* earned a master's in journalism from Columbia and went to work for two New Jersey newspapers, reporting on the Yankees ("I've seen Yogi Berra naked") and uncovering political corruption ("We were constantly sending mayors to jail"). He then turned to books after being blacklisted for organizing a union. He's written oral histories about Manhattan (*You Must Remember This*), television (*The Box*), and 1960s protests (*Generation on Fire*), as well as two books for young audiences, *Who is Baseball's Greatest Hitter?* and *Who is Baseball's Greatest Pitcher?*

While working on the Hiss book, he undertook a number of other projects, including launching an education program in collaboration with *The Nation* magazine.

His guiding principle for *Rewriting Hisstory* was simple.

"It was about using basic reporting to figure this thing out," he says. "I said early on that if I thought Alger was guilty, I would say so—I was only after the truth."

The years of research, the long hours at the keyboard—even the strokes—were worth it to salvage the reputation of a wrongly maligned figure of American history, he insists.

"If I didn't do this, nobody would have," he says. "My folks taught me about the importance of doing right by people, and I just wasn't going to let it go."

Sustainable By Design

Seasons of Change

Decarbonizing the country one municipality at a time

By Melissa Hanson

Serena Galleshaw '12 loves to get outside. During the winter months, she hits the slopes for skiing and snowboarding, and she surfs in every season. But Galleshaw, who grew up in New England and works in Boston, is troubled by how much the climate here has changed during her lifetime.

"Watching our winters become different is definitely a driving source of motivation," says Galleshaw, an urban planner and sustainability coordinator for Sasaki, an interdisciplinary planning firm. "I'm a year-round surfer, so coastal adaptation work is really important to me."

Galleshaw has worked on projects in the Northeast and beyond for Sasaki, primarily focusing on decarbonization, resilience, and adaptation. She helps municipalities and schools develop climate action plans and get off fossil fuels.

"I got into planning because I kept asking myself, 'How can I make it easier for more people to live sustainably?' One of the ways to do that is land-use policy, because if you can't walk to your grocery store, that's a policy failure," she says.

Galleshaw contributed to a decarbonization plan for Middlesex Community College, which has campuses in Lowell and Bedford, Massachusetts, that called for buildings to transition to electric heating and cooling. She also built a digital resilience and recovery guidebook and toolkit for a regional planning commission in Southwest Ohio. After a series of tornadoes in 2019, the commission wanted a go-to resource for natural disaster recovery for the region.

Galleshaw majored in global environmental studies at Clark. Her self-designed capstone on experiential education and ecological literacy as a solution to the climate crisis involved working with the Audubon Society in Worcester to investigate the river otter population. "The Audubon Society wasn't sure river otters existed in the region but had heard rumors," Galleshaw says. "I tracked the otter and confirmed that it was actually there. Worcester is a dense urban city, and to know that there were still river otters was cool."

She has seen conversations about climate change evolve since she earned her degree and started working in the field. In the early 2000s, she recalls, many people were still questioning the existence of climate change. Today, plans and policies to address it are in motion.

"Massachusetts is a leader when it comes to climate policy and climate action, so there are many opportunities to get involved," she says. "A lot of the climate action planning I'm doing for schools, for example, started because there's an executive order requiring the state to decarbonize all assets by 2050."

As technology and climate action evolve, so do planning, zoning, and modeling tools. Says Galleshaw, "We have an amazing opportunity to use our science to make better policy decisions that can save costs on buildings, do some amazing retrofits on our communities to better support the world that we live in, and ultimately help save lives."

"WATCHING OUR WINTERS BECOME DIFFERENT IS DEFINITELY A DRIVING SOURCE OF MOTIVATION."

Steven King photo

Alumni Notes
Tom Hicks

Clark's Connection is What Unites Us

Since the beginning of time, people have naturally identified with a particular tribe or community. Whether through shared geography, culture, or experience, there's an undeniable bond that forms. (Have you ever seen two people from New York City meet for the first time outside of New York? Instant connection.)

Many of us support sports teams not just out of loyalty, but because they're tied to where we grew up or where we live. It's about belonging.

You've probably heard the phrase, "Never talk about politics or religion at Thanksgiving dinner." That's because those topics—while deeply personal—reflect how strongly we identify with our beliefs and the communities built around them.

As humans, we instinctively seek out these commonalities—to build friendships, partnerships, and a sense of purpose.

Being part of the Clark University community is no different. Each of us shares a connection to Clark—whether positive, complex, or somewhere in between—that fuels our passion and sense of belonging.

Since 2020 and the onset of the COVID-19 pandemic, we haven't had the same opportunities to gather in person as we once did. But now is the time to reconnect.

As many of you may have heard, Clark is undergoing a transformation unlike any in its nearly 140-year history. This is the institution that helped put a man on the moon and advanced the mapping and study of our planet. Today, Clark is leading the way in the study of manmade climate change.

But like many institutions of higher learning, Clark must evolve to meet the challenges of a rapidly changing world. As president of the Alumni Council, I ask you to step up and support the University in whatever way you can. Attend a local event, join an online forum—take action. Our school and our country were not built by sitting on the sidelines, but by stepping forward.

I encourage you to update your contact information and reach out to your Clark "tribe." Reignite those connections, share your stories, and help strengthen the community we all care so deeply about—for the next 140 years and beyond. And as you peruse Class Notes, watch for the names in green, which signify those who work and advocate for issues around the climate and environmental health of the planet we share.

WHAT HAVE YOU BEEN UP TO?

Did you get a promotion? Get married? Write a book? Meet up with fellow Clarkies for a mini-reunion? We want to hear all about it, and your classmates do, too. Send your class note to classnotes@clarku.edu.

Or, if you prefer snail mail: Melissa Lynch, Managing Editor, Marketing and Communications, 138 Woodland St., Worcester, MA 01610

Class Notes

1957

Lawrence Freed '57, P '00, traveled across the U.S. four times (and Canada once), and has visited almost all of the country's national parks, monuments, and historic sites, and witnessed tribal ceremonies—experiences that inspired his interest in the environment. He has been dedicated to the city of Worcester, where he has volunteered for several environmental organizations and served on government entities focused on conservation. Lawrence also co-founded nonprofits including the Regional Environmental Council and Green Hill Park Coalition, and has testified on Beacon Hill and in front of local environmental boards and commissions. He also received the Region I U.S. EPA Merit Award.

1968

Margot Overington's dedication to environmental justice began when she attended a 1973 environmental conference and met E.F. Schumacher, the author of *Small Is Beautiful;* C.J. Swet, who invented solar panels for cooking in rural India; and scientists from Woods Hole, Massachusetts, who were working on both windmills for electricity and fish farming within a small, controlled ecosystem. She shared the urgency of changing from oil and gas to renewable resources with her Quaker Meeting and, with the help of St. Mary's University, Halifax, they held a weekend conference called "Energy and Peace." The long-term results of the conference included the Woods Hole scientists being invited to test the viability of using wind energy on Prince Edward Island. The Province of Nova Scotia began experimenting with tidal energy in the Bay of Fundy, and fellow Clark alum **Susan Holtz '71** was invited to join discussions on nuclear power in Ottawa. Margot moved to British Columbia and is still active in environmental activism. Her current interest is affordable housing.

1963 **Ross E. Heller** has married Cheryl A. Adamscheck, a 1968 graduate of the University of Oregon. Ross and Cheryl celebrated a dual wedding: They were married on March 1 at the Calvary Episcopal Chapel in Seaside, Oregon, by the Rev. David Sweeney, and then on May 4 were wed at their home in Chevy Chase, Maryland, by Rabbi Eric Abbott, spiritual leader of the Bethesda Jewish Congregation. A nice crowd of friends and family came to both events.

1963 **DUNCAN L. CLARKE** has published his second novel, *Murder on the Appalachian Trail.* He has hiked the 2,200-mile trail from Georgia to Maine twice with his German Shepherd and is a 50-year member of the Appalachian Trail Conservancy. His debut novel, *A Little Rebellion Is a Good Thing* (2020), told of a student uprising at a public women's college in Virginia. Duncan is professor emeritus of international relations and former director of the United States Foreign Policy Program at American University's School of International Service in Washington, D.C. He has authored numerous articles and five books on U.S. Defense and foreign policy.

Daniel Ranalli is a visual artist with a 45-year body of work engaging with environmental issues. His exhibition "Whale Stranding" traveled to the Ilulissat Art Museum in Greenland after a nine-month stay at the New Bedford Whaling Museum and will travel to additional venues in 2025. His most recent work, "The Garden Series," is a dystopic vision of what is going on with our environment and uses figures from art history to represent the expulsion from the Garden of Eden. Daniel and his wife, the artist Tabatha Vevers, divide their time between Cape Cod and Tucson, Arizona. Daniel also sits in as an occasional vocalist with the band Sensible Shoes.

Donna Hamil Tamlan, M.Ed. 68, is a psychotherapist and visual artist. In the past decade, her art's focus has been about keeping the Earth livable. Her ongoing participatory art project is "The Snowball Effect," where she asks people at public events to commit to one new action to help the environment. "Clarkies, of course, participate with great enthusiasm," Donna wrote. The person writes their "eco-pledge" on a plastic scrap cut from detergent bottles; Donna tacks the pledges onto a giant fish form to create a living piece of art. They have been displayed at several locations. "Thousands of eco pledges have been collected over the years, and hopefully as many hearts and minds have been impacted as well to benefit our beautiful planet." donnahamiltalman.com

1970

Joshua L. Miller has published *Psychosocial responses to sociopolitical targeting, oppression and violence: Challenges for helping professionals.* Josh is a professor emeritus at Smith College's School for Social Work.

1980

Mary McMahon-Chappell is a retired teacher who is part of an Audubon book club and has been focusing her time this spring and summer on increasing her birding prowess in the brush along the Quinebaug River. She also composed a poem about climate change that was recognized by her local library.

1981

William Riebsame Travis, Ph.D. '81, recalls working with Geography Professor Robert Kates

1976 **Gary Morse** welcomed classmates from the Clark Class of 1976 to celebrate his granddaughter's Bat Mitzvah on March 22, 2025, in Richmond, Virginia. Standing, left to right: **Jeffrey Marin '76, Laura Marin '76, Carey Friedman '76, Howard Nusbaum '76, Howie Tuttman, Melissa Tuttman '76, Sandra Morse, Gary Morse '76.** Seated: **Mary Ellen Nusbaum, Robert Obeiter '76.**

1995 Gathering in Singapore in April were, left to right: **Sandy Halim, MBA ’96; Unchalee (Kansaksiri) Krongboonying, MBA ’96; Deborah Abbott, MBA ’95, David Abbott, Lisa Lovely ’85,** and **Edward Pizzuto.** Lisa and Deb were heading on a cruise with their husbands, and Unchalee and Sandy came from Thailand and Indonesia to see them off. “The picture was taken at the Jewel Rain Vortex in Singapore,” Deb wrote. “A pretty impressive place for a Clark reunion!”

on the first NSF-funded research linking climate and society. He writes: “In that first project, called CLIMPOP for climate and population, grad and undergrad students studied the history of climate impacts in the Tigris-Euphrates Valley, the African Sahel, and the U.S. Great Plains. I got assigned to the Great Plains and the next summer found myself on puddle-jumper commuter flights across the Plains, from Boulder, Colorado, to Miles City, Montana, to Williston and Fargo, North Dakota, collecting data on farm economics through historical droughts (1910s, 1930s, 1950s and 1970s), to test Bob’s hypothesis about adaptation that, over time, lessened climate impacts. We presented our results at the first Climate and History Conference at the University of East Anglia in the UK, my first trip outside the U.S.” William still works on climate and society research at the University of Colorado and maintains a website of Bob’s work on climate, hazards, and sustainability, at www.rwkates.org.

2005

Nick Malizia ’05, M.A. ’06, is head of product development and strategy for sustainability at Indigo Agriculture, which builds technology to help farmers produce their crops more sustainably and develops programs for growers to get paid for those benefits. In his role, he focuses on developing the technology to support a portfolio of programs.

2011

Tyrone Hall, M.A. ’11, is a global communicator and sustainability specialist who has worked with a range of constituencies, from community groups to the United Nations, on climate strategy and outreach. To urge action on climate change, he says, “you have to talk to people in constructive ways” and frame the topic in terms they identify with. At the U.N., Tyrone was the lead advisor for outreach, climate communications, and political mobilization in the Executive Office of the Secretary-General. Tyrone is currently a special advisor in the Office of the Vice President for Academic Affairs at George Brown College in Toronto, where he is contributing to the planning of a new sustainability initiative. Tyrone received his doctorate in communication and culture (sustainability politics and policy) from York University in Toronto.

2006 **Joanna Brinton ’06, MPA ’07, Josie Clark ’05, M.A. ’06,** and **Cara Wood ’05, MSPC ’06,** got together in Maine for a mini Clark reunion.

2012

Joe Krahe is celebrating 10 years as an economist with the U.S. Environmental Protection Agency. In the Office of Land and Emergency Management, he has worked on economic analyses for regulations under several statutes, including Superfund, the Resource Conservation and Recovery Act, and the Toxic Substances Control Act. “But the project I am most proud of is the Updated Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities,” Joe wrote. “The costs and benefits that I helped to monetize for this project are measured in the billions and it has the chance to impact millions of Americans.” Joe credits Clark Professor Jacqueline Geoghegan and former Mosakowski Institute for Public Enterprise Director Jim Gomes with mentoring him on the path to his career.

Jemmie Martinez ’17, MPA ’18, has joined Mirick as an associate in the firm’s Labor, Employment & Employee Benefits Group. Her practice includes labor and employment and education law, along with general litigation. She began her career at Mirick as a summer associate in 2023; previously, she was a judicial intern for the Honorable Judge Patti B. Saris and the Honorable Margaret R. Guzman ’89 for the U.S. District Court for the District of Massachusetts. She served as a congressional intern for Massachusetts Senator Elizabeth Warren and for the Fair Labor Division at the Massachusetts Attorney General’s Office in Boston. Martinez is a graduate of Suffolk University Law School, where she served as an editor for the *Suffolk Transnational Law Review* and sat on its board as competitions editor during her second year.

2018

Koby Gardner-Levine ’18, M.S. ’19, was recently named by *BusinessWeek* as one of its 40 Under Forty for 2025. As the regional manager for the Northampton, Massachusetts, office of U.S. Rep. Jim McGovern, he handles everything from overseeing the needs of the 30 municipalities in the western portion of the massive district (most of them in Hampshire and Franklin counties) to assisting individual constituents and overseeing $8.5 million in Community Project Funding across the district in 2024. Koby also serves on the boards of the Hitchcock Center for the Environment in Amherst and the United Way of the Franklin and Hampshire Region, and is a member of the Hampshire Food Policy Council.

2021

Jacob P. Chamberlain, Ph.D. ’21, has published *Migrant Justice in the Age of Removal: Rights, Law, and Resistance against Territory’s Exclusions.* The book tells the story of Migrant Justice, a migrant rights organization led by undocumented workers in Vermont. This story, which includes U.S. Immigration and Customs Enforcement’s use of a covert informant to infiltrate the group and deport key members of their community, provides a detailed analysis of the state of immigration enforcement in the country, alongside an intimate portrait of successful modes of resistance against it.

2017 **David Quiroa ’17** and **Laura Winslow ’17** were married on August 17, 2024. Clarkies celebrating with them were, from left to right: **Monica Marrone ’17, Yousra Benchekroun ’17, Senegal Carty ’17, Laura** and **David, Feston Idrizi ’16, Rose Watts ’17, and Degen Larkin ’17.**

In Memoriam

“She Left an Indelible Mark”

Stylish. Witty. Caring. Brilliant.

Those are just a few of the adjectives used by colleagues to describe Amy Richter, chair of the History Department and academic director of the Worcester chapter of The Clemente Course in the Humanities, who died on June 2, 2025, after a long struggle with ALS.

Richter, who specialized in 19th- and 20th-century American and cultural history, with an emphasis on women’s and urban history, joined the History Department in 2000 and was recognized across the University for her leadership, service, and scholarly work. She was beloved by students and honored during her tenure at Clark as the Outstanding Academic Advisor of the Year, Distinguished Academic Advisor of the Year, and Outstanding Teacher.

“Everything she did was excellent,” said Dean of the College Laurie Ross, “whether it was writing a request for a faculty position or advising a student. She was a deep thinker who could offer an insight or a different way of considering something that was extremely valuable.”

History Professor Ousmane Power-Greene remembered Richter as a teacher who always injected humor into the classroom and managed to set a high bar for students and challenge them while being endlessly supportive. She was a fierce intellectual and extraordinarily supportive colleague, he said.

“She was one of those rare people who would always try to understand what she could do to help you find success in your teaching, scholarship, or community-building,” Power-Greene said. “She always would be problem-solving, and she was a great networker, trying to help colleagues collaborate across the University and in Worcester. She was the least pretentious person I know and so selfless.”

Richter and Power-Greene were both instructors of The Clemente Course in the Humanities, which provides free education for adults facing economic hardship and adverse circumstances. Richter began as a U.S. History instructor for Clemente and then became the academic director of Clemente’s Worcester chapter. The program thrived under her leadership, and after her first year as director, 17 students graduated and 14 found jobs or pursued further study.

Richter directed the Higgins School of Humanities (now the Alice Coonley Higgins Institute for Arts and Humanities) from 2013 to 2017, hosting a series of speakers who challenged the Clark community to think deeply about pressing issues.

In 2023, she received the John W. Lund Community Achievement Award for her dedication to The Clemente Course and her involvement with Simon Says Give, a national organization that provides school supplies to new middle-schoolers and birthday parties for younger children. The Worcester chapter of Simon Says Give was founded by Richter’s son, Simon, and her husband, Jim Eber. As a family team, Amy, Simon, and Jim spent thousands of hours recruiting volunteers, procuring donations of supplies and food, networking with school administrators and local organizations to identify youth with unmet needs, hosting events, and organizing parties.

Colleague and friend, Kristen Williams, professor of political history, recalls that Clark students often lined up outside Richter’s office, eager for guidance and conversation. “She had a lot of advisees,” Williams says, “and whether it was undergraduate, master’s, or doctoral students, she was always available, and students gravitated to her.”

Richter authored *Home on the Rails: Women, the Railroad, and the Rise of Public Domesticity* (2005) and *At Home in Nineteenth-Century America: A Documentary History* (2015), as well as many chapters and articles about women’s studies and 19th- and 20th-century American and cultural studies. She also was an affiliated faculty member with the Urban Studies and CGRAS programs. Her doctoral work earned her the 2001 Lerner-Scott Prize for Best Doctoral Dissertation in U.S. Women’s History from the Organization of American Historians. She received her Ph.D. in history from New York University in 2000 and a bachelor’s in urban studies from Columbia College, Columbia University, in 1991.

A New York City native, Richter made Worcester her second home and was named a Worcester Magazine Hometown Hero in 2023, highlighting her commitment to The Clemente Course and Simon Says Give. Richter told *Worcester Magazine* that while it was lovely to be recognized, “It doesn’t seem heroic to do something that is so personally satisfying.”

Richter’s greatest legacy, Williams said, was simply being a good human.

“She left an indelible mark and so many people will miss her. I will be forever grateful that I had her in my life.”

STEVE KING

In Memoriam

John H. Flavell, M.A. ’52, Ph.D. ’55

PIAGET EXPERT

John H. Flavell, M.A. ’52, Ph.D. ’55, a preeminent figure in modern developmental psychology who founded the field of metacognition, passed away on March 13, 2025, at age 96.

Among his many contributions, Flavell’s treatise on the work of Jean Piaget effectively introduced Piaget, and the structuralist approach to children’s thinking, to American psychology. So clear and compelling was Flavell’s presentation that the Piagetian approach quickly became the dominant paradigm in cognitive development, and it remains a powerful force in that field.

David G. Hayes ’57

ECONOMIST, CIVIL SERVANT

David G. Hayes ’57 passed away on June 8, 2025, in Greensboro, North Carolina. He earned a master’s and Ph.D. in economics from Brown University and was a member of the economics faculty at Penn State before he began his career in government in Washington, D.C., which included roles at the Federal Reserve, the Center for Naval Analyses, and a lengthy tenure at the Office of the Comptroller of the Currency in the Economic and Policy Analysis division. He lived in Arlington with his beloved wife of 63 years, Gwendolyn “Gwyn” Hayes ’59, until her death in 2022. They married in the summer of 1959, just after Gwyn graduated from Clark.

Stephen Provencher ’64

SOFTWARE SPECIALIST; RACER

Stephen Provencher ’64 passed away on July 10, 2025, in Oakville, Ontario, Canada, after a long battle with cancer. He is survived by his beloved partner and wife of 42 years, Carola Koitz.

Stephen was born on November 3, 1942, in Worcester. He received his bachelor’s degree in chemistry from Clark and earned his Ph.D. in chemistry from Yale University.

Clark University was always close to his heart. Stephen felt the University transformed his life, allowing him to be rigorously challenged in the sciences. He and Carola endowed a scholarship fund in his name for students in need.

Besides science, Stephen had a passion for car racing and won multiple trophies in the Formula Ford series. Through an automotive internship, he learned how to repair his own racing cars.

In 2000, Stephen and Carola moved to Oakville, Ontario, Canada, where they started LCModel, Inc. A popular software program used for interpreting diagnostic medical research data, the technology has been sold worldwide for more than 20 years and is utilized in conjunction with MRI, PET, and other spectroscopy-based medical studies. Stephen retired from the company in 2022.

Stephen and Carola were benefactors of the arts in Canada and enjoyed traveling the world.

Passings

1940–49

Patricia (Bubar) Henderson ’49

1950–59

Raymond J. Caefer ’50
John C. Dirienzo ’50
Robert D. Belden ’51
Mary Jane (Flynn) Gogan ’51
Joan (Ziegler) Sadowsky ’51, P ’81
Donald H. Clegg ’52
Carol Gabrielson Fine, M.A. ’52
Dorothy (Kavoogian) Durkin ’53
William P. O’Brien ’54
Eleanor A. (de Guise) Sternlof ’54
Donald Richard Labrie ’55, M.A.Ed. ’56
Joan A. (Engstrom) Allard ’56
Harold M. Bates ’56
Frederick C. Cohen ’56
W. Richard Granger, M.A.Ed. ’56
Richard Andrew Hansen ’58
Judith (Gladding) Reilly ’58, M.A. ’60
Joan E. (Nelson) Calverley ’55
Eleanor B. Reddington ’55
Barbara J. (Schultz) Lander ’57

1960–69

Martha L. (Tuthill) Andrews ’60
Mary (Mahoney) DeWinter ’60
David A. Crouse ’62
Ki Hoon Kim, M.A. ’62
Walter E. Matern ’62
Glenn A. Meltzer ’62
William R. Anderson, M.A. ’63
Richard J. Bolan ’63
Mary Winnie Campbell ’63
Andrew G. Kagan ’63
Laurie (Little) Rothrock ’64
Stephen W. Provencher ’64
Louis G. Frank ’65
Alice C. Gannon ’65
George T. Logan ’65
Christopher E. Pickwick ’65
Bruce H. Needham ’66
Philip R. Pratt ’66
Susan (Honig) Scott ’67
Arnold Hoffman ’69
Ranganathan Ramachandran, Ph.D. ’69

1970–79

Kathleen A. (Olson) Carey ’70
Joseph Concordia, MBA ’70
Simon G. Harootian, Jr. ’71
Russell D. Lincoln ’71
Daniel C. Dewolfe, MBA ’72
Dennis E. Ahern, M.A. ’72
Dennis Anderson, MBA ’72
George R. Carlson, MBA ’73
Susan (Haines) Nelson, M.A. ’73
Stephen J. Hein ’74
Richard H. Freizer ’75
John S. Brown, MPA ’77
John J. Mattrick Jr., MBA ’77
Gloria W. Symonds ’77

1980–89

William Dustin Baker ’81
Laurel P. Sanderson ’81, MBA ’87
Karen (Krongold) Modell ’84
Linda M. (Flebotte) Sypek ’85
Daniel J. Greenwald ’86
Susan S. LeBlanc ’86, M.A.Ed. ’93
Rose-Marie M. McCluskey ’86, M.A. ’92
Clayton R. Carlisle, MPA ’89
Dana M. Drukker ’89

1990–99

Kristopher D. White ’92
Peter William Siebert, M.A. ’97
Alesia L. Ventura ’97

2000–

Jared B. Bienenfeld ’01
Christopher C. Nichols ’09
Jerry Simatos, MBA ’09
Mathew Ryan Graci ’24

As the magazine went to press, we learned of the death of Clark Trustee Anthony Cannon ’77, M.D., on Sept. 14, 2025. A full obituary will be published in the spring issue.

Clarkives

CLARK AS TRANSFORMER

In 1864, George Perkins Marsh—widely considered America's first environmentalist—published *Man and Nature: Or, Physical Geography as Modified by Human Action*, recognizing the irreversible impact of humankind's actions on the Earth.

Just over a century later, Clark took Marsh's hypothesis a step further when it hosted the ground-breaking conference, "The Earth as Transformed by Human Action." Organized by Clark geographers Robert Kates and Billie Lee Turner with Harvard's William C. Clark, the international symposium drew widespread attention from the scientific community, encouraged Clark's research in earth system science and sustainability science, and helped lay the foundation for the creation of the University's George Perkins Marsh Institute.

Writing about the conference in the August 1988 issue of *The Professional Geographer*, Turner noted, "Three years of planning and preparation for the conference centered around outlining and commissioning some 40 papers from leading experts or teams of experts around the world" documenting global environmental changes and their impact on human society. As attendees Ian Douglas and Michael Chisholm wrote in *Area*, the journal of the Royal Geographical Society, the goal was to "tease out the links between processes affecting the land, sea, and atmosphere" and, ultimately, people.

"This challenge is being taken up, *inter alia*, by the Graduate School of Geography at Clark University."

Three years later, Cambridge University Press published the conference's papers in *The Earth as Transformed by Human Action*, co-edited by Turner with contributions from a number of Clark researchers and faculty, including Roger Kasperson, one of the first geographers to be elected a member of the National Academy of Sciences, and Kates, who served as a member of the Intergovernmental Panel on Climate Change that received the Nobel Peace Prize in 2007. The book, a major stocktaking of the anthropogenic impacts on the planet and its ecosystems over 300 years, was deemed a landmark study and a wake-up call to the world.

> "The book was deemed a landmark study and a wake-up call to the world."

"Earthrise," photographed on Dec. 24, 1968, by astronaut William Anders aboard Apollo 8.

GETTY IMAGES; OPPOSITE: STEVE KING

Members of the Class of 2029 greet the day at Orientation.

CLARK UNIVERSITY

CHALLENGE CONVENTION. CHANGE OUR WORLD.

950 Main Street
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"As humans, we want to feel that what we do matters—and here at Clark it really does."

LOU LEONARD, D.J.A. SPENCER DEAN OF
THE SCHOOL OF CLIMATE, ENVIRONMENT, AND SOCIETY