

Rochester Review

University of Rochester
Fall 2026

To Infinity and Beyond

How URochester
alumni helped
build NASA's
sweeping new view
of the universe
>P.34



What if sustainability felt inevitable?

What lies beyond what we can see?



Creating an ever better world starts with imagining how it could be.
At URochester, we ask questions that challenge what's possible and act
with the courage to turn possibility into progress. Where can one question lead?

The future belongs to those

rochester.edu/wonder

Can AI help us become more human?

Why do people choose hope?



who *wonder.*



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Laser Focused

The US National Science Foundation (NSF) has awarded the University of Rochester the first round of funding to advance NSF OPAL into its final design phase. The proposed two-beam, high-peak-power facility, planned for the Laboratory for Laser Energetics (LLE), would be the world's most powerful laser system and a shared resource for researchers around the world. The award follows NSF's selection of the University-led STELLAR Engine, which will establish national leadership in laser science and development across New York's Rochester, Finger Lakes, and Southern Tier regions.

—Alison Arnold

Pictured: the target chamber of the MTW-OPAL laser system at LLE, supported by the National Nuclear Security Administration and the Air Force Office of Scientific Research. NSF OPAL builds on some of the work at LLE's MTW-OPAL laser system.





PHOTOGRAPH BY JACOB DEATS

Friday Night Lights

URochester quarterback Shawn Bellenger '29S drops back to pass during the season opener on September 4 against Case Western Reserve University at Fauver Stadium. The game was the first-ever Friday night home game in 137 seasons of football at the University. Despite a pair of special teams touchdowns, including a 100-yard kickoff return by Jett Genovese '29S, the Yellowjackets fell to the Spartans, 38-20. Football is one of 23 varsity sports at the University, which has produced 785 All-Americans. —Scott Sabocheck





Signs of Change

Upstate New York's largest academic health system has a new name. University of Rochester Medicine encompasses the academic and clinical programs based on the University's Health Sciences Campus, formerly known as University of Rochester Medical Center, and the clinical care enterprise previously known as UR Medicine. The change is part of the University's broader brand evolution that began last fall and more clearly reflects the system's long-standing connections across discovery, learning, and healing.
—Tama Miyake Lung





for
**EVER
BETTER**

THE CAMPAIGN
FOR THE UNIVERSITY
OF ROCHESTER

Because every gift today becomes an opportunity for someone tomorrow.

Trustee Ria Nova '98 credits her University of Rochester experience for the foundation of her career. Now she's giving back—challenging our URochester community to add 175 George Eastman Circle memberships by December 31, 2026 and unlock \$250,000 for the next generation of students.

FROM GENEROSITY TO BOUNDLESS OPPORTUNITY

Join us in a campaign that will turn today's giving into tomorrow's possibility.

everbetter.rochester.edu

The George Eastman Circle is the University of Rochester's leadership annual giving society. Members make a minimum five-year annual commitment of \$1,500 or more.



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Our Possibilities Remain ‘Boundless’

As we mark the midpoint of our strategic planning process, the road map is guiding us through fast-paced change as we invest in our future.

BY SARAH C. MANGELSDORF



Each academic year arrives with excitement and energy as campus comes alive with new and returning students, faculty, and staff.

All of us look forward to pursuing new discoveries, making friends and renewing conversations with colleagues, developing performances and exhibitions, engaging with patients, and figuring out where our interests will take us next.

Research institutions like the University of Rochester are special places where the pursuit of ideas with people from all walks of life and with all kinds of perspectives helps us grow as scholars, citizens, and human beings.

Our spirit of optimism is grounded in our sense of community, perseverance, resilience, and mission-driven teamwork that are the hallmarks of URochester's legacy of excellence. It's a spirit that has helped us achieve several milestones that have grown out of our *Boundless Possibility* strategic plan.

At its midway point this year, the plan builds on our academic, research, and clinical

strengths while fine-tuning our business operations in ways that help us invest in our people and programs. Our goal is to elevate our reputation as a globally recognized research university that remains true to our roots in Rochester and the Finger Lakes region of New York.

The plan gave us a head start to address some of the issues that have arisen across the landscape for higher education and healthcare. Since we adopted the plan, long-standing models of federal support for university research and medicine have been upended, global agreements that allowed international

“The plan builds on our academic, research, and clinical strengths while fine-tuning our business operations in ways that help us invest in our people and programs.”

students and scholars to join US educational communities have been rewritten, costs for goods and services, particularly in healthcare, have increased more quickly than expected, and the development of technologies like artificial intelligence has exploded.

In the first three and a half years of *Boundless Possibility*, we invested resources to earn National Cancer Institute designation for the Wilmot Cancer Institute, a recognition awarded to only 4 percent of cancer centers in the country, and to establish faculty-driven research initiatives in music and engineering, quantum science, augmented reality and virtual reality technology, and psychological resilience among children and families.

We are creating a true University Student Life portfolio that encompasses the educational, residential, and physical and mental well-being of all students.

We have overhauled our budget model to ensure greater efficiency while allowing innovation and modernized our major human resources systems so staff can take better ownership of their professional development goals and advance in their careers.

We are investing in new infrastructure, including an expansion of Strong Memorial Hospital, new Student Life buildings, renovations to residence halls, and early work on a state-of-the-art, interdisciplinary science building.

Our strategic marketing and communications initiatives are showing promise for increasing applications and enrollment numbers and strengthening our reputation among peers.

And we launched *For Ever Better*, the most ambitious comprehensive campaign in our history. Guided by the strategic outline of *Boundless Possibility*, the campaign has been met with enthusiasm and incredible support from our volunteer leaders and across the alumni community. I want to thank everyone who has supported the *For Ever Better* campaign, and I look forward to further momentum toward our goal.

As we turn toward the second half of the *Boundless Possibility* plan, we need to remain agile and innovative in how we think about our operations, responsive to political, social, and cultural challenges, and entrepreneurial in seizing future opportunities as they arise.

I am grateful to everyone in the University community for your commitment to our mission and for helping us reach so many important milestones.

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MATT WITTMAYER



“Made me proud”



↑
Our spring 2026 issue showcased URochester's expertise in sleep science while exploring art curation, music history, and much more.

Funny you should mention ...

I just wanted to reach out and express my congratulations on a job well done in putting together the *Rochester Review* just delivered. Not sure if there are national awards/recognition for alumni publications, but you certainly would be a winner in my book! The variety and number of UR topics/subjects explored was

amazing and beautifully crafted. Really made me proud of the UR and its multidimensional mission.
Charles Kochbeiser '66 (MA)
Gansevoort, New York

Editor's response: *Since our redesign in fall 2025, Rochester Review has in fact been recognized with a number of national and regional awards, including by the Society of Publication Designers, the Rochester Chapter of the Public Relations Society of America, and the University & College Designers Association. We hope there will be many more to come!*

Living the dream

I read the fascinating article about Michelle Carr and how her lucid dreams prompted her to become a “dream engineer.” I’ve had a few brief lucid dreams in which I became aware that I was dreaming from within the dream. The dream setting didn’t change when I became lucid. I remained within the dreamscape. Unlike Michelle

Carr’s experience, my physical body was not observable.

I wonder if the labeling of Michelle Carr’s experience might be more properly called an out-of-body experience (OBE) rather than a lucid dream. Unless what was happening in her dream before becoming lucid was taking place in her dorm room, this sounds more like an OBE.

The opening of the original *Star Trek* series began with the statement “Space, the final frontier.” I suggest that consciousness is the final frontier. There is ample evidence that consciousness

is not created by the brain. Near-death experiences, OBEs, and after-death communications are some consciousness-related subjects worthy of study and have significant implications for redefining who we are and why we are here.

James Fisher '76S (MBA)
Jamestown, North Carolina

Board meeting

Your picture on pages four and five of the spring 2026 *Rochester Review* will make all divers wince. Ms. Sides isn’t going anywhere with the videographer



↑
A photo in the “Sights” section of the spring 2026 issue drew reaction from one reader, a former competitive diver, who spotted a slight problem with the setup.

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Credits

Alumni photographs are courtesy of the subjects. Unless otherwise credited, all others are *Rochester Review* photos.



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↑
Responding to Jonathan Heath's "America's Greatest Hits: The Soundtrack of a Nation at 250," American music expert Donna Coleman '86E (DMA) suggested additional composers whose work shaped ragtime and beyond.

standing on the board, right over the fulcrum! Hopefully, he moved. (From a former University of Rochester resident, fellow, and faculty member and a Harvard diver '81-'84. I was also born at Highland Hospital and went to Pittsford Sutherland High School. Rochester forever!)
Karl Illig '95M (Res), '97M (Flw)
Houston, Texas

Editor's response: Please rest assured, Karl—the videographer moved before *Sides* took off. It was all part of making sure our brand anthem video made a splash.

The sound of (American) music
I read the article "America's Greatest Hits: The Soundtrack of a Nation at 250" with interest. As a concert pianist, recording artist, and performance researcher whose focus for the past 50-plus years has been (among other threads in the grand musical fabric) American music, I would

like to add the names of a few other people whose work I believe was crucial to the development of what we call "American" music.
The *tresillo*-infused danzas of 19th-century Cuban composers Manuel Saumell (1818–70) and Ignacio Cervantes (1847–1905),

both friends of New Orleans-born Louis Moreau Gottschalk (1829–69), were direct links to ragtime.

Natalie Curtis's (1875–1921) *The Indians' Book* (1907) was a major contribution to the world's knowledge and appreciation of the music of Native Americans. Curtis gave a copy to Ferruccio Busoni (1866–1924) in 1910, and he selected several of the melodies she had transcribed as inspiration for four significant compositions, including the solo

piano *Indianisches Tagebuch I* (BV267, 1915).

And I cannot close without mentioning "my reason for being," Charles Ives, whose music joyfully embraces every genre considered to be "American" (and beyond) and poignantly and powerfully expresses the feelings of spiritual fervency that beat in the heart of the land.

Donna Coleman '86E (DMA)
Santa Fe, New Mexico,
and Melbourne, Australia

'Commons' ground

The Ever Connected "Flashback" photo of Wilson Commons struck a chord with me. I wasn't aware of the architect's theme for the building or the ranking it received in 1986, but, coincidentally, it was in 1986 that I stood on the steps in the Commons, as a prospective U of R student, and felt with certainty, "This is the place I want to be and where I want to have my college memories."

And, as a college advisor for the past 30 years, I've been fortunate to reflect often on how I knew U of R was the right fit for me and how I thrived as a student in the campus community, as I aim to help new college students "find their fit" and make the most of their college experience.

Lia Fiato Hallett '91, '98W (MS)
Buffalo, New York

 /University-of-Rochester

"Thrilled to see my 'Ask the Archivist' question featured in the latest edition of the **Rochester Review**! A huge thank you to Melissa Mead for the insightful response. Mark Zaid mentioned in the same article is truly the cherry on top! 🍒

 #UniversityofRochester
#RochesterReview

Meliora to my fellow University of Rochester alumni!"
— Jason Buitrago '07, '14W (MS)



↑
Congratulations to Meredith Ackley '21, Isaac Ajewole '70, '75 (PhD), Susan Becker '80N, David Kroth '08S (MBA), and Jeannine Mongeon '93E (MM), winners of our spring 2026 "You Snooze, You Win" crossword contest. Their prize packages included a signed copy of Harry Reis's book *How to Feel Loved*, Alarm Will Sound's Grammy-winning album *Land of Winter*, a *Monopoly: Rochester Edition* board game, and assorted U of Rochester swag.

WHAT DO YOU THINK?



A few readers noticed something missing from our spring 2026 issue: the full table of contents. A condensed version now appears on the back cover, but do you think we should bring back the old format? Visit uofr.us/tocsurvey to cast your vote and help us settle the great table-of-contents debate!

FRONTIERS

Methane is one of the most powerful drivers of near-term climate change—yet notoriously difficult to trace to its sources. University of Rochester scientists are chasing the elusive gas everywhere from the Genesee River to Antarctica, working to determine where it comes from, where it goes, and where cutting emissions could make the greatest difference. BY LINDSEY VALICH

PHOTOGRAPHY BY MATT WITTMAYER



Hot on t

URochester's methane hunters include, from left, Lee Murray, John Kessler, Vasilii Petrenko, and Thomas Weber.



the trail

Methane is everywhere yet remarkably difficult to pin down. The invisible, odorless gas rises from wetlands and landfills, bubbles from the bottoms of lakes, leaks from oil and gas wells, and is even burped out by cows as they digest their food.

Although it occurs in tiny concentrations, methane has an outsized effect on near-term warming, making it an increasingly important target for climate action. The challenge is deciding where to act: Scientists first have to identify the sources that matter most and understand what happens to the gas after it is released.

To do that, they have become methane hunters. At the University of Rochester, John Kessler, Lee Murray, Vasilii Petrenko, and Thomas Weber are among the researchers pursuing clues scattered across the planet, from ancient air trapped in Antarctic ice and methane seeping from lake and ocean sediments to measurements collected on state roadways and observations made by satellites hundreds of miles above Earth. Each approaches the problem from a different perspective and at a different scale, together building a more complete picture of methane's journey through the planet and how that knowledge could help shape climate solutions.

"We're not stamp collectors," says Kessler, who, along with Murray, Petrenko, and Weber, is a member of the University's Department of Earth and Environmental Sciences. "We're not just collecting routine, isolated measurements. We want to discover something new. Ultimately, we want to be able to predict these systems and inform policies that can help mitigate methane. But there's also a science side to our motivation—the science must be new and unique and creative and cool."

Why methane matters

Methane has been in Earth's atmosphere for millions of years. Scientists have known for decades that it's a greenhouse gas. But it has only recently become one of the world's top climate priorities as scientists have gained new tools to track emissions and a better understanding of methane's role in near-term global warming.

Methane matters not because it's the most abundant gas—it isn't—but because it packs such a punch. Molecule for molecule, methane traps far more heat than carbon dioxide over the first few decades after it is released. But unlike carbon dioxide, which can persist in the atmosphere for centuries, methane breaks down in about a decade. That means cutting methane emissions today could slow the pace of global warming relatively quickly and noticeably in a person's lifetime. That realization has prompted governments, industries, and researchers around the world to invest in better ways to measure, monitor, and reduce methane emissions.

"If we're looking to solve climate change," Kessler says, "one of the low-hanging fruits is methane."



Methane is responsible for roughly 30 percent of global warming since the Industrial Revolution.

30%

In 2021, the United States and the European Union launched the Global Methane Pledge, committing 159 nations and the European Commission to take voluntary actions to collectively cut methane emissions by at least 30 percent below 2020 levels by 2030. Meeting that target could avoid more than 0.2 degrees Celsius of warming by 2050. States including New York have also adopted their own measures to reduce methane emissions.

Beyond its role in climate change, methane has taken on growing economic and public-health importance. Companies lose a valuable fuel when methane leaks from pipelines and infrastructure, and regulations have created additional incentives to find and stop the leaks. Many methane sources also release pollutants that are harmful to human health.

"You've got the climate argument for reducing methane emissions, you've got the economic argument for reducing emissions, and now there's also a human health argument," says URochester atmospheric scientist Sean Crowell, who uses satellite data to help measure methane in the atmosphere. "A lot of things that release methane also release other things like benzene that are carcinogens if we breathe them."

But before emissions can be reduced, scientists have to know where they're coming from.

Following an invisible trail

Finding methane turns out to be far more complicated than just spotting a gas leak. For one thing, the concentration of methane in our atmosphere is only about two parts per million. This means that for every million molecules of air, only two are methane.

"Detecting something this low in concentration is a challenge," Kessler says.

If methane came from a single source, tracing it would be relatively straightforward. But methane comes from many places, both natural and human-caused. Some rises from wetlands and lake and ocean sediments. Other emissions escape from landfills, leaking pipelines, and livestock. Once all these methane molecules mix together in the atmosphere, they become almost impossible to tell apart.

The challenge is compounded because natural and human-caused emissions often overlap in the same landscape. A monitoring station may detect methane from a wetland, landfill, herd of cattle, or gas facility at the same time. Scientists therefore have to work backward from what they measure, combining chemical fingerprints with wind patterns, field observations, satellites, and models—each adding a different piece of evidence about where the gas originated.

"The advantage to having so many people working on different aspects of methane is being able to understand the system as a whole."

—Vasilii Petrenko



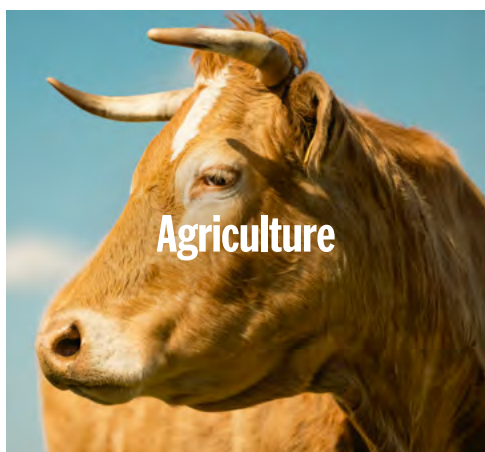
Wetlands



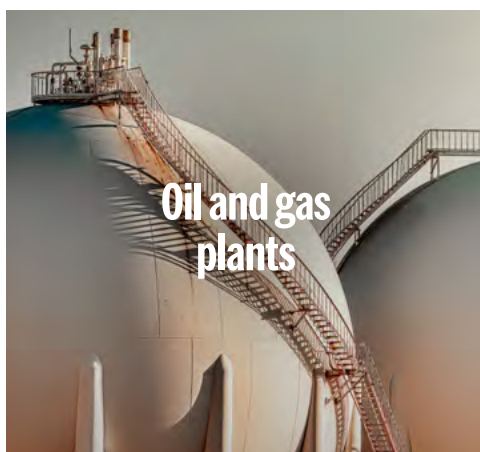
Freshwater systems



Oceans



Agriculture



Oil and gas plants



Landfills and wastewater treatment

According to the Global Carbon Project, which tracks global greenhouse gas emissions, about 60 percent of methane emissions come from human activity and 40 percent from natural sources. Wetlands are the largest natural source, while agriculture is the largest human-caused source.

Methane is also constantly moving and changing. Some is consumed by microbes before it ever reaches the atmosphere, while some escapes into the air. Once there, winds may carry it far from where it was released as chemical reactions gradually begin breaking it down. By the time scientists measure a plume, it may have traveled hundreds of miles from its source and already started to disappear.

One of methane's biggest natural checks is the hydroxyl radical, or OH, which reacts with the gas and helps break it down. But scientists still don't know exactly what role changes in OH have played in methane's rise and fall. That uncertainty makes it harder to explain why atmospheric methane surges in some periods and stalls in others.

After rising steadily for decades, methane concentrations unexpectedly plateaued in the mid-1990s, remaining relatively stable until about 2007. Then they began rising again. After the COVID-19 pandemic, concentrations increased at the fastest rates ever recorded.

"We have no idea why," says Murray, an atmospheric scientist. "There are many theories, but even people using the exact same data are drawing different conclusions about what has been driving these trends over the historic past and the recent past."

Understanding methane, then, isn't just a matter of measuring its concentration at a given place and time. Scientists must balance all the processes adding methane to the atmosphere against those removing it—and determine how quickly that balance is changing. Together, those gains and losses make up what's known as the global methane budget.



81X

If we emit one ton of methane today, it would warm Earth 81 times as much over 20 years as one ton of carbon dioxide.

Building the hunter's toolkit

No one scientist can track methane's entire journey. Each methane hunter pursues different leads, together revealing how the gas moves through Earth's ocean, soil, and atmospheric systems in ways no single instrument can capture.

Some leads lie hidden in the past, preserved in air bubbles in ancient ice and tiny fossils in ocean sediments that reveal how methane behaved long before people began keeping records. Others are unfolding in real time, in lakes, oceans, wetlands, landfills, and the atmosphere itself, where scientists measure methane as it is produced, transported, and removed. Still others emerge when thousands of individual measurements are combined in computer models or observed from hundreds of miles above Earth by satellites, revealing patterns impossible to see from the ground.

"The advantage to having so many people working on different aspects of methane is being able to understand the atmospheric methane and methane in the Earth system as a whole," Petrenko says. "This allows us to make the best measurements possible and be very comprehensive."

Many of those measurements are integrated through FETCH₄ (Fate, Emissions, and Transport of CH₄), an international collaboration cofounded by Petrenko and Murray at URochester in 2023. The initiative brings together experts in field measurements, isotope chemistry, atmospheric modeling, and satellite observations to better understand Earth's methane budget.

“I think we will potentially get there on removal. It’s emissions reduction where we need governments and societies to act together.”

—John Kessler

Each method has its limits. A methane measurement collected from a lake tells only part of the story. Ice cores reveal the atmosphere of the past, but they can’t show what happens next. Satellites can spot methane plumes from space, but they can’t always determine the exact source on the ground. Computer models connect those pieces, but they depend on accurate field measurements to improve their predictions.

Turning clues into action

The better scientists understand methane, the better equipped society will be to identify which emissions can actually be reduced.

Murray’s work has already helped point New York toward methane sources that might otherwise have gone unnoticed. While monitoring the state’s greenhouse gases, Murray and his team detected unexpectedly large methane plumes coming from a network of salt mines beneath Seneca and Cayuga Lakes. The mines, which extract road salt from ancient geological formations, pass through the same formations that contain natural gas. After Murray’s team brought the finding to the state’s Department of Environmental Conservation, the agency began investigating the mines as a potential source of methane.

A 2025 United Nations Environment Programme report found that global methane emissions are still rising—but also that many of the tools needed to reduce them already exist. More than 80 percent of the potential reductions by 2030 could be achieved at low cost, the report found, with most of the opportunity in the energy sector and additional reductions possible in waste and agriculture.

“I think we will potentially get there with really bright people working on the removal side,” Kessler says. “Heck, it might even come from our own department. But it’s the emissions-reduction side of this where we need governments and societies to act together.”

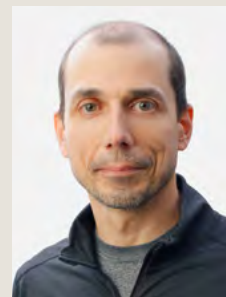
Methane mitigation—including efforts to capture the gas before it leaks into the atmosphere—is becoming more common. Landfills and waste facilities, for instance, are doing more to mitigate methane emissions through initiatives that Crowell describes as “putting covers on top of the mountains of garbage, then pushing all that methane into a natural gas or renewable natural gas recovery system.”

Reducing and mitigating methane emissions depends on knowing where—and how—to intervene. Each new measurement brings scientists one step closer to understanding a greenhouse gas that has long hidden in plain sight. Methane may be invisible, but the scientists following its trail are making it increasingly hard to ignore.



Ice core scientists have reconstructed a continuous record of Earth’s atmospheric methane as far back as 1.2 million years using ancient Antarctic ice.

1.2MIL

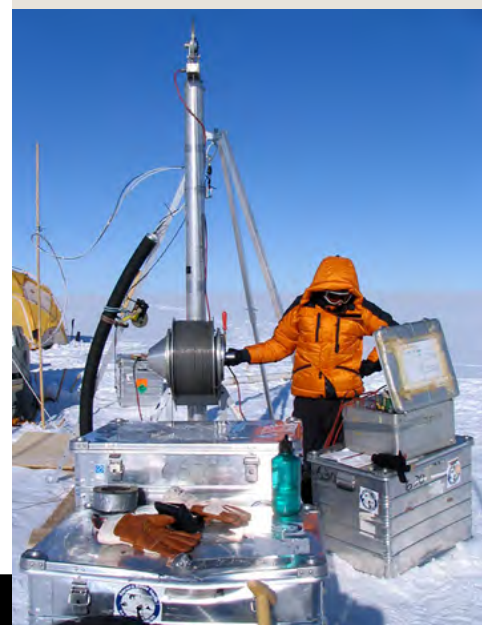


Vasili Petrenko Tracking methane back in time

Vasili Petrenko studies air that no human alive today has ever breathed. Tiny bubbles trapped inside Antarctic ice preserve samples of Earth’s atmosphere

dating back more than a million years. To Petrenko, an atmospheric chemist, those bubbles are time capsules containing ancient air from long before thermometers, satellites, or air-quality monitors existed.

By comparing that ancient air with methane collected from modern sources such as landfills and wetlands, Petrenko





Vasilii Petrenko travels to places such as Antarctica (below left) and Greenland to collect ice cores, which he brings back to study in his Ice Core and Atmospheric Chemistry Lab in Hutchison Hall.

traces how the gas has changed through time and helps answer the question: Where is today's methane coming from?

Petrenko travels to the extremes of the globe, from Antarctica to Greenland, to collect ice cores, which provide a baseline that modern atmospheric measurements cannot. The air inside the ice cores reveals what Earth's atmosphere looked like before the Industrial Revolution—when human-caused methane emissions began rising dramatically—making it possible to distinguish natural variability from human-driven change.

What he has found is alarming. “When we compare methane levels from before the

Industrial Revolution to now, methane has gone up between a factor of two and a half and three,” Petrenko says. “We know that this really large increase is driven by human activity.”

Petrenko distinguishes methane sources by analyzing their unique chemical fingerprints. But once methane from different sources mixes together in the atmosphere, the process becomes all the more challenging. “Untangling these contributions requires combining isotope measurements with field observations and atmospheric models,” he says.

Using the air trapped in the ice cores, scientists have constructed a continuous methane record stretching back 1.2 million years,

with snapshots of methane levels extending nearly three million years into the past.

Looking across such a long span allows researchers to examine periods of natural climate change, including transitions from glacial periods (ice ages) to interglacials (warmer periods between ice ages) and compare them with what is happening today.

Petrenko also studies present-day emissions, collecting data from landfills and natural seeps from ancient underground deposits. Undergraduate and graduate students regularly take part in the work, participating in field campaigns, collecting samples, and publishing their own research.

Recent projects by Katie Hall '24, '25 (MS) and Maggie Scholer '24, for example, showed that natural methane seepage from hydrocarbon basins in Michigan and the Southwest is far lower than previously estimated—findings that help scientists better distinguish natural methane emissions from those caused by human activity.

Research in Petrenko's lab reveals that climate shifts have caused methane levels to rise and fall before. But against a record stretching back more than a million years, the speed and magnitude of today's increase stand apart.

“Where we are now,” he says, “is completely unprecedented.”



As part of his work leading URochester's Atmospheric Chemistry and Climate Group, Lee Murray has helped establish a greenhouse gas monitoring network at fixed locations across New York State.

Lee Murray Chasing methane through the atmosphere



For atmospheric scientist Lee Murray, hunting methane often means following the wind.

In a 2021 study, for example, Murray and his collaborators used a modified Mercedes-

Benz Sprinter van as a mobile laboratory, driving around New York in search of emissions from some of the state's largest landfills and other potential sources. Equipped with methane sensors, the van allowed them to measure the concentration of the gas in the air as they moved.

By comparing those measurements with wind patterns, they could begin to determine where the methane they were detecting came from. They could then combine the mobile measurements with data from stationary monitoring sites, aircraft, satellites, and computer models to build a more complete map of emissions across the state.

Sometimes, that kind of research attracts more attention than expected. When Murray's team hired an aircraft to measure methane emissions, including around a natural gas plant in Oswego, the FBI came calling to make sure the flight was authorized.

Murray is also interested in what happens to the gas once it reaches the atmosphere. His research focuses in part on the hydroxyl radical, or OH. Often called "the detergent of the atmosphere," OH is a highly reactive molecule that helps break down methane and other pollutants. While OH is the

primary natural mechanism for removing methane from the atmosphere, methane reacts with OH unusually slowly compared with many other compounds.

By studying the factors that control OH and the atmosphere's overall oxidative capacity, Murray is trying to determine the rate at which methane and other gases are naturally removed from the air. That question is becoming increasingly important as private companies investigate whether increasing OH could help remove greenhouse gases from the atmosphere.

Murray has serious concerns about the idea. "Just the thought of intentionally perturbing the atmosphere's most critical resource, which is its oxidative capacity, is quite disturbing," he says. "Any form of geoengineering is risky because it will have side effects."

Deliberately increasing OH in the atmosphere does not automatically mean that more methane will be removed. OH also reacts with many other compounds, and those reactions could have consequences of their own.

That's not to say scientists should simply ignore the possibility, notes Murray. If companies attempt to alter the atmosphere's chemistry, researchers need to understand all the potential repercussions.

Doing that requires knowing what is actually happening in the atmosphere, which can be difficult when the thing you're trying to measure is invisible to human eyes. "The bane of communicating my research is always that air is transparent," Murray says, "so you can never get good photographs."

"Just the thought of intentionally perturbing the atmosphere's most critical resource—its oxidative capacity—is quite disturbing."

—Lee Murray



John Kessler Following methane through ebbs and flows

Every 10 seconds, another measurement appears on John Kessler's computer screen aboard the R/V *Blue Heron*. As the research vessel crosses the Great Lakes, Kessler—a marine and freshwater chemist—builds a detailed picture of methane concentrations beneath the water's surface. "This continual data collection allows us to capture and map gradients that were previously invisible," he explains.

During a two-week expedition, the complicated maze of pumps, sampling bottles, tubing, and sensors on the R/V *Blue Heron* records tens of thousands of measurements, revealing subtle changes that would be impossible to detect from occasional sampling alone.

In aquatic systems, methane's path is rarely straightforward. Concentrations can change dramatically over surprisingly short distances and over the course of days or weeks as weather, water circulation, biological activity, and sediment processes shift.

A handful of water samples can show "hot spots" where the gas is present, but continual measurements can reveal much more: the processes that affect methane throughout an entire aquatic system.

The data allow Kessler and his team—including undergraduate and graduate students—to trace how methane spreads in the water from sources such as lake sediments, oil and gas infrastructure, and seafloor seeps; how much is consumed by microbes before reaching the surface; and how much ultimately escapes into the atmosphere as a greenhouse gas.

"We're trying to study the dynamics of the entire methane system," Kessler says.

That interest in methane's hidden pathways also motivated Kessler's earlier work on the 2010 Deepwater Horizon oil spill, where he helped investigate the fate of the enormous quantities of methane released from the disaster. Rather than asking how much methane had escaped, he was brought on to study what happened after it entered the ocean.

Today, in addition to his work aboard the R/V *Blue Heron* and other vessels on the oceans, Kessler employs a scaled-down version of the same approach in waterways closer to home. Using specially equipped kayaks as floating laboratories, he and his students have surveyed the Genesee River and Erie Canal in and around Rochester.

For students, these vessels become floating classrooms, giving them firsthand experience with every stage of the scientific process, from collecting measurements in the field to interpreting data showing how methane behaves in aquatic environments.

Those detailed observations do more than explain today's methane emissions. They provide the real-world foundation for computer models that can scale local and regional measurements into a global picture of methane dynamics and help scientists predict how those systems may change in a warming world.

"If we don't understand what's going on beneath the surface," Kessler says, "then our predictive capability is nothing."

Among the aquatic environments he's studied, John Kessler has analyzed water samples where the Genesee River and Erie Canal meet to see how their mixing affects concentrations of dissolved gases.



How You Can Help

Methane is a global problem, but some of its biggest human-caused sources are tied to everyday choices—from what we eat to how we power our homes and handle food waste.

“We can definitely do a lot as a society,” says John Kessler. “And we have to do better. There are some informed choices that I hope we can make, not just as a country, but as a global society, to limit methane.”

Eat less red meat. Cattle and sheep release methane as they digest food. Replacing even a few meals each week with plant-based proteins can reduce your methane footprint.

Reduce food waste. The less food that ends up in landfills, the less organic matter is available to produce methane. Plan meals, freeze leftovers, and use food before it spoils.

Compost food scraps. In landfills, food waste becomes so tightly compacted that it decomposes without oxygen, producing methane. Composting allows food scraps to break down in the presence of oxygen, dramatically reducing methane emissions.

Choose cleaner energy. If you have the option, purchase electricity from renewable sources, install solar panels, or replace older gas-powered appliances with electric alternatives. Reducing the demand for natural gas can help lower methane emissions from oil and gas production.

Support community initiatives. Many communities are expanding composting programs, capturing methane from landfills, offering community solar farms, and repairing leaking natural gas infrastructure.



About how long methane stays in the atmosphere.

10 YEARS



Thomas Weber Piecing together the methane puzzle

Scientists can't measure every drop of seawater or every plume of methane rising from the world's oceans and lakes. Instead, they collect measurements from specific locations and times, then use models to weave those observations into a larger picture. That's where Thomas Weber comes in.

Weber, the director of graduate studies for the Department of Earth and Environmental Sciences, is a chemical oceanographer who builds computer models that reveal patterns scientists can't observe directly. The models help researchers estimate how much methane the world's oceans release into the atmosphere and how those emissions may respond as the climate changes.

“The ocean is a relatively small source of methane to the atmosphere,” Weber says, “but it's probably the one with the most question marks in regard to how it will change as the climate system changes.”

Understanding those changes requires accounting for every source and sink in Earth's methane budget, much like balancing a bank account. It's not enough to know how much



methane is entering and leaving the atmosphere today. Researchers also need to understand how each source and sink behaves and how those processes may shift over time.

“If you're really interested in what the balance on your bank account will look like in 10 years' time, you can't get there just by knowing how your salary is going to change,” he says. “You have to be able to predict all of the different incomes and expenditures.”

For Weber, models are not just tools for predicting the



Thomas Weber monitors methane distributions in the Great Lakes aboard the R/V *Blue Heron* using a system designed by John Kessler to collect continual water and air measurements for real-time analysis.

future. They also help scientists test ideas and understand the biological and chemical processes that control methane cycling. His research focuses in part on

understanding the microscopic organisms beneath the water that produce and consume methane.

Increasingly, Weber has joined field expeditions himself, bringing

a modeler's perspective to deciding which measurements will be most useful for improving the models.

"It helps to have modelers involved in data collection because we know the data sets that would be perfect to validate models against," Weber says. "We need to break down the traditional boundary between nerdy modelers at their computers and intrepid field scientists going out and collecting the data."

Current observations inform the models, but scientists can

also test them against Earth's past. Ancient methane records—from sources such as Antarctic ice cores and ocean sediments—provide real-world benchmarks. If a model can accurately reproduce past changes in Earth's methane cycle, scientists can have greater confidence in its ability to explore what might happen in the future.

So when is a model considered successful? For Weber, the test is simple: "When it tells you something useful that the data alone can't tell you." *

"We need to break down the traditional boundary between nerdy modelers at their computers and intrepid field scientists going out and collecting the data."

—Thomas Weber

J. ADAM FENSTER



Testing the

URochester faculty and graduate students set off aboard the research vessel *Blue Heron* to measure methane across the Great Lakes—one sample, sensor, and data point at a time.

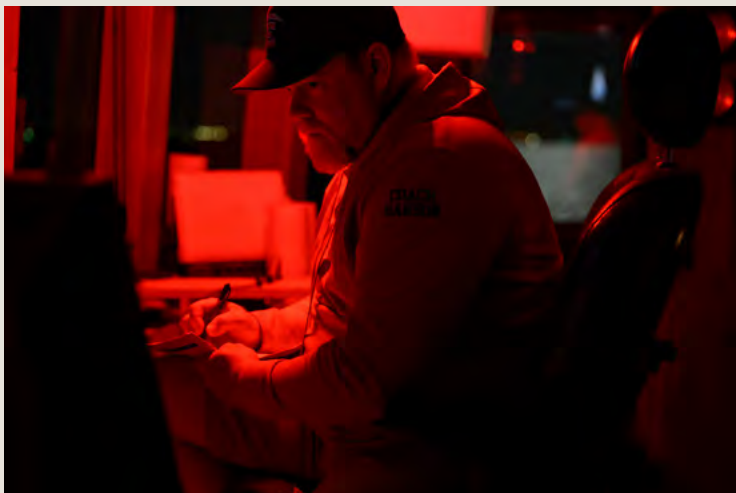
BY LINDSEY VALICH

PHOTOGRAPHY BY J. ADAM FENSTER



Waters

Thomas Weber (left) and John Kessler wrangle equipment during a 17-day trip aboard the R/V *Blue Heron*, one of three National Science Foundation-funded research expeditions they jointly managed over the last year to measure methane emissions from the Great Lakes.



The 86-foot R/V *Blue Heron* is owned and operated by a crew from the University of Minnesota Duluth, including first mate Jay Hanson (above left). The ship is part of the University-National Oceanographic Laboratory System and hosts researchers studying the Great Lakes.

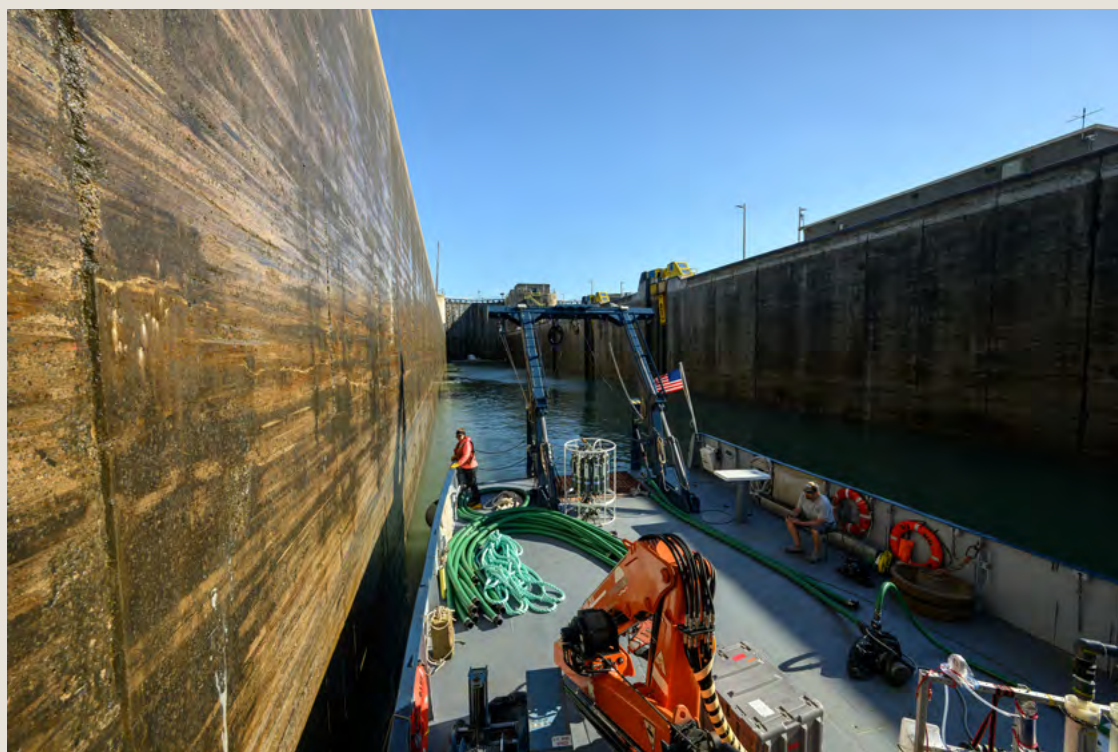
PhD students Rebecca Rust '23 (below) and Rachel Flickinger joined Kessler, Weber, and the R/V *Blue Heron* crew for the journey. URochester undergraduate and graduate students regularly take part in this kind of hands-on fieldwork.



8,190 MILES

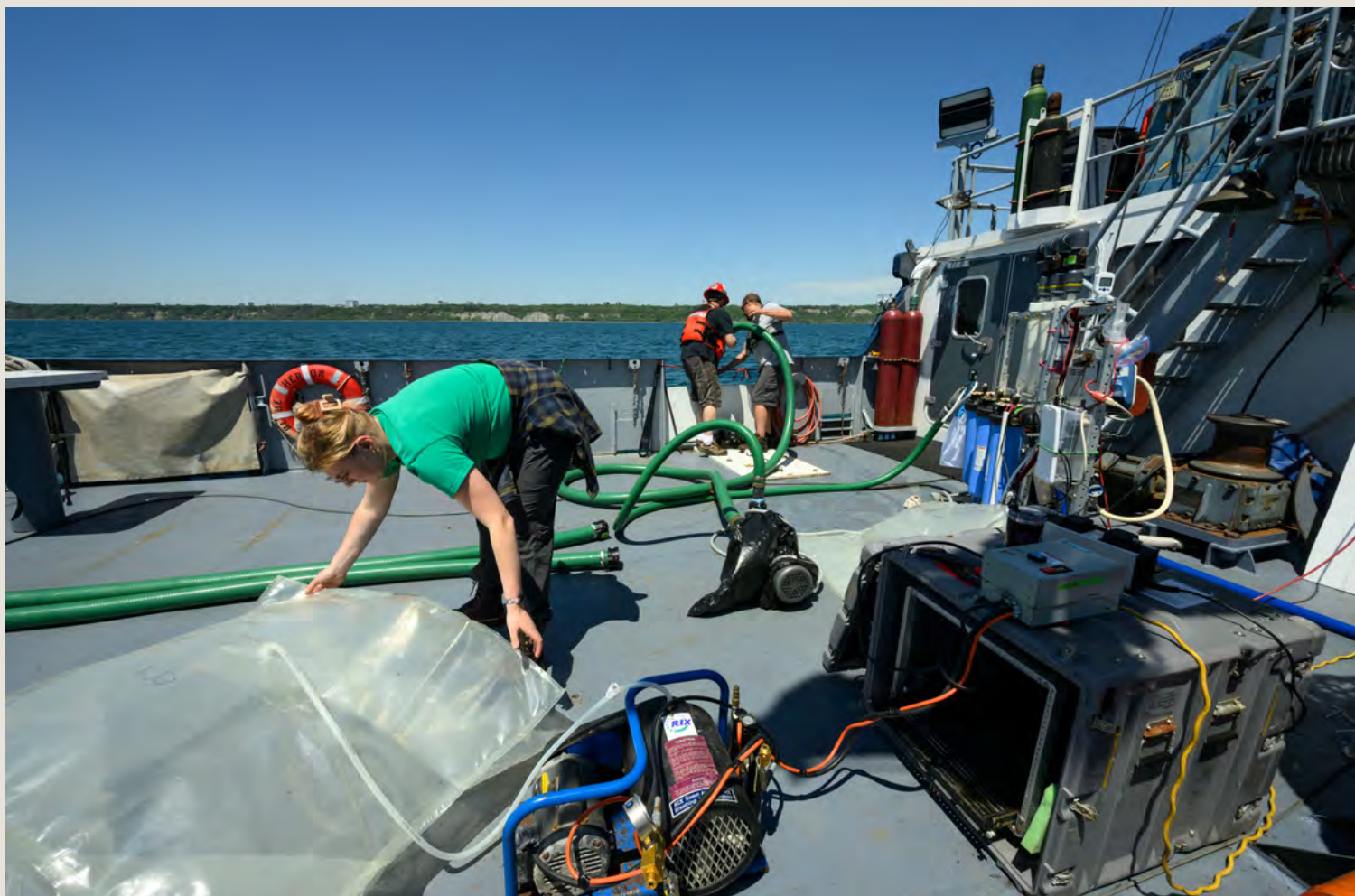


Approximate distance that URochester faculty and students covered during three trips on the R/V *Blue Heron* through the Great Lakes, collecting water samples and measurements every 10 seconds.



Monitors display data from an automated air-water flux system designed by Kessler (top left). The system provides researchers like Weber with thousands of real-time data points that they can use to map methane distributions in surface waters.

The R/V *Blue Heron* is lowered more than 300 feet through eight locks in the Welland Canal (above) to safely bypass Niagara Falls and travel between Lake Erie and Lake Ontario. The team continued collecting data in these connecting waterways, discovering their unique role in the Great Lakes methane system.



Flickinger (above left) uses a membrane-based system to extract gases, including methane, from lake water. The extracted gases are first collected in a large plastic pouch before being compressed into cylinders that are brought to the team's URochester lab for testing.

R/V *Blue Heron* engineer Tom Frantti (below left) and marine technician/science liaison Jason Agnich connect hoses to pump surface water into the on-deck gas extraction system.



A universal sonar mount on the ship's port side (right) supports large hoses to pump surface water into the on-deck gas extraction system during operations near Toronto, Canada.

Researchers and crew members gather on the R/V *Blue Heron*'s deck (below) to enjoy the sunset as the expedition continues across the Great Lakes. By tracking where methane comes from, how it moves through freshwater, and how much reaches the atmosphere, the team hopes to better understand the lakes' role in the global climate system.



How to See



Part of a pioneering energy project, a KivuWatt barge extracts methane from the depths of Rwanda's Lake Kivu for conversion into electricity. During the project's construction, local fishermen who depended on the lake for their livelihood saw their boats and nets confiscated and daily catches fall by as much as 95 percent.

FIELD NOTES

As the world is wowed by ambitious technological wonders promising peace, prosperity, and economic growth, anthropologist Kristin Doughty's research shows how this vision of progress can be manipulated by those in power—and who bears those costs.

BY ERIN PETERSON

the Other Side

SIMON MAINA VIA GETTY IMAGES (OPPOSITE), HEMIS/ALAMY



In 2015, the story of Lake Kivu had the makings of a classic technological triumph: a terrifying threat—and an ingenious solution. Media outlets including *Nature* and *MIT Technology Review* reported on potentially catastrophic levels of dissolved methane in the deep waters of the massive lake along the border of Rwanda and the Democratic Republic of the Congo.

In the worst-case scenario, a massive gas explosion could threaten millions of people living nearby. One article described it as a “ticking time bomb.” Then came KivuWatt. The \$200 million project, backed by American companies, used a novel technology to extract methane from the lake. The process would both reduce the danger of the lake and turn the gas into much-needed electricity for Rwanda.

It was the kind of story the modern world—and Western media—loves: a daunting problem, a technological breakthrough, and the promise of a safer, more prosperous future. But to Kristin Doughty, an associate professor of anthropology who had spent nearly 15 years studying and working in Rwanda, the story seemed almost too tidy. She wanted to know what the feel-good narrative left out.

So Doughty began looking beyond the executives and government officials celebrating the project. She talked not only to scientists but also to fishermen whose catches had plummeted after they were barred from familiar waters, families that were displaced to make way for infrastructure, and communities that lost gathering places as the project expanded.

What she found complicated the story of technological progress considerably.

Her new book, *Threats to Power: Methane Extraction on Lake Kivu, Rwanda* (MIT Press), examines how a project designed to protect people and improve their lives could also be used by an authoritarian government to justify surveillance, exclusion, and dispossession.

The book is also a deeply researched effort to show the KivuWatt story from the perspectives of those most affected by it—the hallmark of ambitious ethnographic research. Seeing beyond the headlines and the hype to tell a more nuanced truth demands a rigorous, deeply human process. Here’s what that looks like.

Electricity pylons carry power generated by KivuWatt to homes and businesses in Kibuye, on the eastern shore of Lake Kivu. Kristin Doughty sees the project as an example of how governments and corporate partners can use infrastructure to expand social control.





1. Know the context.

Doughty had been studying Rwanda in the context of post-genocide rebuilding since 2002, spending up to 15 months at a time there and talking to a wide range of locals. The country's leaders had earned praise for drawing on local strengths and resources as Rwanda pursued justice, economic growth, and redevelopment. Doughty's work studying the systems and culture gave her a framework for understanding KivuWatt not as an isolated engineering project but as part of a much larger story about the country's sense of progress.



2. Bring a critical eye to unchecked boosterism.

The KivuWatt project was framed by leaders as an ingenious, homegrown solution that relied on the country's natural resources to solve a pressing national challenge. But because Doughty had spent years studying how narratives of self-reliance operated in Rwanda, she knew to look closely at what those celebratory stories might obscure. In this case, she also saw a troubling undercurrent that Western media often gobbled up uncritically: "It was a narrative," she says, "that [framed] Western technoscience as something that would 'save Africa from itself.'"



3. Talk to everyone.

To understand the broad range of perspectives surrounding the project, Doughty talked to methane and lake scientists both locally and internationally, engineers working on the KivuWatt barge, corporate executives, government officials, and people living and working near Lake Kivu.

4. Document, document, document.

"I have everything in my notebooks typed up. But they're sacred objects, in a certain way."



5. Take the problems faced by everyday people seriously.

In her conversations, Doughty talked to local fishermen who were banned from their usual fishing spots when the methane infrastructure was installed. Some saw their daily hauls diminish by up to 95 percent. Families living along the lake were forced to move to clear space for machinery and power lines, sometimes waiting years for promised payments. Communities mourned the loss of recreational spaces, like soccer fields, that were seized by the government during the process of building the power plant. "The goal of my work—the goal of ethnographic work," Doughty says, "is to understand a situation from the perspective of people involved in the situation."

"The goal of my work—the goal of ethnographic work—is to understand a situation from the perspective of people involved in the situation."

—Kristin Doughty

6. Make the most of every moment.

During her time in Rwanda, Doughty lived near Gisenyi, a town on the north shore of Lake Kivu.

“When I’m there,” she says of her four-week stretches in the country, “I just hold my breath and grind. It sounds hokey, but I genuinely feel most alive when I’m doing fieldwork because I’m learning so much all the time.”

Here’s what a typical day looked like.

9:30 a.m.–4:00 p.m. Interview three to five sources

Doughty took along a spiral notebook and a pen while walking and interviewing, jotting down what people said, observations about the setting, and bits of informal scene-setting, like conversations she might overhear on buses.

7:00–11:00 p.m. Review and transcribe notes

“Every night as part of a dedicated process of field-note writing, I type up my notes while they’re still fresh in my mind. It’s important because I can’t read my handwriting more than three days after I write things down.”

She keeps her typed notes in Word documents organized by month.

6:00 a.m. Wake up

“Most people get up at six, because that’s when the sun comes up. Then I would get my kids up and drop them off at school.”

7:30 a.m. Walk into town

The mile-long walk was the first of many daily treks.

8:00–9:30 a.m. Travel to sources near Lake Kivu

“We might try to catch a minibus, but they would often be full. So we might just walk an hour and a half to get where we were going.”

4:00–7:00 p.m. Return home, make dinner, spend time with family

“We’re out all day without food or water, so by the afternoon, I’m always a little woozy,” she says. She and her family relied on basic staples for their everyday meals—rice, beans, and plenty of peanut butter and jelly sandwiches. Highlights included fresh produce like mangoes, pineapples, and bananas. “The carrots,” she says, “are the best I’ve ever eaten in my life.”



7. Recognize your privileges ...

“For someone like me, with a US passport and white skin, Rwanda is extremely safe. I never fear for my physical safety.”

8. ... but know your own and others’ vulnerabilities.

“The government would take my passport when I arrived and hold it until I left. And I know I’m being watched all the time. In my interviews, I follow people’s lead: I don’t want to put them in the spotlight if it’s going to get them in trouble. I know how to move with caution and humility. Is all of this ‘normal’? No. But it’s normal within authoritarianism.”

9. Bring a new lens to an old problem.

Doughty sees the Lake Kivu project as an example of what she calls “carceral repair,” in which those already in power use energy and infrastructure projects as a way to expand social control. First, those in power, including government and corporate partners, identified an existential risk: dangerous levels of methane trapped in a lake. Next, they built a technical fix: a cutting-edge gas-extraction barge. Finally, dubbing the barge and pipelines “critical national infrastructure,” the government sent armed soldiers to patrol the lake, established exclusion zones, and confiscated the boats and nets of fishermen who depended on the lake for their livelihood. In other words, the infrastructure developed to repair the lake ended up marginalizing those who were most dependent on it.

10. Let the story surprise you.

While Doughty may have been suspicious of the polished narrative from the outset, she had no reason to doubt the scientists' assessments of Lake Kivu's danger. But as the science evolved—more recent analysis has suggested that the risk is far less significant than initially assumed—it laid bare how much political and economic power had been built around an uncertain environmental risk.

11. Know the cost of truth.

Authoritarian governments like Rwanda's are not known for their tolerance of critics. "I have a colleague who was literally escorted out of the country for her critiques of the government," Doughty says. "Will my book go under the radar there? I don't know. I would like to be able to go back, but I might give it a beat. My deep hope is to return, but I was also committed to making a certain argument. I have peers who have told me, 'No, you've signed your own goodbye note with this text.'"



12. Teach and share everything you've learned.

Doughty has developed and reshaped two courses as a result of her research.

ANTH 200: Research Methods in Anthropology Using some of her own work as an example, Doughty teaches students how to write descriptive, observational field notes without overlaying their own assumptions. "I want them to avoid interpretation," she says. "You might believe you see a couple at a coffee shop because two people are holding hands, but you may learn something later that makes you change that interpretation. Observe. But be open to being wrong."

ANTH 243: Energy and Power

Last year, students in the fieldwork-based course studied the development of a solar farm linked to New York's clean-energy goals. They attended town meetings, talked to the mayor, and knocked on the doors of local residents who had signs in their yards supporting or opposing the solar farm to ask about their positions. "In some ways," she says, "the dynamics in Rwanda—Who gets defined as a risk? How do disputes get resolved? How does science relate to community-level politics?—are present here."

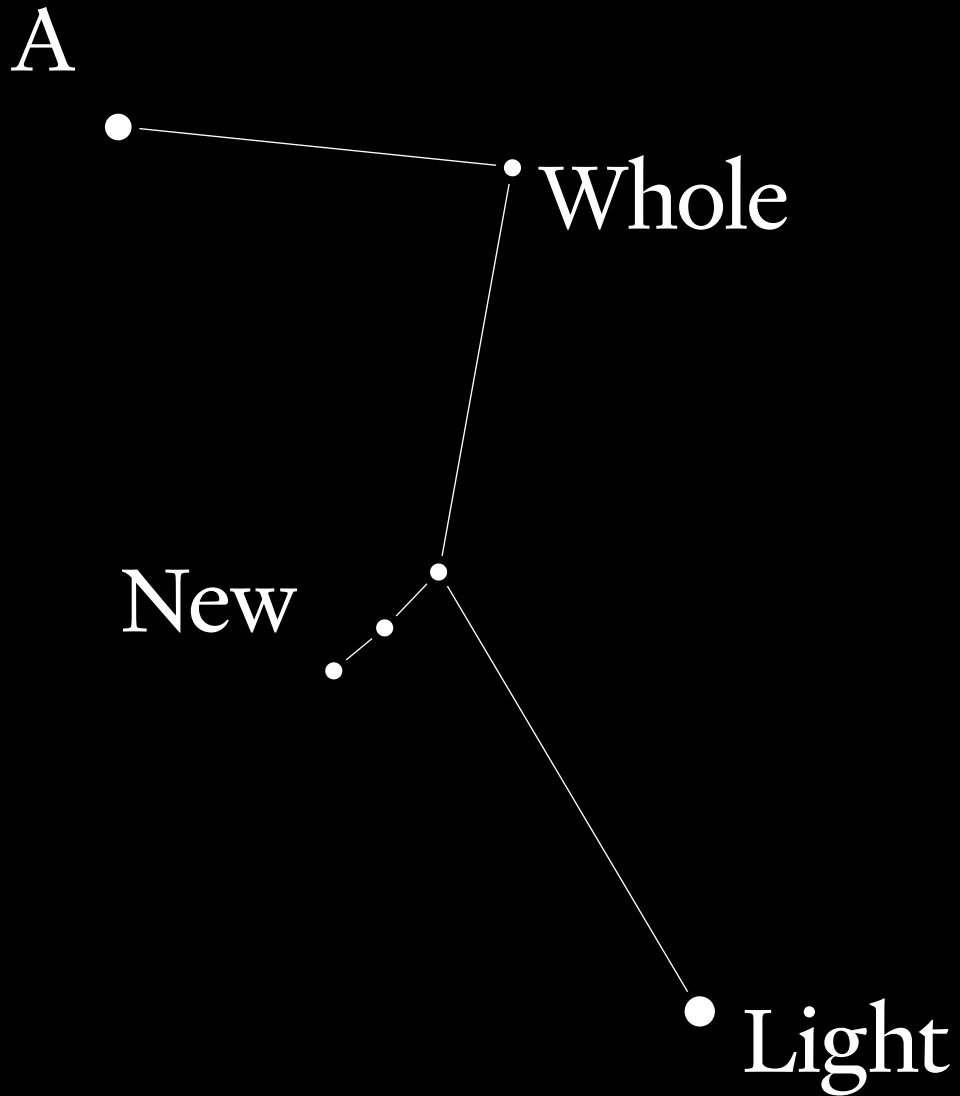
13. Stay focused on your north star.

The point of Doughty's book is not to suggest that technological innovation should slow—only that we all grapple honestly with its costs. "I'm all for dreaming big," she says. "But I also hope that people can sit with the perspectives of people living next to the lake and not just say, 'Well, they're ill-informed. They don't understand that it's 'better for them.'" I hope people understand the impact that [these technologies] have on real people." *



Extra Credit

During her career, Doughty has been recognized with the Goergen Award for Excellence in Undergraduate Teaching, the W.E.B. DuBois Award for Educational Excellence by the University of Rochester Black Students' Union, and Professor of the Year in the Social Sciences by the University of Rochester Students' Association. In addition to serving as director of undergraduate studies for the Department of Anthropology, she is codirector of the University's Rochester Education Justice Initiative.



With a field of view at least 100 times larger than Hubble's, NASA's Nancy Grace Roman Space Telescope will survey the cosmos on an unprecedented scale. Dozens of URochester alumni helped bring its expansive view into focus.

BY LUKE AUBURN



After being designed and built by L3Harris Technologies in Rochester, the Nancy Grace Roman Space Telescope's optical telescope assembly (front cover) was integrated with the coronagraph and other key components in the largest clean room at NASA's Goddard Space Flight Center in Maryland (opening spread and right). When fully deployed, Roman (left) is about the size of a tour bus.



WHEN NASA'S Nancy Grace Roman Space Telescope begins transmitting its first images from a million miles away in outer space, few people back on Earth will be more eager to see them than Rebecca Borrelli '12 (PhD).

She is one of dozens of University of Rochester alumni who helped design, build, and test the telescope, which successfully launched at 7:26 a.m. (EDT) on August 30, 2026, from the Kennedy Space Center in Florida.

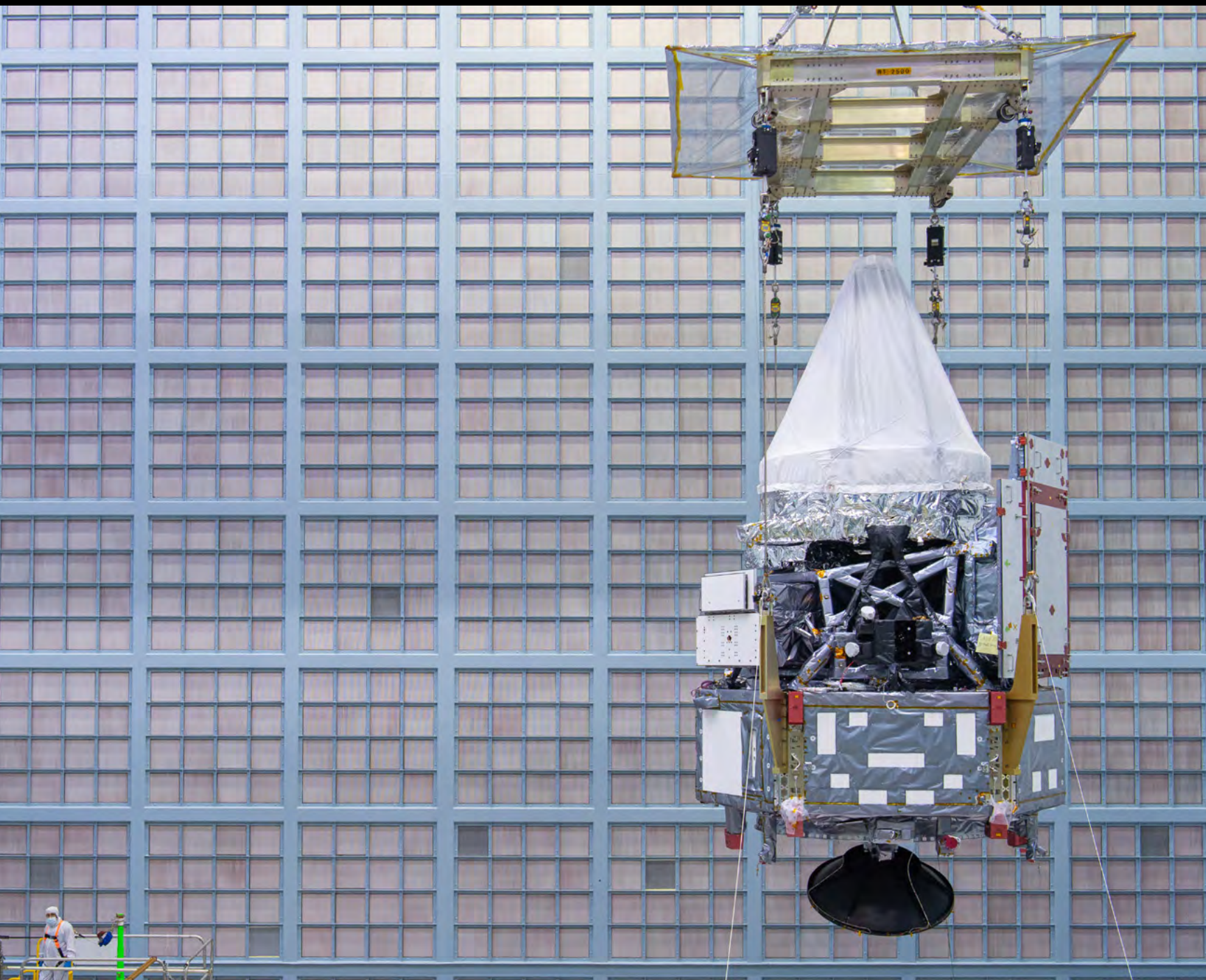
"It's the best telescope that NASA has ever created in terms of performance," says Borrelli, the chief technologist for space superiority and imaging at L3Harris Technologies. "It's going to take beautiful images."



With a field of view at least 100 times larger than that of the Hubble Space Telescope and crisp infrared vision, Roman could measure light from a billion galaxies over the course of its mission, offering humanity a powerful tool for exploring dark matter, dark energy, and planets outside our solar system.

That would not have been possible without people like Borrelli and other URochester alumni at L3Harris who designed and built Roman's optical eye, communication systems, guide sensors, and electronic components. Dozens more alumni at NASA's Goddard Space

FROM LEFT: NASA GODDARD SPACE FLIGHT CENTER
SCIENTIFIC VISUALIZATION STUDIO, NASA/MIKE GUINTO



Flight Center and Jet Propulsion Laboratory, as well as California-headquartered Teledyne Technologies, had a hand in designing and refining the telescope, from work on its coronagraph to its flight detectors.

● Shooting for the stars

URochester's connection to space optics dates back decades. In the 1960s, James Webb, the head of NASA during the Kennedy and Johnson administrations, asked Brian O'Brien, the

former director of the University's Institute of Optics, to form a committee to advise NASA on future programs—one of which would eventually become the Space Shuttle program.

When a flaw was discovered in Hubble's primary mirror soon after its launch in 1990, Duncan Moore, then the director of the Institute of Optics and now the Rudolf and Hilda Kingslake Professor Emeritus in Optical Engineering Science, chaired the independent review panel charged with determining what had gone wrong. James Fienup, the Robert E. Hopkins Professor of Optics, then helped cor-

rect what was determined to be the telescope's nearsightedness.

That success continues to shape the newest generation of space telescopes, including the James Webb Space Telescope and Roman.

Some of Fienup's former optics students, including Matthew Bolcar '09 (PhD), Thomas Zielinski '11 (PhD), Alden Jurling '15 (PhD), Matthew Bergkoetter '17 (PhD), Scott Paine '19 (PhD), and Scott Will '22 (PhD), have played significant roles with Roman, applying and advancing techniques developed for earlier missions.

Compared with the intricate design of Webb, which launched in 2021, Roman—named after NASA’s first chief astronomer and one of the architects of the agency’s modern science program—is a throwback.

Joe Howard ’00 (PhD), an optical engineer at NASA Goddard who has helped design the telescope since its early days, calls it a “stubby Hubble.” But Roman’s simplicity and sawed-off appearance give it distinct advantages over Hubble and Webb.

“If you’ve ever looked closely at a wide-angle camera lens, you’ll see the same sort of shorter design,” Howard says. “Placing the secondary mirror a lot closer to the primary mirror helps Roman to have a gigantic field of view that enables a lot of different science than either of its predecessors.”

How gigantic? Roman was designed to capture a patch of the sky bigger than the apparent size of a full moon. That allows it to survey the universe 1,000 times faster than Hubble.

Roman was also designed to test a new instrument that astronomers believe will super-

charge the search for planets outside our solar system: the coronagraph, which uses a system of optics, masks, self-flexing mirrors, and sensors to block the light emitted by a star.

“The best analogy I’ve heard is that it’s equivalent to someone in Rochester trying to take a picture of a lightning bug next to stadium lights in Los Angeles, except it’s 100 times harder,” says Paine, an optical engineer at L3Harris who worked on wavefront error measurements for Roman.

● Going to extremes

Roman’s creation followed an unusual path and did not start from scratch. While Howard and others had initially designed a telescope with a primary mirror half the size of Hubble’s, plans pivoted when the National Reconnaissance Office (NRO) gifted NASA a telescope it no longer needed.

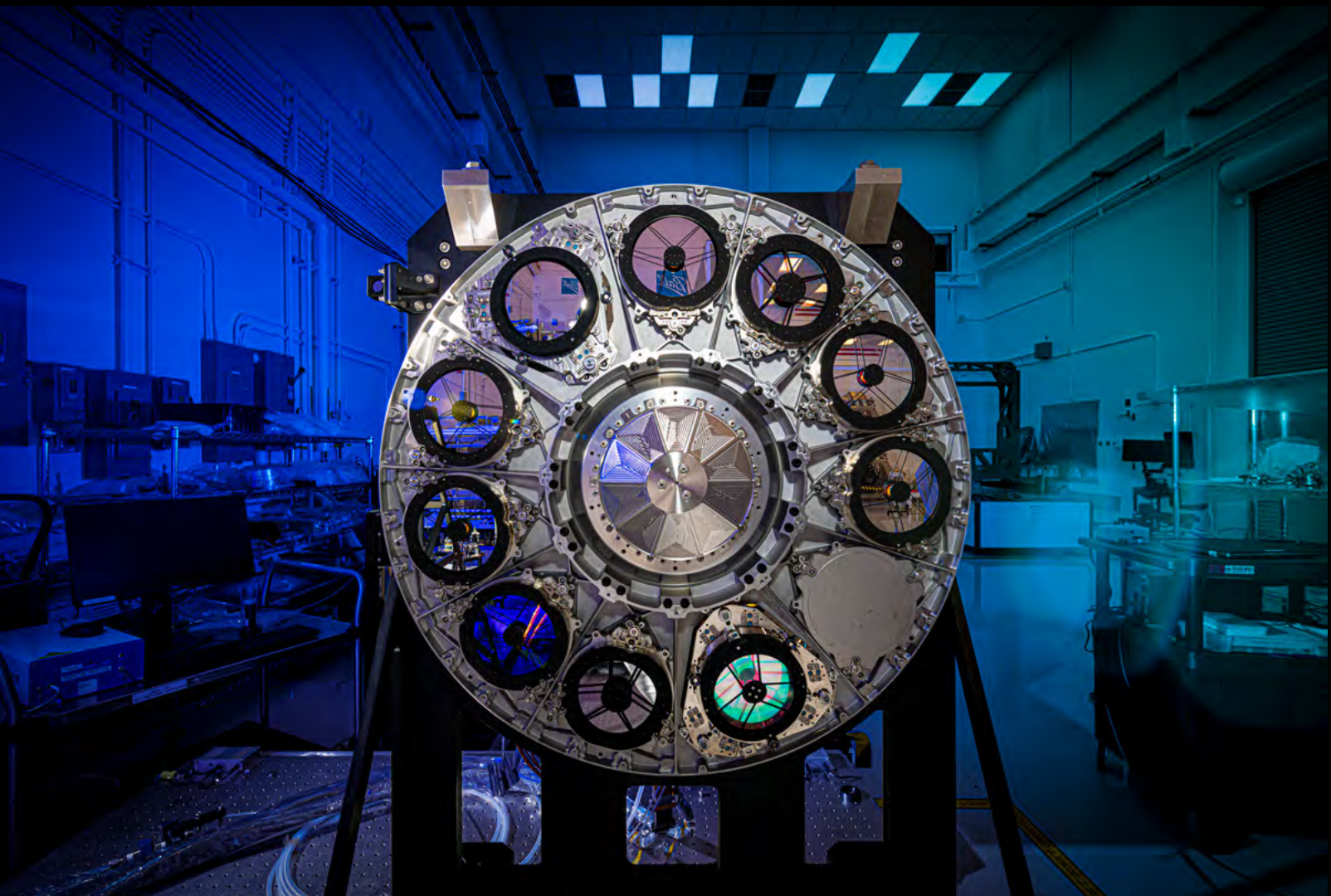
“It was half-built for a different use, so we had to sort of repurpose it,” Howard says.

Reconfiguring NRO’s telescope allowed NASA to expand the scope of the project, but getting there required a lot of work.

“We had to reshape all of the mirrors because they had a completely different prescription,” Borrelli says. “Then [NASA] had to develop the integration and testing, refinish the mirrors, and develop the flight electronics and thermal controls.”

L3Harris built the optical telescope assembly in Rochester but designed it to operate one million miles away, which meant it had to handle extreme thermal ranges.

“Materials do really well if you keep their temperatures stable, but the second your temperatures start shifting, materials grow and shrink as they get hotter or colder, and that means things move and shift,” Borrelli says. “For an optical system, that’s not something you can tolerate. If you think about Hubble, for example, the error they had on their primary mirror was only one micron across the whole surface, which is about one one-hundredth the width of a human hair.”



CLOCKWISE FROM LEFT: BALL AEROSPACE, NASA/CHRIS GUNN, NASA/JOHN KRAUS

After the optical telescope assembly was built in Rochester, it was shipped to NASA Goddard in Maryland, where it was combined with other components, including the coronagraph, before being shipped onward to the Kennedy Space Center.

● Putting it to the test

Alumni at NASA and L3Harris who worked on Roman say they were much less nervous about Roman's launch than they had been about Webb's, when any one of the telescope's 344 single-point failures could have doomed the mission.

But testing was still a massive undertaking.

Bolcar joined the Roman project in 2020 as NASA Goddard's optical systems lead. His job mainly focused on testing the telescope to ensure it met requirements for wavefront error, alignment, and overall optical performance.

"A mantra we follow is 'test as you fly, fly as you test,'" Bolcar says.

That meant testing the optical telescope assembly before and after it was mounted, after it was aligned, and after the Wide Field Instrument—a 300-megapixel infrared camera—was added. They subjected it to vibration and acoustic testing and simulated a launch. Once the telescope was assembled, it went through a 65-day thermal-vacuum test. It wasn't easy.

"Working here in Rochester, there are highways all over the place, and a truck going by on a highway a mile from the facility creates vibrations in the ground that you can see in the test," Borrelli says.

After light is reflected and focused by Roman's mirrors, it will pass through the element wheel assembly (opposite) before reaching the detector array (right), which converts the light into vast images of the sky. A SpaceX Falcon Heavy rocket (below) launched the telescope into space.



"By the end of the year, knock on wood, our scientist friends will be reaping new and great ideas and lots of awesome images."

—JOE HOWARD

Because conditions on Earth are so different from those in space, the team had to get creative. As NASA Goddard's wavefront sensing lead engineer for Roman, Jurling heads a team of software and optics experts who measure the alignment and performance of the telescope's optics. For them, gravity is a major obstacle.

"The primary mirror for Roman is very lightweight, about a quarter of the weight of Hubble's, and, because of that, on the ground it sags a lot more than we would like," Jurling says. "My team had to develop a novel gravity sag measurement technique that we used in ground testing very successfully."

For many who contributed to Roman, the August launch was their first chance to watch one of their missions lift off in person—and a reunion nearly two decades in the making.

"The best part about watching the launch was that it was with the extended team," says Howard, who has worked at NASA for more than 25 years. "I would wander down the causeway viewing area and meet colleague after colleague spanning this extended effort over time, all together for this single event."

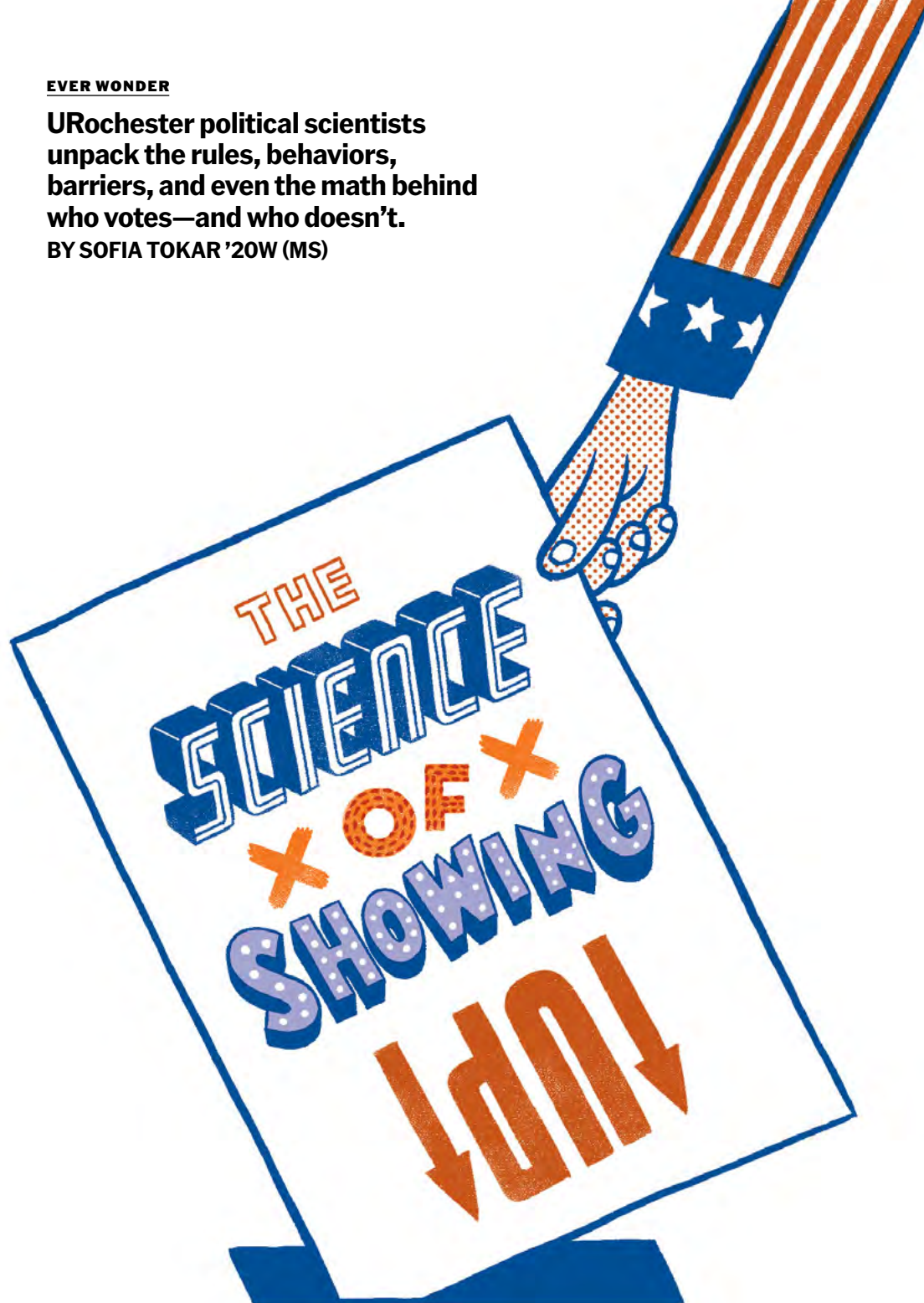
Roman has since been making its way toward its destination at the second Lagrange point, L2. The team at NASA Goddard, including Howard, Bolcar, and Jurling, has been busy during this christening period adjusting the alignment of the optics and mechanics to get the best possible performance.

Next comes the part they've been waiting for. "Once we make sure the telescope is in focus and the image quality is good, we hand over the keys, so to speak, to the scientists," Howard says. "By the end of the year, knock on wood, our scientist friends will be reaping new and great ideas and lots of awesome images." *



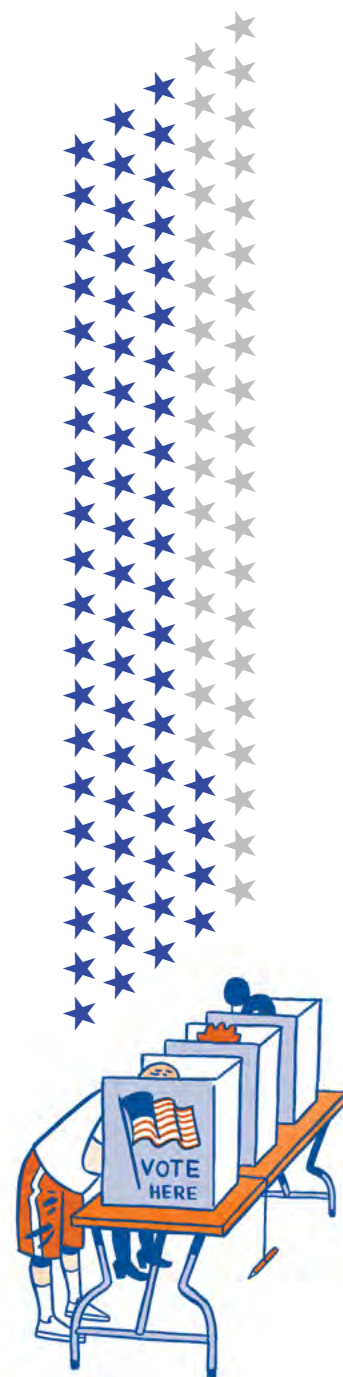
URochester political scientists unpack the rules, behaviors, barriers, and even the math behind who votes—and who doesn't.

BY SOFIA TOKAR '20W (MS)



Every election ends with a count: Who won? Who lost? But the University of Rochester's political scientists are interested in another number, too: *Who showed up?* Voter turnout sounds simple enough: How many eligible voters cast a ballot? Yet behind that number is a complicated mix of individual behaviors, institutional rules, and real-world circumstances.

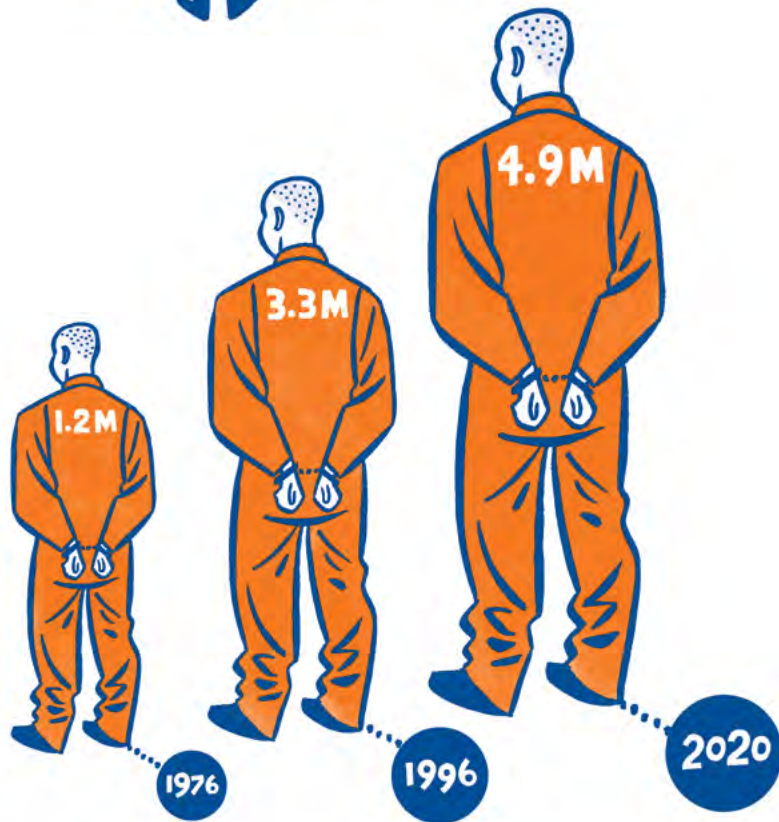
For decades, URochester political scientists have used data, experiments, mathematical models, and game theory to understand who votes, what makes voting easier—or harder—and why people vote at all. With the 2026 midterm elections underway—and control of Congress at stake—we asked Scott Abramson, James Druckman, Mayya Komisarichik, and Scott Tyson what the evidence tells us.



What does 'voter turnout' actually mean?

If there were 100 eligible voters and 64 people voted, turnout would be 64 percent.

Eligible is key. Total population is not the same as the voting-eligible population. Citizenship, age, and state law all affect who can cast a ballot—which means the denominator matters.



The denominator changed.

As mass incarceration expanded, so did the number of Americans barred from voting because of felony convictions.

Counting ineligible adults in the voting-age population can make turnout appear lower than it actually is.

SOURCES: THE SENTENCING PROJECT, *LOCKED OUT* 2024; MICHAEL P. McDONALD AND SAMUEL L. POPKIN, "THE MYTH OF THE VANISHING VOTER," *AMERICAN POLITICAL SCIENCE REVIEW* 95(4) (2001). McDONALD AND POPKIN IDENTIFY GROWTH IN BOTH THE NONCITIZEN AND FELONY-DISENFRANCHISED POPULATIONS AS IMPORTANT DENOMINATOR EFFECTS.

"Voter turnout appeared to decline through the 1970s, '80s, and '90s. In reality, this is explained by the growing disenfranchisement rate of felons."

—James Druckman

Who gets to vote?

1870

15th Amendment

Prohibited denying the right to vote on account of race, color, or previous condition of servitude.



1920

19th Amendment

Prohibited denying the right to vote on account of sex.



1965

Voting Rights Act

Banned discriminatory voting practices and required certain states and localities with histories of voting discrimination to get federal approval—known as preclearance—before changing voting laws.



2013

Shelby County v. Holder

Effectively ended preclearance. After Shelby, some election rules changed—notably voter ID laws—but Komisarchik and coauthor Ariel White found little change in Black-white turnout gaps during the period studied.



2026

Louisiana v. Callais

The Supreme Court tightened the requirements for challenging potentially racially discriminatory maps under the Voting Rights Act.

SOURCES: UNIVERSITY OF ROCHESTER NEWS CENTER VOTER-TURNOUT EXPLAINER (2024); NATIONAL ARCHIVES; MAYYA KOMISARCHIK AND ARIEL WHITE, "THROWING AWAY THE UMBRELLA: MINORITY VOTING AFTER THE SUPREME COURT'S SHELBY DECISION," *QUARTERLY JOURNAL OF POLITICAL SCIENCE* 20(2) (2025), 269–305.

Voting is habit-forming.



of adults 65 and older who were eligible for the 2020, 2022, and 2024 elections voted in all three.



of young adults old enough to vote in all three did the same.



of those young adults voted in none of the three.

SOURCE: PEW RESEARCH CENTER, VALIDATED-VOTER ANALYSIS OF THE 2020, 2022, AND 2024 ELECTIONS (2025).

“The key determinant of voting in any given election is whether you have voted before.”

—James Druckman



A tornado created a natural experiment.

March 3, 2020: Hours before polls open on Election Day, a tornado strikes Nashville, Tennessee, forcing officials to consolidate 21 voting precincts into six.

Usually, researchers have a problem: People compensate for voting barriers—with transportation, information, or outreach.

This time, they couldn't.

SOURCE: SCOTT ABRAMSON AND SHARECE THROWER, “THE DIRECT COST TO VOTERS OF POLLING SITE CLOSURES AND CONSOLIDATION,” POLITICAL SCIENCE RESEARCH AND METHODS (2025).

“The tornado gave us something we almost never get: a chance to see the direct cost of making voting harder before anyone has time to compensate for it.”

—Scott Abramson

Make registration easier. Make voting easier.

According to the United States Census Bureau, 73.6 percent of the citizen voting-age population was registered to vote in the 2024 presidential election, meaning roughly one in four was not. Same-day registration allows eligible voters to register and cast a ballot at the same time. Currently, 24 states and the District of Columbia have implemented same-day or Election Day registration.

SOURCES: UNITED STATES CENSUS BUREAU PRESS RELEASE CB25-TPS.29, APRIL 30, 2025; NATIONAL CONFERENCE OF STATE LEGISLATURES BRIEF, “SAME-DAY VOTER REGISTRATION,” UPDATED MARCH 27, 2026.



Reward of voting

=



Probability your
vote is pivotal



Benefit if your
candidate wins

-



Cost of voting

+



Value of voting itself

“Voters need time, the ability to navigate local voting systems, and often a little encouragement. The more accessible those things are, the more likely people are to participate.”

—Mayya Komisarchik



Your vote probably won't decide the election. So why bother?

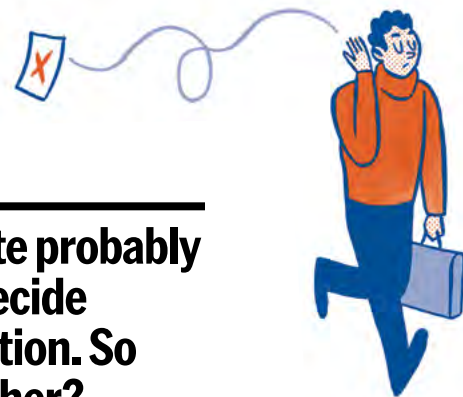
That puzzle helped launch the Rochester School of Political Science. In 1968, William Riker and Peter Ordeshook '69 (PhD) used mathematics to explain why voting can still be rational even when the odds that one ballot will decide an election are vanishingly small.

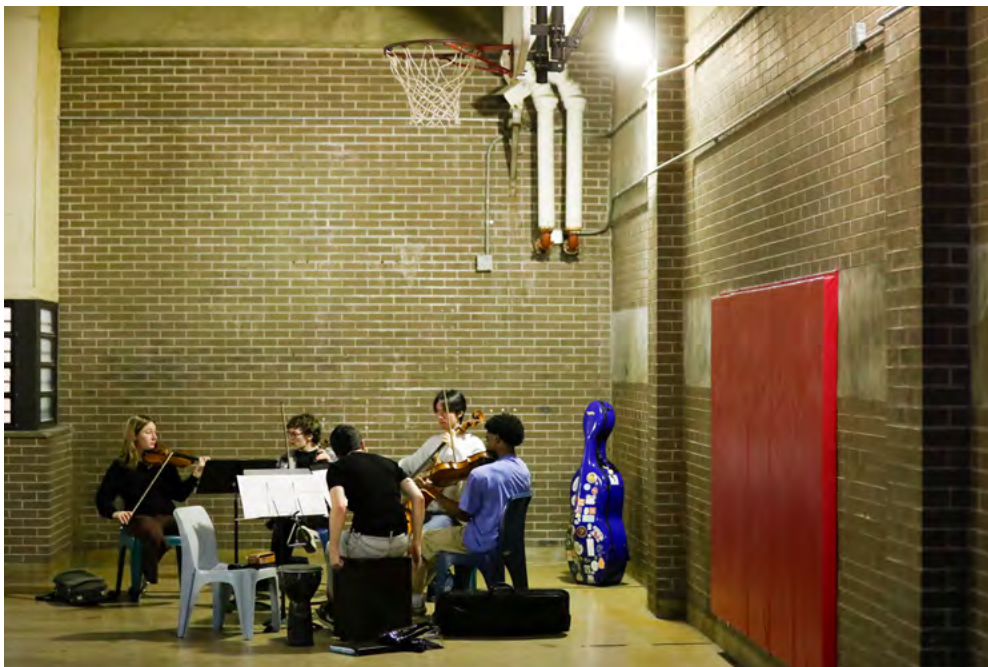
Sometimes, showing up is the point.

SOURCE: UNIVERSITY OF ROCHESTER NEWS CENTER VOTER-TURNOUT EXPLAINER (2024); WILLIAM H. RIKER AND PETER C. ORDESHOOK, “A THEORY OF THE CALCULUS OF VOTING,” AMERICAN POLITICAL SCIENCE REVIEW 62(1) (1968).

“Voting isn't just about duty. It's part of being in a community. You see your neighbors. You look each other in the eye. You're part of something together.”

—Scott Tyson





Associate Professor Elinor Freer leads a music composition session at the Monroe County Jail (right), Micah celebrates his work in progress (below), and Eastman School of Music students prepare for a practice session in the jail's gymnasium (left).

IN HARMONY

A new partnership between the Eastman School of Music and Rochester's Monroe County Jail explores what can happen when people are given the chance not just to listen to music but to create it themselves.

BY MELISSA PHETERSON



MEASURE BY MEASURE



THE DECOMMISSIONED gymnasium at the Monroe County Jail—a massive concrete facility one block west of the Genesee River in downtown Rochester—is not designed for chamber music. Fluorescent lights flatten the brown brick walls. Exposed pipes crisscross the ceiling. A basketball hoop hangs over a scuffed floor.

But on a warm spring morning in April, plastic chairs scraped against the linoleum as a student string quartet and percussionist from the University of Rochester’s Eastman School of Music unpacked their instruments: violins, viola, cello, triangle, cajón, woodblock, and doumbek.

The cellist tested a scale. The percussionist tapped the triangle. A bright metallic ping ricocheted through the room. Laughing, the violinists adjusted their music stands. The musicians were warming up, but they were also waiting.

Down the hall, a corrections officer was escorting Micah (whose full name, like those of the other incarcerated individuals, is being withheld to protect his privacy) from a classroom in the drug rehabilitation unit. Together, they passed a security desk and institutional walls the color of tapiocha, only occasionally brightened by letter-size printouts of motivational sayings. One read, “You can’t change the past, but you can write your future!” Another: “Smile and laugh as often as you can! It’s good for the soul.”

Micah seemed to have taken that latter advice to heart. Tall and athletic, with closely cropped hair, rectangular glasses trimmed in red, and a neatly kept beard, he entered the gym grinning easily, revealing the gap between his front teeth. He picked up a laptop from one of the chairs and sat down.

Elinor Freer, an associate professor of piano and chamber music at Eastman, leaned over his shoulder. Colored lines stretched across the screen in shades of blue, green, and orange. They resembled a child’s drawing more than a musical score. But they were music. Micah’s music.

Micah had been revising the piece, experimenting with rhythm, melody, pacing, and texture. Now, for the first time, he would hear it performed live by the Eastman students.

Israel Anselme ’27E, Felix Harkness ’27E, Aiden Hughes ’27, ’27E, Amelia Posner-Hess ’26E, and Elin Schlichting ’25E (MM) raised their instruments. Freer nodded. The lights flickered. The opening phrases emerged cautiously before gathering momentum. A triangle flashed above the strings. The music slowed, then accelerated, circling back toward its opening ideas.

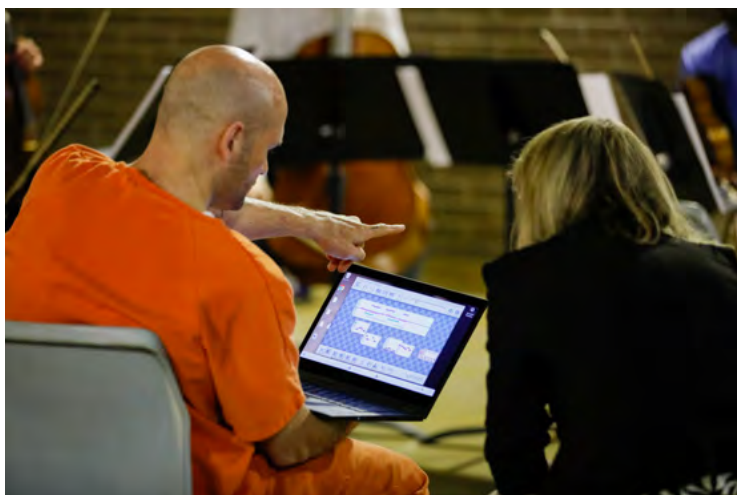
Freer listened intently as Micah nodded, almost imperceptibly. “I think your plan to bring the opening back at the end and come full circle is good,” she said as they evaluated what they heard. “Yeah, just like life,” Micah answered. “Now I need to finish it.”

Later, as the musicians began another run-through, Micah rocked gently with the rhythm, unable to suppress his awe. “I wrote this,” he said, more to himself than anyone else.

FINDING THEIR RHYTHM

A month earlier, Micah had never written a piece of music. Neither had four other men from the jail’s drug rehabilitation program. Twice a week, they opened their laptops and met with Freer and the Eastman students not simply to listen to music but to create it.

Working side by side in sessions they dubbed “Music Mondays” and “Music Fridays,” the incarcerated students sketched rhythms, debated tempos, revised melodies, discarded ideas, argued over endings, and slowly assembled original compositions for string quartet and percussion using Hyperscore, an intuitive visual composing program developed at the Massachusetts Institute of Technology’s Media Lab.



Josh and Freer work out ideas using the Hyperscore visual composing program (left), and the Eastman student string quartet and percussionist perform for jail residents and staff inside the drug rehabilitation unit (right).

“MUSIC HAS ALWAYS BEEN A HEALING FORCE FOR THOSE WHO LISTEN TO IT AS WELL AS THOSE WHO COMPOSE IT.”

The pilot for an Eastman course called Breaking Barriers grew from a deceptively simple question: What happens if music education inside a jail becomes something more than a performance?

Freer had spent several years bringing Eastman musicians into places where classical music rarely ventures: homeless shelters, treatment centers, and the Monroe County Jail itself. Those encounters, part of an outreach initiative called ROC City Concerts, often produced emotional reactions from listeners. But they ended the same way every time. The musicians packed their instruments, while the audience stayed behind.

Then Joel Yager, the director of drug and alcohol rehabilitation for the Monroe County Sheriff's Office, posed a different challenge. The incarcerated men he worked with weren't simply asking to hear music anymore. They wanted to learn how to make it.

For Yager, that shift—from listening to creating—was central to the program's potential. “Music has always been a healing force for those who listen to it as well as those who compose it,” he says. “This program created a format for participants to tell their story through music. Nothing could be more impactful or therapeutic.”

Freer also believed that the process of composition offered something performance alone could not. To compose is to make choices, to revise, to collaborate, to pivot, to stay with something long enough to finish it. Those skills matter not only in music but also outside it.

“The idea behind ROC City Concerts was to use music to heal, uplift, and foster human connection,” Freer says. “But this pilot lets us share music's transformative powers in an even more concentrated way by teaching and practicing life skills through the process of composition.”

She began the incarcerated students' composition study by looking at rhythm. “One thing that inspires composers is everyday sounds,” Freer told them.



Together, they listened for the rhythms of the rehabilitation unit: washing machines chugging in the distance, doors clanging open and shut, keys jangling on officers' belts, voices overlapping in the halls. The students spent their first few sessions learning how to copy and then graphically notate the sounds, eventually layering and then looping them. Hyperscore allowed them to draw the rhythms as colored lines rather than learn traditional notation, which can take years to master.

From there, the focus shifted to making melodies. Listening to examples ranging from Beethoven to Rihanna to Bruno Mars, students tried their hand at composing short musical motifs and then developing them. They sketched these short ideas—bits of rhythm and scraps of melody—on their laptops, then worked week by week with Freer to develop them into pieces for strings and percussion. As the class progressed, they learned about elements of musical form, timbre, range, dynamics, and other sophisticated concepts.

“The beauty of Hyperscore is that it uses a very low entry point for students of any age to learn about the basic elements of music and to then compose a fairly sophisticated piece of music,” Freer says.

As the Eastman students tried out the composers' ideas, Freer moved among the groups asking questions rather than prescribing answers: What did they want a section to feel like? Where should the energy



change? Should a passage sound smooth and mellow—or “caffeinated and manic”? The musicians might play the same phrase several ways until the composer heard the version that felt right.

On workshop day, when the string quartet and percussionist performed the full works in progress for the first time, Dan carried himself with the assurance of someone accustomed to listening closely. Bald, with a neat white beard and vivid blue eyes, he leaned forward with his laptop balanced across his knees.

As the musicians rehearsed his composition, he frowned slightly. When something didn’t sound the way he anticipated, he raised a hand and asked questions. His eyes moved from the screen to the musicians as he described the sound he was chasing. Not louder or faster, exactly, but different. The musicians conferred, presented a couple of alternatives, and then played it again. Dan responded, “Yeah, that’s it!”

Damien listened first and spoke second. Wearing oversized headphones, he studied the primary colors of his composition before quietly explaining the effect he wanted to create. “I like catching people off-guard,” he said, with a sheepish expression. A few moments later, the quartet arrived at one of those unexpected turns, and Damien leaned forward and watched the musicians almost as carefully as he listened to the music itself.

STRIKING A CHORD

For decades, correctional facilities across the United States have experimented with arts education, from theater productions and creative writing workshops to painting classes, poetry circles, and prison choirs. Researchers have found that these programs can foster self-expression, improve emotional regulation, strengthen communication skills, and encourage participants to see themselves in ways not defined solely by their convictions.

In New York, Rehabilitation Through the Arts has spent three decades offering arts programs in correctional facilities that span music, theater, dance, visual art, poetry, creative writing, and other forms. It reports that fewer than 3 percent of its participants return to prison within three years, compared with a national recidivism rate of more than 60 percent. Participants also often pursue higher education after joining the program, and hundreds of alumni have gone on to careers in social work, advocacy, academia, entrepreneurship, and other fields through which they give back to their communities.

John Blackshear, a forensic psychologist and URochester’s vice president for University student life, has spent decades working with people accused or convicted of serious crimes. In discussing that work, he points to



the importance of what he calls “restorative experiences”—relationships and experiences that can help people recover a sense of their own value.

At URochester, efforts to create educational opportunities for incarcerated individuals extend well beyond music. Since 2015, the Rochester Education Justice Initiative (REJI) has provided higher-education opportunities for incarcerated and formerly incarcerated students in western New York. Today, REJI administers associate degree programs in partnership with SUNY Genesee Community College at Attica, Groveland, and Wyoming correctional facilities as well as a URochester bachelor’s degree program at Attica. It also creates pathways for formerly incarcerated students to continue their education after release.

Freer, for her part, is careful not to overstate what a pilot program like the one she designed can accomplish. “It would be unrealistic to say four weeks changes a person’s life,” she says. “But music can help people reconnect with something they’ve lost. For someone who has lost their sense of self and their sense of humanity, music can help them begin to recover that.”

It can also offer a different way to experience learning. Composing an original musical work demands listening, collaboration, persistence, and trust—skills and qualities not often exercised in a correctional facility.

ROC City Concerts had been largely one-directional: Eastman students and faculty performed for incarcerated audiences. Breaking Barriers instead makes the Eastman students and Monroe County Jail participants a team, working together to create something new.

For the Eastman students, that collaboration calls for more than musical skills. Freer says it also requires social and communication skills, an awareness of social justice issues and the lives of incarcerated individuals, and the use of specialized software and technology—not to mention “a large dose of courage and vulnerability.”

“I still think our number one job as faculty is to get our students playing, composing, teaching, and writing at the highest levels,” she says. “But at some point, we should give students the opportunity to wonder

**“MUSIC CAN HELP
PEOPLE RECONNECT
WITH SOMETHING
THEY’VE LOST.”**



Monroe County Jail staff and County Executive Adam Bello (seated left, clapping) enjoy the rare live musical performance inside the jail; Damien, Frank, and Josh congratulate one another at the concert (right); and percussionist Aiden Hughes addresses the audience (below left).



if it might be about something bigger than that. And my hope is that this course will provide that opportunity.”

Freer saw that broader exchange take shape after one class, when the two groups stood at their respective elevator banks, separated by bars. One of the participants, Frank, had suggested that the Eastman students listen to a violin line in a particular rap song for melodic inspiration. “Uh, I don’t think she should listen to that,” Schlichting said, pointing at Freer.

“Oh, I know,” Frank said, grinning. “Don’t listen to the lyrics. Especially in front of your professor! Just the music.” Laughter ensued on both sides of the bars.

SOMETHING OLD, SOMETHING NEW

As concert day approached, the Eastman students admitted to feeling unusually nervous. “We wanted to honor what they’d written,” says Posner-Hess, a violinist from Chapel Hill, North Carolina. “It wasn’t our music anymore.”

The Breaking Barriers finale, held on a Friday morning in May, unfolded not in the gymnasium where the program had begun but in the atrium inside the drug rehabilitation unit—a bright, open gathering space lined by two tiers of cells. In the center stood vending machines stocked with colorful packages of instant ramen. Scattered across the room were tables whose checkerboards were printed directly into the laminate.

One by one, the cell doors opened. Men dressed in jail-issued tangerine scrubs filtered into the atrium, greeting one another and lingering briefly along the railings before finding seats. Conversation drifted through the room until the Eastman students settled in with their instruments.

Freer welcomed the audience—about 30 men seated on plastic chairs, with jail staff along the edges of the atrium and on the walkways above—and introduced the morning’s program: “Something Old, Something New.” It would pair established repertoire with original works written over the previous month by men living in the jail.

First came “something old”: the quartet and Hughes performed works by Astor Piazzolla, Scott Joplin, Mozart, and Camille Saint-Saëns. Then came the “something new.”

“At each and every class, these new composers brought something of themselves,” Freer told the audience. “It’s not really about the music. It’s about practicing life skills: making decisions, working collaboratively, seeing a project through to the end. They learned from one another, and I learned even more from them.”

Each composition revealed a different musical voice. Josh dedicated his piece, “Breaking Through Barriers,” to “the new me.” Frank, who had spoken about addiction and how difficult it had once been to finish anything, described what it meant to complete something he could be proud of.

As the students played his piece, “Surrender,” Frank’s shoulders relaxed. “There was this gorgeous melody just floating around in Frank’s brain,” Freer told the audience, “and now we all get to hear it.” Frank broke into a smile, a dark curl falling across his forehead, as applause echoed off concrete walls and steel railings.

Damien’s composition, “Magic Dame,” contained one of the concert’s surprises: a deliberate silence that fooled the audience into applauding before the piece was over. Damien grinned as the musicians resumed.

When it was Micah’s turn, he thanked the Eastman students “for bringing my ideas to life.” Freer described his piece, “Plaza North Score,” as “warm and vibrant with lush strings,” a style of writing that its composer did particularly well. When it ended, Micah stood, grinning widely, as the audience and his fellow participants cheered.

The concert closed with Eastman violist Anselme encouraging the audience to imagine a better place before the quartet performed a moving rendition of “Somewhere” from *West Side Story*. Then the musicians gathered for group photos, and the composers returned to their cells. Frank lingered by the narrow glass pane in his door, waving.

As the last of the music faded from the jail, participants on both sides reflected on what the experience had meant to them. Josh said it made him feel “important and recognized.” Frank said it had given him “a confidence I never had.” For Schlichting, a violinist, it was “probably the most meaningful project I have ever done at Eastman.” For Micah, who said the process had given him newfound confidence, the experience reinforced a simple idea: “Music brings people together.”

Freer is leading another four-week pilot this fall with incarcerated women and a new group of Eastman students. In spring 2027, Breaking Barriers will become a for-credit course in Eastman’s chamber music department.

“Experiences like this provide such important opportunities to harness the power of the arts to help people reconnect with their humanity and succeed once they’re on the outside,” Freer says. “It’s a great privilege to show them how to use music as part of that journey.” *

Read about the forces that shape incarceration—and the URochester researchers working to interrupt them—at rochester.edu/news/incarceration.



David Zhu '30M (MD)
Shanghai, China; Medicine



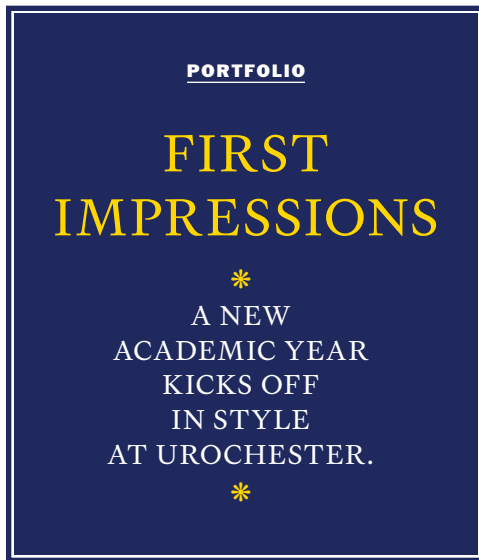
Marin Grundig '27, '27S; Boston, Massachusetts;
Psychology and Business Marketing



Jeffrey Jose '27; Montville, New Jersey;
Biological Sciences and Spanish



Alexander Hatch '29E
Mystic, Connecticut; Jazz Saxophone



Adeline Regis '30; Bennington, New Hampshire;
German, International Relations, and GRADE program



Chloe Wen '30M (MD)
Buffalo, New York; Medicine



Dominique Barksdale '27, '27S; Washington, DC;
Clinical and Translational Sciences and Business



Kevin Johnson '27; Chicago, Illinois; Clinical and
Translational Sciences, Psychology, and French

→

Why the tuba?

When I first got into music, I was playing trombone. And then there was an opening for the tuba, and I was like, “Ohhh, big shiny thing.” I was 10 when I started. And then I didn’t stop.

*



Matthew Langrell '27E
Washington, DC; Tuba



Ty “Taya” Promreuk '25E, '27E (MM)
Sunnyvale, California; Piano



Noah Tobias Carver '27E
Beals, Maine; Voice



Sukhman Thind '30M (MD)
Toronto, Canada; Medicine



Clare Canario '27
Geneva, New York; Biological Sciences

←

What class are you most excited for this year?

Probably microbiology. I’m doing a lab at the medical center, and there’s a huge writing component. We’ll see how that goes for me.

*



Alyssa Austin '27N; Manhattan, New York;
Accelerated Bachelor’s in Nursing

→
What do you do in your downtime?

Me and my friends have set times when we can just chill, relax, play board games, watch movies.

No electronic devices—just talk and interact.



Nate France '30E
Webster, New York; Jazz Trumpet and Music Education



Janelly Andrade-Gonzales '25, '27N
Los Angeles, California; Accelerated Bachelor's in Nursing



Jai'Neya Wright '30S
Syracuse, New York; Business Analytics

←
Talk about this 'fit.

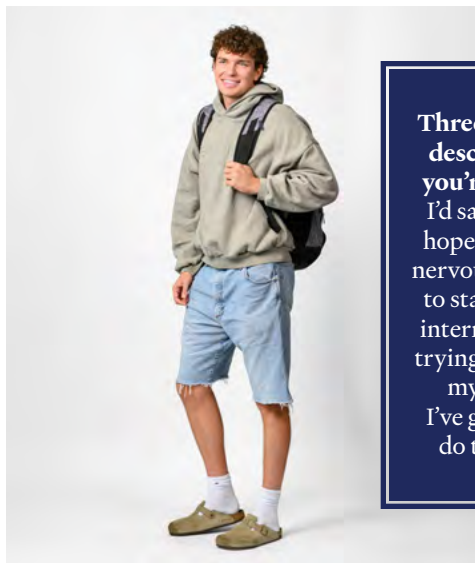
Nobody here really knows how I usually dress, so I can experiment. I've always had ideas that I just never put to fruition. So this is me doing that, and I really like how it came out.



Dede Xu '30
Xi'an, China; Optical Engineering



Nia Alexander '30M (MD)
Houston, Texas; Medicine



Camden Fleming '28S
Marblehead, Massachusetts; Business Finance

←
Three words to describe how you're feeling?
I'd say excited, hopeful, a little nervous. It's time to start getting internships and trying to further my career. I've got a lot to do this year.
✱



Vrinda Modi '30M (MD)
Jersey City, New Jersey; Medicine



Elijah Gebers '27E
Denver, Colorado; Opera



Zakeem Wooten '30S
Brooklyn, New York; Finance and/or Accounting



Karis Kelly '28
Chicago, Illinois; Epidemiology



Naomi Chad '27E
Tomball, Texas; Voice

→
Who are you calling later?
My sister is a junior in high school. I miss her a lot, but we FaceTime every day. I'm trying to get her to come here so I have more of a reason to come back.
✱



Isabella Florez Monroy '27
Austin, New York; Chemistry



Zinedine Bousraou '30
Malverne, New York; Chemical or Optical Engineering



The Big Cheese

BY DAVID ANDREATTA

Shake Shack CEO Rob Lynch has made a career of reviving some of the country's best-known restaurant brands. His key ingredient: seeing potential in others before they see it in themselves.



Rob Lynch often visits the Shake Shack at The Battery Atlanta, a mixed-use development that's also home to the company's local headquarters.



The staff at the Shake Shack around the corner from the company's Atlanta headquarters were preparing to open on a midsummer day when Rob Lynch '99, '00S (MBA) walked through the front door. The CEO of the fast-growing fast-casual restaurant chain arrived alone. No assistant. No clipboard. No entourage.

Wearing a crisp open-collared shirt and sport jacket, he blended into the crowd at The Battery, the bustling development of shops and offices around Truist Park, home of the Atlanta Braves. Had a pair of photographers not been waiting for him inside, most of the restaurant's employees probably wouldn't have noticed him. That wouldn't have been unusual.

"We don't know he's here most of the time until he's sitting at a table," said Danny Boliek, the restaurant's general manager. "He comes in here like a regular guest, orders at the kiosk, and the next thing I know I'm doing a table touch and there he is."

Lynch exchanged greetings with Boliek, then wandered behind the counter into the gleaming stainless-steel kitchen. He wasn't there to inspect the place. He wasn't looking for mistakes. He was looking for people. When he found them, he introduced himself as if he were just some ordinary guy. He asked about their families and backstories and talked about his own.

The employees seemed so at ease around him that when Lynch posed for the obligatory photo at the grill, they thought nothing of telling the boss to wear an apron before laying down a patty and to swap plastic gloves when dressing his burger with lettuce and tomato. "You'll want to change gloves, sir," one said. "Good thinking," Lynch replied.

Seeing employees as people with lives outside the workplace is an ethos that Lynch has carried through a career leading some of America's best-known restaurant brands. Business writers often describe him as a turnaround artist—an executive called in when a brand has lost its way. But listen to Lynch talk about business, and he spends less time on margins or market share than on the people doing the work.

"I call it authentic empathy," he says. "Being transparent, being real, and recognizing that everyone has their own story, and you don't know what that is. The best you can do is to have empathy, try to put yourself in their shoes, so you can give them what they need, and you can work together from there."

Ask Lynch about his philosophy, and before long he talks about his college football coach, a financial aid officer, a professor, and a mentor. Each, he says, saw something in him before he saw it in himself.

Now, he explains on the walk back to his office, he spends much of his time trying to do the same. "This is nice and everything, but this kind of stuff actually drives me crazy," he says of being profiled in *Rochester Review*. "The people who should get recognized are the people who are out there every day, working that grill, taking care of our guests."

Lynch was once one of those people.



Lynch's management style centers on "authentic empathy"—getting to know his employees and what they need to perform at their best.

ILLUSTRATIONS: AIDAN STONEHOUSE/THE NOUN PROJECT



Running interference

Long before he was the public face of thousands of employees and billions of dollars in revenue, Lynch was growing up in Pittsburgh, the elder of two sons of a steelworker and a supermarket clerk. He went by “Bobby” in those days.

Money was tight. He was 10 when he told the delivery manager at *The Pittsburgh Press* that he was 12 so he could get an after-school job. “I was tired of standing in line for free lunch tickets when all my buddies were walking into school,” he says. “So I was like, ‘What can I do?’ I got a newspaper route. I’d walk up to people’s houses and knock on the door and say, ‘Hey, you owe me two dollars.’ Can you imagine that today? But that’s what you did to be able to pay for your lunch like everyone else.”

The few impressive homes on his route belonged to lawyers and doctors. Seeing as he hated needles, Lynch decided he would become a lawyer. But there were obstacles—namely money and know-how. Neither of his parents had gone to college. By his senior year in high school, Lynch wasn’t sure he would, either.

He was slinging pies in a pizza parlor and playing football as his college prospects dwindled. He had solid grades and had been accepted at a handful of good schools. But their tuition was impossibly out of reach.

Then Jeff McMartin, a defensive line coach for the University of Rochester football team, came to recruit on his high school campus. McMartin asked Lynch’s coach if he could speak to any players who scored above a certain threshold on their SATs. Only two students qualified. Lynch was one of them.

He liked what he heard from McMartin but never bothered to apply upon seeing the tuition price tag. URochester, he figured, would be as out of reach for him as the others. But McMartin did something no representative of any other school did: He called Lynch that spring to ask why he hadn’t applied. “I just got to be straight with you,” Lynch recalls telling him. “I can’t afford to go to community college, much less the University of Rochester.”

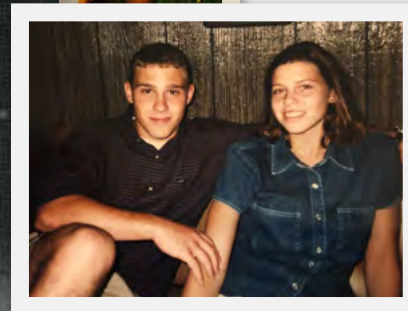
The coach’s response would become a defining moment of Lynch’s life. “You send the application in,” Lynch remembers him saying, “and let us work on that for you.”

A few weeks later, Lynch was at a friend’s house on a Friday night when the phone rang. His friend’s mother answered and told Lynch the call was for him. On the other end was a woman from URochester’s Office of Financial Aid. She explained that she had assembled a package of grants that would cover nearly all of his tuition. The remaining costs for room and board, she said, could be financed through student loans, something neither Lynch nor his parents had understood was possible.

“I said, ‘So, let me get this straight,’” he recalls. “‘You’re telling me I can go to the University of Rochester, play football, and not have to pay anything until I graduate and get a job?’” His voice softens when he remembers her saying “yes.” To which he replied, “Well, you just changed my life.”

More than 30 years later, Lynch can still see the phone hanging on the kitchen wall and the living room where he told his friends the news. He can feel them hugging him and patting him on the back. Someone had seen him. Someone had believed in him. Someone had invested in him. There would be others.

Lynch, who played football in high school, married his high school sweetheart, Sarah, and played on Team Simon’s champion intramural softball team (center, in white hat).



A million-dollar prediction

Peter Regenstreif, a professor of comparative politics and public opinion known for his wry humor, taught Lynch as a first-year student and said something that struck him as preposterous at the time. “He looked out at everybody, and he says, ‘I know this may seem hard to believe, but every one of you will make a million dollars in your lifetime,’” Lynch says. “Being from my background and hearing that was just such a powerful thing for me.”

As outlandish as it sounded, the idea helped Lynch see that the world beyond the River Campus was bigger than anything he had ever imagined, and so were its possibilities. He realized that more with each passing year—when an injury forced him to give up football, when serving slices at Pontillo’s gave way to waiting tables at Ruby Tuesday’s and Outback, and, eventually, bartending at the Elmwood Inn. He studied political science and economics and found his passion in the latter.

Economics for Lynch was about identifying patterns in complex data sets and using them to seize an opportunity or overcome a challenge. He stayed an extra year to earn an MBA at Simon Business School, where he studied marketing and developed an intellectual curiosity about what moved people to act. “The thing about Rochester for me was,” he says, “it gave me every opportunity to realize my full potential.”

It gave him another when Dan Hecht ’91, ’92S (MBA) returned to campus as a representative of Procter & Gamble to interview prospective interns for the company’s pharmaceutical division and selected Lynch from among the applicants.

Hecht remembers Lynch as disciplined and hardworking but also curious, personable, and candid—a combination he regarded as essential to thriving at the company. In those days, Hecht jokingly divided employees into “Proctoids,” the people who knew how to navigate bureaucracy and toe the company line, and “Gamblers,” those who could spot possibilities and were willing to take risks. Hecht saw Lynch as someone who could be both.

“He wasn’t just like, ‘What am I supposed to do? I’ll go do it,’” says Hecht, now an executive coach and professor of leadership at the Jack Welch Management Institute at Strayer University. “Rob was more like, ‘Help me understand it, let me go and figure out how to do it,’ and sometimes came back with new ideas.”

Hecht used Lynch as a test case for a new approach to training interns that Hecht had been developing. Rather than immediately assigning him a task like the other interns, Hecht introduced Lynch to the people and workings of the organization. He had Lynch sit in on meetings, talk with colleagues, and get a feel for the place, from the lunchroom to the conference room.

“By the end of the week, he was a little frustrated because everyone else had a project,” Hecht recalls. “But when I finally gave him his project, he was grounded, and he took off like a rocket. He understood the landscape and that getting to know people, the business, the organization, is critical to figuring out where you’re going.”

The training—and Hecht—had a profound effect on Lynch. “Dan always made time for me, and I always felt like he was truly invested in my success,” he says. “That’s how I’ve tried to show up in my roles since then. I try to create a hospitable work environment where people want to work together and they want to collaborate.”

What was supposed to be a summer internship eventually followed by law school turned into a seven-year job helping shepherd Procter & Gamble’s prized Crest brand. Lynch joined at a time when the brand had seen its share of the marketplace for whiter teeth dwindle. *The New York Times* chronicled the fall under the headline, “Decline of Crest shows how a brand can fade.” In the ensuing years, though, Crest rebounded with the introduction of a series of cosmetic and flavoring initiatives like Crest Whitestrips and Crest Pro-Health Rinse mouthwash.

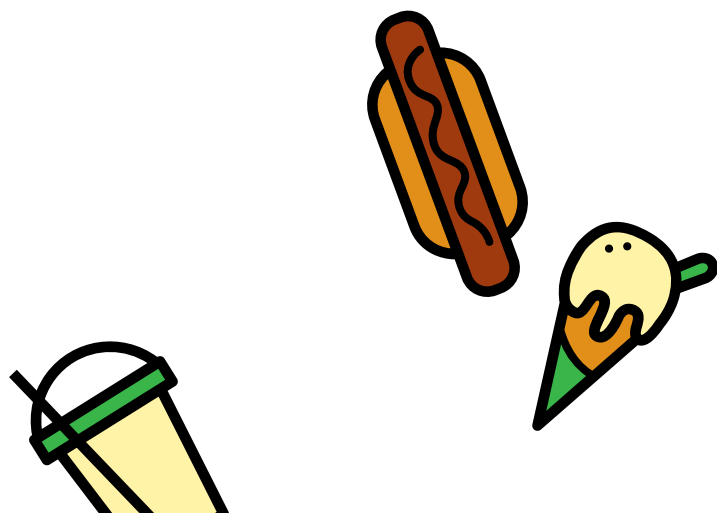
“That,” Lynch says, “was the foundation for everything I’ve done since.”

Climbing the food chain

Along the way, Lynch married his high school sweetheart, had three children, and got to know brands the way Bo knows baseball and football. After a run as the associate marketing director at Heinz, he became vice president of marketing at Taco Bell and worked on new products like Doritos Locos Tacos, one of the most successful fast-food product launches in history.

As chief marketing officer at Arby’s, he turned a chain that had become a punchline into a personality with its audacious “We Have the Meats” campaign. Lynch recalls his first reaction when the advertising agency he had hired presented the slogan. “I was, like, really?

“I try to create an environment where people want to work together and they want to collaborate.”



‘We Have the Meats?’” Lynch says. “Why doesn’t Nike just say, ‘We Have the Shoes?’”

But he set aside his doubts and put his trust in people. When the slogan was paired with that signature sonic “boom-boom-boom,” from rapper Pusha T, featured on Yogi and Skrillex’s “Burial,” the campaign came to life—and took on a life of its own.

Lynch remembers the moment he realized the campaign had become more than a way to sell sandwiches. He was walking in Chastain Park in Atlanta and stopped to watch a youth football game. The players were perhaps 11 years old. “These kids broke the huddle with, ‘One, two, three, we have the meats!’” Lynch says. “That’s when I knew we’d done something special.”

When Lynch was named CEO at Papa John’s in 2019 and tasked with turning around the brand after its founder became embroiled in a series of racially charged scandals, *The New York Times* led its story about his hire with, “He was the man behind ‘we have the meats.’” Lynch went on to steer the pizza franchise out of the most turbulent period in its history, but the label still makes him cringe: “The last thing I want my whole career to be known for is my being the ‘We Have the Meats’ guy.”

What, then, does Lynch want as his legacy? That brings us to Shake Shack.

Seeking enlightenment

By the time he arrived at Shake Shack in 2024, Lynch had a reputation as a textbook turnaround specialist. But the publicly traded fast-casual restaurant chain presented a different problem from the other brands he had managed. It wasn’t broken. It was beloved.

The challenge Lynch has set out to overcome is not rescuing the brand. It’s scaling a culture. He has moved quickly. The chain has expanded rapidly on his watch, from a few hundred boutique locations to 710 as of this summer. Lynch has publicly stated he wants to “blow past 1,500” locations and grow its everyday customer base while retaining its reputation as a special dining destination.

Innovation has been key. The restaurant has expanded its “Smoky BBQ” menu, and deal offers on its app have translated to huge gains in digital sales, according to industry trade publications. *QSR* magazine recently wrote that Shake Shack is “owning the beverage conversation,” and called the chain’s viral Dubai Chocolate Pistachio Shake one of the “buzziest drops in brand history.” When Shake Shack began offering the drink at 30 select locations in New York City, Los Angeles, and Miami, lines reportedly snaked around street corners before stores opened.

The queues harkened back to the early days of Shake Shack, which New York City restaurateur Danny Meyer opened in 2001 in Madison Square Park as a hot dog cart to raise money for charity. Three years later, it became a permanent kiosk, adding burgers and fries to the menu. “Everybody who wanted to come in had to stand in line, whether you were a sanitation worker or a Wall Street executive,” Lynch told *Restaurant Business Online*. “That’s not exclusive. That’s inclusive.”

Today, Meyer remains chairman of Shake Shack while leading Union Square Hospitality Group, which grew out of Union Square Cafe, the New York City restaurant he opened in 1985. Though Shake Shack operates independently of the group, Lynch has embraced its motto: “Extending Enlightened Hospitality.”

“I want my legacy to be that I built a restaurant company that supported 30,000 employees who prospered, built careers, and took care of their families and their communities,” Lynch says. “We want people who derive fulfillment and satisfaction from caring for others. That’s at the core of enlightened hospitality.”

That’s what Lynch is looking for when he visits Shake Shacks unannounced. He will order his burger from the kiosk like everyone else. He will ask a few questions. He will listen. He will take notice of someone behind the counter who reminds him of himself as a young man—hard-working and eager to please, with no clue what life has in store. *

FOR BOUNDLESS OPPORTUNITIES

SCHOLARSHIPS OPEN DOORS AND CHANGE LIVES

By Kristine Kappel Thompson



The impact of scholarship support reaches far beyond tuition. For many exceptional students, financial assistance—and the generosity of donors—make a University of Rochester education possible.

SPONSORED BY THE OFFICE OF ADVANCEMENT

Every year, exceptional students earn admission to the University of Rochester because of their talent, curiosity, and drive. But for many of them, the decision to enroll depends on one thing: whether they can afford it.

That's why student support is a priority in ***For Ever Better: The Campaign for the University of Rochester***. Through scholarships, fellowships, and other philanthropy, the campaign expands access, strengthens academic excellence, and helps ensure talented students from every background can say “yes” to a URochester education.

“Cost should not be the reason someone walks away from achieving their potential,” says Robert Alexander, vice provost for enrollment strategy and operations. “Providing the level of support students need requires significant resources, and strengthening our financial aid program is essential to our mission. We simply could not enroll the caliber and breadth of students we do without the generosity of donors.”

For donors, scholarships are among the most meaningful investments they can make in higher education. An endowed scholarship can change a student's life immediately while building a permanent source of financial support for future URochester students.

About 90 percent of first-year URochester students receive some financial aid*, with an average total award of \$65,000 per year. The University is committed to meeting 100 percent of demonstrated financial need for all admitted undergraduate students at the School of Arts & Sciences, Hajim School of Engineering & Applied Sciences, and Simon Business School. For the 2026–27 academic year, about 65 percent of first-year students received scholarships based on merit alone—a distinction shared by few peer institutions.

Yet URochester relies more heavily than its peers on annual operating funds to provide student aid because a smaller share of its endowment is allocated to scholarships. Growing the total number of endowed scholarships helps expand the resources available to support students and advances the University's broader mission, which includes accelerating research, supporting faculty, enhancing academic programs, and enriching the student experience.

SCHOLARSHIP IMPACT

In 2026, Trustee Ria Nova '98 committed \$1 million to support scholarships and student success initiatives at the University. As part of her gift, she joined the Piaker Family Scholarship Challenge, which provided matching funds. Nova's commitment also includes funding for cocurricular programs, leadership development, urgent student needs, and scholarships through the George Eastman Circle (GEC), the University's leadership annual giving society. Additionally, her generosity established the Ria Nova George Eastman Circle New Membership Challenge to inspire 175 new GEC memberships this year in honor of the University's 175th anniversary.

Nova's comprehensive philanthropy supports what is important to her: giving today's students access to the same opportunities she had at URochester. As an undergraduate, she received several scholarships that made it possible for her to attend. Nova also benefited from her experience on the college's Debate Union team, developing skills that shaped her academic and professional path.

“Generous donors helped me, and now it is my turn to help the next generation. Qualified, deserving students shouldn't be limited by financial circumstances—I wasn't, and I am forever grateful.”

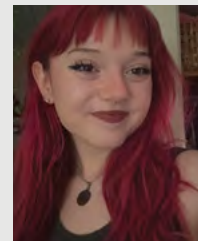
—TRUSTEE RIA NOVA '98

It's this kind of impact—and the ripple effect on students, families, and communities—that the University hopes to accelerate through greater investment in scholarships and financial aid.

“Donors who support financial aid and scholarships at the University of Rochester are really making generational and societal change possible,” says Alexander. “When our students graduate, we know they are ready to make the world ever better.”

*This applies to the School of Arts & Sciences, Hajim School of Engineering & Applied Sciences, and Simon Business School. It includes aid from all sources—federal, state, institutional, private—as well as loans, grants, scholarships, and work study.

“Financial aid is the only reason I've been able to attend college and study what I'm passionate about. Higher education has been historically inaccessible for my family, and being an aid recipient has opened an otherwise closed door. Aid has allowed me to focus on my education and future outside of debt and interest rates.”



EMILY COOK '29

Recipient of the Ron and Cynthia Rigby Scholarship Fund

Majors: Psychology and philosophy, School of Arts & Sciences

“Scholarship support helped reduce the financial burden on both my family and me, allowing me to focus more fully on my studies, my career development, and my future goals. To those who support financial aid, I'm deeply grateful, as your generosity has made my journey with University of Rochester possible.”



SON NGUYEN '29

Recipient of the Chai Sophonpanich Endowed Undergraduate Scholarship

Major: Computer science, Hajim School

“Scholarship support has fundamentally shaped what my medical school experience has been. Practically, it has allowed me to make decisions based on educational value and service rather than short-term financial necessity. It lets me focus fully on becoming the best, most thoughtful physician I can be and carries a strong sense of responsibility to pay that investment forward.”



JASON NAGOURNEY

Recipient of an Alexander and Lucy Levitan Endowment for Medical Student Research Fellowship

Doctoral program: Medicine, School of Medicine & Dentistry

“The Saunders Family Scholarship was truly a blessing and has tremendously supported my goals of becoming an FNP through financial ways I never thought were possible. I am truly thankful to have the opportunity to work at Noyes and receive such a generous scholarship. I am excited to continue making a difference here.”



KENNEDY KATHLEEN GARDNER

Recipient of the Saunders Family Nursing Scholarship

Master's program: Family Nurse Practitioner (FNP), School of Nursing

ISING TO THE CHALLENGE

Scholarship challenges amplify donor impact, create legacies, and transform the lives of undergraduate and graduate students. Thank you to everyone who has created or joined a scholarship challenge. Among them are the Lee & Cicily Backus Scholarship Challenge, the Boehning Scholarship Challenge, Pramit Jhaveri Simon GEC Challenge, the Juan C. Jones Scholarship Challenge, the Bennett and Davielle Keiser Scholarship Challenge, the Evans Lam Opportunity Challenge, the Nancy Lieberman Scholarship Challenge, the Sarah C. Mangelsdorf and Karl S. Rosengren Undergraduate Scholarship Challenge, the Courtney and Naveen Nataraj Scholarship Challenge, the Piaker Family Scholarship Challenge, the Shair Family Scholarship Challenge, and the Wegman Family Scholarship Challenge. Together, these challenges have resulted in 139 new scholarships.

HOW YOU CAN HELP OUR STUDENTS:

- Make a gift of any size to support scholarships, fellowships, and financial aid.
- Mentor a student or recent graduate.
- Share career advice and expertise.
- Offer internships or research opportunities.
- Hire URochester students and graduates.



Be a part of the
For Ever Better campaign!

Learn more at
everbetter.rochester.edu.

WHY WE GIVE

JUAN C. JONES '88S (MBA)

Over the years, Juan Jones, a University trustee and **For Ever Better** campaign cochair, has funded endowed scholarships. His scholarship challenge at Simon Business School provided \$500,000 in matching funds and, to date, has inspired nine other donors to create new scholarships. Together they have provided over \$1.1 million in support for Simon students. "As the first in my family to attend college and graduate school, and coming from a modest military background, I understand the transformative power of education," he says. "I've wanted to help students with limited means benefit from the same kind of opportunities I had."

JOAN BEAL '84E AND JEFF BEAL '85E

In 2025, University Trustee Joan Beal '84E and Emmy-winning composer Jeff Beal '85E made a historic gift to the Eastman School of Music that included student support. Their latest gift strengthens the school's ability to offer competitive financial aid to attract and retain outstanding students from around the world, regardless of their economic circumstances. "Jeff and I are who we are today largely because of the education, mentorship, and opportunities we received at Eastman," says Joan, cochair of the University's **For Ever Better** campaign.

LEE BACKUS '62 AND CICILY BACKUS

During the **For Ever Better** campaign, Lee and Cicily Backus have created an endowed graduate scholarship for future teachers and counselors as well as a challenge fund to support the next generation of teachers. Together, these commitments have the potential to raise up to \$2 million in financial aid for the Warner School. "We wanted to ease the cost burden for graduate students pursuing a high-quality education, and we care deeply about supporting those facing challenging circumstances," says Lee. Adds Cicily: "We believe that education should be within reach for everyone, and that it plays a real role in addressing income inequality."

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for
EVER BETTER

**THE CAMPAIGN FOR THE
UNIVERSITY OF ROCHESTER**

**Beside
the**

Genesee



Game Changer

Riley Laygo '27 has already rewritten the URochester softball record book. With one season left in her collegiate career, the computer science major is thinking about what comes next. >**P.74**

Learn

→
The professor of physics and astronomy and of computer science has decorated his office in Bausch & Lomb Hall with unique objects collected during his travels.

OFFICE HOURS

Gourab Ghoshal

The physicist on complex systems, the emergence of life and intelligence, and what distinguishes living systems from machines.

INTERVIEW BY LINDSEY VALICH



I grew up in an academic environment. My dad is a now-retired professor of political science. When I was about three, I apparently approached Carl Sagan on the quad at Cornell and asked him questions.

I read a lot as a kid, and I really liked the *Doctor Who* series of novels. I think that's what got me

interested in physics. The first time I saw $E=mc^2$ was in one of those books.

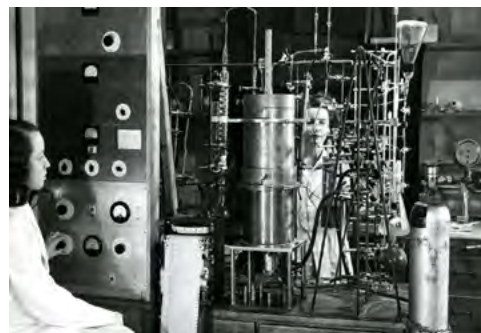
I originally wanted to be an archaeologist, but around 10th grade, I saw a BBC interview with the famous physicist Richard Feynman. I was mesmerized. I'd never heard anyone speak with that kind of clarity of

From Atoms to Action

University of Rochester Medicine's new Department of Environmental Medicine and Public Health Sciences unites two of the University's long-standing areas of research and practice, both of which have increasingly connected scientific discovery with efforts to prevent disease, inform policy, and improve health. Here are just a few of the milestones that brought them together. —Tama Miyake Lung

1943

URochester joins the highly classified Manhattan Project, becoming a center for studying radiation and chemical hazards associated with atomic-weapons production. The work later includes controversial studies in which hospital patients are unknowingly injected with plutonium, polonium, and radium.



1958

The Department of Community and Preventive Medicine launches with an emphasis on community health, including lead screening, storefront clinics, and preventive programs serving Rochester and the surrounding region. It is renamed the Department of Public Health Sciences in 2012.

1965

URochester becomes the first institution in the US to award a PhD in toxicology.

1971

Mercury toxicology expert Thomas Clarkson and colleagues help Iraqi health authorities investigate a massive outbreak of methylmercury poisoning caused by treated grain.

1974

URochester launches a master's in community health—the nation's first such program established in a medical

school department and accredited by the Council on Education in Public Health. It evolves into a Master of Public Health program in 1989 and is joined by a doctoral program in health services in 1994.

1975

The National Institute of Environmental Health Sciences awards URochester a grant establishing what becomes the Environmental Health Sciences Center (EHSC), now the nation's second-oldest continuously funded NIEHS Core Center.

MINER LIBRARY (ATOMIC), JOHN SCHLIA (SEYCHELLES), J. ADAM FENSTER (LOMP), MONICA RODRIGUEZ VIA GETTY IMAGES (BEIJING OLYMPICS)

PHOTOGRAPH BY J. ADAM FENSTER



thought. I started reading books on quantum mechanics. It's the strange weirdness about quantum mechanics that got me.

I became interested in complex systems in grad school. I was planning to study high-energy physics, but I went to a talk by my eventual advisor where he used techniques from condensed-

matter physics and applied them to things like social and economic systems. I realized I could combine my interests in socioeconomics, political science, anthropology, history, and physics under this umbrella of studying complex systems.

Complex systems are pretty much everywhere in the universe.

A society, an economy, the human brain, the desk in my office—all are complex systems. When you have many interacting components, things get very complicated. But something interesting happens where there is this emergent global behavior, and things simplify. All of a sudden, you can understand a very complicated system through very reduced sets of variables.

I'm trying to understand a fundamental question: How does order emerge from very messy systems? Right now, through my Templeton Foundation grant, we're bringing together philosophers, evolutionary biologists, physicists, and computer scientists to study how life, intelligence, and agency

emerge and what distinguishes living systems from machines.

We're trying to formalize some of these ideas mathematically.

The first part of the project is a philosophical component, where we're trying to define concepts like agency and intelligence. The second part involves developing mathematical models of how these systems arise and sustain themselves and the energetic costs of that.

Agency is something I'm really interested in.

Living systems are constantly trying to stay alive, and much of what they do is organized around self-maintenance, whereas engineered systems are designed to solve problems. But even more important is knowing which questions to ask. Living systems accrue a tremendous amount of knowledge but discriminate between relevant and irrelevant information.

There are tasks that AI can perform much better than humans, but think about the resources and computing power it takes to train AI. AI is very good at solving existing problems, but I don't

see it advancing the frontier and asking truly original questions. Yet. You do have to be humble about these things and be open to what may come. And I honestly don't know what that may be.

I use AI, but I don't completely trust it.

I use Claude and ChatGPT, mostly for mundane purposes, like accounting and travel research, or as a sounding board for ideas. I've trained it to be adversarial. Every time it agrees with me, I scold it, so it's a great way for me to sharpen my ideas.

I'm a scientist, but I have a love for the arts and humanities.

I think it's important to have a holistic perspective. I love to travel and go to museums and the theater. I'm a huge history buff, and I'm beginning to appreciate philosophy more. I like learning new things and reinventing myself periodically.

The John Templeton Foundation has awarded a team of researchers led by Ghoshal a three-year, \$4.2 million grant to investigate the science behind the capacity of living things to generate and pursue goals. Learn more at rochester.edu/news/VIPAI.



1986
URochester researchers begin recruiting the first cohort for the Seychelles Child Development Study, examining how prenatal mercury exposure from frequent fish consumption may affect children.

1992
Drawing together decades of interdisciplinary research and training, the University formally establishes the Department of Environmental Medicine.

2000
EHSC researchers help create the Coalition to Prevent Lead Poisoning, making Rochester a national model for lead abatement. In 2012, Deborah Cory-Slechta cochairs a federal panel that recommends slashing blood-lead thresholds for intervention in children.

2001
After 9/11, EHSC faculty begin studying the toxicity of World Trade Center dust and develop an outreach program to help those affected by the environmental consequences of the terrorist attacks.



2008
Pollution controls during the Beijing Olympics create a large-scale natural experiment that allows URochester researchers to study the impact of pollution levels on cardiovascular health and birth weight.

2023
The University launches the Institute for Human Health and the Environment to coordinate work on key issues related to the impact of the environment on human health across the lifespan.

2024
URochester and Rochester Institute of Technology launch the Lake Ontario Microplastics Center, one of six federally funded Centers for Oceans and Human Health, to study the environmental fate of microplastics and their human health impacts.

2026
The Board of Trustees approves the formation of the Department of Environmental Medicine and Public Health Sciences, uniting the two departments under chair B. Paige Lawrence. Its three core research areas are population health, toxicology, and translational science and health policy.





↑
Taylor Hall, named for Earl Burt Taylor, has served a variety of URochester staff and students over 91 years.

ASK THE ARCHIVIST

Q

A question for Melissa Mead, the John M. and Barbara Keil University Archivist and Rochester Collections Librarian: **My office is in Taylor Hall, which hosts an odd assortment of student services. In addition to Title IX, it's home to the Office of Disability Resources and a machine shop. I've also heard it's the only single-story building left on campus. Do you know if that's the case? What's the story behind this little outlier of a building?**

—Mace McDonald, sexual misconduct prevention education specialist, Title IX Office

A

Opened in 1935 as the Services Building, this 144-by-81-foot structure centralized the staff and equipment of the facilities department, then led by General Superintendent Clarence Livingston.

According to an article in the *Campus* student newspaper, “A staff of 183 ... do almost every type of work imaginable—from welding to bird-catching.” Across four campuses—the River Campus, Eastman School, Medical Center, and Prince Street—those duties covered more than one million square feet: four miles of corridors, 6,000 doors, 8,000 windows, 9,000 lightbulbs, 45.5 acres of floors, and upwards of 100 acres of grounds. Livingston’s “Analysis of Functions for the Buildings and Grounds Department” binder, which sat on his desk and listed each staff member’s duties, is preserved in the University Archives.

When the colleges for men and women were unified on the River Campus in 1955, offices and divisions on the Prince Street Campus also moved. This included the University School of Liberal and Applied Studies, which served non-traditional students seeking degrees or additional training in general studies, business administration, education, and nursing.

The facilities department moved across Elmwood to what is now the Health Sciences Campus, and, in 1956, the University School took up residence. The building was named for Earl Burt Taylor (Class of 1912 and 1913 (MA)), “the man who largely founded that division of the University as a development of the former Division of University Extension,” according to

a 1955 *Rochester Review*. The University School gained a roommate in March, when the new Computing Center joined it.

With the 1958 launch of the graduate schools of education, business, and engineering, the University School stopped managing evening programs for those students. Its offices moved to Wallis Hall, and in 1961 the College of Education, now the Warner School of Education & Human Development, took its place at Taylor. Meanwhile, the Computing Center expanded and became the primary resident until 2014.

The area that originally served as the facilities machine shop returned to that purpose in 2005. The Taylor Hall Shop is one of 20 design studios, fabrication labs, machine shops, and collaborative spaces available to arts, sciences, and engineering students.

Taylor Hall—nicknamed “the Skyscraper” by University School students—is not the only one-story building on campus: The nearby New York State Center for Advanced Technology (Center for Innovative and Emerging Sciences) is similarly compact.

Although Taylor Hall outlasted the University School, its occupants still enter past the bronze plaque honoring Taylor’s “candor, courage, and humor” and crediting him with “[winning] by wisdom and good will the high regard of the community, the confidence of ... colleagues, and the devotion of close associates.”

Have a question about University history? Email rochrev@rochester.edu with “Ask the Archivist” in the subject line. For more about the history of the University School and Computing Center, visit urexhibits.lib.rochester.edu/s/ata.

COURSEWORK

Play Anything

When music students trade reeds, strings, and sticks for software, a world of creative possibility emerges.

BY MATT COOK

A dish brush scrubbing a frying pan. Air blown into a Nintendo 64 cartridge. A cushion thumped against a couch. All sounds Swedish musician and former YouTube Seth Everman sampled to recreate—with the help of a keyboard—Billie Eilish’s “Bad Guy.”

Students in MCT 101: Introduction to Music Technology, open to undergraduates at the Eastman School of Music and the River Campus, take up a similar challenge. Early in the semester, Dennis DeSantis ’05E (DMA), an associate professor of music and technology, tasks them with creating a minute-long composition using field recordings obtained on a “soundwalk.” It’s one of the first of many assignments designed to instill the fundamentals of sound recording and manipulation.

MCT 101 is built for aspiring music producers, engineers craving creative expression, and trained musicians looking to bolster their skills. Across four units—Capturing Sound, MIDI, Creating and Shaping Sound, and Beyond Sound—the course provides basic, hands-on exploration of contemporary music technology, including digital audio workstations, synthesis, sampling, recording, and signal flow.

Another early assignment asks students to create a “bad recording,” something downright antithetical to Eastman standards. DeSantis uses it as part of an exercise in learning how to diagnose accidental degradation and appreciate deliberate noise and distortion used as musical texture.

“My hope is that students take away a better understanding of how to make music using technology and manipulate sound in creative ways,” he says. “At a higher level, I want them to leave feeling empowered to experiment with music technology and, more generally, music.”

Students have access to a small keyboard controller and do most of their work using Ableton Live, a digital audio workstation that DeSantis helped develop in his previous role as head of music learning at music software company Ableton. Because the field and tools are constantly evolving, students are encouraged to be open and willing to experiment.

Some of that experimentation could serve as an on-ramp to the kind of research happening at SoundSpace, a URochester transdisciplinary research center focused on exploring the interplay among music, sound, and technological innovation.

“The relationship between technology and artistry can vary widely from person to person,” DeSantis says. Some musicians use technology to extend an instrumental or vocal practice. For others, technology becomes the instrument. Between those poles lie many more ways to make music.



Study Hall

Get a crash course in music technology.

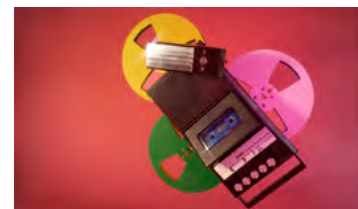
Watch

SPACES: Inside the tiny bedroom where Finneas and Billie Eilish are redefining pop music (AWAL, YouTube)



Read

Field Recordings Are Music, Material, and Method (daily.bandcamp.com/lists/field-recordings-list)



Listen

J Dilla: “Colors of You” (Vic, YouTube)



Play with Funklet

(goodhertz.com/funklet)

Funklet

CLOCKWISE FROM BOTTOM: ABLETON, NOVATION, VIDEO STILL: AWAL/YOUTUBE, BANDCAMP.COM, VIDEO STILL: VIC/YOUTUBE, GOODHERTZ.COM/FUNKLET



Discover



Time Will Tell

A new imaging technique allows scientists to see through deep tissue and dense fog.

BY LUKE AUBURN

Light can reveal what the eye cannot see. But even near-infrared light, widely used in medical imaging and LiDAR systems, begins to scatter when it passes through deep tissue, dense fog, and other difficult environments, blurring the picture.

URochester researchers have developed a lower-cost imaging system designed to cut through that interference. The technology, outlined in a recent *Nature Communications* paper, uses inexpensive silicon-based detectors and an ultrafast technique called time-gating that the laboratory of Robert Boyd, the William F. Krupke Distinguished Professor in Optics, has spent more than a decade refining.

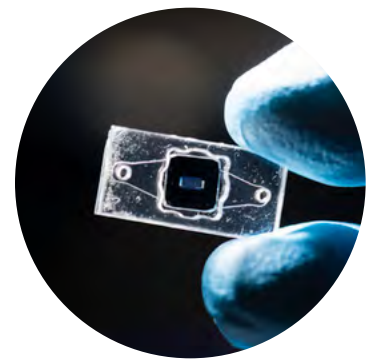
Time-gating works something like a camera shutter—except that light itself opens and closes the gate. Pulses lasting about a picosecond allow selected near-infrared photons through while rejecting much of the scattered light. A thin film of indium tin oxide then converts those photons into visible light, producing a clear image in real time.

Boyd, lead author Yang Xu '26 (PhD), and their colleagues have also teamed with UCLA researchers to add machine learning, dramatically expanding the system's field of view. That work was reported separately in the journal *Light: Science & Applications*. The approach could eventually sharpen noninvasive imaging used to detect cancer and improve LiDAR systems that help autonomous vehicles navigate when fog or other conditions obscure their view.

↑
PhD student Long Nguyen, lead author Yang Xu, and optics professor Robert Boyd demonstrate time-gating in Boyd's lab.

Passing the Test

Researchers from the Translational Center for Barrier Microphysiological Systems (TraCe-bMPS) have reached an important milestone for tissue chip technology that predicts dangerous immune reactions to cancer therapies. The team, led by James McGrath, the William R. Kenan, Jr. Professor of Biomedical Engineering, has been accepted into the FDA's Innovative Science and Technology Approaches for New Drugs (ISTAND) pilot program. If fully qualified, the “organs-on-a-chip” could be used to evaluate new drugs and offer a more accurate alternative to animal testing, which often fails to predict severe side effects from immunotherapies.



Abstracts



● A team led by biology professor **Vera Gorbunova** unexpectedly found that the protein cGAS can both trigger inflammation and help protect cells from it.

● URochester researchers are part of **TEMPEST**, a new \$30 million NSF-funded center focused on predicting—and ultimately controlling—turbulence.

Water, Water Everywhere

Laser-treated panels offer a safer, more effective way to produce fresh water.

BY LUKE AUBURN

About 2.2 billion people worldwide lack safely managed drinking water, according to the United Nations, while communities from California to the Middle East rely on desalination to turn seawater into fresh water. But common methods such as reverse osmosis consume significant energy, require water treatment, and leave behind brine that can wreak havoc on sea life when released back into the ocean.

A novel approach developed by a team led by Chunlei Guo, the Joseph W. and Honmai Goodman Distinguished Professor in Optics, could address some of those drawbacks. The technology uses solar panels made of black metal etched with femtosecond lasers to make them super light absorbing and superwicking. The laser-treated regions pull water across the surface, use sunlight to distill it, and move leftover salts to untreated edges, preventing clogs and allowing continuous desalination.

Instead of leaving behind brine that must be disposed of or processed, the new method extracts nearly all salts in solid form. It could also be used to extract valuable minerals such as lithium, a key component in batteries that power electric vehicles.

The new technology could be scaled up to expand clean-water access and recover precious minerals.



Diamonds Are Forever

Until you bring them to URochester. At the University's Laboratory for Laser Energetics, scientists used the powerful OMEGA laser to melt tiny diamonds under extraordinary pressure—and helped resolve a 20-year mismatch between experiments and theoretical predictions. The findings could improve fusion experiments and even help explain what happens deep inside planets like Neptune and Uranus.



J. ADAM FENSTER (ALL PHOTOS)

● The Warner School is leading new national research into how universities can better support low-income engineering and computer science students.

● A new study suggests that reinforcing circadian rhythms could help the brain recover after a stroke while improving brain waste clearance.

● URochester has launched its first NY THRIVE Innovation Voucher project to accelerate semiconductor innovation across upstate New York.

● Anne S. Meyer and colleagues have developed reusable 3D-printed "bio-stickers" that speed up the breakdown of plastic in marine environments.

Heal

OPINION

The Patient Who Could Not Die What AI can—and can't—teach doctors about connection.

BY ERIKA RAMSDALE '21 (MS)

One day, I met a patient who was never born and who could not die. Her name was Maya. She had metastatic stomach cancer. Her face was a featureless landscape, with none of the quirks of individual embodiment (the mole by your right earlobe, the cloud across your pupil). Maya was a virtual human. She was created to train physicians to have serious illness conversations. I had volunteered to interact with her.

I opened the visit like I normally do in my oncology clinic. "How are you feeling today?"

"Great!" she chirped. "How are you doing? What is new with you?"

I smiled. "I am doing OK. I'm glad to hear you are feeling well. Let's talk about how your last chemotherapy went."

She frowned a little, or I think she did. Her voice was gregarious and crisp, with infomercial inflection. "But I really want to know what is going on with you! Let's talk about your life."

I glanced at the student who was walking me through the software demonstration. He mumbled something about "retraining the model" and "unexpected behavior."

I swiveled my focus back to the two-dimensional, uncannily still face and upper torso sitting in the exact middle of a nondescript rectangle. I could not tell if she was wringing her hands or sitting on the edge of her seat. Were her fingernails painted or chewed and ragged? Perhaps she wore a plain wedding band on her left hand or a set of brass

knuckles. I had no way to read what she might need from this interaction and from me. No way, that is, except for ignoring unexpected answers and repeating myself, recombining words until I received clear information back. Systematically tweaking a request to get the desired output is known as prompt engineering when working with AI language models, and it is an essential skill in working with these machines. When working with patients, ignoring their answers (no matter how unexpected) and repeating questions at them is bad bedside manner. Eliciting information from people requires delicate work, not an engineering approach. ...

Another fundamental belief has emerged from my work with patients: Our voice and our care are embodied. It is not just the words that matter or the mechanics of them, but the bodies inhabiting the space, the semiotic extravaganza of them. The beads of sweat on the bridge of a nose. The pause, the looking up and to the left, the hitch in the throat. It is bodies that act, and act on us, creating and reinforcing human connection. I walk into the clinic room, I squeeze your hand, I smell the scent of the detergent you use, and I remember that your grandson's high school graduation is coming up soon. "What do you hope for?" I asked when you were diagnosed with stomach cancer. You did not hesitate. "I want to see my grandson graduate high school. I'll do whatever it takes." ...

After I closed Maya's rectangle, the software created a report grading me on various aspects of the interaction. It also graded me on my empathy, giving me very low marks. It suggested how to improve, by saying things such as, "That sounds very difficult" or "I am sorry you are experiencing

"To learn how to care for people, we should start and end where we always have: with the person in front of us."



Erika Ramsdale

this." Within this framework, empathy itself is flattened to call-and-response, a set of platitudes, an algorithm. It is true that these small scripts can help patients feel heard and understood. AI models are often rated higher in empathy than human clinicians. They can consistently deploy rote phrases and mirroring that sound empathic, and they have no bodies or internal states to interfere with this. They do not experience hunger, irritation, the time pressure of a full waiting room, or any of the thousands of frictions that complicate real communication. ... Machines do not teach humans to be more human, and when given the choice, patients prioritize human connection over empathic phrasing. The art may start with a script, but it does not end there. ...

To learn how to care for people, we should start and end where we always have: with the person in front of us. At your next appointment, I ask you about your grandson's graduation. Your face breaks open, smiling, and you say, "It was a perfect day. I felt well, and I could enjoy it. I wasn't even too tired." You add, wryly, "You can just chuck me in the ravine now!" I wonder what Maya would want me to say to this. It must be hard for you, thinking about being flung into a ravine. Instead, I laugh. We both do. I respond, "Well, I took an oath not to throw people in ravines. So here we are. What's next?" And you tell me.

Erika Ramsdale '21 (MS) is an associate professor of medicine in the Division of Hematology and Oncology at University of Rochester Medicine Wilmot Cancer Institute. This content is excerpted from an article of the same title published in the Journal of Clinical Oncology (vol. 44, no. 28, October 2026).



← Music therapy can gently calm a patient's nervous system, reducing—or even eliminating—the need for sedation.

Safe and Sound Music therapy is transforming dental care for patients with complex needs.

BY KAREN BLACK

Before Coryanne Harrison settles into the dental chair, she walks around the room, greets the staff, and studies their badges. Then she picks up a cabasa, a small percussion instrument, while music therapist Madeline Vinolus strums classic rock on a guitar.

For Harrison, 34, who has fetal alcohol syndrome and is legally blind, that routine has changed what a dental visit can be. She once required general anesthesia for treatment and went years without adequate dental care. At URochester Medicine's Eastman Institute for Oral Health, she has undergone fillings and extractions without it.

Harrison is among the patients benefiting from music therapy at the Eastman Institute, where clinicians use it to ease severe dental anxiety, especially among people with intellectual and developmental disabilities. Vinolus, a board-certified music therapist with the Eastman Performing Arts Medicine Center, adapts tempo, volume, singing, and instruments based on each patient's response.

The approach can do more than make an appointment less stressful. Adela Planerova, chair of Special Needs Dentistry, says her team is seeing shorter appointment times; some extractions once expected to require sedation have been completed in 15 minutes. With thousands of people on regional dental waiting lists, reducing reliance on sedation can also help more patients get care sooner.



Heals on Wheels

URochester Medicine is expanding care on the road with two new mobile health units. A second Mobile Stroke Unit brings CT imaging, lab testing, and clot-busting treatment directly to patients, building on a program that has responded to 7,304 calls since 2019. Meanwhile, Golisano Children's new Pediatric Mobile Clinic will travel to schools, shelters, and other youth-serving sites, offering services including well-child visits, immunizations, and primary care support. The additions expand a mobile care network that also includes eye care, dental care, and mammography and serves children with complex medical needs.





Create



← Assistant Professor Joshua Conyers first had the idea to record songs by Black composers when he was a student at a high school for the arts.

Seen and Heard Eastman students and faculty bring Black art song to life.

BY JONATHAN HEATH

When baritone Joshua Conyers first encountered Thomas H. Kerr Jr.'s "Riding to Town" as a teenager, he didn't know Kerr was Black—or that the song would help inspire a project decades later.

Now an assistant professor of voice at the Eastman School of Music, Conyers led *In Plain Sight: The Black Anthology* (Lexicon Classics), a schoolwide recording and performance project devoted to works from *The Anthology of Art Songs by Black American Composers*. More than 30 student singers and percussionists joined Eastman faculty, including singers, pianists, and a cellist, to record repertoire that has often been difficult to encounter outside the printed page. Produced at the Hajim School of Engineering & Applied Sciences' Gavett Audio Studio, the album was released in August. For Conyers, the goal is not to "recover" forgotten music but to change how listeners hear the American canon: "These songs have always been here, waiting not to be found but to be fully heard."

Work of Tart

Call it a collaboration with culture. When the Memorial Art Gallery asked Rochester's Strangebird to brew something special for its annual M&T Bank Clothesline Art & Fine Craft Festival, the answer was an easy yes. Using ingredients from across the Americas, brewmaster Micah Krichinsky created Clothesline State of Mind, a petite sour that pairs tropical pawpaw with pink peppercorn. Missed the festival? Clothesline State of Mind is available on tap at Strangebird, while supplies last.



J. ADAM FENSTER (IN PLAIN SIGHT), PAIGE ENGARD (MAG)

FACULTY WORKS

Field Notes

Seven new works from URochester faculty span Beethoven, bees, and the borderlands.

BY MELISSA PHETERSON

Science Nonfiction: Behind the Scenes in University Research

Darren Lipomi, the Arthur Gould Yates Professor of Engineering and chair of chemical and sustainability engineering, delivers a *Kitchen Confidential* for the lab. Part memoir, part confessional, and part advocacy, Lipomi's candor about graduate school, failed experiments, and the economics of the \$60 billion research enterprise demystifies the people who actually drive the work of discovery, with all its risks and rewards. Read more at rochester.edu/news/sciencenonfiction. (Buckland Creek Press)

Six Dead German Composers and How They Got That Way

A retired neurosurgeon and professor emeritus of neurosurgery, Robert Bakos applies a clinician's eye and ear to Beethoven, Schubert, Brahms, Mendelssohn, and both Schumanns, weighing historical records against modern medical scholarship. The result invokes musical biography and pathology to propose how illness, suffering, and resilience shaped six extraordinary creative lives, rather than merely shortening them. (McFarland)

Breaking Families, Making Families: Adoption and Child Welfare in the 1990s

Historian and physician Mical Raz, the Charles E. and Dale L. Phelps Professor in Public Policy and Health, maps the political history behind 1990s adoption reform, culminating in the 1997 Adoption and Safe Families Act. Drawing on archives, legislation, and oral histories, she argues that bipartisan enthusiasm for adoption reshaped—and often severed—poor families of color through punitive intervention. (University of North Carolina Press)

Recipes for the Melting Pot: The Lives of The Settlement Cook Book

Nora Rubel, the Elizabeth Denio Professor in the Department of Religion and Classics, traces the most successful charitable cookbook in American history from Lizzie Black Kander's late-19th-century Milwaukee cooking classes to Jewish kitchens nationwide. More than

a compendium of recipes—and not even remotely kosher—the book taught newcomers to adapt to America without surrendering the flavors of home. Read more at rochester.edu/news/settlement. (Columbia University Press)

Traces of Intimacy: Native Americans, Mexican Americans, and the Borderlands of Race

Assistant Professor of History Jedediah Kuhn presents case studies of Native American and Mexican American lives across the Sierra borderlands of Nevada and California, from the Gold Rush to mass incarceration. Reading archives against the grain, he discovers that both groups have existed as lovers, neighbors, and rivals who strategically claimed or denied their connection to survive colonization. (University of California Press)

The Book of Bees: A Life-Size Guide to Bees Worldwide

Biologist Robert Minckley,

a professor of instruction who keeps 62,000 specimens and has a sweat bee named for him, edits a life-size portrait gallery of more than 400 species. Bold photography and field detail on behaviors, flowers, and human encounters make the case that there's more to the proverbial hive than just the honeybee. Read more at rochester.edu/news/bees. (University of Chicago Press)

Strangers and Settlers: Migration Politics in a Local's World

Associate Professor of Political Science Bethany Lacina draws on four decades of opinion surveys and census records to drill into the complexities of minority and migrant life in the context of culture, economics, and in-group identities. Suggesting that migration politics unfold within a nativist status quo, she contends that conflicts turn on a persistent question: Who counts as a local, and who decides? (Oxford University Press)





Compete



In 2026, Riley Laygo led Division III in total bases, ranked second in slugging percentage, and finished third in hits, doubles, and RBIs.

GOOD SPORT

Ahead of the Game Riley Laygo '27 has rewritten the URochester softball record book. Now she's exploring what else she can do.

BY DAVID ANDREATTA

Now in her senior year, Riley Laygo '27 is poised to finish her collegiate career as the best varsity softball player in Yellowjackets history.

If our printing that sounds like too much pressure on her, don't worry. Pressure fuels Laygo. It gives her purpose. "Bases loaded, two outs, your team's down, and you come through with a big hit," Laygo says. "I live for those moments."

There have been plenty. In 2026, Laygo became the first URochester softball player to be named the National Fastpitch Coaches Association Division III Player of the Year and the first to earn multiple All-America honors. She set nine URochester single-season records, including batting average (.535) and home runs (17), and led the Yellowjackets to the Liberty League championship. Her fielding at first base was nearly flawless.

Laygo has earned a reputation for leaving everything she has on the field. Her coach, Abby Hurley-Martin, has called her "a generational talent." But there is more to Laygo than softball. "Anyone reading my softball bio would think I'm super serious about softball all the time," Laygo says. "Honestly, it's a big part of my identity. But I have another side of me, too."

The 21-year-old computer science major spent the summer at home in Hacienda Heights, California, much of it immersed in the *Persona* video game series, in which players balance everyday life with exploring supernatural realms, fighting inner demons, and using magical manifestations of their psyches called “personas.”

Laygo has a few personas of her own. She cooks but favors no cuisine. She’s been experimenting with Korean but enjoys a good New York strip steak, too. She recently joined a running club. She’s not partial to long-distance jogs but joined to meet people outside her softball orbit.

Laygo has also been teaching herself Python with an eye toward programming video games one day. Horror is her favorite genre. Not surprisingly, she thrives on characters who are constantly under pressure.

“I’ve always been very competitive, so I take that competitiveness wherever I go,” Laygo says. “But I’m also just trying to get to know me as more than a softball player.”

What the novelist W.P. Kinsella once wrote of baseball holds true for softball: There is no rule stating that the foul lines diverging from home plate end at the outfield wall. They run on forever, eventually covering all the world in fair territory.

“Coming into college, I didn’t know what I wanted to do,” Laygo says. “So I’m seeing what I like and don’t like and discovering things I’m passionate about other than softball. I’m still figuring it out.”

On the field, though, Laygo has it all figured out. She hopes to lead the Yellowjackets in 2027 to the “Super Regionals,” the round of the NCAA Division III softball tournament that is the precursor to the Women’s College World Series.

Along the way, she would like to earn All-America status—for the third time. After that, she wants to play softball internationally for the Philippines, a country to which she traces part of her heritage. “That’s always been a dream of mine since I was little,” she says.

See what we mean about Riley Laygo and pressure?

Pounds of recycling generated per person during the 2026 Campus Race to Zero Waste competition, earning URochester the No. 1 ranking among large institutions.

27.57



↑ The physics team, wearing shirts emblazoned with “Spontaneous Victory,” retained its underdog status for another year.

A Cup of Their Own

The World Cup crowns champions. The Photon Cup fuels a legendary campus rivalry. Each year, students and faculty from the Department of Physics and Astronomy and the Institute of Optics come together for a spirited matchup that’s competitive, electric, and uniquely URochester. The competition is friendly, but the bragging rights are real. This year, Optics emerged victorious once again, claiming the Photon Cup and campus supremacy—at least until the next showdown.

Scorecard

- The men’s golf team rallied from an 11-stroke deficit to claim the 2026 Liberty League title and qualify for the NCAA Division III Championship in Howey-in-the-Hills, Florida.
- Five URochester students were among the nine winners of the 2026 Robert S. Hilbert Memorial Optical Design Competition, which recognizes innovative work using Keysight’s Optical Design Engineering software.
- The women’s swimming and diving team completed an undefeated dual meet season in 2025–26, only the second in team history and the first in 50 years.

Celebrate



← The two-story, 15,000-square-foot building, designed by CetraRuddy, will be surrounded by patios, terraces, and greenery.

Coming to Life Construction begins on a new building for Student Life and Hillel.

BY SARA MILLER

Construction is underway on a new Student Life building that will add 15,000 square feet of gathering, rehearsal, and programmatic space to the River Campus. The two-story building, located on Intercampus Drive next to Library Lot, is designed to serve students across the University. Its ground floor will include an open lobby for studying and informal gatherings, a conference room, and a ballroom that can be divided for smaller events and used as dedicated rehearsal space for dance and other performance groups. Outdoor patios, new landscaping, and an elevated walkway connecting the building to Susan B. Anthony Circle are also planned.

The second floor will become the Greenbaum Center for Jewish Life, a new home for Hillel at the University. The center traces its origins to lead gifts totaling \$3.5 million from University Trustee David Greenbaum '73 and his wife, Laureine, with the vision of the center being a resource for Hillel programming and the broader student community.

"This building reflects who we are as a University, a place where every student can find belonging, connection, and space to grow, no matter their background or beliefs," says URochester President Sarah Mangelsdorf. "It's a meaningful step forward for Student Life."

The building responds in part to growing demand for space at the Interfaith Chapel, which opened in 1970 to serve about 4,000 undergraduates and three religious traditions and now supports 14 religiously affiliated student groups. A ceremonial groundbreaking was held during Meliora Weekend, attended by Mangelsdorf; David Greenbaum; Chris Boehning '87, '88 (MS), chair of the Board of Trustees; Adam Lehman, CEO of Hillel International; and others. The building is slated to be completed in fall 2027.

Light Speed

The Laboratory for Laser Energetics marks 50 years of scientific advances.

BY ALISON ARNOLD

URochester's Laboratory for Laser Energetics (LLE) marked a half-century of discovery this summer, reflecting on 50 years of advances in laser science, plasma physics, and fusion research. Among LLE's contributions: the development of Nd:phosphate laser glass and innovated efficient frequency conversion, both now used in major fusion laser systems worldwide; techniques for producing smoother, more powerful laser beams; and advances in diagnostics that allow scientists to study matter under extreme conditions. In 1985, graduate student Donna Strickland '89 (PhD) and her advisor Gérard Mourou developed chirped-pulse amplification (CPA), which made ultrahigh-power laser pulses possible and later earned them the 2018 Nobel Prize in Physics.

Today, LLE's Omega Laser Facility is a national resource for experiments in inertial confinement fusion, high-energy-density physics, astrophysics, materials science, and laser-matter interactions, and for the laser-based science, technology, and engineering that make them possible. The half-century mark coincided with two related milestones: 30 years of the OMEGA Laser System and 40 years since the invention of CPA.

Moshe Lubin, LLE's founding director, stands at the placement of the building's cornerstone in 1976.



Art for All

In a return to its founding vision—a space for everyone in the community to enjoy—the Memorial Art Gallery is following through on its commitment to eliminate the cost of general admission. Beginning May 1, 2027, visitors to MAG will enjoy free access to rotating major exhibitions along with the museum's permanent collection of more than 13,000 objects and over 5,000 years of art history. The *Free For All, Forever* initiative was made possible by a series of transformational gifts from URochester alumni and supporters and generous contributions from the community.

Kudos

● URochester Medicine's Clinical and Translational Science Institute is marking 20 years of continuous support from the National Institutes of Health, totaling \$157 million.

● James Druckman, the Martin Brewer Anderson Professor of Political Science, is one of 25 international members elected to the National Academy of Sciences in 2026.

● Three years after Damar Hamlin suffered an on-field cardiac arrest, more than 10,000 Buffalo Bills fans have learned CPR from URochester Medicine and the American Heart Association.

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FLASHBACK

Celebrating Freedom

The inaugural Meliora Weekend, held October 12–14, 2001, took on new significance in the wake of the 9/11 terrorist attacks a month earlier. The gathering, which had been planned since early that spring around the theme of “Freedom,” included a Ceremony of Hope and Remembrance honoring the six URochester alumni who died in the attacks. Meliora Weekend has been held annually since, except 2020, with a scaled-down version in 2021.



Class Notes

EVER BETTER, TOGETHER



Relive the highlights of Meliora Weekend 2026—from headline speakers and performances to reunions, campus traditions, athletics, and much more. Find the recap and see photos from the festivities at rochester.edu/news/melwknd26.

'50s

John Wermuth '50 died in April at age 98 in Elm Grove, Wisconsin. Raised in Rochester, John enrolled at

URochester to study economics on a New York State Regents Scholarship at age 16. Halfway through his studies, he stepped away to serve in the United States Navy as an electronics technician. After returning and graduating summa cum laude, he enrolled at Harvard Business School, where he earned an MBA and met his wife of 65 years, Marilyn. John worked in financial management for many years before launching his own financial services business. He and Marilyn were parents to five children and ardent patrons of the fine arts in the Milwaukee area. John was also an expert bridge player and an avid tennis player, playing well into his 80s. He dabbled in many hobbies, including painting and winemaking; he even took up oboe and saxophone for a brief time as a young father.

Hugh Van Liew '56M (PhD) died peacefully in December 2025 at age 95, reports his son, Joel Van Liew. Hugh received a doctorate in physiology from URochester, where he met his wife, **Judith Litchfield Van Liew** '58M (PhD), who died in July 2013. Hugh went on to work as a research fellow at Harvard University and an assistant professor at Stanford University before joining the faculty in the Department of Physiology at the University at Buffalo (UB)

in 1963. At UB, he taught medical and dental students and conducted research in respiratory physiology, focusing on the diffusion of gas bubbles from the lungs to tissues. His research was widely published in scientific journals, and, in 1999, he and his research team were awarded a US patent for a method for enhancing gas transport to tissues.

Gerald Margolis '57 died in April, reports **Harrington "Kit" Crissey Jr.** '66. Born in the Bronx, New York, Gerald majored in general science at URochester, where he was inducted into Phi Beta Kappa. He went on to attend medical school at the University of Chicago Pritzker School of Medicine and complete postgraduate training in psychiatry at SUNY Upstate Medical Center, where he was chief resident. Gerald was also a captain in the United States Air Force, serving as chief of psychiatry at Maxwell Air Force Base. He focused his professional career on psychiatry and psychoanalysis, opening a private practice in 1967, which he ran for 50 years. He was an avid water-skier and traveler, and he loved art and music. He was proudest of and most fulfilled by his relationship with his family.

Joan Coombs McKinley '57 proudly shares, "Two of our granddaughters are graduating in two weeks: Elizabeth McKinley from Wheaton College, with a degree in psychology, and Sarah McKinley from Worcester Polytechnic Institute, with a master's

degree in mechanical engineering. Both young women have jobs and are starting their careers."

Nancy Bates Carlman '59, a long-retired teacher, shares a memory sparked by an item in the Office of Advancement's *Buzz* magazine: "In the winter of 1956, my roommate, **Alberta Diener McCormack** '59, and I would go out walking in the snow of Mount Hope Cemetery. Some of the snowdrifts were drifts, others held tombstones. Once, we stayed after the gate had closed and had to climb over the wrought iron fence. No photos, unfortunately. It was long before the time of cell phones."

'60s

Robert "Bob" Milrad '60 died in May, reports his life partner, Mark Madge. "Bob had many wonderful stories of his years attending Rochester, where he was very active in the theatre and music scene," Mark writes. "His musical piano talents took him to New York in 1960 after graduation, where he performed at the cabaret club upstairs of the Downstairs, and then to Broadway, where his musical talents kept him busy to the point of conducting the successful *A Funny Thing Happened on the Way to the Forum*, among other musical projects. Bob eventually settled in Los Angeles, where he continued with his musical talents, writing the music and a book for a popular fundraising production, *Under One Umbrella*. He also worked with many celebrities as a vocal coach."

James Richens '60E (MM) has died at age 90, reports **Mary Jane Richens** '60E, his wife of 65 years. James was born and raised in Memphis. He distinguished himself as a musician at the Christian Brothers High School, where he was inducted into the school's Hall of Fame. He continued to hone his craft at the University of Memphis, where he earned a bachelor's in music composition and then earned a master's degree in music theory and composition at the Eastman School of Music. At Eastman, he was exposed to the emerging field of

electronic music, which influenced his career for decades to come—it's also where he met Mary Jane, a piano major. James returned to the University of Memphis, where he spent 45 years teaching composition, orchestration, and music theory and launched an electronic music program. In parallel, he spent 40 years with the Memphis Symphony Orchestra, serving as a musician, composer-in-residence, and assistant conductor.

Mary Frances Boyce '61, '63E (MA) died in March at age 86, reports her niece, Katherine Chesick. Mary was living in Southampton, Pennsylvania, but was born in Cleveland Heights, Ohio. She earned a BA in music at URochester and an MA in music theory at the Eastman School of Music before earning a PhD in musicology from the University of North Carolina. Mary taught violin, viola, and cello in Chapel Hill, North Carolina, for 40 years and was one of the first teachers to introduce the Suzuki method of violin instruction to the area. In addition to being a gifted musician and devoted teacher, she was a woman of deep Christian faith who will be remembered for her gentle spirit, warmth, and generosity toward all who knew her.

Lynne Stevens Sheldon '63 died in January at age 85, reports her husband of 62 years, **Paul Sheldon** '63. "Lynne and I met at the U of R and were married in 1964. After graduation, Lynne worked for two years as a math teacher at a Niagara Falls school she herself had attended. We have two children (both U of R graduates) and three grandchildren. Lynne went back to school at the University at Buffalo and completed an MS in computer science." Lynne went on to work for Calspan, an independent research and development contractor, for about 15 years as a computer programmer. Throughout her life, her love for her family was steady and unmistakable. She had a deep appreciation for music, which she indulged as a regular attendee of the Buffalo Philharmonic Orchestra with Paul.

Abbreviations Your Class Notes cheat sheet **E:** Eastman School of Music **M:** School of Medicine & Dentistry **N:** School of Nursing & Health Sciences **S:** Simon Business School **W:** Warner School of Education & Human Development **Dpl:** Diploma **Flw:** Postdoctoral fellowship **Pdc:** Postdoctoral certificate **Res:** Residency

We want to hear from you! Submit your news, updates, and photos at rochester.edu/alumni/forms/class-notes.

We also welcome snail mail and email at 22 Wallis Hall, University of Rochester, Box 270044, Rochester, NY 14627-0044.

✉ rochrev@rochester.edu. Class notes may be edited for length, clarity, and style. Submissions for the spring 2027 issue must be received by December 31, 2026. Find more class notes and stay up to date with all your classmates at uofr.us/alumniportal.





LIFE LESSONS

Notes to Self

Jeff Beal's journey from Eastman to the Emmy stage has taken him from coast to coast and across multiple musical boundaries.

For Jeff Beal '85E, a career in music has never followed a straight line. From jazz trumpeter to Emmy-winning composer, from the concert hall to the soundstages of Hollywood, his four-plus decades as an artist have been defined by curiosity, collaboration, and, above all, a willingness to keep growing.

That spirit has been especially evident in 2026. Beal released two very different recordings: *New York Etudes, Vol. II*, a collection of solo piano works shaped in part by his experience living with multiple sclerosis, and *Body in Motion*, a violin concerto written for fellow Eastman School of Music alumnus Kelly Hall-Tompkins '93E. He also earned two Primetime Emmy nominations for his work on the Peacock series *All Her Fault*, bringing his career total to 21 nominations and five wins.

The accolades are impressive. But when Beal reflects on his career, he's more interested in

what the journey has taught him: the value of being prepared, the freedom that comes from crossing artistic boundaries, and the simple necessity of continuing to do the work.

In many ways, those lessons began at Eastman. When Beal arrived in the early 1980s, the trumpet was his primary instrument, but he also played piano. "I wanted to go to a great music school where jazz and classical were taught," he recalls. "Back then, that was a much shorter list than it is now. Eastman very quickly rose to the top."

The clincher, however, was a photograph of composer and educator Rayburn Wright '43E in an Eastman catalog, alongside a mention of Wright's work in film music. "A little light bulb went off," Beal says. "I thought, 'Wow, now that's interesting.'"

Beal also met his future wife, vocalist Joan '84E, at Eastman, and, after graduation, the two moved to San Francisco when she accepted

a position with the San Francisco Opera. The move west opened new doors for Beal, who began writing music for television and film as well as for corporate clients including Apple and Pixar. In 1991, the couple relocated to Los Angeles.

Beal's breakthrough came when he was hired to score *Pollock*, the 2000 film directed by Ed Harris. Beal was the third composer Harris had tried, and time was short. For Beal, it was an opportunity to bring together the many musical skills he had developed at Eastman—and one that would change the course of his career.

Pollock went on to be nominated for two Academy Awards, winning one. "The film got seen by everybody, and that really put me on the map," Beal says.

Yet Beal has never viewed film music as a destination so much as another avenue for artistic exploration. He relishes its collaborative nature and the challenge of solving what he calls the "puzzle" of every film. "A score," he says, "should ultimately become a character of its own."

Beal doesn't believe in strict "silos" separating film music, concert music, jazz, and performance. Instead, he sees them as mutually enriching. "To me, the creative part of it isn't a juggling act; it's cross-fertilizing," he says. "I might learn something in a film score that I want to bring into a concert piece and vice versa."

This approach is evident in his latest work. *Body in Motion* grew from Beal's connection with Hall-Tompkins, whom he met during Eastman's centennial celebrations in 2022. He immediately recognized in her what he calls the "Eastman spark"—hard work coupled with passion and joy. Hall-Tompkins performed Beal's violin concerto with the Eastman Philharmonia, led by guest conductor Leonard Slatkin, at its Rochester premiere in 2025.

Beal has also learned to give creativity room to unfold. He writes early in the morning and has embraced meditation as part of his routine. "I've become very comfortable with just sitting and staring and trying to let my unconscious mind do the leading as opposed to my conscious mind," he says.

At the same time, Beal remains an active performer and conductor. After the pandemic, that work took on new meaning. "I realized just how special it is," he explains, "to be in a room with people and perform."

It's a lesson that seems to bring his long career full circle. The student who arrived at Eastman eager to explore multiple musical worlds has become an artist who refuses to choose among them. And while awards may mark milestones along the way, Beal says the moments that matter most are subtle and more enduring.

"Having a moment of shared connection artistically, those are the kinds of things that stay with you forever." —Jonathan Heath

What inspires Jeff Beal? Listen to a playlist he curated especially for *Rochester Review* readers at rochester.edu/news/beal.

Gretchen Wilke Fischer '64, currently living in Washington state, writes, "When I discovered that I could self-publish a book on Amazon, I thought it sounded like fun, so I put together *Diary of a Young Embassy Wife in Yemen*. I lived in Yemen for three years in the 1970s. Those years were some of the most memorable of my life. Famous as the home of the legendary Queen of Sheba, Yemen is also known for its unique architecture and geographical variety. My life there was a fascinating variety of thrilling, comic, thought-provoking, and delightful experiences."

Ann Kuebler Hager '65, '65N, a part-time nurse at the Bassett Medical Center in Cooperstown, New York, "has completed over 55 years of service in a variety of roles, starting as a pediatric nurse at the Johns Hopkins Medical Center, school nursing, going to Emory University to earn an MS in midwifery and chairing that program at the University of Cincinnati for 16 years, and delivering almost 1,000 babies,"

reports her husband, Paul Hager. "We moved back to upstate New York when I retired in 2010. She missed her 60th [reunion] but has toured the old Helen Wood Hall in the past couple of years."

Patricia "Patsy" Vyner Hawks '65 died in May at age 82. A native of Baltimore, Maryland, Patsy majored in history at URochester. Teaching history in the Baltimore City Public School System, she developed a lifelong interest in Asian studies and culture that ultimately led to her earning an MA in East Asian studies at Indiana University (Bloomington). Working as a speechwriter for a Congressional campaign in Richmond, Virginia, Patsy met her husband of 43 years, Anthony "Andy" Hawks. She continued to work in the political scene, serving Senator Birch Bayh, at the Close Up Foundation, and at the consulting firm Technology Analysis Group, setting up a nationwide series of Congressional workshops on the US-Japan telecommunications trade. In 1985, she formed her own consulting firm, Capitol Techwatch Associates.

Clifford Fishman '66 reports he retired at the end of 2019. He previously spent 42 years as a law professor at the Columbia School of Law at the Catholic University of America and eight years as a prosecutor in the New York City District Attorney's Office. He writes, "I am the sole or leading author of 20 law books and a contributing author to another, which, in aggregate, contain more footnotes than any rational person would read in a lifetime, let alone write. I still supplement my treatises (on electronic surveillance and evidence), a task that would be three times more enjoyable if it involved one-third the work. In 1968, I married my college sweetheart, **Betty Lohwasser Fishman** '68. This summer, we celebrated our 58th anniversary and can think of no sensible reason to stop anytime soon."

Burt Levine '66, a musician, songwriter, producer, and engineer, writes, "Still making music out here in sunny California and wish great outcomes for the entire world! My best wishes to all of humanity!"

Judith Kerman '67 has published her 12th collection of poetry, *A Hard Frost* (Broadstone Books), in which she confronts aging and disability with honesty, wit, and an undiminished creative force. Written from the lived experience of becoming moderately disabled later in life, the poems examine the physical limitations of an aging body while refusing narratives of decline. Judith, 80, says, "My poems try to investigate the questions my life raises without insisting on answers. And I know this much for sure: Old women rock."

Peter Requa '67 died in April at age 80. Peter spent his life selflessly helping others, dedicating much of his life to service as a probation and parole officer, tirelessly working to help individuals find a better path forward, offering guidance, accountability, and compassion. In his retirement years, Peter continued his mission of service as a volunteer at Guiding Eyes for the Blind, helping to prepare service dogs that would enable individuals who are blind to navigate the world with greater independence. Known fondly in the community as the "Can Man," he also spent 20 years collecting returnable cans and bottles, donating the proceeds to various charities throughout the Rochester area. Peter, a devoted husband, father, grandfather,

great-grandfather, and friend, lived with a quiet but unshakable faith, drawing strength and purpose from his deep trust in God.

Gene Arum '68, an ophthalmologist and avid art collector, has donated a work by American painter-turned-sculptor Hugo Robus to the Memorial Art Gallery's extensive collection of historical American art. *The General*, a bronze sculpture originally conceived in 1922, depicts a stylized golden figure riding a horse with its head bowed. "Art historians have said it's related to futurism and as far as I know, it's the only American example of futurist sculpture," Gene says. "It's got a wonderful patina and it looks great in the gallery. As far as I'm concerned, it's in very exalted company. I think people will look at it and like it a lot."

Stuart Bauer '68M (MD) officially retired from his pediatric urology practice in February, after almost 49 years as a member of the Department of Urology at Boston Children's Hospital and professor of surgery (urology) at Harvard Medical School. He shares, "I have been fortunate to have been able to positively change how children with myelodysplasia are managed nationally and worldwide, as well as improving the lives of a countless number of other children with urologic problems—a very 'storied' career. I owe a great deal of this success to the foundations in medicine I received as a student at the U of Rochester School of Medicine & Dentistry so many years ago."

John "Jack" Reuter '68 (PhD) died in December 2025 at age 92, reports his daughter, Leslie Reuter. Born in 1933, Jack grew up in Manchester, New Hampshire, and eventually earned a bachelor's degree in English literature from the University of New Hampshire. He then went on to earn master's and doctoral degrees in



BUZZWORTHY

Game, Set, Renée

Renée Richards '59M (MD), the first and only transgender individual to play in both the men's and women's tournaments in the US Open, is back in the news following the release of a sweeping biography. *Finding Renée Richards: The Groundbreaking Story of Tennis's Trans Pioneer*, by sports journalist Julie Kliegman, chronicles Richards's "extraordinary life, moving from her tumultuous upbringing in Queens, New York, to her career as a successful eye surgeon; her years as a star tennis player to her role as a transgender pioneer." Richards, now 92, graduated from URochester's School of Medicine & Dentistry with a specialization in ophthalmology before completing her residency in New York City. She played the US Open several times between 1953 and 1981, turning pro in 1977.

—Tama Miyake Lung



Stuart Bauer '68M (MD)



Bill Glasner '69 carves a glass bead

English at URochester, focusing on the early development of the English novel. Jack then taught English at Fairleigh Dickinson University, the State University of New York at Binghamton, the State University of New York at Oswego, and the University of Southern Maine, where he was a tenured professor. Throughout his teaching career, he specialized in early modern literature—Shakespeare and John Milton, in particular—and even after retirement, he continued sharing his passion for literature with his children and grandchildren.

Alan Arkawy '69, who earned a BA with distinction from URochester in physics and mathematics, died in November 2025 at age 79, reports close friend **Mark Portnoy '68**. For over five decades, Alan developed and managed real estate, most notably Dutchess Park Shopping Center in Fishkill, New York. He was also an accomplished aerobatic pilot with a lifelong passion for flying, owning several classic tail-dragger planes, including a Stearman and a Meyers OTW. Beyond aviation and real estate, he was an exceptional photographer with a keen eye for beauty and an extraordinary storyteller, admired and cherished by his many lifelong friends.

Bill Glasner '69, a retired craftsman of handblown glass, shares that his work is now part of the prestigious Venice Glass Museum's collection. Additionally, four of his works are in the permanent collection of the Corning Museum of Glass.

Tom Herman '69E, a composer who has written art songs, piano and chamber music, orchestral and choral pieces, and theater works, is proud to announce his latest album *Songs from Life* (self-published). The new album features 20 new art songs, each "its own small world which the listener is invited to enter into and inhabit for a little while."



Alan Rauch '71 with **Catherine Malone Smitas '02M (MD)** and **Marge Saphir Fish '66**

Max Stern '69E—a composer, performer, conductor, musicologist, music critic, educator, and "pioneering figure in Israel's music life"—has released his 22nd CD of compositions. *Hallel* (CDI) is inspired in part by the Hallel psalms that are recited and sung on the New Moon and Jewish holidays.



Clifton Furukawa '70M (MD) died in February at age 82, reports his son, John Furukawa. Clifton, or as he was known to his pediatric patients, "Dr. Furry Cow," was born in Honolulu, Hawaii. He earned an undergraduate degree at Stanford University before earning a medical degree at URochester. He then moved to Seattle, where he completed a residency and fellowship at the University of Washington and Seattle Children's Hospital. After two years of service in the United States Air Force, he received a board certification in allergy and immunology and built his career at Northwest Asthma & Allergy Center. At home, he played chess, Nintendo, and Magic the Gathering with his boys, and watched *Star Trek: The Next Generation* every Thursday. He was generous with his attention to others and loved making memories with the people he cared about.

Richard Kellogg '70W (EdD) is the author of a new mystery for children, *Barry Baskerville and the Rare Coin* (Airship 27). The story introduces children to Sherlock Holmes literature while enhancing their problem-solving skills. This is the 10th book in a series of Barry Baskerville adventures, illustrated by noted Hawaiian artist Gary Kato.

Donald Kingston '70S (MBA) shares, "After retiring from my business career in 2007, I successfully ran for the Duck, North Carolina, town council in 2009 and was elected mayor in 2011. I decided not to run for office again in 2025, stepping down in December after serving for seven terms (14 years) as mayor. My wife and I have since relocated to Ashburn, Virginia."

Vince Luizzi '70 was designated Distinguished Professor of Philosophy Emeritus at Texas State University. He retired after 46 years of service.

John Richert '70M (MD), '72M (Res), a biotech consultant, shares he had the honor of delivering the 2025 annual Murray B. Bornstein Memorial Lecture at Dartmouth Medical School.

Alan Rauch '71 discovered shared URochester roots with **Catherine Malone Smitas '02M (MD)** and **Marge Saphir Fish '66** while volunteering at a free clinic. Sharing a photo, Alan writes that all three "are retired from clinical medicine and support those in need."

Ann Winn-Mueller '71 died in February at age 76, reports her daughter, **Catherine Mueller Wong '09**. Ann was born in Rochester and grew up in Slingerlands, New York. She earned a bachelor's degree with honors in history at URochester and continued her education at Rutgers University, where she earned a master's in social work. After spending some time as a clinical social worker, Ann became a creator and vendor of voice recognition products, eventually starting her own software company, VoxScripta. After two decades of successfully operating her business, she retired in 2025. Outside her professional

FEATURED WORKS



For She Had Eyes

Author and branding consultant **Seth Margolis '76**—best known for *Losing Isaiah*—returns with a psychological suspense novel about ambition, loyalty, and the fatal cost of believing the wrong person. Set in New York City, the story echoes *Othello*. (Arcanum Books)



Letters from Brazil

Ruth Zelig '74 (MA) reflects on migration, dislocation, and an enduring friendship through eight years of letters exchanged with a friend she left behind in Brazil. A 2026 International Book Awards finalist in multicultural nonfiction. (She Writes Press)



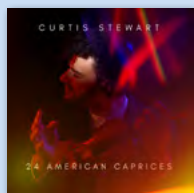
The Perception Revolution

Diagnosed autistic at 55, entrepreneur **Peter Allen Mann '88** explores how neurodivergent insights can become a competitive advantage. All proceeds from the book support URochester students with disabilities. (Fast Company Press)

FEATURED WORKS

**Stay Still**

Pianist and composer **Digba Ogunbiyi** '24E (DMA) blends Yoruba rhythm, jazz, and classical traditions to explore themes of identity, stillness, and self-expression. With music by **Adam Aronesty** '24E, **Aaron Ouellette** '24E, and **Zach Walgren** '23E. (Akilo Music)

**24 American Caprices**

Drawing inspiration from music ranging from Bob Dylan's "Blowing in the Wind" to Taylor Swift's "Shake It Off," **Curtis Stewart** '08, '08E presents an array of technically demanding works for violin. Also features **Jory Lane** '23E. (Bright Shiny Things)

**The Fiddle and the Drum**

Celebrated classical artist **Renée Fleming** '83E (MM), '11 (Honorary) teams up with banjo virtuoso Béla Fleck for a celebration of Appalachian bluegrass and folk music. Fleming recorded the debut single, "In the Pines," with the late Dolly Parton. (Thirty Tigers)

life, Ann enjoyed woodworking, singing, and beekeeping, among other outdoor activities. She was a strong advocate for women's rights and a devoted mother. Catherine writes, "Our family has a long history with the U of R. My mother's mother, **Nancy Gay Winn** '39, '41E, attended Eastman; my mom's brother, **Merle Winn** '73, sang with the U of R YellowJackets as an undergrad; my father, **David Mueller** '00M (Pdc), did his postdoc at Strong Memorial Hospital; my brother, **Ben Mueller** '02, met his wife, **Kelly Donnelly Mueller** '03, while an undergrad; and I'm an alum as well."

Dennis Clements '72M (MD), professor emeritus of pediatrics and adjunct professor of global health at Duke University, became the third employee to receive the Kyle J. Cavanaugh Award for Leadership and Service. The award was created in 2022 to recognize extraordinary contributions by Duke staff and faculty whose leadership has had a lasting impact on the university. Dennis founded the Duke Vaccine and Epidemiology Unit, led Pediatric Primary Care for more than 20 years, and was instrumental in establishing the Duke Global Health Institute (DGHI). He notes, "I'm very proud of my Rochester roots," and that he and his wife are donors to the School of Medicine & Dentistry. He also shares a photo of himself and Joseph Egger, the director of academic programs at DGHI, with the winners of the DGHI award for "Outstanding Capstone Research Project."

Conrad Cropsey '72 writes, "First, elected district attorney; second, general law with complex commercial; third, now short Family Court matters from home. Married 48 years! Kept growing."



Eliza Rogers Gouverneur '72 and **Richard Cohen** '73 (MA)

Eliza Rogers Gouverneur '72 and **Richard Cohen** '73 (MA) recently welcomed their seventh and eighth granddaughters, Maya and Liora. Eliza says, "We've been told that eight out of eight is a chance of 1/256, but we think all the girls are one in a million." Eliza has also published her first mystery novel, *The Palm of Tyrants: A Mystery of Roman Palestine* (Off the Common Books), while Richard has authored *Sacred Flaws: Finding Strength in the Struggles of Our Biblical Ancestors* (KTAV Publishing House). Eliza and Richard "live and write (and canoe and paint and run and play with the girls) in Amherst, Massachusetts."

David Weimer '72, '73, a professor emeritus of political science and public affairs at the University of Wisconsin–Madison, received the American Political Science Association's John Gaus Award at the group's annual meeting in September. The award honors a lifetime of exemplary scholarship in the joint tradition of political science and public administration. David's publications have been cited more than 18,000 times and have influenced generations of



Liz Elias Chifari '73 and her former suitemates reunite in Colorado

researchers and practitioners. From 1977 to 2000, David was a member of URochester's political science faculty.

Liz Elias Chifari '73, a retired law librarian, shares a photo of a mini reunion with some of her URochester suitemates. "Some of us had not seen each other in over 40 years, but the conversation picked up right where it left off," she writes. "We had a lovely day at the Denver Botanic Gardens, followed by afternoon tea at the Brown Palace Hotel. Hope to do it again soon, maybe in sunny Miami, where I live." Pictured, from left, are **Liz**, **Heather George Pistell** '73, **Kathe Rauch** '73, and **Christine Pfaff** '73.

Janet Ballota Zandy '73 (MA) has published *Working-Class Girls Don't Become Artists: Looking at Art and Class* (University of Illinois Press). Writing from a working-class perspective, Janet links labor and art to challenge the unnamed class biases in systems of art curation, categorization, and expertise through the voices of nine artists: Käthe Kollwitz, Elizabeth Catlett, Ruth Asawa, Marilyn Anderson, Milton Rogovin, Jens S. Jensen, Mark Rogovin, Ralph Fasanella, and Raymond Mason.

Cory Amron '74 "was recently selected by the American Bar Association (ABA) to receive its prestigious Margaret Brent Women Lawyers of Achievement Award," reports her husband, Curt Ritter. "Other awardees have included Supreme Court justices, attorneys general, congresspersons, etc." Each year, the ABA's Commission on Women in the Profession honors up to five outstanding women lawyers who have achieved professional excellence and paved the way for other women in the legal profession.

Bradley Radwaner '76, a cardiologist and founder of the New York Center for the Prevention



Dennis Clements '72M (MD) receives a leadership award at Duke University

of Heart Disease, reflects on memories of working on the *Campus Times* from 1972 to 1974, first as a writer and later as a member of the production team. He writes, “When I was a freshman, **Marc Rosenwasser** ’74 was the editor-in-chief, and I recall writing a front-page article on the construction of Wilson Commons. I also wrote an article about how large the University’s endowment was in 1972—at that time, the fourth- or fifth-largest endowment behind schools like Harvard, Yale, and Rice University. In my sophomore year, I was the production manager for the Wednesday paper, and I remember the busy, fun nights in the *Campus Times* office in Todd Union, arranging the layouts with hot wax and choosing which anti-Nixon Doonesbury cartoon to pick for publication. Of course, we were there all night putting the paper together, listening for the AP and UPI teletypes to ring with three, or even four, bells for a breaking news story. Finally, at five in the morning, we would drive the paper down into the city of Rochester for photo offset printing. The long, fun night always ended with breakfast at Sandy’s Diner and then falling asleep in my first class at 8 a.m., Philosophy 101. Somehow, I made it to Cornell University Medical College two years later. Fond, fun memories of being 19 years old!”

Robert Dardano ’77 announces, “I am pleased to be a new member of URochester’s Libraries National Council, the primary volunteer advisory group to the dean of libraries. Members help the dean develop plans for the future of all university libraries and promote our libraries with external audiences.”

Tim Smith ’77 shares a book he wrote with his wife, Deb: *Royally Regaling Greater Rochester: Taking Stock of the ROC* (Pandimensional Solutions), a collection of engaging stories, historical anecdotes, and little-known facts that celebrates the people, places, and events that have shaped Greater Rochester’s unique character and legacy.

John Treffeisen ’77 writes, “After I retired, I finally got around to publishing my first novel, *The Joe London Show* (Spines), a darkly comic adult urban fantasy that asks the question, ‘What if daytime TV produced paranormal chaos?’”

Dorianne Cotter-Lockard ’78E, an adjunct faculty member at Saybrook University, has coauthored a book



Peter Bourke ’79 in Juárez, Mexico



Cheryl Rubin ’79 and **Shannon Hesse** ’06E (DMA) on a bicycle trip

titled *The Art of Collaboration: Chamber Music Rehearsal Techniques and Team Building* (Oxford University Press). The book is a practical guide to chamber music that combines rehearsal techniques, communication strategies, and team-building principles to help musical ensembles collaborate more effectively, resolve conflict, and achieve stronger artistic performances.

Robert Bly ’79 has released a new book, *AI Apocalypse: A Guide to Artificial Intelligence as Portrayed in and Predicted by SF Stories, Novels, TV, Films, Comic Books, and Video Games* (Crystal Lake Publishing).

Peter Bourke ’79 writes that in October 2025 and April 2026, he traveled with volunteers from his church to build houses in Juárez, Mexico. “In April, I also presented a STEM class on ‘Light, Lasers and Optics’ to 120 youths who attend events and classes at the Mission Ministries Team Center in Juárez. These children, ages 10–14, do not have educational opportunities in STEM areas. I gave one of four presentations. They were well received and very rewarding to give.”

Cheryl Rubin ’79 reports she was “thrilled to have a chance meeting with fellow alumna **Shannon Hesse** ’06E (DMA), on an awesome bicycle trip to Mt. Rushmore and the Badlands. The trip was run by WomanTours, which, coincidentally, is a Rochester-based bike tour company.”

’80s

Lisa Sarnoff Gochman ’80, a retired attorney living in New Jersey, shares her essay “At the Library of the Appellate Gods” was published in the *Journal of Appellate Practice and Process* (University of Arizona James E. Rogers College of Law, Volume 25, Number 2, Summer 2025). Her essay recounts her adventures in the Library of Congress in Washington, DC, reading the papers of the late Justice John Paul Stevens, who authored the majority opinion in the Supreme Court’s landmark criminal sentencing case, *Apprendi v. New Jersey*. Lisa represented the State of New Jersey in the Apprendi argument before the Rehnquist Court in March 2000. Her essay is a bonus chapter to her memoir *At the Altar of the Appellate Gods: Arguing Before the US Supreme Court* (Indiana University Press).

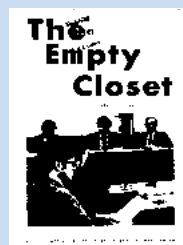
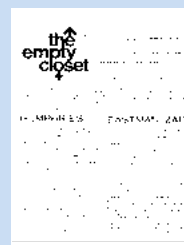
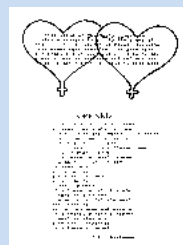
Doug Abeles ’81 writes that he is “happy to report that a short piece of narrative nonfiction I wrote was published in the summer 2026 issue



Madeleine Mitchell ’81E (MM)

of the literary journal *The Missouri Review*. It’s called “The Look-alike.” And in more good news, “Another piece of narrative nonfiction I wrote has been shortlisted as a finalist for *The Missouri Review*’s 2026 Perkoff Prize.”

Isabelle Lipschutz Ganz ’81E (DMA) has published the choral work *A Song for Three Holidays* (E.C. Schirmer). The sheet music blends melodies and traditions for Christmas, Hanukkah, and Kwanzaa in English, Hebrew, and Swahili.



BUZZWORTHY

Pressing Ahead

The Empty Closet, founded in 1971 by URochester’s Gay Liberation Front in the basement of Todd Union, returned to print in June after a six-year hiatus. Once one of the nation’s longest-running LGBTQ+ publications, the paper chronicled nearly five decades of local and national news, activism, poetry, literature, and community life. The Rochester Rainbow Union leads its revival in collaboration with Rathaus Press, which trained community members in foundational publishing skills to produce the new edition. *The Empty Closet* remains free, in both print and digital formats, with a renewed emphasis on building community engagement through physical media. —Melissa Pheterson

Dan Locklair '81E (DMA), a composer-in-residence and professor of music emeritus at Wake Forest University, has released *Sing to the World* (Convivium Records), a collection of secular choral works. Performed by the Phoenix Consort choir with pianist Iain Farrington and conducted by Adam Whitmore, the album explores themes of love and loss, nature and freedom, and moments of reflection, drawing on the works of poets such as Robert Frost, Walt Whitman, and W.B. Yeats.

Madeleine Mitchell '81E (MM), a British violinist, had the honor of being invited by the British ambassador in Türkiye to give a special concert of British music at the embassy and teach a week of violin classes at Bilkent University.

The concert followed a major fall tour in the US that included giving classes and performances at the Aaron Copland School of Music in New York City, the University of Minnesota, and the San Francisco Conservatory of Music. Additionally, her London Chamber Ensemble Quartet has released another album, *Charles Wood String Quartets* (SOMM), featuring all first recordings.

Debbie Mitchell Nihill '81N announces from Montana, "I retired in 2025 from full-time work as quality leader at Mercy Hospital St. Louis. I'm getting used to having more time for hobbies and travel!"

Jeanine Khoury '82, who retired as managing director at the private investment banking company

Brown Brothers Harriman, writes she is "proud to have cochaired the University's 2026 Volunteer in Partnership conference! What a great experience, and I encourage my fellow alumni to get involved."

Patricia Hryzak Lin '82N (MS) shares that she was thrilled to see her former students **Chrisanne Mansfield** '87N, '93N (MS) and **Patricia Lawrence** '87N at the School of Nursing's 100th anniversary celebration. "Chrisanne has worked for more than 35 years on the Pediatric Adolescent Unit. Patricia is located in Atlanta, attained her doctorate, and is conducting nursing research. Our profession is in great hands with these two nursing leaders."

Rosie Zaloum Foster '83 reports that she is officially retired after a 42-year medical writing career, the last 26 years as a freelancer. "When I went to the U of R, I had every intention of going to medical school, but the medical schools that rejected me had other ideas! Fortunately, I discovered medical writing, which enabled me to support the health of others through my reporting and words. I'm now focusing on what I call the Five B's: baking, birding, books, biking, and my newest hobby, learning to play the banjo! Looking forward to catching up with my classmates at our next reunion."

Arnold Stillman '83, the founder and CEO of POEM Technology, writes, "I am one of the winners of the Breakthrough Prize in Fundamental Physics. I was a member of the g-2 team at Brookhaven National Laboratory when I was there from 1985 to 2003." The Breakthrough Prize, renowned as the "Oscars of science," recognizes the world's top scientists working in the fundamental sciences—the disciplines that ask the biggest questions and find the deepest explanations.

Gabriel Panelias '84M (PhD) died in May at age 76, reports his wife, Maria Carmen Garces Ramon. Born on the Greek island Naxos, Gabriel earned a BS in physics from the University of Athens before continuing his studies at URochester's School of Medicine & Dentistry, where he earned a PhD in radiation biology and biophysics for which he won the George V. Metzger Award. A leading European scientist, Gabriel served as research director, institute director, and vice president at the National Centre for Scientific Research in Athens, Greece. In 2020, he was awarded the Bacq and Alexander Award by the European Radiation Research Society for his outstanding contributions to radiation biology research. Beyond science, he was a passionate musician who played the bouzouki, guitar, flute, and piano. In his final months, he turned to literature and published the poetry collection *Eternal White Rose* (self-published), inspired primarily by his childhood memories of Naxos and reflecting on deeper existential matters. Maria writes Gabriel's "scientific legacy and warm, vibrant spirit will be deeply missed by the University community and colleagues worldwide."

Scott Rummier '84 writes that he is besting Wall Street. Scott's fintech start-up ScalarSight uses quantum logic to predict long-range equity and crypto prices. Through his next-gen technology, he says, "My predictions have beaten the top Wall Street pros for three years running. Charts proving this have been steadily updated at ScalarSight.com and on my LinkedIn."

Stephen De Luca '85 sends an update from Lake Parsippany, New Jersey: "Last year, I had the honor of serving as reunion cochair and class gift campaign chair for the 40th reunion of the Class of 1985. I continue to be a member of the George Eastman Circle, the Wilson Society, the Meliora Collective Mentorship Program, and the Medallion Leadership Society. As for my personal life, for the past two years, I've been working as a Special Associate Corporation Counsel with the New York City Law Department in downtown New York City. I'm serving in various capacities with my church, teaching classes on the prevention of child sex abuse for the Diocese of Paterson and the Archdiocese of Newark, and serving on the Board of Trustees of the New Jersey Coalition Against Human



BUZZWORTHY

Picture Perfect

Paul Hubel '86, the chief scientist of camera technology at Apple, has been named this year's recipient of the Edwin H. Land Medal by Optica and the Society for Imaging Science & Technology. Hubel (pictured right)—who worked with Land (pictured left) during summers at Harvard's Rowland Institute—received the award "for pioneering novel image algorithms in digital camera research, for development of optimal software-firmware strategies compatible with both existing and new hardware, and for three decades of image quality improvements that make better photographs—instantly." Hubel has been with Apple since 2008. "After the first year of my [PhD] at Oxford, my supervisor told me, 'Paul, it's not just about pretty pictures,'" he wrote on LinkedIn after the announcement. "Turns out, it kinda was." —**Matt Cook**



Patricia Hryzak Lin '82N (MS) with her former nursing school students

Trafficking. I'm also serving as an EMR with the Parsippany Volunteer Ambulance Squad and an associate diver with the Parsippany Rescue & Recovery Dive Team. As a trumpet player, I have had the honor of being invited to play 'Taps' over the years at military funerals as well as on occasions such as Memorial Day, Independence Day, 9/11, and Veterans Day events, and last year I was accepted into the national organization Taps for Veterans."

John Fedchock '85E (MM), a world-class trombone soloist and Grammy-nominated arranger, shares that he and his wife, Jennifer Wharton, a low brass specialist and leader of the trombone-forward ensemble Bonegasm, were featured in the January 2026 issue of *International Musician*, a monthly magazine that provides industry news, such as legislation affecting musicians, audition notices, and activity spotlights. The couple's story covers New York City's diverse freelance music scene and their unique dynamic: a husband and wife who play the same instrument in a competitive environment.

John Bird '86 (PhD), a professor emeritus of English at Winthrop University, published *Mark Twain's 1884: A Pivotal Year in the Life* (University of Missouri Press). The book focuses on the year during which Twain stood at the height of his powers as a writer and enjoyed some of the happiest times with his family.

Nina Gaby '86N, '90N (MS), a writer, visual artist, and psychiatric nurse practitioner, had essays published in *Where It Hurts: Dispatches from the Emotional Frontlines of Medicine* (The Experiment) and issue 50 of *Bellevue Literary Review*. Nina recently returned to Rochester after living in Vermont for 23 years. She shares that she continues to work as a psychiatric nurse via telehealth and runs workshops for the Rochester-based arts organization Writers & Books, including one for long-term survivors of HIV/AIDS.

H. Christopher Boehning '87, '88 (MS), chairman of the URochester Board of Trustees, and other members of the Class of 1987 participated in a virtual meetup in the spring where they reconnected, shared memories of their time at URochester, and built excitement for their 40th reunion at Meliora Weekend 2027. Others who attended the meetup included URochester

Trustee **Lizette Pérez-Deisboeck** '87, **Amy Goldstein Borne** '87, and **Roy Youman** '87.

Craig DeLancey '87, a professor and department chair in the Department of Philosophy at the State University of New York at Oswego, had a book published: *Camus on Justice: A Metaphysics of Revolt* (University of Notre Dame Press). *Camus on Justice* investigates French philosopher Albert Camus's rich and overlooked theory about the relationship among the absurd, politics, and revolution.

Caroline Genco '87M (PhD), former provost and senior vice president at Tufts University, was named the University at Buffalo's 16th president in June. The first woman and the first Buffalo native to lead the institution in its 180-year history, Genco earned an MS and PhD in microbiology and immunology at URochester. She has authored more than 140 scientific articles, and her research has been continuously supported by the National Institutes of Health.

Jeffrey Smith '87, '88S (MBA), who was killed in the September 11, 2001, terrorist attacks in New York City, is being honored through a new scholarship to support future Simon Business School students. **Michael Degenhart** '88S (MBA), who met Jeff at Simon and remained close with him after graduation, made the gift after learning of the Juan Jones Scholarship Challenge, created by Simon classmate and University Trustee **Juan Jones** '88S (MBA) to encourage alumni to fund scholarships that expand access to graduate business education. Mike hopes recipients will be inspired by the qualities Jeff embodied: friendship, generosity, curiosity, perseverance, and a deep love of family.

Marian Tanofsky-Kraff '87 coauthored *The New Food Fight: How the Weight Management and Eating Disorder Fields Became So Divided and What We Can Do About It* (Oxford University Press). Marian writes, "I have been in the intersection of these fields and am now focusing a lot on the GLP-1s in relation to eating disorders." *The New Food Fight* cuts through myths and misinformation to show how bias and competing narratives have often overshadowed scientific evidence. Marian and her coauthors draw on research, professional expertise, and lived experience to offer a compassionate, evidence-based



Alex Goff '89

look at the complex factors that shape eating habits, body weight, and overall health.

Dawn Asson '89 shares that she recently published *Becoming* (self-published), a collection of poetry exploring her identity as a trans woman and a journey marked by fear, joy, doubt, and defiance.

Alex Goff '89, who has been covering rugby as a sportswriter for more than 30 years, was inducted into the US Rugby Hall of Fame with the 2026 class for his services to the sport as a journalist. Alex got into rugby first as player while at school in England and then at URochester, where he met his late wife **Jennifer Elden Goff** '89, who died of cancer in 2020. Jennifer was instrumental to Alex's growth as a writer, encouraging him to launch GoffonRugby.com in 2001 and eventually devote himself to rugby journalism full time in 2004. In 2006, Alex became the editor of RugbyMag.com and served in that role until June of 2014. He left to launch *Goff Rugby Report*, which covers high school, college, and national rugby in the US. Alex posts roughly 2,000 articles a year and hundreds of video interviews; he has also been a frequent broadcast pundit and game announcer, having served as the play-by-play announcer for the US national team, major international tournaments, and, most recently, as announcer and analyst for the D1A Collegiate Championships and the women's NCAA Finals. Currently, he's also a rugby coach, working with first-year students at St. Ignatius High School in Cleveland, Ohio.

Sven Shockey '89, the national director of design for SmithGroup, is excited to share that he's one of 78 architects who have been elevated by the American Institute of Architects (AIA) to its College of Fellows for promoting the aesthetic, scientific, and practical efficiency

of the profession. AIA fellows are recognized for their exceptional work and contributions to architecture and society. Fewer than 3 percent of AIA members hold the prestigious fellowship designation.



Patria Frias-Colón '90, a trial judge for the Kings County Supreme Court in New York City, announces that her

daughter, Lida Nida Colón, successfully defended her dissertation and is graduating with a PhD.

Petra Halpern Pasquina '90 wasn't able to make it to Meliora Weekend 2025 for her class's 30th reunion, so she created her own. On a very cold January day in New York City, Petra hosted a small gathering of alumni from the late 1980s and early '90s at the Perfect Pint in Midtown East.

Tim Marler '91 writes, "After having worked for a decade at the RAND think tank, I recently moved to Aerospace Corporation, a nonprofit that provides independent technical oversight and objective analysis for national security space programs. Working in a new sector on a broad cross section of challenging problems is exciting and fun!"

Celeste Glasgow Ribbins '91 authored the book *Everyday Hallelujah: How Worship Changes Everything—Especially You* (The Powershift Experience). The 40-entry worship devotional "dismantles the idea that worship belongs only in church and rebuilds it as what it was always meant to be: a lifestyle, an identity, and a daily practice that touches every part of who you are."

Erin Gibson Allen '92, a partner at the law firm Fisher Phillips, is the recipient of the 2026 Women of Influence Award, given by the *Pittsburgh Business Times* to honor the region's businesswomen who are helping to lead their organizations, making impactful change in the region, and getting deeply involved in their communities. Honorees have demonstrated achievement across three dimensions: organizational leadership, community impact, and mentorship. In addition to her work as an attorney, Erin has held leadership positions in both the Pittsburgh Symphony Orchestra and the Women's Center & Shelter of Greater Pittsburgh.

Hui "John" Zhang '92 has joined Moody Capital Solutions's capital

markets and advisory team as managing director. John has also held managing director roles at Bank of America, Citigroup, Cr dit Agricole Lazard Financial Products, and Roc Global. He began his career trading derivatives and convertible bonds in New York.

Katherine “Kate” Rogers Arnold ’93 died in February at age 55, reports **Joelle Love Buckner** ’93. Kate’s primary occupation—and passion—was being a mother to her two daughters. She also loved to help women feel beautiful, leading her to sell clothing and jewelry through Cabi and Noonday, respectively. Kate also had a gift for putting people at ease, which she used to great effect through the Patti Robinson Kaufmann First Connection Program, a service of Blood Cancer United. There, she spoke with newly diagnosed patients and shared her experiences as a patient and survivor. Kate was born in Washington, DC, but considered Denver and, more generally, “the mountains,” to be her home and where a piece of her soul will always reside.

David Wisner ’93 (PhD) retired in January. David was a professor of international relations at the American College of Thessaloniki in Pylaia, Greece, where he also served as the founding director of the Michael and Kitty Dukakis Center for Public and Humanitarian Service. He has written on the French Revolution, neo-idealist epistemology, and neoclassical art in three books and numerous articles in scholarly journals and within mainstream media.

Philip Kusnetz ’94 had an article published in *Nassau Lawyer*, the official journal and publication of the Nassau County Bar Association, on the topic of personal injury and matrimonial law. While an undergraduate, Philip was a frequent contributor to the *Campus Times*.

Paul Aiello ’96, a member of the



Paul Aiello ’96 returns to the stage



Lindsay Greene Koenig ’98, son **Zachary** ’30S, and **McKenzie Morrow** ’28

YellowJackets a cappella group from 1993 to 1996, returned to the stage after a two-year hiatus to perform in the comedy *The 39 Steps*, an adaptation of Alfred Hitchcock’s film, at the Bergen County Players in Oradell, New Jersey, where he currently resides. The play concluded its run in May. In 2023, Paul won a Perry Award from New Jersey’s Premiere Awards for Community Theater for Outstanding Featured Actor in a Musical for his role as Albert in *It Shoulda Been You*.

Kevin Sweeney ’96 shares that he finished his seventh book, *The Ohio State University 2025–2026 Football Season* (self-published). He says he is working on his eighth book and has started his ninth.

Catherine Loomis ’97 (PhD) published a book that began to take shape in Rush Rhees Library’s microfilm room, *He Words Me: Men Writing as Women in Early Modern England* (Arizona State University Press). “It’s a collection of Early Modern English literary texts in which men are writing in the first person as women, and it’s an open-access digital text, so it’s free to read and use.”

James Carden ’98, a former State Department advisor and contributing editor and columnist at *The American Conservative*, has authored a new book, *The Great Betrayal: How the Democrats Became the Party of War* (OR Books).

Lindsay Greene Koenig ’98 shares a “small world” photo from a Mediterranean cruise she was on with her son, **Zachary Koenig** ’30S. They were celebrating Zachary graduating high school and heading off to URochester when they met **McKenzie Morrow** ’28.

Cara Ippolito Tyrell ’98, an early childhood educator and parent coach, published *Talk to Them Early and Often* (Teachers College Press), an educational textbook for infant and toddler caregivers who want to harness the power of language during the most important years of brain development: birth to age three.

Clinton Young ’98 reports that in August 2025 he became the dean of social science and business at South Puget Sound Community College in Olympia, Washington. “This was a long-awaited return to the Pacific Northwest after 30 years away.”



Crista Crittenden ’01, ’07M (MPH) published *Understanding Health Psychology Through the Works of Stephen King: Getting Under Your Skin*

(Routledge). She reports, “The University of Rochester School of Medicine & Dentistry features prominently in the book, particularly in my discussion of George Engel and the development of the biopsychosocial model, as well as the foundational work of Ader and Cohen in the field of psychoneuroimmunology.”

Jonas Kumpitch ’01S (MBA) died in January at age 54, reports his partner, Carrie Caldwell. Born in Saint Croix in the US Virgin Islands, Jonas was known for his exceedingly dry humor, gentle presence, and steadfast curiosity. The latter helped him earn an undergraduate degree from Rensselaer Polytechnic Institute and an MBA from Simon Business School. As a senior manager at Deloitte, Jonas traveled the world, consulting with clients across a variety of industries. He realized his dream of working in media when he joined NBCUniversal and, most recently, Versant Media, where his insight and empathy earned him the respect of colleagues across departments. Jonas was an avid sailor and lover of adventure. He will be remembered for his thoughtfulness in conversation, his knack for finding irony in everyday moments, and his ability to make those around him feel seen and valued.

Aasim Padela ’01, ’08M (Res) is the editor of *Bridging Bioscience and Islam: Engaging Big Questions about the Human Being* (Palgrave Macmillan). The book brings together scholars from multiple disciplines to explore questions at the intersection of bioscience and Islamic thought, including human origins, cognition, embodiment, genetics, neurobiology, and emerging biotechnologies. Aasim also developed a six-episode podcast series, *Big Questions About the Human Being: Islam and Biomedicine in Dialogue*, which won 2026 Podcast of the Year in the Religion and Spirituality category of



Anietie Ukpe-Wallace ’01



Laura Cowan Osborne ’03 with **Charles** ’70 and **Candace Geyer Cowan** ’70

the American Writing Awards.

Anietie Ukpe-Wallace ’01, a physical therapist specializing in pelvic health, shares her new book *Tending to Your Womb: Self-Care for Every Stage of Your Reproductive Journey, No Matter the Outcome* (Uphill Books).

Laura Cowan Osborne ’03 sends a photo from Northwest Stadium, home to the NFL’s Washington Commanders, with her parents **Charles** ’70 and **Candace Geyer Cowan** ’70. Laura has spent two seasons playing alto saxophone with the Commanders marching band, which plays at all the home games, after getting her start at URochester: “I was in the UR Wind Symphony, in the UR Pep Band, and studied with Chien-Kwan Lin at Eastman while I was a student on the River Campus.”

Eileen G’Sell ’04 (MA) wrote her first nonfiction book, *Lipstick* (Bloomsbury Academic), saying, “It is part of the eminently quirky ‘Object Lessons’ series.”

Mike Litrownik ’04 is now an assistant attorney general in the Civil Rights Bureau of the New York State Attorney General’s office, where he will be protecting New Yorkers from discrimination. He shares, “I joined the AG’s office after spending over five years at Mobilization for Justice, a civil legal services organization in New York City, where I oversaw



CLOSE TO HOME

An Odyssey, of Sorts

For Rochester independent bookshop owner Jess Gale, community is essential to both the journey and the destination.

The sirens of Greek mythology first appear in Homer's *Odyssey*, female beings singing hypnotic songs that lure sailors to their deaths. But at their most fundamental interpretation, sirens are heralds, beckoning all who hear them to come closer, to come home.

For Jess Gale '04, who owns Rochester's *The Siren and the Sea: Books and Coffee*, the name of her shop was clear in its intent. "I liked the idea of the sirens calling people in," she says, adding that she was drawn to reframing the image of a siren "from an evil woman to a powerful figure with more feminist, progressive

values. If we don't reclaim these things, who will, you know?"

Gale arrived at URochester from a small town in Michigan's Upper Peninsula, excited to be in a larger, more diverse city. Besides spending much of her time in the libraries, she practiced with the rowing club in the early mornings on the Genesee River.

During her senior year, Gale joined friends who were starting an off-campus, eco-conscious, cooperative living space, establishing what would become the prevailing ethos of her personal and professional life: finding and embracing community.

After graduation, Gale spent a year in Philadelphia. But friends still living at the self-named Eco-House encouraged her to return to Rochester. She took their advice, piecing together part-time jobs at Abundance, a local food co-op, The Little Theatre, and elsewhere, before working as a research assistant for some of her former URochester professors.

Gale eventually left Rochester again, earned an MFA in film at American University, and settled in Jacksonville, Illinois, where she worked part time at Illinois College. "And then," she says, "an independent bookstore on the town square came up for sale." Gale bought Our Town Books in 2018 and immediately felt at home among its book-loving community.

In 2023, the desire to live in a more diverse and liberal region beckoned once again, and Rochester—still home to close friends from her URochester days—was it. Gale returned with her family, a love of bookselling, and the celebration of a third space in tow.

She toured various properties before finding a building in Rochester's South Wedge, which she bought outright. After much effort that included painting the ceilings and persuading some of her beloved former staff from Illinois to join her in Rochester, *The Siren and the Sea* opened in October 2025.

With its proximity to the Mt. Hope neighborhood, downtown Rochester, and URochester's River Campus, the South Wedge was, to Gale, a crucial location. It's close to a bus stop and stands firmly in the mix of several service-forward organizations like a local food pantry, a fitness center for veterans, and a clinic offering healthcare to low-income individuals.

"There are so many community needs being met in this spot," Gale says. "Employees from the other businesses will stop in, which helps us get to know them as well as the people using those services."

The store markets itself as general interest, but it's clear that art, inclusivity, and critical thinking are central to everything from book curation to the café menu. "It's important to me that we offer a place where people can feel at home," says Gale, "where they can connect and explore ideas."

To wit, each month brings an eclectic array of events, with recent offerings ranging from a craft rave to a silent reading night to an LGBTQ+ Latino film screening. The store caps most events at 20 people, shares Gale, and they're almost always filled.

It's poetry befitting of Homer, then, to reclaim the siren and to establish a spot that calls people in from wherever they might be. It may seem like luck or happenstance that it happened in the very same city where she first found a sense of community, but for Gale, Rochester is the exact right place to be. "This is above and beyond what I could have imagined." —*Johanna Lester*

This story is adapted from a piece on the URochester News Center. Read the full version, including Jess Gale's personal book recommendations, at rochester.edu/news/siren.

the organization's class action and impact litigation work."

Christina Koulouglioti '05N (PhD), a senior research fellow in the Department of Research and Innovation at England's Western Sussex Hospitals NHS Foundation Trust, has authored a new book, *Culturally Competent Spiritual Care During Health Disasters and Emergencies: Developments in the Era of Artificial Intelligence and Robotics* (Routledge) is an innovative book that uses a wide range of multidisciplinary research to illuminate how the helping professions can provide person-centric spiritual care to their patients in a health emergency through new digital technologies in addition to more established modes of care.

Kelly McNamee '05, a nationally recognized media litigator, became a partner at the law firm Foley Hoag as part of the firm's launching of a First Amendment and media practice group. Kelly and her law partner, Michael Grygiel, built one of the most respected media law practices in the country, representing media organizations, entertainment companies, publishers, authors, and content creators in high-stakes

First Amendment matters for a decade. In addition to defending against defamation claims, invasion of privacy suits, and copyright and Lanham Act matters, she has an extensive record of affirmatively helping journalists and news organizations obtain information the public has a right to know through public-access litigation.

Adam Bink '06 writes from California, "I have accepted a role as chief communications officer with Marin Community Foundation in the Bay Area."

Heather Braun '06E, first violinist of the Arneis Quartet, shares the group's debut album, *Moving Shapes* (Albany Records). The album features the music of Joseph Haydn, Ruth Crawford, Elena Ruehr, and Fanny Hensel. The quartet's four members all teach at Boston University and have performed together since 2009.

Michael Cabin '06, a partner at the law firm Duane Morris, was named cochair of the firm's securities litigation division of the trial practice group. Michael's practice focuses on complex securities, fiduciary-duty and deal litigation, and other complex commercial matters, and his experience spans a wide range of



Bill Gensheimer '10M (MD), '14M (Res) and friends reunite on the slopes

industries. He has represented large financial institutions and issuers as well as individual directors and officers and has extensive experience in litigation involving complex structured-finance transactions, trading, mergers, and more.



Bill Gensheimer '10M (MD), '14M (Res) sends a photo of alumni from the School of Medicine & Dentistry's Class of 2010—and friends—for the school's first annual ski reunion at Attitash Mountain in New Hampshire: "The crew shredded some serious East Coast gnar." Pictured, from left (with Mount Washington in the background), are **Bill, Larry Donahue '10M (MD), Matt Malek '11M (MD), Ed Sze '10M (MD), Harvey Williams, Ben Faustich '10M (MD), and Kurt Hofmann.**

Heather Guyer Wensley '11N (MS), '23N (DNP) presented "Equity Starts Here: Screening Eating Disorders in SBHCs" at the national School-Based Health Center (SBHC) Alliance Conference in Washington, DC, in June. Heather is a pediatric nurse practitioner at East High School in Rochester.

Christopher Wong '11 died in October 2025 at age 36, reports URochester classmate **Paul Alperin '11**. Chris came to URochester from Boston, Massachusetts. He translated his passion for science and discovery into a BS (URochester) and PhD in organic chemistry (Boston University). Chris was known for putting others ahead of himself with the rare gift of making people feel profoundly valued and supported. His humility and gentle warmth made him a continual advisor to friends. He will be remembered as

a source of light and joy and someone who lived with optimism, deep purpose, and generosity.

URochester and the Class of 2012 are mourning the death of **Louisa Gag '12** in July. Louisa grew up in Roslindale, Massachusetts, and spent most of her life living in Boston. She moved away to attend URochester, where she became a member of Phi Beta Kappa and graduated magna cum laude, and then returned to Boston to earn a master's in urban and public planning and policy from Tufts University. Louisa worked tirelessly to make her home city more livable, enjoyable, and humane by working with Livable Streets Alliance, the South Boston Neighborhood Development Corporation, and the Boston Transportation Department, where she helped build the Bluebikes program. Louisa loved dogs and ice cream, was an avid reader, and was known for bringing the cleverest gifts to the holiday party game "Yankee Swap." Her friends and family considered her a beacon of kindness and empathy.

Mercedes Szpunar '12M (PhD), '14M (MD), a fellowship-trained reproductive psychiatrist, was appointed as the inaugural Tsao Family Foundation Endowed Chair in Maternal Mental Health at Hoag Hospital Foundation. The new position provides sustainable support for research and increased access to psychotherapy, including PTSD screening and treatment for traumatic childbirth. Under Mercedes's leadership, Hoag has plans to establish a centralized women's mental health center.

Cassandra Jones '14, '16N writes, "After graduation, I moved to DC and started my emergency nurse



BUZZWORTHY

Reimagining a Legend

Julia Bullock '09E took to the stage at the Paris Opera's opulent Palais Garnier in September in a run of *Perle Noire: Meditations for Joséphine*. The soprano cocreated the piece and starred as Josephine Baker, the Jazz Age diva who, as a Black woman, found a form of liberation in France during the Roaring Twenties. *Perle Noire* explores Baker's life, artistry, civil rights activism, and carefully constructed public persona, introducing audiences to the woman behind the entertainer. *The New York Times* reported that Bullock's connection to Baker was personal: Both women grew up in St. Louis, and Bullock began researching Baker's life as an Eastman undergraduate. —David Andreatta



Mercedes Szpunar '12M (PhD), '14M (MD) with Tsao Family Foundation leaders



Cassandra Jones '14, '16N

residency at Washington Hospital Center. Soon after, I took my commission as an emergency/trauma nurse in the United States Navy. Four continents and three humanitarian-focused deployments have made the past eight years of service amazing, and I look forward to what the next step in my service brings!"

Sohl Lee '14 (PhD), an associate professor of art history at Stony Brook University, published *The Minjung Art Movement: Decolonization and Democracy in South Korea* (Duke University Press). The book traces how South Korea's minjung art movement of the 1970s and '80s forged decolonial protest aesthetics that helped galvanize democratization and explains why its practices continue to resonate with artists and activists today.

Brian Frain '16W (EdD), a Catholic priest, shares he recently transitioned to parish ministry in Baltimore and now serves as pastor of St. Ignatius Church, where he finds great joy in offering the sacraments and responding to the needs of those he serves. He is also on the board of the Loyola School, a Jesuit preschool and elementary school located across the street from St. Ignatius Church.

Alan Shramuk '16, '17 (MS) became a partner at Marshall, Gerstein & Borun LLP, a Chicago-based law firm that focuses exclusively on intellectual property law. Alan is a member of the firm's electrical and computer technologies team, where he has practiced since joining as an associate in 2020. He counsels clients on patent prosecution in a wide range of technologies, including electrical engineering, computer hardware and software, communications devices, optoelectronics, optical devices, blockchain, artificial intelligence and machine learning, semiconductors and superconductivity, and 5G systems. Being elevated to partner recognizes Alan's strong track record of excellent legal results and commitment to client service.

Alexander Brier Marr '17 (PhD), an associate curator of Native American art at the Saint Louis Art Museum (SLAM), is the editor of the recently published *Native Studio Art Since the 1920s* (The University of Chicago

Press). Reproducing important yet often overlooked works of 63 Indigenous artists from SLAM's William P. Healey Collection, the book conveys major narratives and key figures of 20th-century Native American studio art through essays by art historians, conservators, and artists' relations.

Sam Pomerantz '18, '20S (MBA) and **Karina Vasquez Moscoso '21,**



Sam Pomerantz '18, '20S (MBA) weds Karina Vasquez Moscoso '21, '22S (MS)



BUZZWORTHY

Flight Path

When William Horn '14 returned to campus in August, it was the definition of a "flyby." The Rochester native and United States Marine Corps major, who double-majored in biochemistry and psychology at URochester, was in town as a featured performer at the Rochester International Airshow. Currently based in Beaufort, South Carolina, and a member of the USMC F-35B Demonstration Team since 2025, Horn travels the country to demonstrate the unique midair hovers, vertical landings, and short takeoffs of the F-35B Lightning II fighter jet. Before making his Rochester airshow debut, he performed in Washington, DC, on July 4 as part of Salute to America 250—"the most ambitious aviation spectacle in American history." Read more about "Braankles" at rochester.edu/news/horn. —Tama Miyake Lung

'22S (MS) said "I do" in May. The couple celebrated with 41 URochester alumni, 31 of whom gathered for a photo. Among those pictured are Sam's father, **Scott Pomerantz '81, '83S (MBA)**, a member of the Hajim School National Council, and **Mike Rosen '82, '83S (MBA)**, a URochester trustee emeritus.

Meghan Reynolds Lambrych '19N, a community health nurse, writes, "I have spent the past five years building my career as a freelance health journalist covering issues that affect nurses. I strive to exemplify the values I learned at the U of R in every piece that I write." As an example, she points to a January blog post for NursingColleges.com: "What Two Court Cases Reveal About Race and Power in Nursing Today." Meghan says, "It covers crucial issues in nursing, chiefly lateral violence and structural racism, issues that I know the University of Rochester School of Nursing cares deeply about. I hope this article starts a crucial conversation that helps push nursing forward."



Amanda Martin '22 hosts the Somerville Porchfest Brunch in Massachusetts



Anna Thompson '23, '23E and friends celebrate her win at an opera competition



Sennett Turner '24 and fellow recent grads win their category at the Seneca7 relay

'20s

Benjamin Cocanougher '20M (MD), a pediatric rare disease researcher and medical geneticist at Cincinnati Children's

Hospital Medical Center, was named a member of the Scientific Advisory Board of Jack's Tomorrow. Jack's is an organization designed to raise awareness and research funds for PURA syndrome, an extremely rare neurogenetic disorder whose hallmarks include significant early-onset intellectual disabilities, severe low muscle tone, feeding/breathing difficulties, and epilepsy. Benjamin leads a research laboratory dedicated to understanding the molecular mechanisms of PURA syndrome and transforming those insights into targeted, disease-modifying therapies.

Caris Trippe '21N, a registered nurse in Strong Memorial Hospital's neuromedicine intensive care unit, writes, "I created an app!" Night Shift Mode was born from Caris's experience as a night shift nurse. She says, "After working nights for a while, I became increasingly annoyed with my phone resetting my health metrics at midnight—I still had seven hours left! I decided to fix that problem by launching Night Shift Mode. By allowing users to set their own 'end of day' time, health metrics don't reset at midnight. This allows for more accurate tracking of your steps, calories, etc. I am super excited that it is now available for download on the Apple App Store, and I would love to have your support as I continue this venture!"

Miller Hickman '22, '23 (MS) and his Taking Suggestions bandmates, **Cassius Close** '22, '23 (MS), **Alex Mancuso** '22, '23 (MS), and **Ellie Wasson** '23, have released their first album. *This Page Intentionally Left Blank* features entirely original compositions written by the band.

Amanda Martin '22 shares a photo from the Somerville Porchfest Brunch in Massachusetts, sponsored by the Young Alumni Grant Fund. Pictured, from left, in the front row, are **Shannon Mulcahy** '22, **Amanda Adams** '22, **Sarah Preuss** '22, **Cez Garcia** '22, **Jenny Jordahl** '23, **Kayla Fussel** '24, **Isabelle Rothman** '19, and **Max Spector** '20; and, in the back row, **Natalie Fullerman** '24, **Mack Bluman** '21, **Ben Cohen** '22, **Claire Decker** '23, and **Evan Coleman** '23.

Soprano **Anna Thompson** '23, '23E shares a photo of several alumni who were in attendance to watch her become a grand final winner of the

2026 Metropolitan Opera Eric and Dominique Laffont Competition in New York City. Pictured, from left, are **Ellie Wasson** '23, **Alex Mancuso** '22, '23 (MS), **Cassius Close** '22, '23 (MS), **Anna Miller Hickman** '22, '23 (MS), and **Noah Sesling** '22E.

Sennett Turner '24 sends a photo of her team, Buzz Sting 'Em, a group of recent URochester graduates—all but one former cross-country and track-and-field athletes—who reunited in April to complete the Seneca7. In a field of more than 300, the former Yellowjackets finished the seven-person, 77.7-mile relay around New York's Seneca Lake in eight hours and 48 minutes, placing first in the Mixed Gender category and ninth overall. "We had so much fun!" reports Sennett. "Thank you to our friends who supported us along the way." Pictured, from left, standing, are **Daniel Ford** '24, **Seth Cutler** '24, **Konstantin Dits** '23, **Christian Voloshen** '24, and **Zachary Spergel** '24; and, kneeling, **Katherine Benninger** '23, '24N and **Sennett**.

Mansi Rai '25S (MS) shares that she is currently a corporate tax auditor with the New York State Department of Taxation and Finance. During her first year in public service, she worked on multistate corporate tax audits involving apportionment, nexus, credits, and digital economy taxation. In 2026, she was recognized as a Top 30 Audit Professional by the Audit Awards and published her first book, *ReNEXUS: Rethinking Economic Presence in a Digital World* (Eliva Press), which explores taxation, technology, and the evolution of digital value creation. She has also published independent research examining the transformation of tax systems from the industrial era to the digital economy. Originally from India, Mansi is building her career in the US at the intersection of public finance, research, and emerging technologies. She remains actively involved in professional development, mentorship, and thought leadership within the accounting and taxation profession.

PhD student and private practice therapist **Megan Black** '26W (AC) received endorsement by the New York State Association for Infant Mental Health as an early childhood mental health specialist. She writes, "This is a powerful recognition of my dedication, knowledge, and commitment to supporting infants, young children, and their families."

In Memoriam

Trustee Emeritus

Everett Ascher '57, a longtime leader of his family's music publishing and distribution business, died in June at the age of 90. He was elected to the University's Board of Trustees in 1983 and served until becoming senior trustee in 1989 and trustee emeritus in 1994. He was actively involved with URochester engagement and events in Los Angeles and helped plan several Class of 1957 reunion efforts. For many years, Ascher supported two prizes—the Everett S. Ascher Prize and the Mary B. Ascher Prize—to recognize undergraduate excellence in the Department of Political Science, where he completed his studies.

Faculty

James Aquavella, the Catherine E. Aquavella Distinguished Professor in the Department of Ophthalmology. May 2026
Howard Beckman, a clinical professor emeritus and former chief of medicine at Highland Hospital. June 2026
Michael Larj, an associate professor in the Division of Pulmonary and Critical Care Medicine. June 2026
Hanna "Ania" Mieszczańska, a professor of cardiology and of psychiatry and director of the Women's Heart Center. May 2026
Gary Morrow '88 (MS), a dean's professor of surgery and of radiation oncology. July 2026

Former Faculty

Roger Boulay '61M (Res), a professor emeritus of medicine. March 2026
Carl Chiarenza, a professor emeritus in the Department of Art and Art History. May 2026
Richard Farmer, a professor emeritus of medicine and former chief of the Division of Gastroenterology and Hepatology. November 2025
Mary Huth '81, a senior librarian in the Department of Rare Books, Special Collections, and Preservation. June 2026
Jerome Kaye, a professor emeritus of biology. May 2026
Ralph "Lin" Saunders Jr. '76M (Res), '80M (Pdc), '88M (MS), a professor of dentistry and former course director for EIOH Geriatric Dentistry/Special Needs. May 2026
Hannelore "Lorrie" Yoos '79N (MS), '91W (PhD), a professor emerita at the School of Nursing. March 2026
Harriet Zimmerman '67E, '75E (MM), a Jack L. Frank Instructor in Piano. January 2026

Alumni

This list includes notices received and confirmed by the Office of Gift and Donor Records from January 1 through June 30, 2026, for deaths occurring on or after October 1, 2025.

Lois Durand Perez '47, March 2026
Ingrid Swanson Perry '47, December 2025

Elizabeth Prokop Stangeland '47E, '53E (MM), January 2026
Helen Parry Heath '48, February 2026
Phyllis Church Moore '48N, February 2026
Patricia Gheer Stedje '48E (MM), February 2026
Mary B. Cole '49, January 2026
Susanne Behrendt Esan '49, '52 (MA), June 2026
Perry H. Myers '49, January 2026
Robert K. Rickard '49, March 2026
Stuart E. Smith '49, '51W (EdM), May 2026
Jack G. Stateler '49 (MS), April 2026
Seymour Weinstein '49, January 2026
Robert E. Greenfield '50, April 2026
N. Ruth Pace '50E (MA), March 2026
June Levin Stornelli '50, February 2026
John M. Wermuth '50, April 2026

Frank J. Cipolla '51E, '57E (MM), February 2026
David B. Fenn '51, May 2026
Howard K. Stott '51, June 2026
Richard J. Barker '52, January 2026
Michaeleen Insalaco Breneman '52, February 2026
Tyrone G. Martin '52, February 2026
Robert F. Osborne '52, '63 (MS), January 2026
Nancy Whipple Erbland '53, March 2026
Jean Wright Grimm '53E, January 2026
Helen Steiner Lewis '53, May 2026
Orpha C. Ochse '53E (PhD), April 2026
Janet Maney Potter '53, May 2026
Willetta Riley Rissell '53, January 2026
Diana Fearby Thomas '53N (Dpl), '57N, February 2026
Ian T. Hill '54, May 2026
Edward G. Mehrhof '54, April 2026

Clifton E. Peterson '54M (MD), February 2026
James L. Roth '54, February 2026
Alice Jones Russell '54, January 2026
Irma Rosen Wiener '54, March 2026
Joseph B. Pompa '55, May 2026
Brock H. Powell '55M (MD), '59M (MS), February 2026
Patricia Sandford Reilly '55N, December 2025
Werner E. Samson '55M (Res), May 2026
Suzanne Ebertz Westee '55N, March 2026
Walter A. Anderson '56 (MS), February 2026
George A. Castellion '56 (PhD), April 2026
William A. Guiffre '56, '63W (EdM), '78W (EdD), January 2026
David R. Mahon '56, '66W (MA), February 2026
Florence Denault Myers '56E, April 2026
Hugh D. Van Liew '56M (PhD), December 2025



GARY MORROW '88 (MS), 1944–2026

* * *

“One of Gary’s greatest gifts was his ability to build community. He created a culture of collaboration with a shared purpose: to improve the lives of patients with cancer.”

Read the tribute at rochester.edu/news/morrow.

Everett S. Ascher '57,
June 2026
Dorothy Daley Bell '57,
January 2026
Justin E. Doyle '57,
May 2026
Sanford L. Gold '57,
June 2026
Richard E. Huse '57,
December 2025
John L. LeBrun '57,
February 2026
Gerald J. Margolis '57,
April 2026
Aaron I. Paul '57,
January 2026
Alexander A. Piccirilli '57,
April 2026
Joyce Lodge Shaw '57,
January 2026
Carol E. Smith '57,
January 2026
Gerald I. Bridge '58,
January 2026
Robert D. Cushing '58,
April 2026
Charles P. Graceffo '58M
(MD), January 2026
Carl S. Huzzen '58, '62 (MS),
June 2026
Diane Austin Johanson '58,
June 2026
Robert O. McClintock '58M
(MS), December 2025

Maryann Strauss Sewell '58,
June 2026
Martin S. Weingarten '58,
May 2026
Martha Walker Welch '58,
'82W (MS), January 2026
Judith Banting Brovitz '59,
'80 (MS), April 2026
Raymond J. Cotroneo '59,
May 2026
Josephine Sciortino
Kehoe-Wood '59, '74W
(EdD), January 2026
Norman J. Marieb '59M
(MD), January 2026
Stuart Silfen '59, January 2026
Janet McAdam Tyler '59,
May 2026
James C. Foote '60,
March 2026
Linda Gilbert Gillim '60,
February 2026
Thomas Grubb '60,
November 2025
Thomas H. Ireland '60,
June 2026
Robert L. Milrad '60,
May 2026
James W. Richens '60E
(MM), January 2026
Joan Levy Stricker '60W,
January 2026
Beverly A. Ward '60E (MM),
March 2026

Roland J. Zavada '60S (MS),
February 2026
Marcia Bettigole '61E,
March 2026
Roger J. Boulay '61M (Res),
March 2026
Mary F. Boyce '61, '63E (MA),
March 2026
Laurie Bolvig Buchanan '61E,
February 2026
Richard J. Hopkins '61,
December 2025
Lester E. Lehr '61E (MM),
April 2026
Wilmer P. O'Connell '61S,
March 2026
Christina Ganey Short '61N,
June 2026
Robert A. Van Ostrand '61,
June 2026
James H. Willey '61E, '72E
(PhD), February 2026
Susan Aronson '62,
December 2025
Ronald J. Cole '62M (MD),
June 2026
Linda Lukas Collins '62W
(EdM), May 2026
Thomas A. Delaney '62M
(MD), March 2026
Lawrence S. Harte '62M
(Pdc), May 2026
Richard E. Herrick '62W
(MA), February 2026

William E. Muar '62W (EdM),
February 2026
Carl J. Richane '62,
May 2026
Leonard N. Schoenberg '62,
May 2026
Richard A. Sorenson '62E
(MM), March 2026
Norman E. Watt '62M (MD),
April 2026
Richard L. Booth '63S,
April 2026
John E. Collins '63E (MM),
February 2026
Max R. Conner '63E,
April 2026
Albert B. Deisseroth '63,
'69M (PhD), '70M (MD),
November 2025
Sharon W. Hicks '63, '66W
(MA), February 2026
Alexander A. Levitan '63M
(MD), March 2026
Regina M. Lopes '63E (MM),
November 2025
Bruce B. Marsh '63 (PhD),
March 2026
Stephen E. Natelson '63M
(MD), May 2026
Lynne Stevens Sheldon '63,
January 2026
Robert A. Allen '64 (MA),
February 2026
William R. Armstrong '64E,
February 2026
Wyan Gaw Bovay '64,
May 2026
Robert A. Kirchner '64M
(MS), April 2026
Roger G. Lang '64,
November 2025
Barbara Copeland Perry '64,
February 2026
Peter S. Pesco '64E,
May 2026
Howard J. Schneider '64M
(MD), February 2026
John E. Burruto '65,
March 2026
Barbara Hanford Hanna
'65W (MA), March 2026
Patricia Vyner Hawks '65,
May 2026
Thomas A. Klein '65M (MD),
November 2025
Wayne T. Lindstrom '65,
April 2026
Alva Aubrey Marticelli '65N,
'69N (MS), January 2026
Lucille E. Shifrin '65,
May 2026
Shirley Kabakoff Block '66W
(MA), May 2026
James H. Chesebro '66M
(MD), '68M (Res),
February 2026
Sandra Sack Donahue '66,
February 2026

Suzanne Hawley '66,
December 2025
Charles H. Newton '66S
(MS), February 2026
Annette Inneo Stanton '66E
(MM), May 2026
James W. Taylor '66,
January 2026
Newel K. Brown '67E (PhD),
November 2025
Kathryn Stuart Cooper '67,
'68W (MA), December 2025
Richard H. Deerhake '67,
March 2026
George J. Horner '67,
March 2026
Paul A. Hudon '67,
December 2025
Steven B. Oppen '67S,
May 2026
Albert A. Post '67M (MS),
March 2026
Peter A. Requa '67, April 2026
Robin L. Stone '67,
January 2026
Curtis T. Stotlar '67E,
April 2026
J. Peter Vernon '67,
April 2026
Susan M. Wedda '67,
April 2026
Harriet Voss Zimmerman
'67E, '75E (MM),
January 2026
Joseph L. Accongio '68,
April 2026
Robert S. Calman '68,
April 2026
Thomas W. Cimino '68,
April 2026
John E. Duffner '68,
February 2026
David B. Jarrett '68,
April 2026
Robert H. Lobliner '68M
(MS), December 2025
Mary E. Neubert '68 (PhD),
January 2026
Ian H. Altman '69E, '72E
(MM), April 2026
Alan D. Arkawy '69,
November 2025
Richard A. Dienstbier '69
(PhD), February 2026
Susan Rasmus Jones '69,
March 2026
Charles R. Leyton '69,
January 2026
James M. Mangano '69,
June 2026
William B. Nielander '69,
May 2026
Edward D. Rossmann '69
(PhD), March 2026
Patricia Leshner Strickland
'69N, June 2026
Steven P. Wyner '69,
January 2026



ALEXANDER "AL" LEVITAN '63M (MD), 1939–2026

* * *

"Al Levitan embodied the University's highest aspirations: excellence, compassion, curiosity, and service to humanity."

Read the tribute at rochester.edu/news/levitan.



MARY HUTH '81, 1944–2026

* * *

“Mary was a tireless investigator, archivist, and a devoted champion of Susan B. Anthony’s life and legacy.”

[Read the tribute at rochester.edu/news/huth.](https://rochester.edu/news/huth)

Donald A. Buermann '70S, January 2026
Michael C. Campa '70 (MS), March 2026
Clifton T. Furukawa '70M (MD), February 2026
Samuel M. Hazlett '70M (MD), January 2026
Joseph T. Kammerer '70S (MBA), February 2026
John J. Kim '70 (PhD), March 2026
Arthur B. Ritter '70 (PhD), January 2026
James L. Wolf '70, April 2026
Michael A. Wolfson '70, May 2026
William K. Boaf '71 (MA), January 2026
James E. Boyle '71W (EdM), April 2026
Michael G. Cheifetz '71 (PhD), February 2026
Joyce Monteau Dean '71, November 2025
Donald H. Horner '71, '77W (MA), January 2026
Stephen M. Kane '71, March 2026
Steven A. Newman '71M (MD), February 2026
Lloyd A. Relyea '71, February 2026

Ann S. Winn-Mueller '71, February 2026
Kathryn Madden Wood '71N (MS), June 2026
Ann Nicholson Baker '72, '76W (EdM), April 2026
Albert E. Gunn '72M (Res), February 2026
Thomas Johnston '72M (Pdc), June 2026
Kenneth S. Lane '72M (MD), February 2026
Monte K. Pishny-Floyd '72E (PhD), October 2025
Teryle Thomas Watson '72E, March 2026
Edward N. Bailey '73M (Res), January 2026
Kornelijus G. Cieminis '73, January 2026
Jean Hardman Duncan '73M (Res), February 2026
Lauren M. Eyres '73, January 2026
Ellen Gillespie Galo '73E, December 2025
Blair R. Hendershot '73, January 2026
Lawrence S. Hershoff '73S (MBA), January 2026
Tynette Wilson Hills '73W (EdM), November 2025
Robert E. Lyons '73S (MBA), February 2026

James P. Neimeier '73S (MBA), February 2026
Pawan J. Singh '73 (PhD), February 2026
Race P. Bergman '74W (EdD), April 2026
Lionel Cudzinowski '74M (Pdc), March 2026
Jo Ann S. Janas '74M (MD), '81M (Res), April 2026
Shirley J. Allen '75N (Crt), June 2026
Alan H. Nye '75 (PhD), January 2026
Anthony L. Panzica '75W (EdD), March 2026
Kathy A. Robertson '75, January 2026
Warren S. Abrahams '76, February 2026
Ervin Chambliss '76, February 2026
Patricia Harvey Fleming '76 (PhD), May 2026
Ralph “Lin” Saunders Jr. '76M (Res), '80M (Pdc), '88M (MS), May 2026
Virginia Brown Smith '76E, March 2026
Margaret E. Thom '76, January 2026
Mojtaba Dini '77M (Res), June 2026

Craig G. Hall '77, '83M (MS), '84M (MD), February 2026
Charles A. Kaye '77S (MBA), December 2025
Walter S. Kovshik '77E, November 2025
Harold J. Pontiff '77, May 2026
William F. Rhatigan '77S (MBA), January 2026
Andrea Corcoran Walter '77W (EdD), April 2026
Darlene Zeliff '77N (Dpl), February 2026
Terry M. Badger '78S (MBA), April 2026
Monica H. Bauer '78S (MBA), June 2026
Roger D. Griffioen '78 (Flw), January 2026
Girish H. Kulkarni '78S (MBA), February 2026
Gary M. Powers '78, March 2026
Peter A. Chryssos '79, May 2026
Michael W. Geer '79, March 2026
Frank J. Harrison '79S (MBA), June 2026
Carol Young Jones '79N, June 2026
Wayne J. Sebastianelli '79, '83M (MD), '88M (Res), May 2026
Hannelore Maierhofer Yoos '79N (MS), '91W (PhD), March 2026
Daniel S. Marder '80S (MBA), May 2026
Martha T. Stack '80, April 2026
John F. Bruckel '81S (MBA), June 2026
Mary M. Huth '81, June 2026
Dominick P. Stirpe '82, January 2026
Kurt A. Cummings '83S (MBA), January 2026
Joseph R. DeBaise '83E (PhD), March 2026
Daniel J. Harkavy '83, February 2026
Michele A. Smith '83E (MA), December 2025
Nancy Sperr Iafrati '84N (MS), April 2026
Kathleen Sanders Jordan '84N (MS), December 2025
Gabriel E. Pantelias '84M (PhD), May 2026
Ellen A. Segelin-Siegel '84, April 2026
Ben R. King '85E (DMA), April 2026
Scott A. Teitelbaum '85M (MD), April 2026

Sharon Alger-Mayer '86M (Res), January 2026
James Loughlin '86S (MBA), February 2026
Deborah D. Bastow '87S (MBA), May 2026
Stephen C. Rumsey '87S (MBA), February 2026
Wilfred J. Schrouder '87S (MBA), April 2026
Rekha Shrivastava '87W (MSE), June 2026
Robyn C. Kaplan-Cho '88, June 2026
Daniel W. Koon '88 (PhD), May 2026
Susan Hudson D’Zmura '89 (PhD), April 2026
Neal A. Seidberg '89, March 2026
John F. Whitaker '89 (PhD), February 2026
Richard S. Zellmer '89S (MBA), December 2025
Colleen K. Keenan '90N (PhD), November 2025
Michael A. Pero '92, April 2026
Katherine Rogers Arnold '93, February 2026
John D. Lloyd-Jones '93S (MBA), June 2026
Deborah Tien Price '93E, December 2025
Ruth Anne Caselli Scott '94N (MS), March 2026
Robert P. Burns '95M (PhD), January 2026
Peter W. Crane '96, '06S (MBA), '18M (AC), March 2026
James M. Bothwell '97M (MD), '02M (Res), March 2026
Anthony F. Devincentis '98, April 2026
Christine M. Formicola '98N, January 2026
Yanfang Ren '98M (Pdc), '99M (Pdc), '06M (MPH), March 2026
Jonas M. Kumpitch '01S (MBA), January 2026
Ryan M. Pettibone '08, February 2026
Amanda Welker Mari '09S (MBA), April 2026
Joseph W. Ambrosetti '11S (MBA), April 2026
Christopher R. Wong '11, October 2025
Elizabeth Ewell Turner '12W (MS), February 2026
Kurtis G. Haut '18, '25 (PhD), June 2026
Amanda V. Broadmeadow '21, May 2026
Stacey Burkholder '22W (AC), June 2026

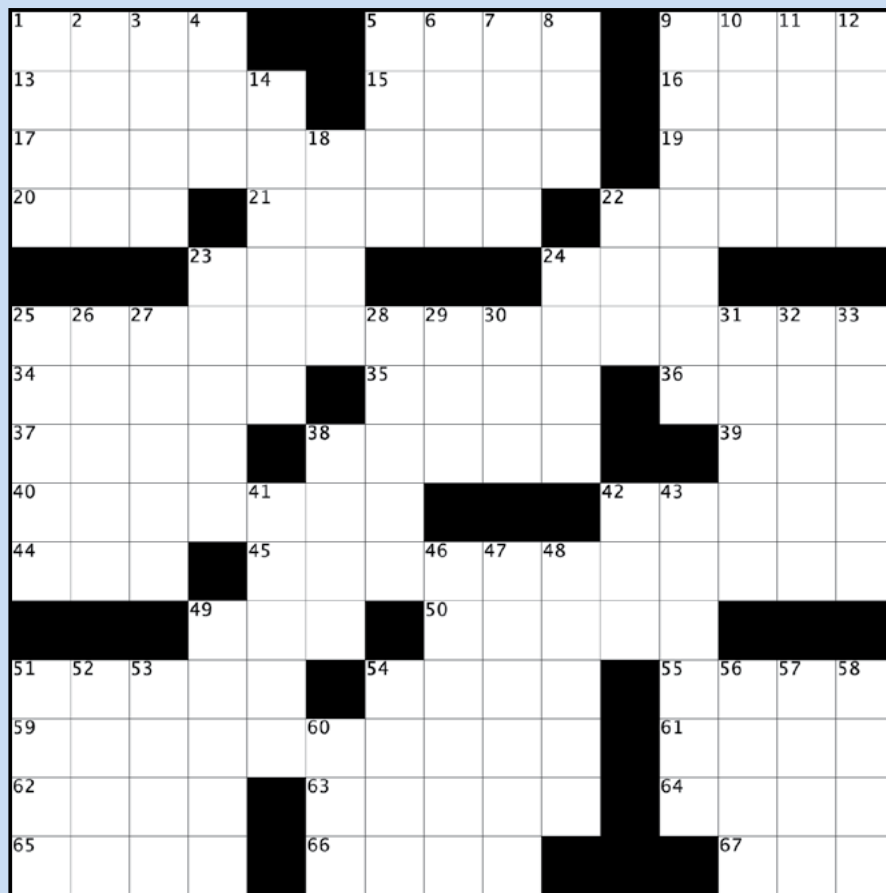
It's a Gas, Gas, Gas

ACROSS

1. Facts and figures analyzed by methane researchers
5. ____ Heron (research vessel used by Professor John Kessler)
9. URochester atmospheric scientist Crowell who studies climate change
13. Savory flavor
15. Material for a knitter
16. Veggie with curly leaves
17. What you can do with food waste to reduce methane emissions
19. Oceanographer Jacques-____ Cousteau
20. Three, in Italian
21. Has to have
22. What "i.e." stands for
23. Title granted to British methane researcher Anthony Cheetham
24. Prefix with "cure" or "center"
25. What you can do after a meal to reduce methane emissions
34. Flood-preventing structure
35. Sister of Sansa on *Game of Thrones*
36. *Night* author Wiesel
37. Low-pH substance
38. Month of Dandelion Day
39. "Kings & Queens" singer ____ Max
40. Throb rhythmically
42. Absolutely essential
44. Soon-to-be URochester grads: Abbr.
45. Clean-energy option to reduce methane emissions
49. Part of the Goergen Athletic Center
50. "It's the ____ I can do!"
51. Give your consent
54. Not domesticated
55. Becomes mature
59. Kind of protein you can eat to reduce methane emissions
61. Lake ____ (site of a methane extraction project studied by Kristin Doughty)
62. Uncontaminated
63. The ____ of defeat
64. Like a tie score
65. Notices
66. Payment for off-campus housing
67. Rowing machine, for short

DOWN

1. Air passage
2. Love, in Spanish
3. Not very exciting
4. Concert sound booster
5. Unit equal to eight bits
6. Installed, as tile
7. Coffee dispensers
8. Language of the UK: Abbr.
9. Jump with a parachute
10. Edge of a roof
11. Drinks at Murphy's Law Irish Pub
12. Home built by yellowjackets
14. Make electrically charged
18. Lacking in moisture
22. Event a Simon School student might analyze
23. "Sowing the ____ of Love"
24. Abbreviation seen in research citations
25. Parts of envelopes
26. Happen again
27. Wicked deeds
28. Place to show your school spirit with a pin
29. Make a mistake



30. "No action needed" abbreviation
31. Greatly gladden
32. RIT, to URochester
33. Tightly closes
38. One of five in a methane molecule
41. So far
42. Nickname of URochester professor and methane researcher Petrenko
43. Everything you eat and drink
46. Actress Brie of *Community*

47. Grow lenient
48. Rice field that's a common source of methane emissions
49. They're studied in URochester's BIOL 101 course
51. Programs like UR Mobile
52. Adhesive for scrapbooking
53. Highly unusual
54. Worker's hourly payment
56. Become a Rochester Loyal, say

57. "____ Better" (what "Meliora" translates to)
58. Like Eastman Opera Theatre performances
60. Filgers East End, for example

Send a photo of your completed puzzle to rochrev@rochester.edu or post it on social media with the hashtag #RochesterReview for a chance to win exciting prizes! We'll choose the lucky puzzlers on December 31, 2026. (Psst: The solution can be found at rochester.edu/news/review.)



University of Rochester

What happens when you study a song ...

and the mind that hears it?

Some of the best discoveries begin with one question. At URochester, curiosity connects ideas, disciplines, and people—opening new ways to think, understand, and create. What will your curiosity uncover next?

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ALSO IN THIS ISSUE

**Hot on the Trail with the Methane
Hunters** P.12 > **Rethinking Power on
Lake Kivu** P.28 > **The Science of
Showing Up** P.40 > **Making Music Inside
Monroe County Jail** P.44 > **Looking
Smart on the First Day of Classes** P.50
> **Shake Shack's Big Cheese** P.54