



STUDENT LIFE

Home Away from Hurricanes

SPECIAL GUESTS: Puerto Rican college students—Andrea Rosado-Quinones, Joshua Rosario, Brian Basu, Adriana Santiago, Syanis Vargas González (seated), Claudine Daneri De Leon, and Mariana Ortiz—are studying and living as guest students at the University this spring while their island home recovers from Hurricane Maria. Rochester was one of many leading universities and colleges that offered students affected by last year's hurricanes a place to keep their studies on track during the recovery.

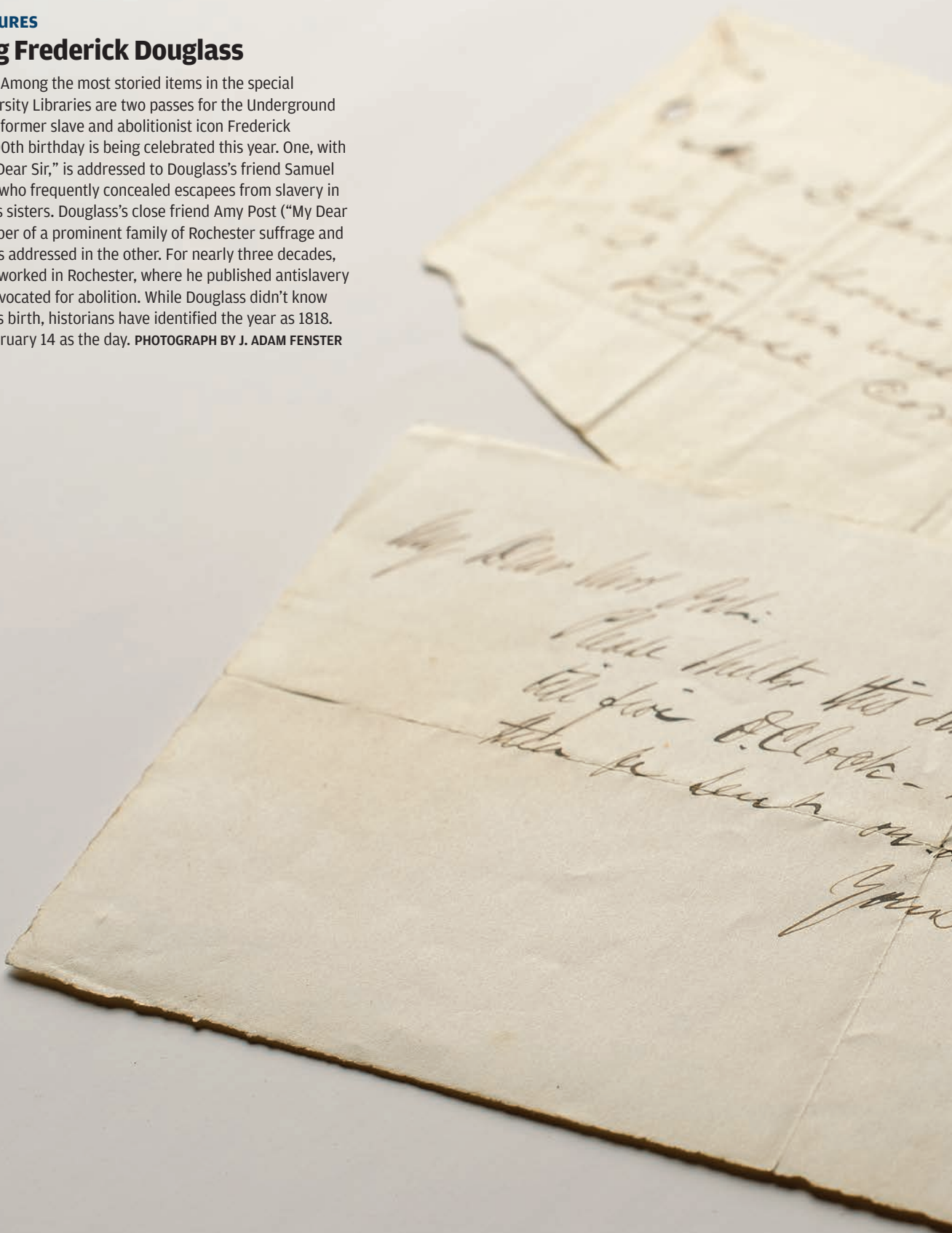
PHOTOGRAPH BY J. ADAM FENSTER



ARCHIVAL TREASURES

Celebrating Frederick Douglass

PRECIOUS PAPERS: Among the most storied items in the special collections of University Libraries are two passes for the Underground Railroad written by former slave and abolitionist icon Frederick Douglass, whose 200th birthday is being celebrated this year. One, with the salutation “My Dear Sir,” is addressed to Douglass’s friend Samuel Drummond Porter, who frequently concealed escapees from slavery in a barn owned by his sisters. Douglass’s close friend Amy Post (“My Dear Mrs. Post”), a member of a prominent family of Rochester suffrage and abolition activists, is addressed in the other. For nearly three decades, Douglass lived and worked in Rochester, where he published antislavery newspapers and advocated for abolition. While Douglass didn’t know the exact date of his birth, historians have identified the year as 1818. Douglass chose February 14 as the day. PHOTOGRAPH BY J. ADAM FENSTER



... these men ...
... in great ...
... need your ...
... advice.
D. C. ...

... from the house of ...
... this afternoon - We will
... the land of ...
... of ...
...
...

The Making of a Nanomembrane

Greg Madejski held his breath as he looked into the microscope, trying to weld two fingernail-sized chips together: a tiny chip containing a nanofilter on top of another chip with a DNA sensor.

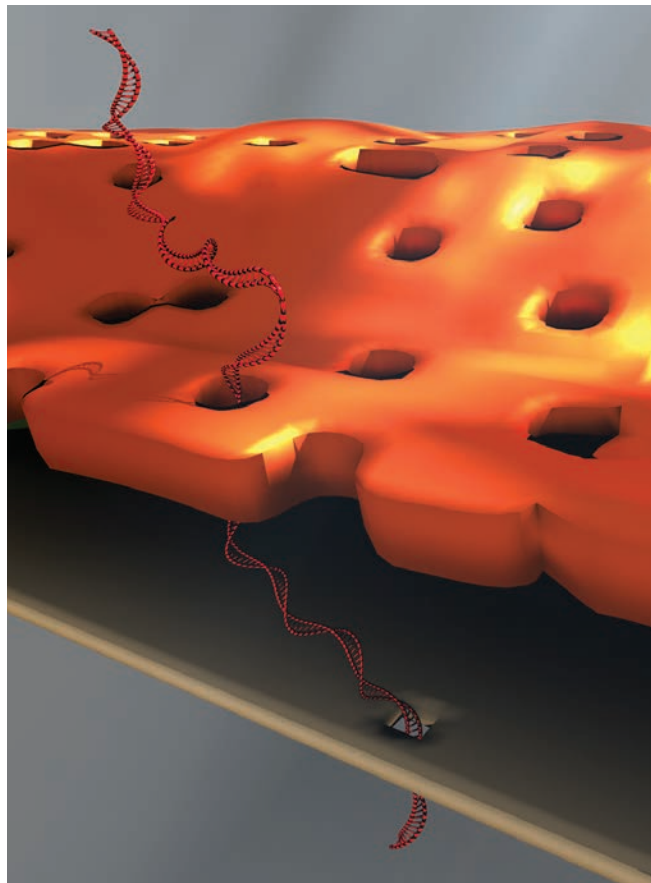
It was frustrating work. The chips weren't making good contact with each other. Madejski gently poked at the chips, then peered over the top of the microscope.

And exhaled.

The sudden waft of warm air swept over the nanofilter, transferring it ever so neatly on the target. The "accident" led Madejski—a PhD student in the lab of biomedical engineering professor James McGrath—to an important insight: that the condensed water vapor in his breath had caused the nonfilter to adhere to the sensor.

The result of Madejski's work is a novel device for detecting DNA biomarkers affiliated with disease.

Described in *Nano Letters*, it's comprised of three ultrathin layers: a nanoporous silicon nitride membrane which serves as a prefilter; a biosensor membrane with a single nanopore; and a spacer layer, filled with less than a femtoliter of fluid, that allows the two outer layers to adhere.



DISEASE DETECTIVE: A Rochester-developed nanomembrane consisting of three layers can detect DNA biomarkers affiliated with disease.

During operation, the device uses an electric field to lure a strand of DNA to enter one of the pores of the prefilter and then pass through the spacer layer to

reach the pore of the underlying sensor membrane. That triggers changes in the device's electrical current that can be detected and analyzed. —Bob Marcotte

New Directions in Neuroprosthetics?

Novel research is helping scientists figure out how to harness the brain's plasticity to rewire neural connections lost through injury or stroke.

In a study published in the journal *Neuron*, Marc Schieber, a professor of neurology at the Medical Center, and Kevin Mazurek, a postdoctoral fellow in Schieber's lab, show that very low levels of electrical stimulation—delivered directly to an area of the brain responsible for motor function—can take the place of signals that the brain typically processes in response to sounds, images, and other sensory perceptions.

"The analogy is what happens when we approach a red light," says Schieber. "The light itself does not cause us to step on the brake."

"Rather, our brain has been trained to process this visual cue and send signals to another part of the brain that controls movement. In this study, what we describe is akin to replacing the red light with an electrical stimulation which the brain has learned to associate with the need to take an action that stops the car."

The findings could have significant implications for the development of brain-computer interfaces and neuroprosthetics, allowing people to control prosthetic devices by tapping into the electrical activity of their brain.

"Most work on the development of inputs to the brain for use with brain-computer interfaces has focused primarily on the sensory areas of the brain," says Mazurek.

The study shows "you can expand the neural real estate that can be targeted for therapies" by bypassing damaged parts of the brain where connections have been lost.

—Mark Michaud

Even Adults Need 'Time Out'

In both her daily life and in her life as a scholar, Thuy-vy Nguyen has observed that solitude is often discussed as something that's either "good" or "bad." But the doctoral candidate in Rochester's Department of Clinical and Social Sciences in Psychology posed an alternative question about solitude.

"I decided to take a step back and just simply look at what solitude does, observe its effect, and let it speak for itself," she says.

The results, published in the *Personality and Social Psychology Bulletin*, suggest that as little as 15 minutes of solitude decreases a person's strong positive and negative emotions, inducing calm. That can lead to relaxation and stress reduction—as long as people actively choose to be alone, adds Nguyen.

The study defined solitude as "a psychological experience of being alone without communications, stimuli, activities, or

devices that might facilitate virtual communications such as text messaging or social media."

"When people willingly spend time alone, they reap the greater benefits—something that, of course, has always been a part of ancient wisdom and practices," says Richard Ryan, a professor of psychology at Rochester and a coauthor. "Here we simply demonstrate the emotional changes that account for these benefits." —Sandra Knispel

In the Mystery of Positrons, Dark Matter Is Leading Suspect

In 2008, satellites detected an unexpectedly large presence of high-energy positrons—antimatter particles with the same mass as an electron, but with a positive charge—in our neighborhood of the galaxy.

Researchers proposed several explanations, including that they had come from pulsars—massive stars that have collapsed and exploded, spinning and throwing off electrons, positrons, and other matter. But in a report published in *Science*, researchers at the High Altitude Water Cherenkov (HAWC) Gamma Ray Observatory in Mexico report that pulsars are unlikely to be the cause of the excess positrons.

To Segev BenZvi, an assistant professor of physics at Rochester and member of the HAWC collaboration, that's exciting news. If pulsars aren't the source, then the positrons might come from something more complex and exotic: the annihilation of particles from dark matter.

Dark matter is so named



'OBSERVING' DARK MATTER? Dark matter can't, in fact, be seen. But this gamma-ray observatory in central Mexico, built with the help of Rochester researchers, may have detected signs of its workings.

because nobody can see it, but scientists can tell it exists because of its gravitational influence. "Although this doesn't prove that dark matter is the source of the excess, we have ruled out the two most obvious source candidates," BenZvi says.

"The nature of dark matter remains one of the biggest

unanswered questions in astrophysics," says Mehr Un Nisa, a PhD student of BenZvi's. "Getting closer to figuring out what dark matter is made of will help us understand how it holds galaxies together and the role it plays in large-scale structure formation in the universe."

A member of the HAWC

collaboration since the observatory was constructed in 2011, BenZvi, along with PhD students Nisa and Chang Rho and post-doctoral researcher Tolga Yapici, assisted in building parts of the observatory's detector, including writing software and algorithms for measuring the gamma ray output.

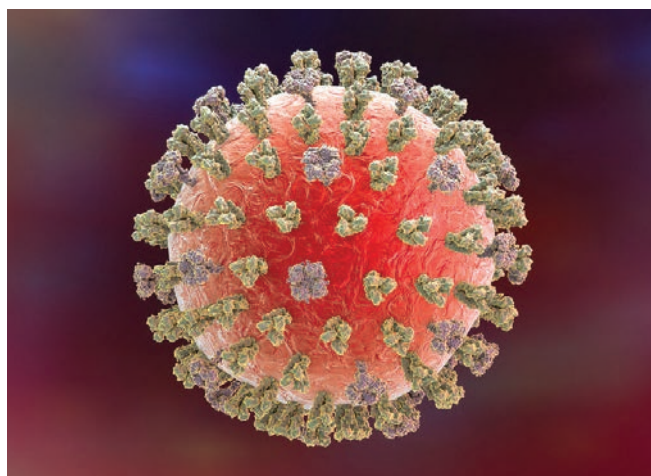
—Lindsey Valich

Progress—of Sorts—in Quest for Flu Vaccine

Researchers around the world are pursuing a "universal" flu vaccine to protect against most or all seasonal and pandemic strains of the flu virus. Research led by David Topham, the Marie Curran Wilson and Joseph Chamberlain Wilson Professor in the Department of Microbiology and Immunology at the Medical Center, suggests that one of the most promising strategies won't be bulletproof.

That strategy has been to target the "stalk" of a protein that covers the flu virus. The hemagglutinin protein, which blankets the outside of the flu virus, looks a bit like a flower. It has a stalk and a head. Current vaccines target the head, which is the part of the virus that's always changing in an effort to evade our immune defenses.

But in the journal *Nature Scientific Reports*, Topham says that



FLOWERING FLU: The stalk-like spikes that protrude from the flu virus may be more variable, and better able to adapt to our immune systems, than researchers supposed.

contrary to popular assumption, the stalk can also change.

Using supercomputers at the University's Health Sciences Center for Computational Innovation, Topham and colleagues

analyzed the genetic sequences of human H1N1 flu viruses circulating since 1918. They found variations in both the head and the stalk, although variability was highest in the head.

In the lab, they coupled the H1N1 virus with human antibodies—immune system soldiers that fight off foreign invaders. Not surprisingly, repetitive exposure to the antibodies caused many mutations in the head, as it worked to escape the immune system's clutches.

But it also led to modifications in the stalk. The results suggest that the stalk can vary in response to pressure from the immune system.

"The good news is that it's much more difficult to drive mutations in the stalk, but it's not impossible," says Topham. "A universal flu vaccine based on the stalk would be more broadly protective than the ones we use now, but this information should be taken into account as we move forward with research and development."

—Emily Boynton



POETRY

Uniting the Spare and the Spooky

Poet James Longenbach's new book of poetry 'looks about,' with clarity.

By Kathleen McGarvey

Earthling, the newest book of poetry by James Longenbach, the Joseph H. Gilmore Professor of English, had its roots in a poem he wrote called "Pastoral."

"I heard something in it that sounded fresh to me," he says, a different tone than in his previous poetry collection, *The Iron Key* (W. W. Norton, 2010). "It seemed to be talking about ordinary

TO LISTEN TO JAMES LONGENBACH read "The Dishwasher" and "Huntington Meadow," search for "Longenbach" at Rochester.edu/newscenter.

things, but in a way that made them seem at the same time kind of spectral or otherworldly. There was also the capacity for wry humor in that tone—and all of that seemed exciting to me."

Written first, "Pastoral" ultimately became the final poem of *Earthling* (W. W. Norton, 2017), the poet and literary critic's fifth poetry collection. The tone drove the book's development, and the collection's overarching narrative isn't one of events, "but of feeling or spiritual development," he says.

Publishers Weekly calls *Earthling*—which is one of five finalists for this year's National Book Critics Circle Award for poetry—"a

moving case for love's power to sustain us." The book moves constantly between the mundane and the mystical as it contemplates mortality, giving voice to a range of emotions that knowledge of life's finiteness can create.

The shifting viewpoints are exemplified perhaps nowhere more dramatically than in "The Crocodile," a poem that playfully considers the perspective of that creature. But the whimsy also offers Longenbach an opportunity to reflect on his own mother's death—an experience that, despite his efforts, had found no home in his poetry before.

"I don't remember quite how it happened. I just got the idea of using this fanciful trope of the speaking crocodile as a way to get at the reality of this confrontation with mortality," he says. The lines in the poem's fourth section are plain and terse:

*When my mother died,
I was right beside her.
She'd been unconscious for a day.
My sister and my father were there, too.*

"It's hard to get more flatly clear and straightforward in language than that," he says, and hopes that what is evoked is also "spooky and revelatory." He brings together the flatness of his



Poet's Plans: A poetry collection takes shape gradually, Longenbach says, as patterns emerge. Jettisoning poems that don't fit the structure, though painful, is good: "It suggests the developing book has integrity, that it's speaking back to you and demanding things of you."


language with the conceit of the crocodile as he ends the section:

*Then, immediately, the color left her face,
She was no longer in her body,
And she sank beneath the lagoon.*

"All I'm ever trying to do is to be scrupulously and absolutely clear about what I'm saying," Longenbach says. "It's become a discipline to me that has taken my poems to their strangest places, because trying to be very clear about things is a difficult, dangerous, and unsettling practice."

The title *Earthling* came to him when he discovered that it was one of the oldest words in the language, an Old English term for a person who plows or tills the earth.

"I'd assumed it was 1950s sci-fi speak: 'Take me to your leader,'" Longenbach says. "I thought it was entrancing that 'earthling' was our name for a person intimate with the soil. And it seemed like the perfect emblem for the tone that was distinguishing these poems as they accumulated—the little earthling coming out of his hole in the ground to look about.

"It's the vulnerability of it, yet the substantial inevitability and necessity of it, too." 

The Dishwasher

For many years I saved my money, bought a car, a used Chevette.
Lean on me, said the radio, *when you're not strong*.

I'd known that song since I was young but every time I heard it
I wanted to hear it again.

I drove to the supermarket, then drove home.

I looked in the refrigerator, under the bed.

As if I were standing in the kitchen, unloading the dishwasher,
holding the phone,

I heard my mother's voice.

I heard it plainly, as if she were standing in the room.

I know it's early, she said,

But I'm planning ahead for Christmas.

So I'd like to remember: What kind of coffee do you like?

Regular, or decaf, or both at certain times?

I want to be prepared, in case you'd like a cup when you're here.

Huntington Meadow

Though I come from a long line of people intimate
With the bodies of horses,

Today, for the first time, I touched a horse.

I placed my hand on its left flank, just behind the shoulder.

The horse was standing beside me, eating grass.

I'm speaking here of things that come to feel essential

Though they happen at one moment in time.

You've never done it, then you've done it before, you're good at it.

You can't imagine your body without it.

Tanqueray up with an olive,

Nobody home, the brine

Still unexpected at the bottom of the glass.

When I touched the horse, I didn't move my hand.

The hide more skin than hair,

The muscle beneath it visceral, relaxed,

More like a lover's than a dog's.

Then, after I took my hand away, I immediately put it back.

The horse seemed all the while

Perfectly happy, ripping up grass at the roots.

That was the only sound, the sound

You hear when you're gardening, weeding the lawn,

Somebody right there beside you, also weeding,

Though because you lack nothing

You're also completely alone.

*Poems are reprinted with permission from Earthling
by James Longenbach; W. W. Norton, 2017.*



RECONSTRUCTING HISTORY: A section of the Erie Canal east of Rochester (above) had to be rebuilt several times, an example of the challenges encountered in constructing the famed waterway, part of the story told by students in a podcast series on the environmental history of the canal.

TEACHING & LEARNING

Podcasting History

An auditory exploration of the Erie Canal marks the debut of a new podcast series.

By Sandra Knispel

For many students, research papers are par for the course. But, according to Thomas Fleischman, an assistant professor of history, there's a shortcoming to the traditional academic capstone: students write for an audience of just one—their professor.

That's why Fleischman, an environmental historian, took a different tack in his course on the environmental history of the Erie Canal, the 200-year-old waterway built to boost the economy of New York and other parts of the country. In lieu of a final paper, the class teamed up to create a podcast series. *Under the Low Bridge*—which borrows its name and theme song from Thomas S. Allen's popular folk song "Low Bridge"—is part of the history department's new podcast program, *Hear UR*.

"I thought a podcast would offer an op-

portunity to engage in the traditional skills of historical practice, meaning, research, writing, editing, and crafting a narrative," says Fleischman, "but also producing something for a broad public audience."

No quibbling from his students.

"It was so unconventional," says Adrian Harwood '18, an international studies major from Maastricht, in the Netherlands. "Everybody's desire to make a good quality piece of work to benefit everybody else really drove me to commit to the process."

The project includes six episodes, with titles such as "Bridging the Gap," about struggling to build an embankment against the natural layout of the land, to "Canal Fever," an examination of the diseases faced by canal laborers.

Sophia McRae '19, a double major in history and environmental humanities from Rochester, coproduced an episode—"Barg-

ing through Conflict"—that takes listeners on an auditory tour to the top of a 30-foot rickety wall of iron and wood, old railroad lines crossing over the canal, pedestrian bridges, and now a major highway built on top of the site of the original canal.

The podcast made her see her hometown differently, says McRae. "It's been one of the most enlightening processes of this past semester."

More podcasts are in the works, promises Fleischman, who admits that he was pleasantly surprised at how well the series turned out. "I was learning along with them," he says. "Now I have seen that it can be successful and intend to carry it forward."

Season two starts in the spring of 2019. The subject? Rochester-trained Carl Akeley, who rose to fame in the early 20th century as the designer of the taxidermy animals in New York City's American Museum of Natural History.

Stay tuned. 🎧

TO LISTEN TO THE PODCAST, visit <http://tffleisch.digitalscholar.rochester.edu/hearur>.

Ask the Archivist: Can I See the Charter?

A question for Melissa Mead, the John M. and Barbara Keil University Archivist and Rochester Collections Librarian.

I'm interested in the founding documents of the University. What are they? Are copies available on the internet? How can I see the University charter?—Mark Doehnert '71, Falls Church, Virginia

One could likely designate several founding documents. The “Form of Subscription,” for example, set out the terms of our very first fundraising effort in 1849. The September 1850 *Plan of Instruction* outlined the earliest Rochester curriculum. But most important of all, perhaps, is the University’s charter, for its legal and symbolic value. Granted by New York State on January 31, 1850, and finalized on Valentine’s Day in 1851, the text includes a phrase which resounds to this day: a pledge to establish “an institution of the highest order for scientific and classical education.”

The document itself is a thing of beauty. Intricate gold-leaf borders on each vellum page were probably applied with a stencil. The text and images are the work of calligrapher David Vaughan (circa 1802-1865). Vaughan emigrated from Ireland in 1847 and was quickly hired by the Office of the New York State Engineer and Surveyor in Albany. His work, even when unsigned, can be identified by his characteristic flourishes and his minute, often humorous, drawings. Albany binder A. L. Harrison created a cover that is almost as splendid as the contents. Harrison invented a process to quickly (and thus cheaply) embellish bindings by using a brass stamp to outline designs which were then painted. Our charter sports patriotic red and white banners and an eagle’s head on a blue leather background.

Creating our charter was probably freelance work for Vaughan. A total of \$25 was paid to Harrison for “scribing, illuminating, parchment, and binding,” and was paid

in full on May 1, 1851.

The Archives celebrates Charter Day every January 31, with a display in Rush Rhees Library. If you can’t make it to Rochester, you can see pictures of the charter, its binding, and the promptly paid invoice online at <http://rbscp.lib.rochester.edu/blog/archives>.

My grandmother collected postcards and had one of the Anderson Statue, postmarked July 7, 1926. Can you tell me who the writer was and what she was doing at the University in the summer?—Joshua Jacobs, assistant director for events, Simon Business School

We have many postcards depicting the University in the Archives—some blank and others, like yours, with messages. There are



PERFECT PICTURES: The original location of the statue of first president Martin Anderson inspired postcards (above), while the University’s charter (below) is itself a work of art.

remarkably few that we can trace to students, perhaps because so many early enrollees were local to Rochester.

The card, sent to William F. Deeney of Batavia, New York, reads:

*Dear Dad,
I finally found a key to unlock my traveling bag—a girl from near Boston, Massachusetts had one to fit. To-day has been the warmest we’ve had here, I think. With love,
Your daughter
Gerry*

Geraldine Deeney was not a graduate of the University; she earned her degree from the Geneseo Normal School and spent her career, from 1920 to 1965, teaching in the Batavia school system. So what was she doing living in the Eastman Dormitory in the summer of 1926? Summer school, of course!

She began taking classes during the summer of 1924, and continued her education for the next three summers, returning for the last time in 1939. The description of the summer sessions notes: “While the work offered is primarily of interest to teachers, practically every branch of University instruction will be given. The regular University faculty will be supplemented by experts in various specialized fields. . . .” Deeney chose a wide variety of coursework in biology, English, Greek, history, and of course, education.

The card she sent home is a particularly lovely example. Produced from a photograph using a commercial collotype process, it was issued by the Albortype Company in Brooklyn, New York, and published by Rochester’s own Sibley, Lindsay & Curr. The Anderson statue dominates the scene, with slivers of three campus buildings in the background: Anderson Hall to the right, Kendrick Hall (a dormitory) beside it, and Sibley Hall to the left.

Need History?

Do you have a question about University history? Email it to rochrev@rochester.edu. Please put “Ask the Archivist” in the subject line.



MUSIC HOME: Home to the Eastman Community Music School, Messenger Hall is undergoing a renovation project to update classrooms, studios, and other spaces for the 1,600 area musicians who study there.

Renovations Begin for Eastman Community Music School

Nearly 1,600 students—ranging in age from a few months to more than 90 years—will soon be practicing and studying music in newly renovated studios, classrooms, labs, and other facilities on the campus of the Eastman School of Music.

Messenger Hall—home to the Eastman Community Music School, a community-oriented educational program that’s been part of Eastman since the school’s

founding in 1921—is undergoing a \$2.8 million renovation project.

The work, which began last fall, includes a keyboard lab, classrooms, 24 teaching studios, percussion and drum set studios, designated waiting spaces for parents, an exterior facelift, and interior upgrades.

The primary supporters of the initiative are Karen Rettner, a member of Eastman’s National Council, and her husband,

University Trustee Ron Rettner. Other contributors include the Kenlou Foundation, the Williams Family, Nancie Kennedy ’79E (MM), the Spindler Family Foundation, and members of Eastman Community Music School’s community, as well as a grant from the Finger Lakes Regional Economic Development Council.

The project is expected to be completed by this fall.

—Jessica Kaufman

Eastman Names Warfield Scholar

Vocalist Jonathan Rhodes ’20E, ’20 is this year’s William Warfield Scholar at the Eastman School of Music.

Named in recognition of the internationally renowned soloist, actor, and Eastman graduate, the William Warfield Scholarship was founded in 1977 to promote opportunity for African-American artists who are pursuing a career in vocal performance and to honor the life and legacy of Warfield ’42E, ’46E (MM).

A second-year student of Anthony Dean Griffey, a professor of voice, Rhodes is also a political science major in the College.

Originally from Orlando, Florida, he made his performance debut with the Minnesota Opera’s youth program, in one of the principal roles (Kurz) in *Memory Boy*.

In 2017, he played the role of Liberto in the Eastman Opera Theatre’s production of Monteverdi’s *L’Incoronazione di Poppea*. —Jessica Kaufman



Jonathan Rhodes ’20E, ’20

Inventors Honored

Several Rochester scientists earned national recognition this winter for their work as inventors over the course of their careers.

Ching Tang, professor emeritus of chemical engineering, was inducted into the National Inventors Hall of Fame for helping pioneer the organic light-emitting diode, or OLED, a technology that’s used in flat-panel and other displays.

Tang, who joined the Department of Chemical Engineering in 2006, pioneered the technology with Steven Van Slyke, also among this year’s inductees, while working as a research scientist for Eastman Kodak Company.

Wayne Knox, a professor of optics and a former director of the University’s Institute of Optics, was inducted as a fellow of the National Academy of Inventors. The holder of 50 US patents, and another 150 or so worldwide, Knox was recognized for demonstrating a “highly prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development, and the welfare of society.”

He joins Kevin Parker, the William F. May Professor and dean emeritus of what is now the Hajim School of Engineering & Applied Sciences, in the academy. Parker was inducted in 2016.

And the laboratory of Wyatt Tenhaeff, assistant professor of chemical engineering at Rochester, was recognized in December by *R&D Magazine* for work to create safer lithium-ion batteries for electric vehicles, work that was developed with Oak Ridge National Laboratory.

The lab received an *R&D100* award, a recognition given since 1963 to honor innovative breakthroughs in materials science, biomedicine, and consumer products by academia, industry, and government-sponsored research agencies. —Bob Marcotte

Grants from Gates Foundation Mark Milestone for University

Two faculty members have received the largest grants ever awarded to University researchers by the Bill & Melinda Gates Foundation, the largest private foundation in the world.

Chunlei Guo, a professor in the Institute of Optics, and

Kirsi Jarvinen-Seppo, Founders' Distinguished Professor of Pediatric Allergy, received separate \$1.5 million grants from the foundation.

Both Guo's and Jarvinen-Seppo's projects are focused on finding solutions to health and mortality problems in the

developing world associated with poor sanitation and nutrition.

Guo, who previously received more than \$500,000 from the foundation, received a new grant to develop sanitation technology with extremely water-repellent, or superhydrophobic, materials. Jarvinen-Seppo, a pediatric

allergist and immunologist, is leading a team from five centers to explore whether breast milk can offer infants protection from key infectious diseases.

Since 2008, the Gates Foundation has awarded three other grants to University faculty members. —Kristine Thompson



Bringing 2,000 Years of Drama to Life

SENECA SENSATION: Samantha Richardson '19 (left), as the Roman philosopher Seneca, and Kevin Bodhipaksha '18E, as the emperor Nero, had key roles in a student production of a rarely seen, nearly 2,000-year-old play when the International Theatre Program closed its fall semester with a work attributed to Seneca. Directed by Obie Award-winning guest director Ken Rus Schmoll, the play, *Octavia*, chronicles the dissolution of the marriage between Nero and Octavia, his aristocratic wife. The program's spring season begins in March with the first work commissioned specifically to be performed at Rochester. —Jeanette Colby

Gift Boosts Italian Studies

Rochester students will have new opportunities to study the language, culture, art, and history of Italy, thanks to a gift to the University's Italian studies program.

A \$2 million gift from Arnold Lisio '56, '60M (MD) and Anne Lisio will endow the Lisio Program in Italian Studies within Arts, Sciences & Engineering.

The gift supports programming that involves Italy from a variety of departments and programs and helps fund student scholarship prizes, summer fellowships, and faculty and program grants.

Those initiatives include the Arezzo Program, a semester-long study program in which students are immersed in academic courses, community life, cultural activities, and study-related travel; the San Martino Archaeological Field School, a summer program to study the archaeology of ancient Italy; the Roman Structures Program in Italy, an interdisciplinary study of Roman engineering and architecture; and an experiential summer learning program, a one-month education abroad course on the island of Procida, off the coast of Naples.

—Kristine Thompson

Medical Center Leads New Initiative on Bone Infections

The Center for Musculoskeletal Research will create a new multidisciplinary program devoted to developing treatments for bone infections, a relatively rare, but potentially fatal, complication of surgery.

Funded through a nearly \$6 million, five-year award from the National Institute of Arthritis and Musculoskeletal and Skin Disease at the National Institutes of Health, the initiative will explore ways to target the bacteria

Staphylococcus aureus, the primary culprit in bone infections.

One of the top NIH-funded orthopaedic researchers in the nation, Edward Schwarz, the Burton Professor of Orthopaedics and director of the

musculoskeletal center, leads the project, with researchers from the Medical Center, the Department of Biomedical Engineering, as well as other disciplines at Rochester and other universities.

—Susanne Pallo

COMPARATIVE LITERATURE

Back to the Future?

Critic Robert Doran traces the roots of contemporary cultural politics.

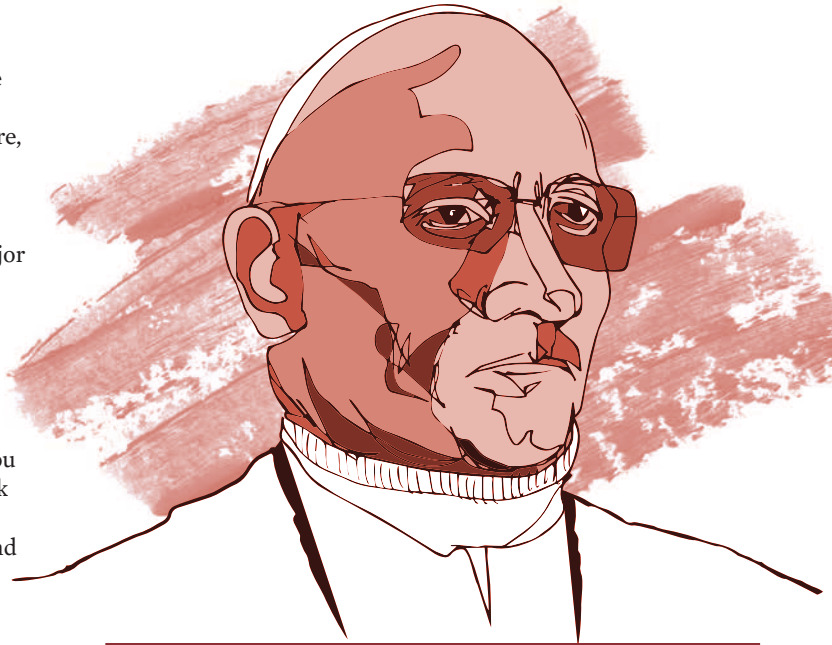
Turned-up collars and acid-washed jeans conjure up the 1980s at a glance. For scholars, the faces of critical theorists Michel Foucault and Jacques Derrida are just as evocative, icons of an intellectual movement that gained momentum through the 1960s and '70s, and then peaked and ebbed in the '80s. But Robert Doran, a professor of French and comparative literature, argues that critical theory has “become synonymous with the ethical and political questions that agitate our times.”

In *The Ethics of Theory: Philosophy, History, Literature* (Bloomsbury, 2017), he investigates how critical theory—a major area of inquiry for humanities scholars and social scientists in the late 20th century—pivoted from a narrow investigation of meaning and text to a broad engagement with culture and politics.

An overview of prominent critical theorists reveals the breadth of their interests. “A lot of people think of theory as a kind of toolbox” for scholarship, he says. “You take this and you take that [mode of analysis]—you take whatever seems to work for you. But these ideas came at a particular time and have a particular meaning. You can’t just take them out of context, and that’s what I try to rectify, to some extent, in this book.”

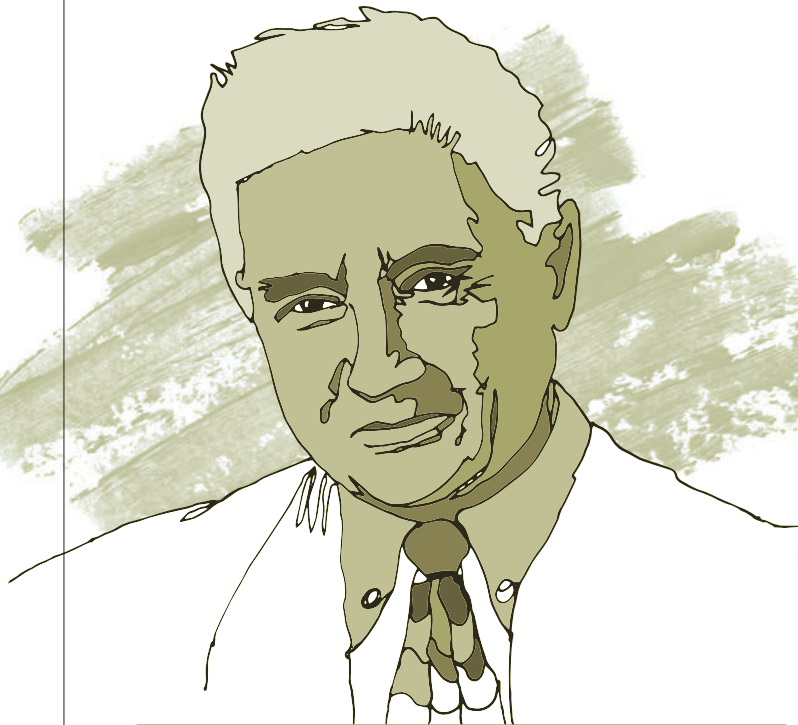
In his book, Doran explores the influence of several key figures in critical theory. Here’s a look at some of them.

—KATHLEEN MCGARVEY



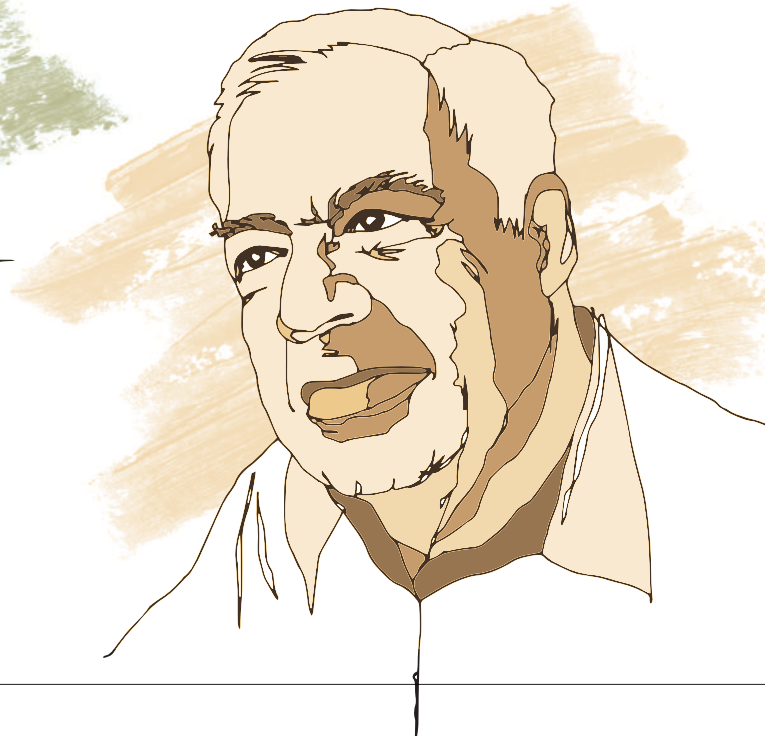
Michel Foucault (1926–1984)

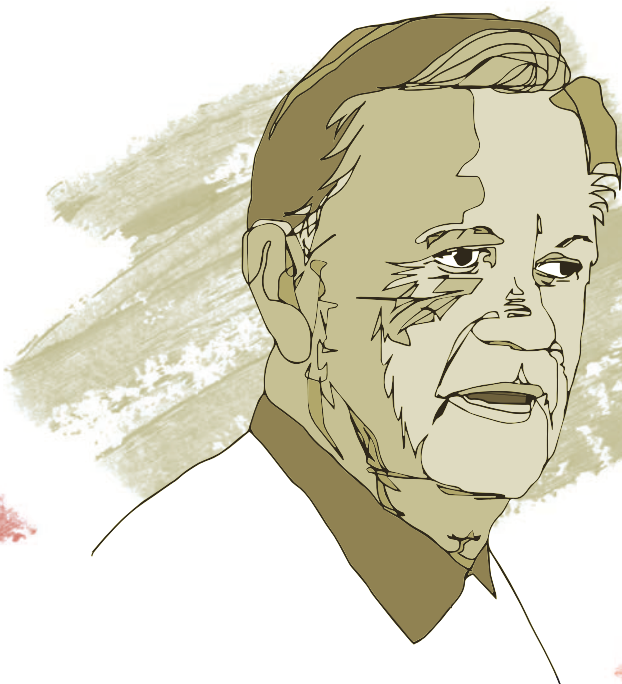
An important figure for structuralist and poststructuralist thought, French philosopher and historian of ideas Foucault investigated the ways in which seemingly scientific thought actually expressed socially contingent commitments. Among his best-known works are *The Order of Things: An Archaeology of the Human Sciences* (1966), *Discipline and Punish* (1975), and the three-volume *History of Sexuality* (1976–1984).



Jacques Derrida (1930–2004)

An academic superstar whose fame carried him even into popular culture, French-Algerian philosopher Derrida was the primary founder of deconstruction, a method of critical analysis rooted in the instability of meaning in a text. The most influential of his many works is *Of Grammatology* (1967).



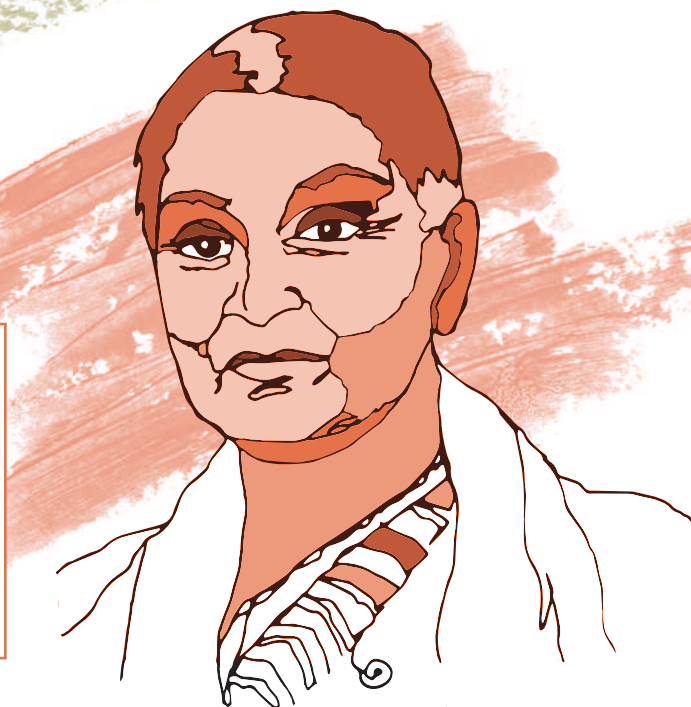


Hayden White (1928–)

The author of *Metahistory: The Historical Imagination in Nineteenth-Century Europe* (1973), American theorist of history White argues that history writing is in kinship with literature—both rely on the art of narrative for meaning. White is currently a professor emeritus at the University of California, Santa Cruz, having recently retired from the position of professor of comparative literature at Stanford University. White was a member of the University of Rochester faculty from 1958 to 1968.

Gayatri Spivak (1942–)

Deconstructionist Spivak translated Derrida's *Of Grammatology* into English, with a deeply influential introductory essay, in 1976. Now a professor of English and the cofounder of the Institute for Comparative Literature and Society at Columbia University, Spivak was born and raised in India before earning her doctorate in comparative literature at Cornell. She helped to create the field of postcolonial studies with her essay "Can the Subaltern Speak?"; other works include *A Critique of Postcolonial Reason* (1999) and *Other Asias* (2005). She's also the author, with Judith Butler, of *Who Sings the Nation-State?: Language, Politics, Belonging* (2007).



Judith Butler (1956–)

In her most famous book, *Gender Trouble: Feminism and the Subversion of Identity* (1990), philosopher Butler argues that gender is performative, created by speech and behavior whose repetition gives the impression of an underlying nature. A member of the Department of Comparative Literature at the University of California, Berkeley, Butler is also the author of several books, including *Bodies That Matter: On the Discursive Limits of "Sex"* (1993), *Excitable Speech: A Politics of the Performative* (1997), and *Parting Ways: Jewishness and the Critique of Zionism* (2012).

Richard Rorty (1931–2007)

American pragmatist philosopher Rorty is best known for his book *Philosophy and the Mirror of Nature* (1979). He rejected the concerns of traditional analytic philosophy—a philosophical movement based on applying principles of logic—and, like other critical theorists, argued that philosophy and science can't claim access to a reality unmediated by language and perception. Other major works by Rorty include *Consequences of Pragmatism* (1982) and *Contingency, Irony, and Solidarity* (1989).



Meet Rochester's 100th Academic All-American

Nik Angyal '19, a defender for the Yellowjackets men's soccer team, marks a milestone.


Interview by Jennifer Hennig '18

With his cumulative 4.0 grade point average and his role leading his team to an Elite 8 appearance in the 2017 season, defender Nik Angyal '19 was named to the 2017 Second Team CoSIDA Academic All-American in men's soccer.

Angyal's selection marks the 100th Academic All-America honor for the University.

The College Sports Information Directors of America established the national award program to recognize distinguished scholar-athletes in 1952.

Rochester's first Academic All-America honor went to Michael Corp '78—a running back on the football team and a double major in history and psychology—in 1976.

Angyal, a chemical engineering major from the Hudson Valley hamlet of Stormville, started in 20 of the 21 games in the 2017 season and was a crucial part of the back line that led the team to nine shutouts and held eight teams to just one goal. 

Biggest accomplishment as a Yellowjacket: The progress I made. I tried to walk on my freshman year and didn't make it. When I tried again in the spring, I made the team, but didn't play that much my sophomore year. To be a starter my junior year was a big accomplishment.

Best thing about soccer: The team aspect of it. I ran track in high school and it was all right. But it feels more satisfying to win as a team than as an individual. The feeling of being a part of something that is bigger than myself is very rewarding.

Favorite class at Rochester: Fluid Dynamics. I took it during sophomore spring, and it was the first real technical engineering class I took. Everything

CENTENNIAL STAR: With his 4.0 grade point average and a key role on the Yellowjackets men's soccer team, Angyal was named the University's 100th Academic All-American since Rochester's first recipient in the late 1970s.



up to that point had been a fundamental or prerequisite course. I was finally able to see how everything applied to chemical engineering.

Most memorable moment on the field:

This whole year. We went as far as we've ever gone. This was only second time in school history that we reached the Elite 8. We won in overtime in the first game, scored late in the second game, and came back again in the Sweet 16. The entire experience was pretty special to be a part of.

Biggest sacrifice as a scholar-athlete:

Down time, because it almost never exists. When I do get some free time, I usually spend it catching up on sleep. I always try my best to get eight hours a night, because if you're trying to play a game on four hours of sleep, it's going to be a pretty rough experience.

Greatest benefit of being a scholar-athlete:

It's been good in terms of balancing and juggling everything. Soccer is a huge time commitment and that gave me the incentive to always be on top of my work and forced me to be a good time manager.

Favorite thing about campus: I love the quad, with the ivy-covered buildings and oak trees. There's just something picturesque about the place.

Future plans: I hope to get a job that allows me to work toward improving the environment. Last summer I worked for New York State in the Department of Environmental Conservation helping to mitigate petroleum leaks and preventing them from reaching drinking water sources. That was a rewarding experience, but ultimately, I hope to contribute to making renewable energy the dominant source of energy generation.

Record Roster

Since 1976, a total of 100 Yellowjackets have been selected as Academic All-Americans. Here's a look at the numbers.

AWARDS BY SPORT

Baseball	7
Basketball (Men's)	7
Basketball (Women's)	3
Field Hockey	5
Football	18
Golf	1
Lacrosse	2
Rowing	1
Soccer (Men's)	10
Soccer (Women's)	3
Softball	1
Swimming & Diving (Men's)	3
Swimming & Diving (Women's)	7
Tennis (Men's)	5
Tennis (Women's)	0
XC/Track & Field (Men's)	16
XC/Track & Field (Women's)	4
Volleyball	7

AWARDS BY YEAR

1976	●	1997	●●●●●
1977	●	1998	●●●●
1978		1999	●●
1979		2000	●●●
1980	●	2001	●●
1981		2002	
1982	●●●	2003	●●
1983	●	2004	●●●●●●●
1984	●●●	2005	●●●●●●●●
1985	●●●	2006	●●●●●●
1986	●●●	2007	●●●●●
1987	●●	2008	●●●
1988		2009	
1989		2010	●
1990	●	2011	●●●
1991		2012	●●
1992	●●●	2013	●●●
1993	●●●●●	2014	●●●●●●
1994	●●	2015	●●●●●●
1995	●	2016	●
1996	●●●	2017	●●●●●

BY THE NUMBERS

19 Students who have won multiple Academic All-America awards.

2 Students who have won the award three times: Patty Rupp (women's swimming and diving in 1985, 1986, and 1987); and Brian Kowalski (football in 1999, 2000, and 2001).

2 Students who have won Academic All-American of the Year: Tanya Klebe (volleyball, 1997); and Nate Micklos (men's soccer, 2005)



HIGH FIVE(HUNDRED): Women's basketball coach Jim Scheible entered the Rochester record books this winter, leading the Yellowjackets to his 500th victory as a coach.

Women's Coach Notches 500th Win

Jim Scheible has a new entry in the Rochester record books. The head coach of the women's basketball team passed the 500-win mark with an 83-79 overtime victory over NYU in January. With that win, Scheible's record over 27 years of coaching was 500-222. At that point in his 19 seasons at Rochester, Scheible's record was 359-151.

The victory was also Rochester's 10th consecutive victory and raised the Yellowjackets' record to 15-1 overall, 5-0 in the UAA. Rochester was ranked No. 7 in the D3hoops.com poll and in the poll conducted by the Women's Basketball Coaches Association.

MIT Coach Named to Lead Yellowjackets Football


The award-winning head coach of the Massachusetts Institute of Technology's football program has been named head football coach at Rochester.

Chad Martinovich, whose nine seasons leading the Engineers included a conference championship, becomes the Yellowjackets' 31st coach. He will lead the team for the season opener on September 1 at Case Western Reserve University.

Credited with building a regularly contending program at MIT, Martinovich was named the 2014 Coach of the Year for the New England Football Conference, New England Football Writers College Division Coach of the Year, ECAC Coach of the Year, and the

American Football Coaches Association Region I Division III Coach of the Year.

During his nine years in Cambridge, MIT football players have earned 17 CoSIDA Academic All-America awards, including seven selections to the First Team. The MIT quarterback was named the 2017 CoSIDA Division III Football Academic All-American of the Year. He has coached two All-Americans, 16 All-Region players, four All-New England performers, and 63 All-Conference players at MIT.

After graduating from Hobart College, where he played football, Martinovich embarked on a coaching career that has taken him to Bucknell, Hamilton, the University at Albany, Swarthmore, and Rensselaer Polytechnic Institute. 

NEW COACH: Chad Martinovich debuts this fall as Rochester's football coach. 

