



BASKETBALL
Radical Rebound

DYNAMIC DUO: Guard Sam Borst-Smith '17 (right) won national attention for an intentionally missed free throw that led to a Yellowjackets' overtime victory against the University of Chicago in February. Borst-Smith caught his own rebound and passed the ball to Mack Montague '17 (left), who made the winning shot. The play aired on ESPN and went viral on YouTube, leading fans to cast enough votes for Borst-Smith to win State Farm's inaugural Assist of the Year award. Borst-Smith was recognized in Houston during the NCAA college men's basketball Final Four events. PHOTOGRAPH BY ADAM FENSTER

OPERA

Wedding Music

LOVE STORY: Eastman Opera Theatre mounted a production of Mozart's beloved comic opera *Le Nozze di Figaro*—"The Marriage of Figaro"—at Eastman Theatre this spring. With two rotating casts of Eastman School of Music undergraduate and graduate students, the production was the fifth at Eastman in the last 30 years, and was inspired by the art of 18th-century French painter Jean-Honoré Fragonard. PHOTOGRAPH BY ADAM FENSTER

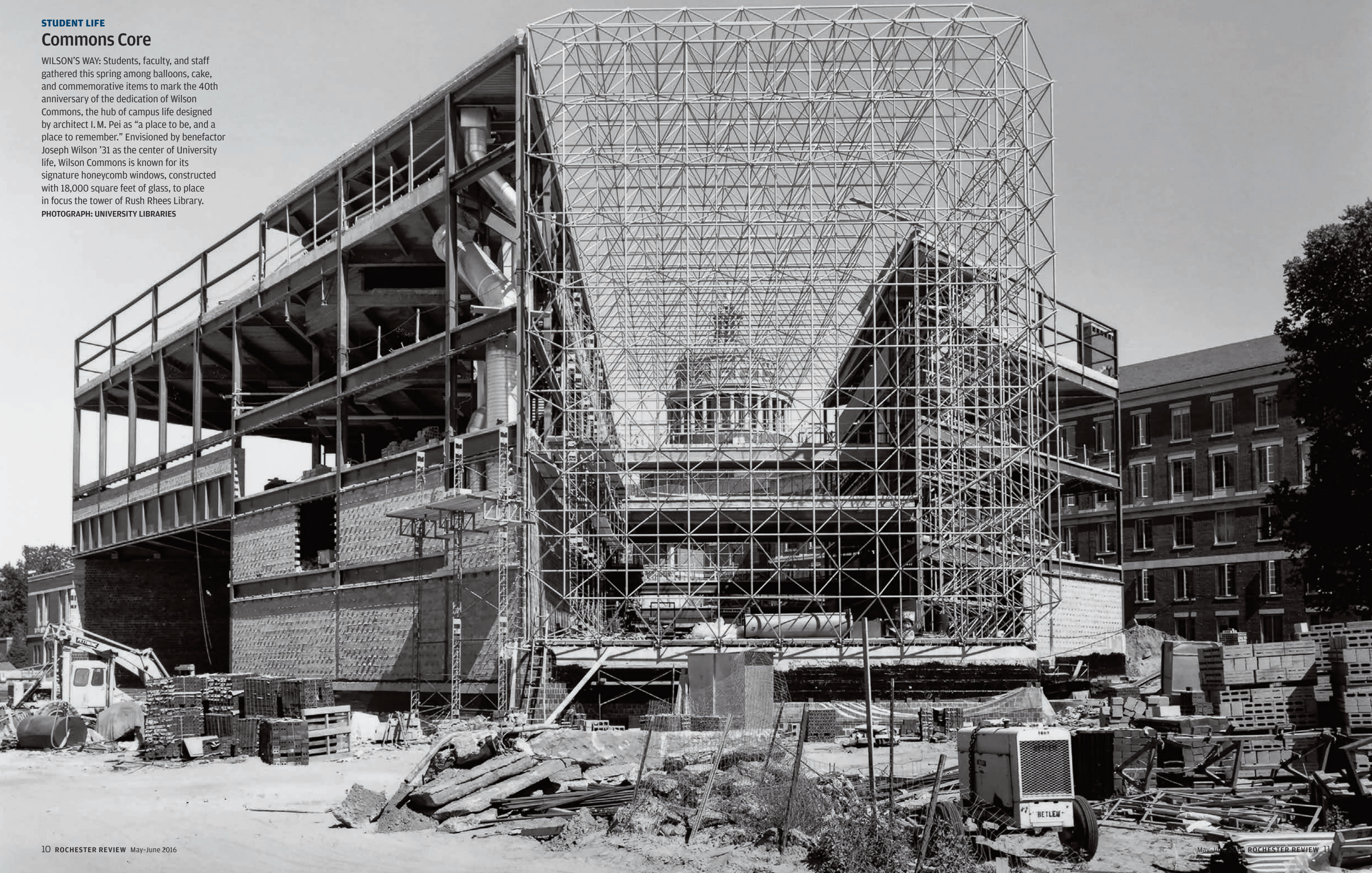


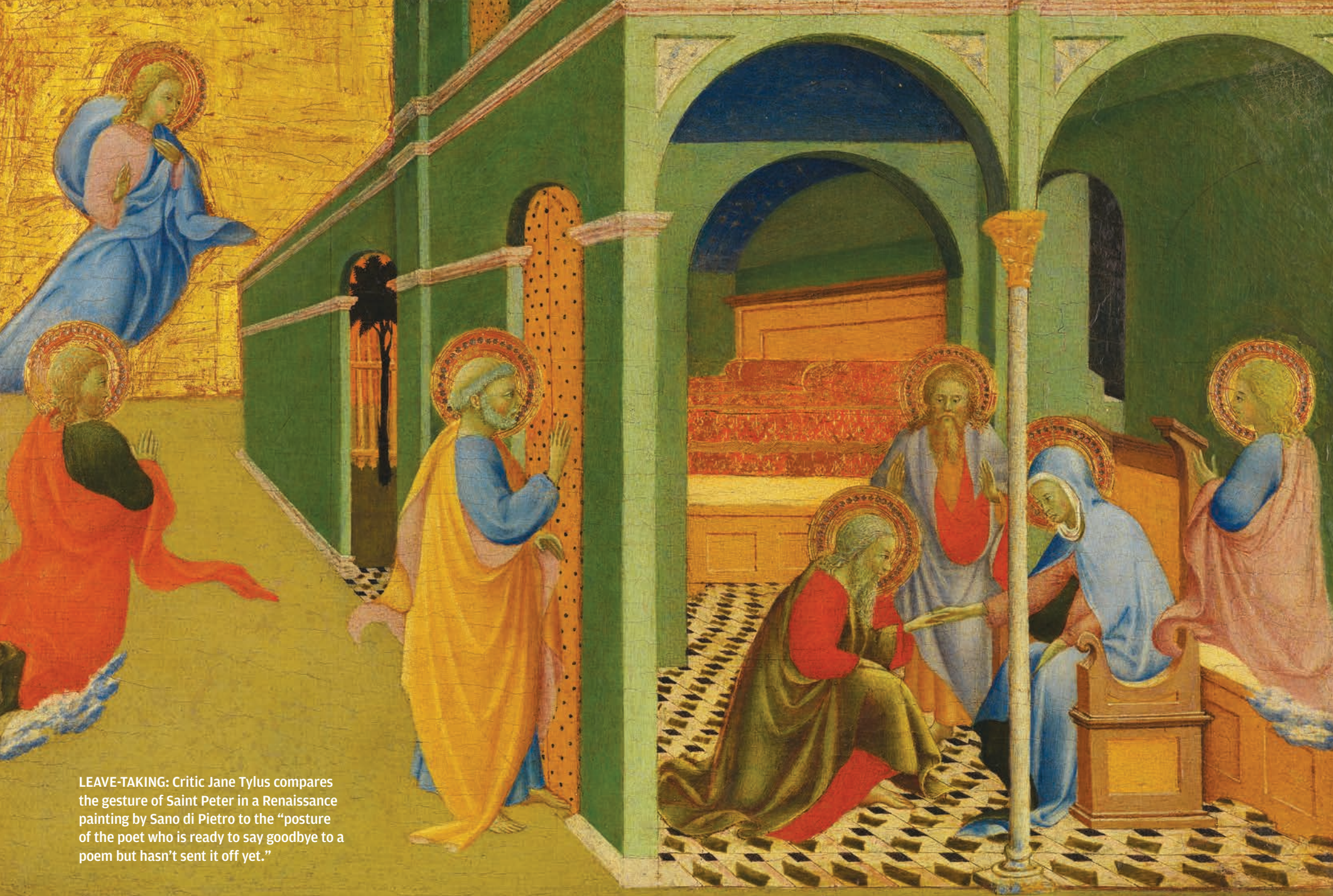
STUDENT LIFE

Commons Core

WILSON'S WAY: Students, faculty, and staff gathered this spring among balloons, cake, and commemorative items to mark the 40th anniversary of the dedication of Wilson Commons, the hub of campus life designed by architect I. M. Pei as "a place to be, and a place to remember." Envisioned by benefactor Joseph Wilson '31 as the center of University life, Wilson Commons is known for its signature honeycomb windows, constructed with 18,000 square feet of glass, to place in focus the tower of Rush Rhees Library.

PHOTOGRAPH: UNIVERSITY LIBRARIES





LEAVE-TAKING: Critic Jane Tylus compares the gesture of Saint Peter in a Renaissance painting by Sano di Pietro to the “posture of the poet who is ready to say goodbye to a poem but hasn’t sent it off yet.”

HUMANITIES

Parting Words

Literary critic Jane Tylus considers Renaissance rituals of separation—and why bidding farewell was so hard.

By Kathleen McGarvey

Saying good-bye—in life and in art—isn’t easy.

For Jane Tylus, a professor of Italian studies and comparative literature at New York University, the idea that there’s a convergence between both forms of parting

became clear when she saw a 15th-century painting that she describes as “probably the most beautiful and thought-provoking painting I’ve seen in a long time.”

It was *Congedo della Vergine*, by Sano di Pietro, at Villa I Tatti, near Florence. The painting depicts a non-Biblical story of the Virgin Mary’s leave-taking from

the disciples as she prepares to be reunited with Jesus Christ. In one panel of the painting, Saint Peter stands at the threshold of her house—there to say good-bye, but hesitating at the moment of doing so.

“This gesture of Saint Peter, who knows what is in front of him, but isn’t ready to go in just yet—this, to me, captures the posture of the poet who is ready to say good-bye to a poem but hasn’t sent it off yet,” says Tylus, who also is faculty director of the NYU Center for the Humanities. Like

involved a variety of activities, including a meeting with humanities graduate students, a public talk on the future of the humanities, and a presentation and round-table conversation on the city in history with faculty and students from a multi-disciplinary undergraduate course, *Cities: Contested Spaces*.

In her recent work, Tylus has written about the most significant women writers in Renaissance Italy, including Catherine of Siena, Lucrezia Tornabuoni, and Gaspara Stampa. Thomas Hahn, a professor of English and the organizer of the symposium, praises her skill as a translator whose work “extends far beyond linguistic expertise and elegance” in books such as *Reclaiming Catherine of Siena: Literacy, Literature, and the Signs of Others* (Chicago, 2009)—winner of the Modern Language Association’s Howard R. Marraro Prize—and *Siena: City of Secrets* (Chicago, 2015).

“Her purpose in these books wasn’t just to recover the past but to situate these writers alongside the monuments and poetry that we all regard as a common heritage—for example, the work of Dante, Petrarch, and Michelangelo,” he says. “She ‘translates’ not just the words of individual writers, but a full sense of an age, a city, a work of art.”

The topic of Tylus’s keynote address was spurred by personal experience: coming to terms with the loss of parents and reflections on mourning and grieving. But her scholar’s mind soon ranged beyond her private sadness to thoughts about how contemporary beliefs and practices surrounding loss differ from what they were centuries ago.

A practicing Catholic, Tylus says she realized that “in my life, there’s a lot more continuity with the Middle Ages. There are sharp differences that Protestantism introduces to Catholic practices of not really saying good-bye.”

With the Protestant Reformation came enormous departures from Catholic religious practice, including a rejection of the idea of purgatory, where souls would be purified before ascending to heaven. Practices such as allowing the living to shorten, through paying for indulgences, the deceased’s time in purgatory meant that relationships continued, in some fashion, after death, Tylus says.

At the same time, artists were carrying on a long poetic tradition of pausing before the end of a work to contemplate the act of letting go. With many names—among them, the *congedo* in Italian and the *envoi* in French—the end of a poem was often a

Ferrari Humanities Symposia

Jane Tylus was the 2016 keynote speaker this spring for the Ferrari Humanities Symposia, an annual event designed to highlight the broad interdisciplinary connections that are fundamental to a liberal arts education. Tylus is the director of NYU’s Center for the Humanities and a professor of Italian studies and comparative literature.

University Trustee Bernard Ferrari ’70, ’74M (MD) and his wife, Linda Gaddis Ferrari, established the symposia to broaden the liberal education of the University’s undergraduates, enhance the experience of graduate students, and expand the connections of University faculty with other scholars from around the world. Established in 2012, the series has hosted speakers including Anthony Grafton and Stephen Greenblatt.

—Kathleen McGarvey

place where poets would turn to address the work itself and consider what might happen to it once it leaves them.

Michelangelo’s *non finito*, or unfinished, sculptures for the tomb of Pope Julius II—itsself unfinished—are one example Tylus points to of a similar phenomenon in the visual arts. The figures “look like they’re imprisoned in the stone because they’re not finished,” she says. Late in his life, Michelangelo wrote a series of sonnets about his art’s lack of value when it comes to his life beyond death. “It’s a sad kind of rejection of the meaning he’s had as an artist, as he’s also saying good-bye to that life itself in his poems,” she says.

Produced a century later, Shakespeare’s work is “riddled with questions about when and how we say good-bye to loved ones,” she says. One particularly well-known example is Polonius’s comically excessive leave-taking from son Laertes in *Hamlet*, but Tylus finds particular meaning in the famous closing speech of Shakespeare’s final play, *The Tempest*. Prospero implores the audience to “release me from my bands/With the help of your good hands.”

“There’s a real sense that Prospero is going to die and is calling to the audience for life beyond death,” she says.

For Michelangelo, who was heavily influenced by some tenets of the Reformation, these radically new ideas struck at the roots of a sense of human community extending beyond death.

What was at stake, Tylus says, was nothing less than “the worth of a work of art in the face of the Reformation.”

Catching Some Rays

A simple but groundbreaking observatory in central Mexico is shedding new light on the workings of cosmic and gamma rays in Earth's atmosphere. Formally opened a year ago, the High-Altitude Water Cherenkov Gamma-Ray Observatory will be used by scientists to gather information on high-energy particle acceleration for 10 years. The observatory is perched on the side of the Sierra Negra volcano, almost 14,000 feet above sea level. Segev BenZvi, an assistant professor of physics, helped to create the observatory and is part of the team now carrying out research there.

Air Showers

When high-energy gamma rays and cosmic rays interact high in the atmosphere, they create a particle cascade that peaks as it falls to Earth and wanes before it reaches the ground. The cascade, which moves at the speed of light, looks like a pancake that grows wider and wider as it nears ground level.

Gamma Rays

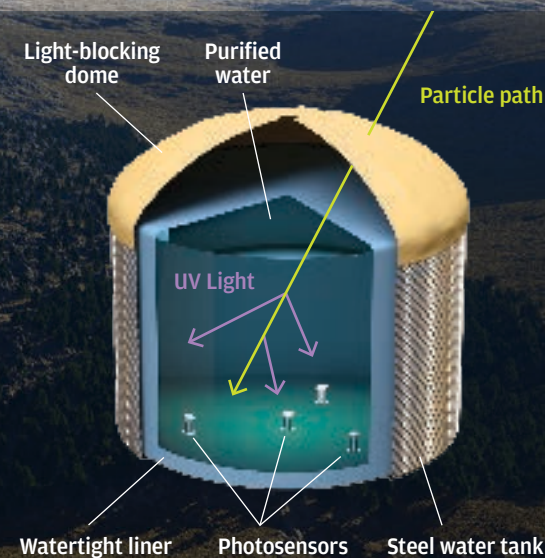
Using the observatory, scientists can distinguish between air showers created by gamma rays and cosmic rays. At ground level, most of the signal from the particle cascade is centered around the direction of the initial gamma ray. But cosmic ray showers are much less orderly, breaking apart as they descend.

High-Altitude Water Cherenkov Gamma-Ray Observatory

Water Cherenkov Tank Array

Giant water tanks outfitted with photosensors sample air-shower particles by recording the light produced when the particles move through the water.

*Citlaltépetl
(Pico de Orizaba)
18,491 feet*



Cherenkov Effect

When particles reach the ground, they move through the water tanks, producing ultraviolet light, in a process known as the Cherenkov effect. Photosensors in each tank record the light. By studying when the sensors are triggered, researchers can deduce information about the air shower of particles.



Tanks and Pancakes

Physicist Segev BenZvi and scientists at an ambitious observatory use simple tools to probe the universe.

Three hundred giant tanks, each holding more than 50,000 gallons of purified water, perch on the side of the Sierra Negra volcano in central Mexico, standing 13,500 feet above sea level. Four photosensors lie at the bottom of each tank.

The array of tanks is part of the High-Altitude Water Cherenkov Gamma-Ray Observatory, or HAWC, a joint project of Mexico and the United States. While the technology is comparatively simple, the project is ambitious: observing gamma and cosmic rays, and contributing to the search for dark matter.

Segev BenZvi, an assistant professor of physics, and fellow

water tank in the lab to measure for muons—heavy, unstable versions of electrons that are the ground-level remnants of particle cascades.

But the project is innovative in three ways: its high-altitude location brings better sensitivity to the particles, which get absorbed by the atmosphere as they descend; its “optically isolated, densely packed” tanks; and the algorithms that let the scientists make use of the data they assemble.

Construction of the observatory began in 2011 at a site in the Parque Nacional Pico de Orizaba, a national park and home to the dormant volcano Pico de

BenZvi and colleagues on the project are studying extremely high-energy particle acceleration, from supernova remnants, black holes, neutron stars, and pulsars—“objects with very, very large amounts of energy,” he says.

scientists are looking for very energetic gamma rays and cosmic rays that enter Earth's atmosphere. When the high-energy rays interact, they create a “particle cascade”—a shower of high-energy particles—that falls to Earth.

BenZvi and colleagues on the project are studying extremely high-energy particle acceleration, from supernova remnants, black holes, neutron stars, and pulsars—“objects with very, very large amounts of energy, some of which is being dumped into accelerating charged particles out in space,” he says. When they interact, they produce gamma rays and cosmic rays.

HAWC is a “scaled-up” version of a classic physics student experiment, he says, that uses a

Orizaba, Mexico's highest peak. HAWC was formally opened last spring. When the experiments are complete, in about 10 years, the scientists will restore the area to as close to its original condition as they can. The park is a “cloud forest,” with one of the highest tree lines in the world. An environmentally sensitive site, the forest affects cloud formation and rainfall in areas south and west of the park. No trees were removed in creating the observatory.

The high-altitude location poses minor challenges for researchers, like shortness of breath, says BenZvi. “And shortness of temper, believe it or not,” he says. “You just get really irritated. Your thinking isn't very clear. I find that I get bad at doing

basic arithmetic in my head when I'm up there.”

The enormous tanks—23 feet wide and more than 16 feet high—are the same kind of tanks used by Midwestern farmers to irrigate their fields. A military contractor who manufactures “light-tight” tents for soldiers in hostile territory makes the tanks’ hemispherical domes.

Local workers assembled the tank array, and then made 4,000 trips by truck up and down the mountain to haul the water to fill them—a volume of 55 million liters, or the equivalent of a soda can’s worth of water for each person living in Mexico.

The tanks sample the air shower particles at ground level. There are about 100 million particles in a cascade at its peak. The number of particles decreases as the cascade descends.

“It’s like a pancake of high-energy particles that moves toward the ground,” BenZvi says. When the particles hit the ground, they move through the tanks—and when high-energy particles move through water, they produce ultraviolet light, known as the Cherenkov effect. The photosensors in the tank record the ultraviolet light. And from the pattern of times that the sensors in each tank are triggered, scientists can reconstruct the direction of the particle pancake.

The data they collect may also shed some light, as it were, on dark matter.

“There is very strong evidence, from all kinds of measurements in astrophysics, that there is something called dark matter,” BenZvi says. “But it’s not clear what it is. We think it’s a fundamental particle or particles.”

But scientists don’t know how massive it is or what its interactions are. “So it’s entirely possible that some of the gamma rays and cosmic rays that we see are actually not produced by neutron stars and supernovae and things like that—they’re actually produced when clumps of dark matter interact and decay. That’s the idea,” he says.

When anomalies are found in astrophysical data, scientists consider whether the source of the anomaly is a mistake in their model or the influence of dark matter.

“And that’s kind of the name of the game,” says BenZvi. “It’s a tough game, as you can imagine. It’s sort of like the joke about ‘unknown unknowns’—you don’t know what you’re not modeling.”

Telescopes offer another way to measure gamma rays. But they have a narrow field of view, taking in only a few degrees of the sky at a time. HAWC records information from two-thirds of the sky every 24 hours.

“Over the course of one day, we can see essentially the entire northern hemisphere,” says BenZvi, noting that the methods are complementary. “We’ve made the bet on more coverage, less sensitivity; they make the bet on more sensitivity, less coverage. If you have both types of instruments running, you can look for unexpected stuff with HAWC—we communicate with those guys through back channels: ‘Hey, we see something interesting. Point your telescope there.’ And that’s how a lot of the field works.”

Scientists are now processing their first year’s worth of data from HAWC, which they began to make public this spring. And they are expanding the array with some additional tanks—just a few, which will bring with them a four-fold increase in sensitivity.

And there is talk of creating a second observatory, possibly in Chile. The southern hemisphere provides the best vantage point for observing the center of the galaxy—and it’s “a very strong candidate for observing dark matter, because we believe there’s a super-massive black hole in the center of the galaxy, and so there should be a gravitational well there where dark matter is concentrated,” says BenZvi.

“If we have a HAWC in the southern hemisphere, literally the center of the galaxy will be right overhead,” he says.

—Kathleen McGarvey



CONVENING SCOTS: Scholars are gathering at Robbins Library to discuss texts written in Older Scots, a descendant of northern Old English that was used in medieval and early modern Scotland.

Brushing Up on Older Scots

Scholars discuss the literature of medieval and early modern Scotland.

Feeling like a *cummerworld*, or even a *dowbart*, because your Older Scots vocabulary is a bit rusty? Fear not: you needn’t be looking *glaiokit* for long.

In May, the University is hosting the Rochester–St Andrews Conference on Older Scots Literature and Culture. The gathering draws specialists from the United States, Canada, and Europe to share papers on 14th- to 16th-century literature in Older Scots, the descendant of Old English that was used in medieval and early modern Scotland.

Rhiannon Purdie of the University of St Andrews in Fife, Scotland, who is visiting the University’s Robbins Library as a Fulbright Scottish Studies Scholar, and Thomas Hahn, professor of English, organized the event. Papers examine early literary and political texts, historiography, and language and ethnicity, among other subjects.

The Robbins Library is home to the Middle English Texts Series, sponsored by the Consortium for the Teaching of the Middle Ages. Among the nearly 100 volumes published, the series has made

Meet a Few Terms from Older Scots . . .

cummerworld: n. useless person (i.e., “encumber-world”)
dowbart: n. dimwit
dreich: adj. tedious, dreary; (of weather) grey and miserable. Still common in modern usage.
glaik: n. fool; **glaiokit:** adj. idiotic
liddy: adj. slow, sluggish, indecisive
maggil, maggle: v. to spoil
maggilit: adj. mangled, ruined
nipcaik: n. miser
quean: n. wench
skaldit skaitbird: n. scabby scavenger
skamelar: n. parasite
slawsy: n. fellow, guy
walidrag: n. wastrel

available, in digital and hard copy, a number of Older Scots writings and more are in production, helping to make Older Scots literature more accessible to teachers and students around the world.

More information about the conference is on its website: Olderscots.com.

—Kathleen McGarvey

Accessing a New Point of View

Scholar Beth Jörgensen turns the lens of disability studies on Latin American culture.

When Beth Jörgensen, a professor of Spanish, prepared in 2009 to teach a course about coming-of-age stories in Latin America, she reversed the common academic order of things.

“Very often, our research contributes much to our teaching,” she says. “My engagement with disability studies over the last seven years actually came directly out of teaching.”

Jörgensen decided to include in the course the book *Gaby Brimmer: An Autobiography in Three Voices*. The collaborative memoir tells the life story of Gabriela Brimmer, who was born to Austrian-Jewish immigrant parents in Mexico City in 1947. Brimmer learned to communicate by manipulating an alphabet board with the big toe of her left foot, the only part of her body that cerebral palsy allowed her to control.

To teach the book, Jörgensen immersed herself in disability studies, a field of cultural criticism that has emerged gradually over the past three decades. Now she’s the coeditor of a new book, *Libre Acceso: Latin American Literature and Film through Disability Studies* (State University of New York Press, 2016). With Susan Antebi of the University of Toronto, Jörgensen assembled the critical essays to turn the lens of disability studies on Latin American literature, film, and culture.

Disability studies may not yet have the wide recognition that women’s studies or African-American studies do, but their origins are similar.

“There’s an activist piece to it,” says Jörgensen. “Women’s studies came out of the women’s rights movement; African-American studies came out of the civil rights movement, in many ways. And disability studies has its roots in the disability rights activism of the last 30 years.”

The approach emphasizes reading literature, viewing film, and theorizing about culture to



“All of the essays make a case for the importance of inclusion, of how much we miss out on the richness of human diversity if we are not inclusive of people with disabilities.”—*Beth Jörgensen*

see how societies construct and view disability.

“It has become quite an important way of looking at literature, film, and art, especially in Britain and North America—Mexico, much less so,” she says. And in Latin American studies, its potential has been little explored.

The best-known literary work discussed in *Libre Acceso* is Gabriel Garcia Márquez’s *One Hundred Years of Solitude*. In his

essay, critic Juan Manuel Espinosa suggests that the novel can be read as an exploration of how a

person with Asperger’s syndrome experiences the world.

Jörgensen calls her introduction to the field “eye-opening.” She began to “see things in literature that I hadn’t even noticed before, because I didn’t have the intellectual tools to notice them.”

But once readers begin to notice the trope of disability, they realize it’s omnipresent. The figure of a character with a disability is pervasive in world literature, she says, from at least the time of Oedipus. But critics haven’t until recently begun to

consider what can be illuminated by considering the category “disability” carefully. Often, it’s a kind of plot device, she says, a “narrative prosthetic” that sets events or conflicts in motion, or a metaphor for social ills, or a mechanism for the moral growth of a non-disabled character.

The field has reshaped Jörgensen’s own understanding of disability and the concept of accommodation. Buildings are heated in the winter as an accommodation of our physical need for warmth, she points out.

“Society accommodates all of us,” she says. “Is it really a special accommodation, then, to put in curb cuts for people with disabilities?”

Common themes emerge in the essays, such as the “intersectionality” of identity that occurs when one is not only disabled, but also poor and a minority member of society. “You can’t just isolate the disability as if nothing else were also determining that person’s destiny,” Jörgensen says.

“All of the essays,” she adds, “make a case for the importance of inclusion, of how much we miss out on the richness of human diversity if we are not inclusive of people with disabilities.”

And now Jörgensen’s research on disability studies is informing her teaching. Last fall, she taught a new course, Disability Studies: Rethinking Difference and Diversity, in which she introduced students to scholarship that treats disability identities both as physical realities and as social and cultural constructions.

The course also explores the literary representations of physical, intellectual, and psychosocial disability in works from a variety of national traditions.

“Teaching a single book, and trying to bone up on what I needed to know to do a good job of teaching that book, opened a new field for me,” she says.

—Bob Marcotte, with Kathleen McGarvey

IN BRIEF

Connecting Veterans with Jobs

A new website aims to connect veterans and reservists with jobs at Rochester.

The site helps job applicants with military experience and knowledge to find positions at the University that match well with their qualifications. It builds on support services offered throughout the University designed to ease the transition from active service to employment or degree programs. Among them are the Veterans Alliance—an affinity group that helps active military and veteran students, staff, faculty, alumni, and their families succeed in higher education—and the Veteran and Military Family Services Office, which supports veterans as they transition from military life to the classroom.

Visit the new site at Universityofrochester-veterans.jobs.

University Launches Antiracism Campaign

A new antiracism campaign, “We’re Better Than That,” was launched this spring as part of a larger effort to address issues of race and diversity at the University.

The catalyst for the campaign came last November, when about 150 students and supporters marched peacefully across campus to protest racism at the University and to present President and CEO Joel Seligman with a list of demands to improve the racial climate.

For more information, visit Rochester.edu/better-than-that.

Top Marks for Health Care Equality

The Human Rights Campaign Foundation—the educational arm of the nation’s largest lesbian, gay, bisexual, and transgender (LGBT) civil rights organization—has recognized UR Medicine’s Strong Memorial and F. F.

Thompson Hospitals as “leaders in LGBT health care equality.”

The foundation annually surveys health care organizations across the country about their inclusive policies and practices related to LGBT patients, visitors, and health care employees.

Both Strong and Thompson earned top marks in meeting nondiscrimination and training criteria, demonstrating a high commitment to providing equitable, inclusive care for LGBT patients and their families.

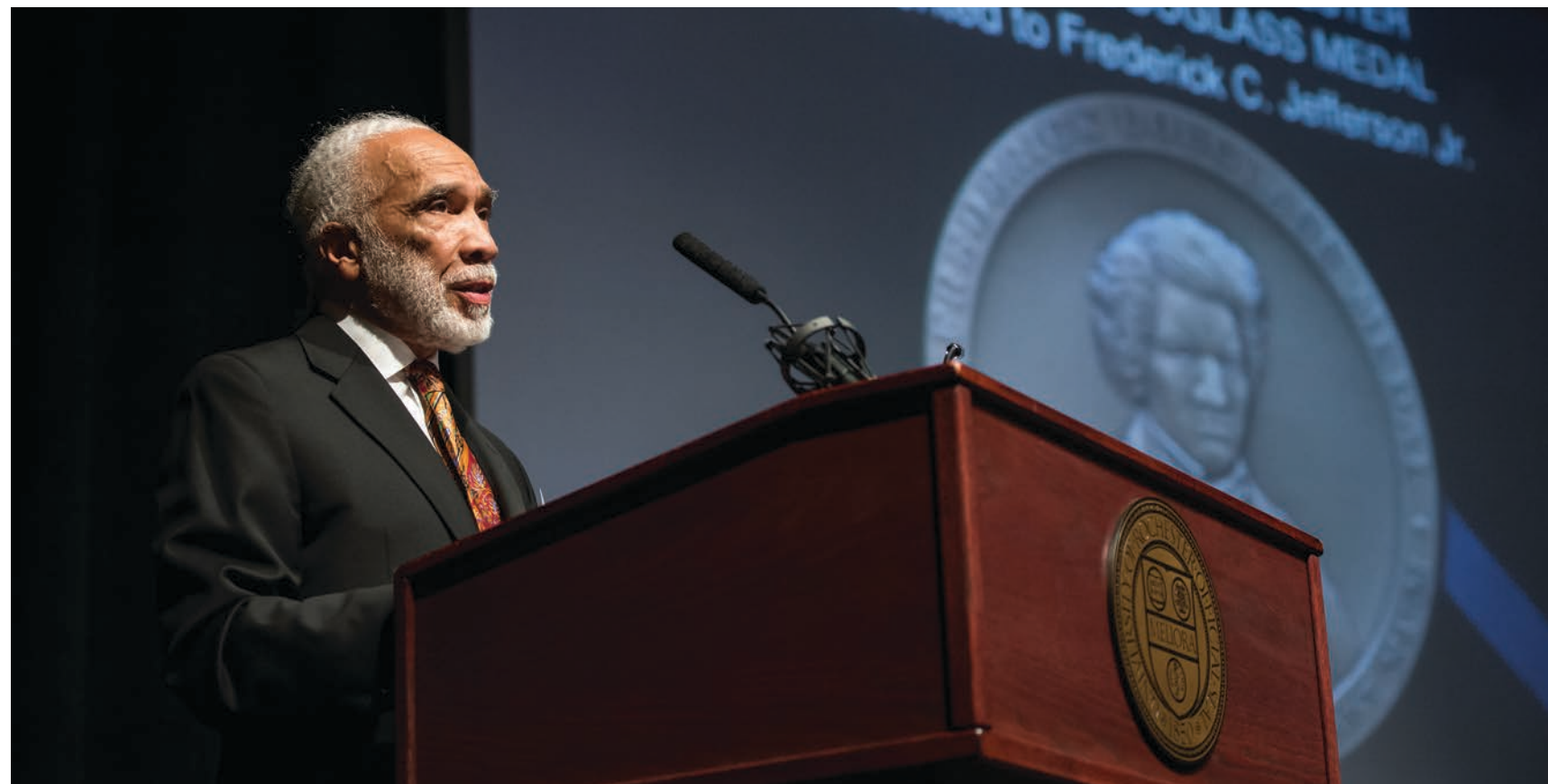
Talking Strategy at Simon

The 16th annual Strategy and the Business Environment Conference was held at the Simon Business School in April. The conference, which has been held at Harvard, Stanford, and the Kellogg School of Management in recent years, featured papers from multiple disciplines, on topics including political risk, corporate governance, corporate social performance, activism, and regulation.

Apple Taps Parkinson App

An iPhone app developed by Sage Bionetworks and Medical Center neurologists to improve the study of Parkinson’s disease was highlighted by Apple during the company’s semiannual product launch event in March.

The mPower app, first unveiled in March 2015 during Apple’s “Spring Forward” product launch, gathers real-time data from patients to more fully understand Parkinson’s and how it affects daily life. The app also allows patients to track symptoms and how treatments are affecting the progression of the disease. With more than 12,000 registered users, it represents one of the largest studies of the disease.



AWARDS

In Douglass’s Footsteps

MEDAL OF HONOR: Frederick Jefferson, a professor emeritus at the Warner School of Education, received the Frederick Douglass Medal in April, in recognition of his part in making the University and the Rochester community more diverse and inclusive.

A behavioral scientist, Jefferson came to Rochester in 1973 as director of the Educational Opportunity Program. Since then, he has served in a variety of roles, including director of the Department of Special Student Services and assistant to the president for University and community affairs. Today he is a University intercessor, specializing in issues related to racial and ethnic diversity.

A significant leader in the Rochester area, Jefferson has served as board chair of Action for a Better Community, as well as the local chapters of the American Red Cross and the United Way. He’s been an advisor to the Gateways Music Festival and currently chairs the board of the Baobab Cultural Center.

The Office of the President and the Frederick Douglass Institute created the medal in 2008 to honor scholars or civic leaders who represent Douglass’s ideals and have contributed to educational life.



HUMANITIES

An Intellectual Icon

GUEST LECTURE: The Humanities Center welcomed Noam Chomsky, the Distinguished Visiting Humanist for the 2015-16 academic year, to campus in April. Chomsky, the Institute Professor and Professor of Linguistics Emeritus at MIT, is widely considered the founder of the modern field of linguistics and a deeply influential public intellectual, having written and spoken on topics of power, force, exploitation, and the media for nearly 50 years.

For three days, Chomsky delivered talks—including a filled-to-capacity lecture on “Language, Creativity, and the Limits of Understanding,” in the Interfaith Chapel—met with faculty, graduates, and undergraduates (left) to discuss his linguistic and political works, and sat for Q&As and discussions at film screenings, including a sold-out screening of *Requiem for the American Dream: Noam Chomsky and the Principles of Concentration of Wealth & Power*, at the Little Theatre in downtown Rochester.

For more on Chomsky’s visit, and on the Humanities Center’s Distinguished Visiting Humanist program, see <http://www.sas.rochester.edu/humanities>.

Discover

A ‘Fishy’ Study Is Promising for Lung Infections

Here’s another reason salmon and sardines can be a boon to human health.

A new study has found that omega-3 fatty acids—like those found in fish—may be key to helping the body combat lung infections.

People with inflammatory diseases like chronic obstructive pulmonary disease, or COPD, often are plagued by a type of bacteria that omega-3 derivatives are effective at clearing.

COPD is most often caused by years of smoking. Quitting smoking can slow its progress, but won’t stop it, and anti-inflammatory drugs—the most common treatment—can put people at risk for secondary infections.

In a recent study in the *Journal of Immunology*, Richard Phipps, who holds the Wright Family Research Professorship in the Department of Environmental



ALPHA OMEGAS: Omega-3 fatty acids, like those found in fish, may be key to fighting bacteria in lungs.

Medicine; Patricia Sime, chief of pulmonary diseases and critical care and the C. Jane Davis and C. Robert Davis Distinguished Professor of Pulmonary Medicine; and toxicology graduate student Amanda Croasdell tested the effectiveness of an inhalable omega-3 derivative to prevent bacterial lung infections. Unlike other anti-inflammatory drugs, the specialized agent used in the study reduced inflammation without suppressing the clearing of bacteria, and could hasten it.

determine the effectiveness of the treatment in people, but the approach also shows promise for remedying other infections caused by the bacteria, including bronchitis, pneumonia, and ear infections.

Further study is needed to

—Susanne Pallo

A Little Bird Told Me ...

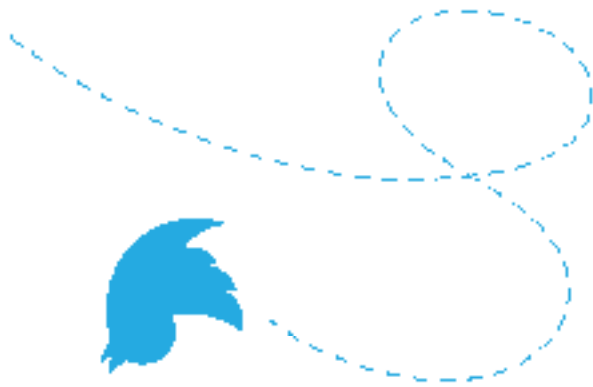
Can a computer tell if you’ve been drinking when you tweet?

New research suggests that it can. In an innovative test case for analyzing ongoing behavior by Twitter users, computer scientists have investigated drinking in different communities.

Computer science graduate student Nabil Hossain and collaborators taught computers to analyze tweets about drinking in an effort to predict where Twitter users are when they report drinking.

Hossain is a member of the computer science group led by Henry Kautz ’87 (PhD), the Robin and Tim Wentworth Director of the Goergen Institute for Data Science.

Hossain is presenting the research at the International AAAI Conference on Web and Social Media, to be held in



Germany in May. The paper was also posted on the arXiv.org repository.

An article in *MIT Technology Review* says the work is based on “two breakthroughs.”

The first is a technique for training a machine-learning algorithm to differentiate between tweets in which people discuss drinking and tweets in which they

homes with greater accuracy than ever before—and thereby determining whether they’re at home when they’re drinking.

Until now, predicting social media users’ home locations was done by establishing the place from which they most often tweet or the common location for their last post of the day.

In the new work, researchers applied machine-learning techniques to identify in-the-moment user behavior.

That allowed them to predict users’ home locations accurately within 100 meters.

When they combined the tools, researchers were able to discover patterns of alcohol use in urban and suburban settings, information that they hope can have applications for prevention and public health programs.

—Leonor Sierra



Counting the Ages of Stars?

People tend to get a little set in their ways as they age. So, it turns out, do stars.

As stars grow older, their activity becomes more predictable, researchers have found. In a paper published in *Monthly Notices of the Royal Astronomical Society*, scientists describe a new conceptual framework for understanding how stars similar to the sun evolved. The researchers explain how investigating the physics behind the speeding up or slowing down of a star’s rotation, its x-ray activity, and its magnetic field

Solving a Calcium Mystery

Secretions like saliva and digestive juices are vital to countless activities that keep the human body running. Now a new study has uncovered a previously mysterious process that makes the secretions possible.

At the heart of the study is calcium, which is present in all human cells and acts as a kind of gatekeeper, opening up the channels that are required for the production and secretion of fluids like saliva.

For 15 years, David Yule, who holds the Louis C. Lasagna Professorship in Experimental Therapeutics, has studied calcium’s role in disorders like acute pancreatitis and dry mouth conditions in which patients have difficulty chewing, swallowing, and speaking due to a lack of saliva.

In his new study, published in the journal *Science Signaling*, he answers a question that has stumped researchers for years: what does it take for a particularly important calcium channel to open and start secretion processes?

Scientists knew that a specific protein, one that is composed of four identical units, is necessary—but using advanced molecular engineering and gene-editing techniques driven by Kamil Alzayady, a research assistant professor in Yule’s lab, the team discovered that all four units that make up the protein must be “turned on” for calcium to increase and start fluid secretion. Yule believes the complexity is likely a safety feature, ensuring that the calcium channel opens only in particular circumstances. That avoids harmful conditions that could result if it opened more easily, as too much calcium is also detrimental.

The team is continuing its research to investigate how genetic diseases affecting the protein result in brain and immune system disorders.

—Emily Boynton



SPECIAL GUESTS

Get Set for Meliora Weekend 2016

The 2016 edition of the fall celebration features big names in music, filmmaking, and political and cultural commentary.

Legendary singer Tony Bennett, acclaimed documentary filmmaker Ken Burns, the hosts of MSNBC's *Morning Joe*—Joe Scarborough and Mika Brzezinski—singer-songwriter Ben Folds, and *The Daily Show* host Trevor Noah are the featured guests at this fall's Meliora Weekend.

The annual celebration, October 6–9, will also mark the celebration of the success of *The Meliora Challenge: The Campaign* for the University of Rochester.

Set to formally conclude on June 30, the Campaign has raised more than \$1.3 billion in support of research, faculty professorships, student scholarships and fellowships, new construction and improvements to facilities and buildings, and new programs.

Registration and ticketing for the weekend opens in July. For more information, visit Rochester.edu/melioraweekend. [@](#)

WEEKEND REPORT: Special guests for October's Meliora Weekend include (clockwise from top left) Joe Scarborough and Mika Brzezinski of MSNBC's *Morning Joe*, filmmaker Ken Burns, singer-songwriter Ben Folds, *The Daily Show* host Trevor Noah, and singer Tony Bennett. The weekend also includes celebrations to mark the success of *The Meliora Challenge* Campaign.



ARTS & HUMANITIES

Poetry Garden

APRIL'S REIGN: A brilliantly illuminated edition of "The May Queen" by Alfred Lord Tennyson was one of the treasures from Rush Rhees Library that took center stage as part of a celebration of National Poetry Month in April. First published in 1832, the poem was illustrated by L. Summerbell in the 1870s. The online project highlighted other examples of poetic and literary work, including videos of faculty members reading some of their favorite poems. Visit Rochester.edu/newscenter/national-poetry-month-2016/.

PHOTOGRAPH BY ADAM FENSTER





ROCHESTER AND ZAMBIA AND MALAWI

People

- 3 alumni living in Malawi
- 3 alumni living in Zambia
- 1 student from Malawi in fall 2015
- 7 students from Zambia in fall 2015

Malawi Immersion Seminar

A three-week study abroad and field school experience run by the Department of Anthropology, the seminar addresses cultural, health, social, political, and ecological issues in Malawi. Students are trained in anthropological research methods, and the seminar welcomes undergraduates and graduate students from any university and any major. Joseph Lanning '00, '07 (Mas) directs the program. Since 2007, 103 Rochester undergraduates have participated; 17 medical students have also taken part, beginning in 2009.



Global Rochester: Zambia and Malawi

Neurologist Gretchen Birbeck confronts seizure disorders in sub-Saharan Africa.

Gretchen Birbeck's first trip to Zambia came in 1994, when she was a University of Chicago medical student completing an elective at the remote Chikankata Mission Hospital, about 75 miles south of the capital city, Lusaka.

More than two decades later, she spends half her year in sub-Saharan Africa, working to improve care for people with seizure disorders.

The Edward A. and Alma Vollertsen Rykenboer Professor in Neurology at Rochester, Birbeck is the director for Chikankata's Epilepsy Care Team. She's also an adjunct faculty member at the University of Zambia.

Seizure disorders can be caused by many medical conditions, and they're more common in the developing world. Neurological and psychological disorders account "for about a quarter of the global burden of disease, and much of that is in developing countries," says Birbeck.

"There's a disconnect between where disease is and where experts are," she says.

She works to redress that disconnection, providing clinical care and conducting research. As a result, more than 3,000 patients have received treatment they otherwise wouldn't have. And she has helped make changes to Zambia's national policy that could help many more.

She's also working to build up the resources and networks necessary to conduct clinical trials in Africa, and to create education and training programs for health care providers and researchers.

She's involved in cerebral malaria research in Malawi and Uganda, and mentors post-graduates and junior faculty carrying out research in Zambia, Malawi, Kenya, and South Africa.

While creating access to specialty health care is critical, Birbeck finds that tackling stigma and

misinformation is also key. The difficulties are complex. There aren't only problems procuring a diagnosis, finding treatment options, and getting access to medication. Open flames from fires and bodies of water also pose significant threats. "Burns and drowning," she says, "are two of the most common causes of death of people with epilepsy in developing countries."

In the years that Birbeck has been traveling to



STOPPING SEIZURES: Birbeck has provided care for more than 3,000 patients with seizure disorders in Africa during two decades of work there.

Africa, she has seen "slow inroads" in Zambia for treating epilepsy, with improvements in general services and better access to information about the disease. Meanwhile, a "roll back malaria" campaign has transformed the incidence of malaria seizures in Zambia, though Malawi hasn't seen such progress. Efforts to deal with malaria haven't kept pace with those for epilepsy, but there have been advances. "I'm not convinced malaria eradication is likely, but there are improvements in infection rates," she says.

Overall, though, Birbeck sees reasons for optimism. "There's much more expertise in-country," she says. "Junior people are coming back as senior people, and staying."

Their efforts are an amalgam of teaching people about seizures and making care available to them. Both are essential, she says, and her research and clinical care are different but interrelated efforts to improve the lives of people with epilepsy and other seizure disorders. "We're educating the public, but we also work with the health care structure to ensure there are providers and treatment," she says.

—Kathleen McGarvey

Ask the Archivist: It's a Date

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

I just came across this great old postcard, which reminds me of the days when I arrived on campus. I am tentatively thinking 1953. I first became familiar with the campus in 1952–53. I have spent the last 62 years watching bricks and asphalt replace the green. —Robert Knox '58 (PhD), professor emeritus of physics, Rochester

The first thing is to rule out the obvious: the archives' copy of the card has a 1959 postmark—far too late, but it does indicate the long shelf- or drawer-life of postcards. The printing code on the back of the card includes "53"—but should we trust that (and where is the fun, if we do)?

The front of the card has all the clues we need. Halfway down the left edge is a red roof: temporary housing for GI Bill veterans was put up in 1946. The extension on the back of Lattimore was added in 1949. Slightly obscured by the trees (and the image quality) is construction on Lovejoy and Hoeing Halls; ground was broken for Lovejoy in April 1952, and both residences opened in September 1953. A story in the Rochester *Times-Union* on June 23, 1953, noted the removal of the red-roofed "barracks."

Across the campus the autumnal trees stand tall. Behind the tower of Rush Rhees Library, there is no evidence of the groundbreaking for what we today call Susan B. Anthony Hall. (You can hear the speeches at the September 1953 groundbreaking here: <http://livinghistory.lib.rochester.edu/womens-center>.)

Taking all these points together, it seems possible to conclude that the image was taken in the fall of 1952, just about the time you were arriving to begin your long association with the University.



POSTCARD VIEW: Autumn color and various landmarks—no Women's Residence Hall (today known as "Sue B"), but construction under way for Lovejoy and Hoeing—suggest the image dates from fall 1952.

Nina Simone seems to be enjoying her moment in the spotlight (new biography, two recently released films). I saw the documentary film *The Amazing Nina Simone* in a local theater and met the filmmaker. I was reminded of Miss Simone's concert at the U of R in 1970 or 1971, and an incident that happened during the concert. I want to confirm my memory and to pinpoint the date. An obviously inebriated older man (that is, apparently not a student) began talking loudly during one of her songs. My recollection is that when the audience began to hiss to show its disapproval, Miss Simone—rather than getting angry (which, as the film documents, she had done in similar situations)—cupped the man's chin in her free hand and sang directly to him until he was charmed into silence. Now, 45-plus years later, I'm wondering how the

local newspapers reported the incident. I'd like to pass the story on to the filmmaker, but want to be sure I have the facts straight.—LeAnn Fields, Ann Arbor, Michigan

Nina Simone performed at the Palestra on February 26, 1971—the show started hours late, because the opening act, Kool and the Gang, had travel delays. The Rochester *Democrat and Chronicle* reports that Simone "began singing 'Black Is the Color of My True Love's Hair' when one fan kept interrupting her with 'Tell them about the ghetto, Nina.' But Miss Simone appeared to enjoy the 'exceptionally responsive' audience."

Gail Wright Sirmans '72 described the event at greater length in the *Campus Times*: "She gave us all of herself, which is rare. Miss Simone is a hypersensitive artist and sometimes becomes impatient with her audience ... 'Black Is the Color of My True Love' began the

performance with vibrating intensity. She held back nothing and let herself drown in a rapturous combination of sound and soul."

Later in her article Wright describes Simone's response to an audience member. "One member of the audience consistently lashed out rude interjections. Maintaining her composure, [Simone] calmly stated, 'If you are so tormented with this place, leave.' While the audience began to show signs of annoyance with the noisemaker, Nina Simone remained intense but unperturbed. 'I know where he is coming from. He's okay, he'll be all right. Let him be.'"

You and 2,000 other fans definitely had a memorable experience.

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.



SPRING AWARDS: Yellowjackets earning All-America honors this spring were Pat Rice '16 (clockwise from above), Ryosei Kobayashi '17, Tomotaka Endo '18, Neil Cordell '16, Mario Yanez Tapia '17, and Alexandra Leslie '18.

AWARDS

Six Yellowjackets Receive All-America Honors

Six Rochester athletes earned All-America honors this spring, in basketball, squash, and the heptathlon.

Alexandra Leslie '18 was named a first team All-American by D3hoops.com and a third team All-American by *DIII News*. Since the end of last season, Leslie has received eight postseason honors, including three All-America teams, two All-Region teams, and one All-League team. She was also named Player of the Year at both league and regional levels.

For the second straight year, and only the third time in the 58-year history of the squash program, Rochester had four All-Americans, as named by the College Squash Association. Ryosei Kobayashi '17 and Mario Yanez Tapia '17 were first team All-Americans, and Neil Cordell '16 and Tomotaka Endo '18 were second team.

The awards capped off the most successful season in Rochester squash history, as the Yellowjackets earned a 12–4 record and reached the national championship match for the first time, falling in a 5–4 match to host Yale.

Pat Rice '16 produced outstanding finishes in his last two events in the NCAA Division III heptathlon and garnered All-America honors. He finished fourth overall with 4,931 points at the New York state championships this winter. That was just shy of his Rochester record in the competition (4,980 points). 📍

—DENNIS O'DONNELL



HIGHLIGHTS

Spring Sports Roundup

By Dennis O'Donnell

Rochester's rowers won the coveted Kerr Cup in Philadelphia and followed that with a victory by the first varsity 8-shell team in the Liberty League championships.

At the 50th edition of the Kerr Cup, the first and second varsity women's teams prevailed in the finals over Franklin and Marshall, Bryn Mawr, and Mary Washington.

At the Liberty League championships, Rochester was seeded third and edged leader William Smith with a sprint over the last 250 meters to win by less than a second.

Here's a look at how the other teams were faring as April came to a close:

Baseball: Rochester was a game out of first place at 10–6 in the Liberty League. Evan Janifer '16 had a 4–2 record and a 1.16 ERA. John Ghyzel '18 was 5–0 with a 1.90 ERA.

Golf: The Yellowjackets finished second at the Liberty League spring championships. Four golfers will earn Scholar All-America honors from the Golf Coaches Association of America this year.

Lacrosse: Three goals in the first three minutes lifted Rochester to a 14–4 victory over Bard College for the first Liberty League win of the season and fourth overall. Jamie Wallisch '17 and Madeline Levy

'18 each had 31 goals with the season winding down.

Softball: Rochester was tied for first in the Liberty League (with RPI) at 8–2. Elizabeth Bourne '19 spun a two-hit shutout over regionally ranked Cortland in late April. At the UAA tournament, Eleni Wechsler '17 had a win and a save as Rochester topped second-ranked Washington twice.

Men's tennis: Rochester reeled off a six-match winning streak, four of those wins with 9–0 scores, heading into the UAA championships. Ben Shapiro '16 was the overall leader in singles victories (15). Aaron Mevorach '18 was second (14).

Women's tennis: The Yellowjackets posted victories over William Smith, Ithaca, Nazareth, and RIT. Alex Wolkoff '18 had 11 singles wins and Lauren Zickar '17 had 10. The doubles team of Camila Garcia '19 and Christine Ho '16 was 16–10.

Men's track and field: The team met eight ECAC qualifying standards at the Bucknell Invitational against competition from all three NCAA divisions.

Women's track and field: The Yellowjackets broke three school records at the Bucknell Invitational: the 3,000-meter steeplechase, the 5,000-meter run (which dated to 1989), and the 4-by-100-meter relay. 📍



HONORS & AWARDS

Soccer Star Recognized

ACCOLADE: Maura McGinnity '87, '96S (MBA) (right) was recognized last fall with a Garnish Citation Award, presented by George VanderZwaag, executive director of athletics and recreation. A member of the 1986 national championship women's soccer team, McGinnity is the development director of interdisciplinary biosciences at Stanford University. Named for a former coach, the late Lysle (Spike) Garnish, the award recognizes support of the intercollegiate athletics program.