Ranked No. 1 for “Best Campus Food” by the Princeton Review for the fourth year in a row, UMass Dining—the largest collegiate dining program in the United States—provides food sourced from over 100 local farms and vendors, and models a sustainable food system. They serve over eight million meals annually, yet their average consumer food waste is less than half of the national average.

Read and watch web exclusives at umass.edu/magazine.

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On the cover: Elyse Langer-Smith ’06MED sings with Rock Voices, an untraditional community choir. Story on page 34.

Read and watch web exclusives at umass.edu/magazine.
DIGITAL MEDIA LAB (DML)

For Edwood Brice ’19 (left), working on his thesis for the Bachelor’s Degree with Individual Concentration program with a concentration in Informatics & Data Science had nothing to do with holing up in a carrel desk or spending all day in a traditional lab. Instead, Brice frequented the Digital Media Lab (DML) on the third floor of the W. E. B. Du Bois Library to investigate the effects of virtual reality (VR) exergaming (pairing VR with video games that provide physical exercise). With support from Catrine Tudor-Locke’s thesis seminar, the UMass STEM Ambassadors Program, his Emerging Scholars-Residential Academic Program peers, and the DML staff—including lead VR Specialist Yuntian Hu ’08 (right)—Brice successfully completed his thesis and degree. He now works as a data scientist at MassMutual and is pursuing a master’s degree in computer science at UMass.

Visit the Digital Media Lab or explore the lab’s 3D models from afar: library.umass.edu/dml/
IN OTHER WORDS

“The Scholar and the Streakers” (Spring 2019) activated a long-since-suppressed memory of the streaking fad at UMass.

I suspected that the story might not be complimentary of anyone who participated, including the fully clothed Colleen photographer (me). I was pleasantly surprised and pleased that the story presented the legend of the streaking fad at UMass.

When my UMass Amherst roomie Steve Ruggles ’77 texted me a copy of page 20. She recognized me in the streaking photo immediately, just as it had been on the front page of the Colleen in April 1974—and much to her dismay at the time, her “roomie” was front and center! However, that picture was not taken at the huge mass streaking event, it was taken earlier, at the Northeast Quadrangle during the streaking frenzy.

I hadn’t yet received my copy of UMass Magazine when my UMass Amherst roomie tested me a copy of page 20. She recognized me in the streaking photo immediately, just as it had been on the front page of the Colleen in April 1974—and much to her dismay at the time, her “roomie” was front and center! However, that picture was not taken at the huge mass streaking event, it was taken earlier, at the Northeast Quadrangle during the streaking frenzy.

Typically, residents of Thatcher dorm would start it off by playing the theme song to the Lone Ranger or some other well-known, action-invoking tune through large speakers set up in the top-floor dormer windows—and the games would begin. On that particular night, I was trying to get into my dorm (Mary Lyons) after the 11 p.m. curfew. I worked late at Stop & Shop and couldn’t go in through the basement door without incurring some kind of demerit. When this happened, I’d throw some pebbles to my second-floor dorm room window to alert my roommate to let me in through the basement door, but on this night she wasn’t responding. When the streaking began, I thought a few of my dorm mates would come to their windows, I could get their attention, and someone would let me in, however, that didn’t play out like I expected and soon I got caught up in the streaking frenzy. This particular streak was promoted by an excess of sorts—over a microphone from the dormers in Thatcher—as the first real streak with a bicycle and motorcycle (behind us and unseen in this photo). I didn’t know the other two people in the photo with me, or on the bicycle or motorcycle—were dressed and went our separate ways right after the streak was over. And I did eventually get to sneak into my dorm undetected and without demerits!

Susan Alston ’78
HAMPDEN, MASSACHUSETTS

TOP: Summer 2018, our 65th anniversary.

BYLINE: Complimentary of anyone who participated, UMass was, and has recently been again, a big part of our family’s lives, as two of our children graduated from the Amherst campus: Kate in 2010 and Chuck in 2012. Good times and good education for all of us.

Thanks for the shock treatment!!!

Thanks for the shock treatment!!!

Top: Summer of 2018, our 65th anniversary.

Bottom: Fall 1949 at a football game in Amherst, our sophomore year.

Congratulations on another fine issue. I was especially interested in the article “We Met at UMass” (Spring 2019) and want to follow-up on the statement that Charles Feldberg ‘54 and Mildred Veileman ‘53 “may have the longest UMass alumni marriage” at 64 years. My wife, Evelyn Postman Crane, and I graduated in 1952 and were married June 9, 1953. We celebrated our 66th anniversary this June.

We were both very active on campus and loved every minute we were there, a very special time providing us with everlasting memories. Living in Atlanta, Georgia, since 1956 makes it difficult to visit often; however, we were there for our 45th class reunion and stopped by whenever we were in the New England area. The campus has developed beautifully. Evelyn joins me in sending our best wishes for continued success at UMass.

Milton Crane ’52
ATLANTA, GEORGIA

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advise Pedro Ramos ’90, superintendent of both Everglades National Park, the largest subtropical wilderness in the United States, and Dry Tortugas National Park, seven remote islands accessible only by boat or seaplane. “We’re going on a swamp walk. You have to get intimate with the Everglades to truly appreciate it.”

On a bright fall morning, we drive a few miles past palms and pines down the main road from Ramos’s park headquarters office—which is next to the Ernest F. Coe Visitor Center, an hour south of Miami— and pull to the roadside. We step out of the car, grab sturdy walking sticks, and head for a wall of trees. Three steps later, the cool and surprisingly clear water covers my sneakers and Ramos’s regulation National Park Service leather lace-ups. Five more steps and we’re knee deep. In a few more strides the water is thigh high. We’re exploring a cypress dome—the main park road is out of sight and the gray trunks of cypress tower around us. Wary of alligators, I tread carefully. I expect to find just muck and bugs, but instead, I see a profusion of air plants (Tillandsia) growing on the tree trunks as we skirt ferns the size of SUVs. I hear only our faint splashes and a woodpecker. “Our biggest danger here is tripping and getting wet.”

Otherworldly Habitats

Ramos points out some of the aptly named flora and fauna in this unique ecosystem: a spinning whirligig beetle; the jagged edges of the sawgrass; and a rounded, root-like cypress knee. He shows me a soggy handful of periphyton—a spongy green-brown mass filled with tiny organisms that form a vital link in an Everglades food chain. This cypress dome is just one of the otherworldly habitats of the Everglades, which are home to an astounding variety of plants and animals. From its rivers of grass to its tangled mangrove forests, many threatened and endangered plants and animals live here, such as the West Indian manatee, the Florida bonneted bat, and 66 species of plants native to the park that are considered to be critically imperiled in South Florida.

On this swamp walk, Ramos points out features of this wet wonderland and enjoys a brief respite from his office and his responsibilities—which, without exaggeration, are as big as all of South Florida.

Big Job, Big Impact

Ramos became superintendent of Everglades National Park and Dry Tortugas National Park in 2015. He was the first Hispanic superintendent in the Everglades and is now one of the 30 most highly ranked officers among the 28,000 people employed by the U.S. National Park Service.
The challenges that Ramos is confronting range from invasive plants (at the top of the list is the fire-resistant, salt-tolerant Brazilian pepper) and invasive animals (18-foot Burmese pythons) to conflicts between conservationists ("No airboats—ever") and outdoor enthusiasts ("More campsites, now").

There are hurricanes (park infrastructure took a big hit from Irma in 2017) and the 2018–2019 government shutdown (loyal volunteers kept the park open). And, of course, there are rising water levels brought on by climate change. Some dilemmas can be solved simply: when vultures were eating windshield wipers and door seals at the parking lot near the Anhinga Trail, the park supplied tarps for visitors to throw over their vehicles. Problem solved, no birds harmed. More often, however, the dilemmas that Ramos is facing involve complex solutions with many stakeholders.

**A Pressing Crisis**

No Everglades crisis is more pressing and long-standing than water flow, or the lack of it. Well before the Everglades was established as a national park in 1947, people were choking off its critical supply of fresh water, drying up sensitive habitats in order to farm or to build roads, homes, and cities. Developers dredged, damned, and drained what they saw as a useless swamp, and endangered the seagrass beds, mangrove forests, freshwater marshes, and plants and animals that lived there. Restoration efforts have been under way for decades, and now, Ramos explains, the Everglades is the site of the largest wetlands restoration project in the history of the world. “We’re not just talking about the park,” he says. "We’re restoring the greater Everglades ecosystem—north to Lake Okeechobee and south to Florida Bay. This level of restoration work has never been attempted.”

"A lot of people have a stake in what we’re doing," Ramos says. "The Everglades is a 1.5-million-acre wilderness surrounded by people." As superintendent, he cooperates with federal, state, and local officials; scientists; business people; residents; and all sorts of community and advocacy groups. A pragmatist, he sees his role as bringing everyone together while steering clear of politics, and keeping in mind that everyone loves the national parks.

**A Victory**

Ramos and other park advocates celebrated a critical victory for the Everglades in June when the U.S. Department of Transportation announced it will give Florida $60 million to complete the elevation of the Tamiami Trail, a highway across the Everglades that has blocked freshwater flow since it was built in 1928. The $60 million will be added to $40 million appropriated by the Florida legislature. Given today’s unpredictable political climate, the funding for this complex interagency effort was by no means assured. Ramos says, “The National Park System is the recipient of a lot of love regardless of who is leading the country. These places tell the story of who we are as Americans.”

Ramos says the first phase of the Tamiami Trail project has already made an impact. “Restoration is not anywhere close to being done, but we have moved a significant amount of water into the park, and the ecosystem is responding well,” he says. “Nesting birds like the egrets, ibises, and spoonbills are coming back—we’re seeing super colonies that we haven’t had in 80 years. When we start doing right by Mother Nature, Mother Nature tends to respond.”

Ramos believes it was his college experience that made him comfortable working with people from many backgrounds. Born and raised in Puerto Rico, he came to UMass in 1985 because he wanted something different and was intrigued by the Northeast.

**The UMass Fix**

He recalls surviving for school with one big suitcase and not enough winter clothes for Massachusetts weather. Unaware of the long distance from Boston to Amherst, he took a taxi from Logan Airport to his dormitory. As he settled in, his language skills improved from classroom English to casual campus English, and soon enough he was making friends who brought him to events like the Holyoke St. Patrick’s Day Parade and to their homes for New England Thanksgiving dinners. “I took loans from my introversion,” he says. “UMass was exactly what I needed. Puerto Rico is a small island, and at UMass I experienced a broad range of perspectives.”

Ramos studied agriculture and natural resource economics, and in his senior year was recruited by the U.S. Department of Agriculture (USDA) as a student trainer for the Farmers Home Administration. He first worked for the USDA in Brattleboro, Vermont. In 1993 he accepted a position in the U.S. Virgin Islands, where he served as Community Development Manager.

In 1997 he returned to New England as the director for administration of rural development, based in Montpelier, Vermont. After four years back in the cold (“It’s inhuman to expect a Puerto Rican kid to spend too much time in the Northeast,” he jokes), he donned the flat hat of the Park Service as an administrative officer at Florida’s Big Cypress National Preserve. In 2000 he was named deputy superintendent at Big Cypress, and was promoted to superintendent in 2009. He moved on to the Everglades and Dry Tortugas National Parks in 2015 when he was selected as superintendent.

In the past year, Ramos has focused on the reorganization of park management. He continues to look for a balance between passive and active recreation in the parks, he has endeavored to bring more minority visitors to the parks, he has boosted entrance fees to address deferred park maintenance, he has raised awareness of the historic Nike missile site—a relic from the Cuban missile crisis in Everglades National Park, and he has worked to improve park infrastructure.

**People First**

As he takes action on these and other concerns, Ramos tries to keep things simple. “I stop thinking about the issue, the thing, the problem,” he says, “and I start thinking about the people. Put people first and things will fall into place.”

Thigh deep in the clear water of the cypress dome, still wearing his flat hat, Ramos calls out to a family group of swamp walkers: “Is this your first time? What did you do before you came here?”

“The Everglades is not as easy to appreciate as the Grand Canyon or Yosemite,” he tells me as we move on to look for fish and turtles from the elevated Anhinga Trail boardwalk. “But you love it once you get to know it. It’s a wild place of incredible diversity. I’m very fortunate to be involved with it. For me, it’s been an amazing journey.”
A REPELLING SMELL FROM THE “CORPSE FLOWER” ATTRACTS A CROWD

On July 10, the Amorphophallus titanum—a 6-foot-tall plant known as the corpse flower because it smells like rotting flesh—bloomed for the first time in 30 years. Drews gathered at the Morrill Greenhouse, willing to brave the stench, to get a view of one of the world’s biggest flowering structures and one of the most unique to get a view of one of the world’s biggest flowers, is just one of the botanical peculiarities found in UMass Amherst’s unique research and teaching collection. The corpse flower takes approximately 10 to 12 years to bloom for the first time. After that, it may bloom every two to three years, or it may take another several to 10 years to bloom again. According to Greenhouse Manager Chris Phillips, “the plant sits dormant until it’s enough energy to bloom; this particular specimen last bloomed about four years ago. We hope to store some of the plant’s pollen for a possible future collection. “As it continues to decline in the wild, I feel it’s in our mission to keep good hearty specimens in captivity,” says Phillips.

IN BRIEF   AROUND THE POND

IN BRIEF   AROUND THE POND

HORSE BARN REDUX

In September 25, Chancellor Kumble R. Subbaswamy led a ribbon-cutting ceremony to unveil the Massachusetts Farm Bureau Federation Hall. Originally built on the campus in the 1940s, when the federal government disbanded the U.S. Civilian Conservation Corps, the barn was relocated and rebuilt as part of the UMass Agricultural Learning Center, a 75-acre outdoor classroom. Built in 1894, the horse barn originally housed the college’s horse and cattle herds. In the 1940s, when the federal government disbanded the CCC, the university assumed the stable for the Morgan horses. It was in full use until 1999 when the horses were moved to the Hadley Farm. The barn was last used by the Massachusetts State Police Department for their mounted patrol over a decade ago. The new barn was built as a replica down to the finest details of the 1894 Queen Anne style architecture. Many pieces of the original barn were reused and repurposed including wood beams and horse stalls. The new building will serve as a vegetable washing and packaging facility for the student farm program, which provides $100,000 worth of organic produce to 10 wholesalers including Big Y and UMass Dining. Students enrolled in the two-semester farming program get hands-on experience that includes learning how to use farm machinery, tending soil, experimenting with growing food, marketing, and the ins and outs of running a farm venture.

DARKNESS VISIBLE

ight University of Massachusetts Amherst astronomers who are members of the Event Horizon Telescope (EHT) Collaboration—an international team who earlier this year unveiled the first direct image of a supermassive black hole and its shadow—continue to collect awards. In September, the team of 347 scientists received the 2020 Breakthrough Prize in Fundamental Physics from the Breakthrough Prize Foundation, founded by Mark Zuckerberg, Priscilla Chan, and others. The EHT Collaboration was awarded the prize “for the first image of a supermassive black hole, taken by means of an Earth-sized alliance of telescopes.” In the award’s description, the foundation recognized the huge collaborative effort it took to accomplish this task. Using eight sensitive radio telescopes strategically positioned around the world, scientists from 60 institutions operating in 20 countries synchronized the telescopes to create a giant virtual telescope “with a resolving power never before achieved from the surface of our planet.” The UMass Amherst contribution came from the large Millimeter Telescope (SMT), which is operated jointly with Mexico’s Instituto Nacional de Astrofísica, Óptica y Electrónica (the National Institute of Astrophysics, Optics and Electronics) and sits atop Sierra Negra—Mexico’s fifth-highest peak. Because of its central geographical location and large aperture, the LMT, which is the biggest millimeter-wave telescope ever built, “has been critical to the success of the black hole image project.” The UMass team is comprised of Research Professor Gopal Narayanan, the principal investiga- tor of the UMass Amherst’s SMT mission; Professor P. Peter Grosslein, the principal investigator of the LMT in the global EHT array; Research Professor Neelidikson; and astronomy graduate students Aleks Popstefanija ‘22 and Sandia Bustamante ‘25; and engineers Ven Fath, Ron Groslein, and Kamal Sorousa. “All the hard work that our team put in on various facets of this experiment has borne fruit. I cannot be prouder of our UMass and SMT team members who share this prize,” says Narayanan.

The Breakthrough Prize, also known as the “Oscars of Science,” is considered to be one of the world’s most generous science awards: The $3 million prize will be split equally among the EHT team members who co-authored six papers published in April reporting the detection of the black hole, which is located in the center of a galaxy in the Virgo cluster known as M87—which some 55 million light-years from Earth.
Behind a single unmarked door in the basement of Morrill Science Center III are more than 6,000 of one of science’s most valuable models for studying human genetics and disease—the zebrafish. The tiny, striped members of the minnow family dart about in 200 small tanks on racks that are four rows deep.

The Jensen Lab is not a large room. There are no windows, there’s fluorescent lighting, and the air is humid, though it smells neither fresh nor stale. Large electric pumps hum in the corner. It’s an intimate place where water, and life, are in nonstop motion; there’s a constant purring.

Today, Abigail Jensen, University of Massachusetts Amherst associate professor of biology, shows me one tank in particular. In this tank, all of the zebrafish—each 3 to 4 centimeters long—have lost their zebra; their typical five uniform, pigmented, horizontal stripes are gone. Called “crystals,” these creatures are a translucent pink. I can see the outlines of their backbones and the shadows of their tiny internal organs.

“I call them crazy crystals,” says Jensen. “We’ve bred the pigments out of them—the silver, the black, and the gold. So now excessive amounts of light will penetrate the entire eyeball, even from the back.”

ABBIE JENSEN HAS BEEN ATTEMPTING TO CRACK THE MYSTERY OF A CERTAIN TYPE OF BLINDNESS FOR SOME 15 YEARS. NEW FUNDING WILL HELP ACCELERATE HER LAB’S WORK.
She reminds me that light is actually a toxic insult to the cellular level, especially on cells called photoreceptors that process light in the eye. “Their eyes are completely clear,” she explains. She hopes the light will degenerate, or damage, the cells. “It seems weird that we are trying to get the cells to die so that we can understand why they die and then how to keep them alive.” Learning why the cells degenerate will improve our understanding of an eye disease that afflicts about one out of every 10,000 young Americans: Stargardt disease.

Named for Karl Stargardt—the German ophthalmologist who first described the inherited eye disorder in 1909—Stargardt disease is a disorder of the retina that causes vision loss. Jensen is just the first of many to be putting the Manning funds to good use, as the Foundation Fighting Blindness recently awarded Jensen a grant to study the rods and cones. “We know that those are compromised, and the cones and rods die right away, and that they are vital for the health of the photoreceptors.”

A FAMILY CONNECTION

Jensen’s research into Stargardt disease hinges close to home for the Mannings. Both of the Manning sons—Bradford and Bryan—have Stargardt disease. The two brothers, both in their early 30s, now run an online clothing label called Two Blind Brothers, which donates all proceeds to the Foundation Fighting Blindness. The New York City-based store offers super soft, Braille-enhanced T-shirts and Henleys. “Their parents’ gift will provide much-needed support to Jensen and other scientists,” says Serio. “It’s the kind of risky research that if it can’t happen at a university like UMass, it won’t happen.” Her next step is to prove her ideas in a lab and get help to manipulate gene expression in photoreceptors under a microscope after forcing light upon the eyes of translucent zebrafish.

OTHER DISEASE TREATMENTS

Discovering these pathways could lead to treatments not just for Stargardt disease, but for other retinal diseases such as retinitis pigmentosa, a severe form of retinal degeneration. “What we’ve done so far is a pretty hardwrought task,” says Jensen, whose senior research associate, John Williams, runs the genome editing technology called CRISPR. “We are doing all we can to combine and stress the retina as much as possible to elicit degeneration.” This means combining all the mutations we can in one fish. “I strive for this to happen as fast as we can.”

While normal research focuses on a single recessive mutation across at most two generations, Jensen and Williams have combined eight different mutations in dozens of different fish and the number is growing. “It’s never been done before.” The number of mutations we’ve made, and combinations of mutations, is insane.

Jensen is just the first of many to be given a Mayportivity with Marthas’s Vineyard funds to prove her ideas in a lab and get help bringing her findings to the greater world. The next wave of scientists and business students chosen to partake in the program have begun work on a new suite of projects this fall semester.

She hopes the light will degenerate, or damage, the cells. “It seems weird that we are trying to get the cells to die so that we can understand why they die and then how to keep them alive.” Learning why the cells degenerate will improve our understanding of an eye disease that afflicts about one out of every 10,000 young Americans: Stargardt disease.

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A SCIENTIFIC BLACK BOX

“It’s a complete black box in the field,” says Jensen. “We don’t understand what program is launched or what internal program is suppressed when cells are dying.” One part of the puzzle is called the retinal pigmented epithelial cell, which plays a vital role in supporting the cones. “We know that those are compromised, and the cones and rods die right away, and that they are vital for the health of the photoreceptors.”

PIONEERING RESEARCH PROGRAM

Alumnus Paul Manning ’77 and his wife, Diane Manning, donated $1 million through their family foundation to establish the Manning Innovation Program in order to stimulate, recognize, and reward innovation. The program will foster a culture of entrepreneurship in the College of Natural Sciences and enhance the spirit of collaboration among Isenberg School of Management advisors, science and technology researchers, and industry experts. UMass Amherst researchers are working on some of the most important issues of our day,” says Paul Manning, who earned a bachelor of science degree in natural science and business together—that can bring solutions to more people, faster.”

A FAMILY CONNECTION

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The ABCA4 gene makes a protein that normally clears away waste by-products inside the cones. In turn, cells that lack the protein accumulate waste and central vision becomes impaired, eventually leading to cellular death. “If we identify the beginning of the process, molecularly, we can identify targets for intervention to slow down or prevent this process,” says Jensen. “One can envision ultimately ways that we could prop up that pathway using drugs or small molecules. That is, to keep them functioning in the presence of the mutation. But you can’t do anything until you identify the pathway, which is what we are trying to do.”

(Think of studying the photoreceptor cells under a microscope after forcing light upon the eyes of translucent zebrafish.)
TRIPLE TAKE

Athena Levesque ’15, ’16MA is her own person, but the rest of the world has long focused on how she and her identical sisters, Andrea and Arianna, are the same—and it used to bug her. “High school was when I really wanted to be the most different. We had no separation; we shared a room together, a car; everything. So, I tried to differentiate,” she says. “But when we went to college, we did separate.” Off they went to study their own fields: history, psychology, and fashion. (Athena first earned a bachelor of arts degree in history; and then earned a master’s in education and a teaching certificate—all at UMass.) “I think it’s normal for siblings to want to be their own people, and when you’re living together, you have to individualize yourselves,” Athena says. “But we don’t try as much anymore. We know who we are.”

Now the 26-year-olds are living in New York City, where the threesome model, act, and build the Levesque Triplets brand. “Our job now is to look as alike as possible,” Athena laughs. After all, the triplets’ sameness is what makes them unique in the fashion and entertainment world, which can be notoriously cutthroat. In a feature article that appeared in the New York Times last year, the triplets were described as a power trio under the headline “These Triplet Models Want to Take This Town by the Throat.” Athena and her sisters’ “talent is more than skin-deep. The triplets have been savvy ambassadors of their brand—themselves.” … They almost always market themselves as one,” the Times wrote, quoting Athena saying, “There are a lot of pretty blond girls, but there aren’t that many triplets. We should use it.”

They’re more than using it, they’re rocking it. In just the last two years, the sisters have modeled for large fashion labels including Giuseppe × Juliet Couture, launched their own clothing line, appeared in several short films and music videos, and were featured guests on Good Morning America—twice. And somehow Athena finds the time to do some teaching, mostly in the form of tutoring and online English as a second language lessons.

As glamorous as modeling seems, the work can be physically challenging and the pressure for perfection is immense. “This work can be a struggle for sure,” Levesque says. But the triplets have a unique built-in support system, helping each other through the grueling gauntlet of auditions and callbacks. “I am lucky that my sisters and I do this together.”

> NADIM SHERMAN

See the Levesque triplets in action: umass.edu/magazine
How much have you thrown away today? I certainly don’t keep track. The wrappers, water bottles, and cans you use aren’t meant to be kept track of, which is why they’re waste products. But the Sonoran Desert in Arizona is filled with these objects as hundreds of migrants from Mexico and Central America pass through it—an almost daily test of survival—to get to the United States. And whether these objects are considered trash or artifacts is up for debate.

Think of an artifact. Some things that probably come to mind are ancient bronze tools or maybe a simple clay pot. Now take your perception of that “trash” you threw away, and what is currently filling the Sonoran Desert, and combine them with what you think an artifact is. Essentially, they are the same. All of those things are artifacts because they leave an important mark on the material culture of our collective history, and they should be thought of as such.

Now think back to the desert, and the migrants from Mexico and Central America who are attempting to cross into the United States. An exodus of people such as this is considered an epic event, and there have been many like it in the past: the Famine of Ireland from famine in 1845, the emigration away from poverty in Italy in 1880, the escape of Jewish people from Nazi Germany in 1939. What did these people leave behind other than stories and documents? They left physical remains of their struggles and hardships—pieces of evidence that they abandoned their homes to find refuge in a new place. All of these were massive movements of people who made their mark on the earth, and left behind fragments that tell a tragic story about each man, woman, and child. Items like the backpacks, water bottles, papers, and shoes that are littering the Arizona desert are a link on this same chain. The items left behind—children’s shoes baking in the heat, photos of loved ones who may never be seen again, or even the tattered remains of clothes once worn not too long ago—all tell a story.

In archaeology there is an important concept called context. Context is, in part, the location where an artifact was found. It is also the type of soil it was found in, the type of site where it was found, and perhaps most importantly, what the artifact was found with or in relation to. So while the object itself can give us some information, it is actually the context that gives us the most information. This is why it is often illegal to move or take objects from an archaeological site. It is this idea of context that makes removal of these migrants’ personal belongings so problematic. Removing them before recording them is an active erasure of history and meaning. How will we be able to accurately record the struggle of these families in 100 or 500 years if we actively work to remove it beforehand?

Together we must work to preserve an ever-growing history of the Americas, to honor both the memories of the hardships our ancestors suffered in the past, and the suffering experienced by migrants today, so we may never forget these journeys.
I keep an unabridged Merriam–Webster Dictionary across the room from where I write. I visit it maybe 15, 20, 30 times during the course of any one-to-three-to-five-hour writing session; on average, maybe five days a week. If my brain—on its own—works to provide surprising combinations, associations, thoughts, images, speculations, music, moods, tones, and logic, then my dictionary—on its own—works to provide my brain with good, solid, always-relevant information and amplification. The singularity of any given word—first, how it looks, what it says, from where it comes; next, that word’s companion words, and last, but maybe most significant of all, random words I meet along the way.

These detours away from where I think I want to go, they might be noted as distractions, but these sometimes serendipitous, sometimes contradictory forays often turn out to be among the crucial fueling ingredients my writing depends on for inspiration, addition, and texture. I might think that what I want to know more about is oblivion, but what I find is the obliquity of the ecliptic and the many facets of metamorphosis, and finally forgiveness (in sense three) with the official ignoring of offenses. I think I need to spend some time with safari, but what arrests my attention are salient, sadomasochism, saccadic, and salad days. I think I will go learn more about coral only to learn a lot more about corollary and counterturn and coffin nail.

I go from magnificence to means to marquee to maniac to distyle, ductile, hindsight, shell game, veronica, yardstick, ball field, magpie, variegated, and close shave.

My brain’s actions depend on words. Nothing much would be going on in there without them. And while I’m aware of the nebulous, ineffable, mysterious all-that-is which also makes up what passes for my consciousness (Webster’s Third New International Dictionary, page 482, sense 1 a, b, and c), I never forget to worship each letter’s letting go of its individuality in service of its contribution to wording.

To be able to stand in that mystery—as burning, as fact, as miraculous as water, as circulation, as gravity, as the very air we breathe, as illusion, as chimera, as life sentence—to be able to stand near it, will always send me to words.

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In the university’s 156-year history, fashion has swung from women’s hoop skirts and men’s trousers to yoga pants and maroon sweatshirts. Technology went from the invention of efficient plows to smart phones, artificial intelligence, and virtual learning. What technology was cutting edge during your time on campus? Was it Tupperware or the push-button phone? Was it the Fitbit or a Wi-Fi controlled drone? Post your answers to any social channel with the tag #umassmagazine and we may share your memory at umass.edu/magazine.
At some point in childhood, somebody probably asked you, “What do you want to be when you grow up?” Your answer may have been a baseball player, astronaut, or perhaps even the president. Mine was always the same—lines that wanted to be a dancer.

Having started dance at the age of three, my childhood revolved around dance training. As I aged, my passion grew, and what started as an extracurricular activity became a career path by the time I was in high school. My dance training was not easy. My feet would blister and bleed from hours spent in pointe shoes; some nights I would come home and seek my muscles in an ice bucket while I finished my homework. The pressure of a high-intensity, pre-professional dance studio sometimes broke me, and there were nights I would come home and break down in tears. But the harsh realities of life as a professional dancer became unavoidable. The daily aches and pains were getting too, and sometimes I felt myself losing motivation in class. Simplicity, it was time to go back. That image of me in the wings began to blur, and seemed like more of a mirage than a destiny. As my freshman year progressed, it soon became clear to me that I had become more interested in becoming a professional dancer. My realization was both devastating and terrifying. I began to question my past and my future. Why had I sacrificed going to school dances, birthday parties, and concerts, for countless hours in a dance studio? Why had I pushed myself to do so much and care so little? I decided to attend the University of Massachusetts, and at the start of my freshman year I decided that I was going to major in journalism in addition to getting my BM in dance. Once I began my coursework, I found myself looking forward to my journalism classes each week, pondering over my reading assignments and rereading every minute detail of “The Elements of Journalism” to my roommate late at night, much to her dismay. I started writing columns for the Massachusetts Daily Collegian (and found that I really liked it.)

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Not many people understood the computer science and artificial intelligence research that Tom Wagner ’00PhD was doing while studying at University of Massachusetts Amherst. “When you’re doing doctorate research, you’re usually focusing on an unusual or novel thing,” Wagner points out. “But then the world evolves.” Since his time at UMass, Wagner has become a pioneer in booming robotics and artificial intelligence industry. The projects he has led have brought robots into realms never before imagined.

A decade ago, Wagner was the chief technical officer of iRobot, the company that brought you the Roomba Robot Vacuum. The company also created innovative robots that save lives. iRobot’s PackBots were used by the U.S. military to hunt improvised explosive devices (a menace that has killed or maimed thousands of U.S. troops in Iraq and Afghanistan). In the aftermath of the Fukushima Daiichi nuclear plant disaster in Japan, the company’s robots were deployed to explore areas that were too dangerous for humans.

Wagner left iRobot in 2012, and in 2013 he became the founder and CEO of the technology firm Berkshire Grey (based in Lexington, Massachusetts), which automates menial work in industrial environments in the name of creating more opportunity for humans. Wagner has spent his career thinking about how technology, robots, and artificial intelligence can make our lives better—and in some ways they already have.

Wagner is driven to invent practical technology that delivers value for customers and he says that often times we don’t know we need a technology until it comes along. Consider something as common-place as photo sharing apps. “In the past you’d have to print the photo, type the letter, address hundreds of envelopes, and send all those things out to share a photo with friends,” Wagner says. None of us could conceive of how easy sharing a photo would become. That’s Wagner’s job—to imagine what most of us can’t. We asked him to imagine what the near future with robots might look like.

FIRST, ROBOTS NEED TO SMARTEN UP

“When you see a robot painting a car, that robot isn’t thinking. Conceptually, you could pull the car out and it would paint the six.” In order to create what Wagner calls “an impactful way to use robotic systems,” he says robots themselves need to get smarter—and the robotic systems he’s creating for retailers and e-commerce companies are moving in that direction.

“We put artificial intelligence into robots to enable them to do tasks that are too hard for conventional, unintelligent robotic automation,” he explains. For example, robots in shipping warehouses can identify and pick up the bottle of shampoo you ordered, select the right size box for it, they can even organize and pack items. This new technology makes use of computer vision, sensors, novel grippers, and machine learning to automate tasks that have never before been performed by robots in commercial settings. Berkshire Grey’s portfolio of robotic solutions pick up objects, pack them in boxes, and ship them out the door to both consumers and stores—all of which saves companies big bucks. “When someone rings your doorbell two days later,” Wagner says, “that package you ordered online may have been handled by one of our robotic systems.” For consumers it might simply be a cool concept, but for small and large e-commerce businesses, it’s a lifesaver—it allows them to compete with juggernauts like Amazon.

ROBOTS NEED TO SMARTEN UP

“Our customers have thousands of positions they can’t fill,” he says. When robotic systems step into those unfilled positions, companies can survive and thrive—and provide jobs to living, breathing humans. Certain things are better handled by people. If you expect a high-end consumer good to be beautifully presented in a box, for example, that goes to a person who does the delicate, artisitic, thoughtful work. We don’t automate that.” At least, not yet.
JADA MARIE HARRIS
Jada Marie Harris ‘20 isn’t afraid of a hurdle—after all, it’s her main track & field event. She’s taken her skills all the way to the NCAA Championships, only the second track & field athlete from UMass to do so. But she’s also interested in tackling hurdles off the playing field, particularly around issues of social justice. “If you’d asked me at the beginning of last summer, I’d have said I was heading to law school,” she explains, “but an internship with U.S. Representative Katherine Clark (a Democrat representing the Fifth Congressional District in Massachusetts) changed my perspective.” She’s still interested in law school, but is also considering a master’s program in public policy at UMass. In addition, taking a class called The People’s History of the War on Drugs with Toussaint Losier, Assistant Professor in the W.E.B. Du Bois Department of Afro-American Studies, ramped up her interest in social justice, with a particular emphasis on fighting the prison industrial complex. It’s a big goal, but Harris, from Bridgeport, Connecticut, is no stranger to big goals—both on and off the field. “My goal is to exceed my own expectations.”

LAST YEAR’S HIGHLIGHTS
Broke a 22-year high jump record and a 20-year 100-meter hurdle record. Came back from a foot injury to win the Atlantic 10 Indoor Track & Field Championships hurdle event.

PRE-GAME RITUAL
A conversation with myself, prayer, then hype myself up. It helps ease my mind.

FAVORITE SNACK
For a healthy snack, apples and peanut butter. For an unhealthy snack, Swedish fish.

STAYING FOCUSED
Track influences how I move about so intensely. You need that amount of focus and energy in every area of your life. I’ll take it wherever I go.

MITCHELL CHAFFEE
“There’s plenty of hockey in Michigan, where I grew up,” Chaffee says. He came to UMass because he knew a new coaching staff was coming in, and he saw an opportunity to get in on the ground floor of something big. “I came because I knew there was a new coaching staff,” he says. Last year, the UMass hockey team catapulted into the NCAA Frozen Four after years of stagnant seasons. Chaffee credits the coaching team, especially Greg Carvel, for turning the team around. “We knew we could be better. Making it to the national championships is a really big accomplishment for us, but all we know is that we have made a really big impact and we’ll carry on from there.” He was right. Last year, the UMass hockey team catapulted into the NCAA Frozen Four after years of stagnant seasons. Chaffee credits the coaching team, especially Greg Carvel, for turning the team around. “We knew we could be better. Making it to the national championships is a really big accomplishment for us, but all we know is that we have made a really big impact and we’ll carry on from there.”

LAST YEAR’S HIGHLIGHTS
Scored the game winner in Game 1 of the Hockey East Tournament quarterfinals. Logged third straight multi-point game with a goal and an assist at University of Connecticut.

BEST BOOK READ LATELY
Extreme Ownership: How U.S. Navy SEALs Lead and Win by Jocko Willink and Leif Babin

FAVORITE CLASS
Abnormal Psychology

PHYSICAL-MENTAL CONNECTION
There is more to sports than just the physical side. Psychology—the mental side—is also a major part of sports.
HIGHER AND HIGHER
The University of Massachusetts Amherst has climbed into the Top 25 of the nation’s premier public universities, coming in at No. 24 among the 146 public schools ranked in the Best Colleges 2020 guide published by U.S. News & World Report. The commonwealth’s flagship campus moved up two slots this year as a top-ranking college. “UMass Amherst’s rise to national prominence reflects our commitment to excellence and innovative thinking,” said Chancellor Kumble R. Bajaj. UMass Amherst’s rising national profile correlates with its growing role in providing talent essential to the success of the Massachusetts innovation economy. The university educates more students from Massachusetts than the eight top-ranked private national universities in the commonwealth combined, and it also awards more undergraduate STEM degrees than any other college or university in the commonwealth, public or private. More than 60 percent of UMass Amherst alumni remain in Massachusetts. The university stands out as a world-class leader in research and innovation. In fiscal year 2019, the campus received more than 1,000 sponsored research awards totaling over $156 million, an all-time high. Total research grant funding has increased 42 percent over the past 10 years.

For six years running, UMass Amherst has been ranked in the top 30 public schools. UMass Amherst was also ranked No. 64 among 359 public and private schools in the U.S. News & World Report National Universities category, moving up six places from last year’s ranking. According to the U.S. Department of Education, there are over 2,800 four-year colleges and universities in the United States, of which 750 are public. The U.S. News rankings are based on a variety of weighted factors: graduation rate performance; undergraduate academic reputation; faculty resources; graduation and retention rates; social mobility; average alumni giving rate; and financial resources per student. All of the schools in the National Universities category offer a wide range of undergraduate majors as well as master’s and doctoral degrees, while emphasizing faculty research.

Daniel Ellsberg, one of the nation’s foremost political activists and whistle-blowers, has donated about 500 boxes of his personal papers to the University of Massachusetts Amherst. This collection, which represents his life’s work, is housed at the Special Collections and University Archives at the W. E. B. Du Bois Library.
Max Nowak ’13
BOSTON, MASS.
I was a musician and played violin and sang. Now, I am an engineer. A big component of my UMass experience was being a resident assistant (RA). UMass is where I met my wife [Kate Nowak ’13 ’16MED]. We were RAs together. It is kind of weird being back on campus. There are a lot of changes, new buildings. There is a huge amount of nostalgia. I met with my old research advisor at the Life Sciences Laboratory building. That building is gorgeous.

Ligaya Hannaford ’98
STOUGHTON, MASS.
I was a young high school graduate who had little knowledge of the world. It feels awesome to be at this year’s homecoming—being able to reminisce and being able to see where essentially I started as an adult.

John Proudman ’63, ’66MS, ’73PhD
FORT VALLEY, VA.
I am most proud of the contributions I made to the student fire department. That’s why I am here this weekend, the student force is having a reunion. I loved being on the fire department. It was my whole reason for being here.

Howard Breslau ’86
NEEDHAM, MASS.
Magical things happen here. I was co-president of UMass Hillel and had to pick up Elie Wiesel, Nobel Laureate and Holocaust survivor, who was in Boston for a visit. I sat knee to knee with Elie Wiesel for two hours on the Mass Pike. I get chills just thinking about it. I was a junior, a kid. My sons [Max ’22 and Mitchell ’20] were immersed in UMass growing up. I used to take them to hockey games. It is an immense source of pride that they are students here, particularly as the university continues its upward trajectory.

PROUD
THE
LOUD
AND
THE
SHORT READ
32 • UMass

Read all interviews from Homecoming 2019 and browse a gallery of photos from the event: umass.edu/magazine

Since last year’s homecoming festivities, so much has changed. The University of Massachusetts Amherst leaps into the top echelon of public research universities, coming in at No. 24 in the Best Colleges 2020 guide published by U.S. News & World Report. The W. E. B. Du Bois Library acquired the papers of Daniel Ellsberg, the most influential whistleblower in U.S. history. Another faculty member was granted the MacArthur Fellow “genius grant.” And our students and alumni continue to garner accolades in their fields—winning Emmy Awards, changing the way the Internet works, and capturing parts of the universe never seen before.

This was a breakout year for UMass not only in achievements, but also in support. This year’s UMassGives (the two-day online fundraising campaign that occurs each April) broke records, garnering some $2.9 million from nearly 10,000 alumni and other community members. Given the successes of the last year, it seemed fitting when in early October UMass launched its Be Revolutionary campaign, which captures both the university’s pioneering spirit and its mission as important forces in the commonwealth and beyond. And in late October at Homecoming 2019, as hundreds of alumni and their families reunited on campus, there was a celebratory buzz in the tents, in the stadiums, and at the reunions.

So, at this capstone event to such a big year we asked the people who make up UMass: What are you proud of? And how far have you come? Here’s what they had to say.

VOICES FROM HOMECOMING 2019

Read all interviews from Homecoming 2019 and browse a gallery of photos from the event: umass.edu/magazine
Dusk has fallen over Northampton, Massachusetts, and dozens of folks from various parts of town are gathering together in the Arts Trust building to sing. But this is no ordinary choir. If you asked, most of these people would tell you they’re not “real” singers—most of them can’t read music, and some haven’t sung anywhere but their shower for years. And when the music starts, it’s not Handel or Bach. It’s not even Sinatra or Garth. It’s The Beach Boys, Fleetwood Mac, and No Doubt. The choir director, Tony Lechner ’93, ’97 MM, sees you and waves you in. You know the words, so you may as well pull up a chair and join in. Lucky you—you’ve found yourself at a Rock Voices rehearsal.

At University of Massachusetts Amherst, Lechner was a dutiful music major. He studied opera and jazz. He started up an a cappella group (the “Accellas”—get it?) and led a jazz vocal choir. He plowed through music theory classes and, of course, he practiced, practiced, practiced. But when the weekend came, Lechner...
screamed his head off singing rock music. “On Monday, my voice teacher would say, ‘Tony, what are you doing with your voice?’” Tony laughs. But you had to cut scissors admonished him for screaming on the weekends, Lechner put an ad in the local paper to see if anyone else might be interested in singing rock music with him. And with that ad, Rock Voices was born.

Fifty people showed up for the first rehearsal. “I was blown away,” Lechner says. “People were lined up down the stairs and out into the parking lot. I finally hit me, people really want to do this!” Part of the appeal might have been that Lechner made the choir as accessible as possible—no one had to audition. But Lechner also thinks that rock is the great equalizer. “It’s the music of the people.”

For all-time while, Lechner tried to keep up with it all—teaching kids as his day job, then directing both the jazz choir and Rock Voices at night. But eventually Abercrombie’s words floated back to Lechner. “I saw the potential of the rock choir spreading,” Lechner says. And so, he decided to focus on fewer things and do them well. He let go of the jazz choir and then, after some serious discussions with his wife, Sara, he let go of his teaching job too. “We had a newborn baby and a one-and-a-half-year-old, so it was a scary time, but that’s how much we believed in Rock Voices,” he says. “We envisioned it getting bigger.”

Getting bigger meant starting up in other cities, which is where the UMass music department comes in yet again. Lechner reached out to two of his old pals from UMass who he had stayed in touch with—Mark Barstow ’92, who was an original member of Lechner’s singing group the Acafellas; and Nate Altimari, who sang in a jazz choir that Lechner directed.

Altimari had been working full time in a recording studio specializing in voice-over work in Albany, New York, and Barstow had left his church choir job in Portland, Oregon, after a life-changing bout with brain cancer. Both had small children and little free time. In other words, it didn’t make any sense for either one of them to take on something like Rock Voices.

But both did, eventually. And both are as passionate about it as Lechner. “It’s not just about the music,” says Altimari. “Anyone who sings in one of these choirs would tell you that the community, the social side of being in a group like ours, is on par with—if not rivaling—the musicality.” Altimari had watched people strike up friendships, begin relationships, and form dinner and karaoke groups. “The unifying factor is that these are all people who love to sing, but didn’t have the opportunity.” Barstow, having led multiple church choirs, understands very well why choral singing is so meaningful. “It’s about community,” he agrees. “People who don’t necessarily think of themselves as singers can come and sing. ‘Anyone who might find themselves singing in the shower or in the car now has a place to do that singing with others—and with others is the point. ‘Right now, in our country, we need community and joy everywhere we can get it.’

As of today, people can find this particular joy and community in 16 different locations, and feelers are out for yet more locations. It turns out that Lechner’s hunch was correct—Rock Voices is catching on, and he thinks he knows why. “Everyone can sing, and everyone loves to sing,” he says simply. “But they think, ‘I can’t read music, I don’t belong.’ What I wanted to do with this choir was create a place where people belonged.” That dovetails with Rock Voices’s official mission statement: “Healing ourselves and others through song.” Lechner believes in it wholeheartedly. “We heal others if we sound good, and we do events for charities all the time,” he points out, “but we also heal ourselves. It started for me as a fun extra thing to do and it’s turned into a movement that I never imagined in my wildest dreams. It makes me feel good about what I’m doing, too. It’s not just a job. It’s changing things for people.”
WHAT IS IT ABOUT SINGING AS A GROUP?

Human beings have long understood intuitively that singing feels good, and singing along with other human beings feels… well, really good. Research has begun to uncover exactly why.

It’s the ultimate icebreaker. It can be hard to get to know total strangers, but when you’re trying to harmonize with them, inhibitions have a way of melting. Recent research suggests that this holds true no matter how large the group is.

It produces happy brain chemicals. Many studies have shown that singing releases endorphins as well as serotonin and oxytocin—hormones that help produce feelings of joy and well-being. It’s actually been shown to lower levels of anxiety, depression, and fatigue.

If there’s no Rock Voices choir in your neck of the woods (yet), consider seeking out other group-singing opportunities. Some secular choirs are audition-only, but many church choirs are open to all. Or consider starting up your own singing group. It’s good clean fun—and good for you!

WE HEAL OTHERS IF WE SOUND GOOD.
The University of Massachusetts Amherst landscape today is a far cry from what it was when the Massachusetts Agricultural College offered its first classes in 1867. Back then it consisted of four wooden buildings on 310 rural acres, and the farm-boy students used fields, orchards, and pastures as laboratories.

Over the last 152 years, there have been significant changes to the UMass campus—the Old Chapel was built in 1885, the campus pond was created in 1892, the first women’s dorm was built in 1920, and the Student Union was constructed in 1957, just to name a few. The last building boom in the 1960s and 1970s was the era that gave rise to a number of now-iconic brutalist-style buildings—the Southwest Residential Area, the W. E. B. Du Bois Library, and the Lederle Graduate Research Center—towering structures that appear to pierce the sky.

In recent years, UMass Amherst has undergone dramatic physical transformations: renovations, facility improvements, and the addition of 35 new buildings that have changed how students learn and live, how professors teach and make new discoveries, how student-athletes train and compete. The improvements have not gone unnoticed. The flagship campus is now the 24th best public research university in the nation. It is also a destination of choice for high-achieving students, and enjoys a rising tide of philanthropy.

As the needs of students and academic fields change, the campus adapts and expands. What started as a 310-acre campus has grown to a sprawling 1,450 acres. The campus, once just a cluster of four buildings, is now home to more than 170 buildings—and counting.

The Student Union is being revitalized to become an eco-friendly Campus Living Room for student activity and a gathering place that supports student organizations, functions, and entrepreneurship.

A new Landscape and Pedestrian Corridor meanders from Worcester Commons to the Student Union.

Five acres of lighted multi-purpose synthetic turf will be a center for Recreational Sports, including pick-up soccer, flag football, and softball.

15,000+ solar panels on campus produce 5.5 megawatts of clean energy annually.

The Songbird Garden provides nourishment for birds of song during warm weather stays and migration flights.

A new Worcester Commons, café, and restaurant will serve as a Neighborhood Center for the north end of campus.

500 new trees planted in the last five years—including nut, edible fruit, oak, and conifer trees—provide Shade, Beauty, and Clean Air.

BOOMING AND BLOOMING

The University of Massachusetts Amherst
BELIEVE IT OR NOT, BUILDINGS CONSUME MORE THAN A THIRD OF THE WORLD’S ENERGY.

And our homes, schools, shopping malls, skyscrapers, factories—all the structures on the planet combined—account for nearly 40 percent of the world’s carbon dioxide emissions. Furthermore, the size of our buildings is growing. In just two decades (by 2040), the floor area of buildings will grow by 60 percent worldwide. Let’s just say that our “built environment” is not necessarily all that good for “the” environment.
“This means that you can push current one way; such as heating, then reverse polarity and push it the other way, such as cooling,” says Zlatan. “The third function is called scavenging—recovering the heat naturally and turning it into electricity itself.”

Smart façades will help solve the challenges of buildings that are always too cold or too hot. “Massive additional savings come from having precision control over heating and cooling in each room throughout the building, depending on an individual’s comfort,” says Ajla. The façades are ideal for retrofitting heating/cooling systems in older, less energy-efficient buildings. “It’s scalable for customization,” says Zlatan. “You can make the aesthetics fit the building rather than the opposite. Plus you maintain energy efficiency without bringing in another visual element, like these big panels,” he says, while pointing to the exposed piping and the radiant panel above us.

Four students have been assisting the couple with their research: architecture graduate student Chris Oumihan ‘17MA, Dylan Brown ‘15 ‘17MA, and Guy Vigneau ‘19MA, and engineering student Meenakshi Upadhyaya ‘23PhD. The latest addition is Mohajer ‘25PhD, a BaIr at the University of Illinois building and construction technology PhD student, who joined in May. “My favorite part of this project is using my creativity to construct within current capabilities and the equipment available to us,” the future, for Mohajer, is blending new technology in new ways with existing materials. “When you consider all the greenhouse gases released into the atmosphere from all the buildings in the world, I want to help slow them down so that future generations will be able to live better!”

“Showing down the release of building emissions means continuing experimentation. The Aksamijas have identified commercial office spaces in 15 regions from Miami to Anchorage where they can compare the smart façade with the conventional façade. They are conducting a realistic simulation of energy usage by compiling historical data and utilizing U.S. Department of Energy–designed software in a study they hope to publish. Before coming to UMass, Ajla was the director of a research laboratory at the Boston studio of Perkins and Will, an international architecture and design firm. A few years back, she published one of the first resources for high-performance façades, Sustainable Façades: Design Methods for High-Performance Building Envelopes. Her latest book, Integrating Innovations in Architecture, provides guidelines for innovative architectural projects and research. “The challenge is to do something that is very technologically sophisticated using the newest materials that have not been employed in buildings before,” she says. “At one time, we want to make it very visually appealing.”

Bosnians by birth, Ajla and Zlatan met in Chicago as teenagers. They married and began working at UMass, but kept their professional lives separate. “This is the first collaboration ever—professional, that is,” says Ajla, laughing. “In the beginning, we said to each other that we are either going to fail,” she pauses, “or it’s going to be successful.” She smiles. “And turns out that we are successful.”
If you look closely at the virtual tour of the University of Massachusetts Amherst, which debuted in August, you’ll find Benjamn C. Leonberg—10 film/video maker, creative director, and college film teacher. He and his crew are sometimes added out, and sometimes included by design, as they stitch together all of the 2-D images and combine them with music and narration to create a 360-degree video.

“Telling stories in VR (virtual reality) allows you to engage audiences in a very traditional films can’t. Features often strive to immerse an audience, but nothing comes close to being able to put a VR headset and live inside a story,” says Leonberg, creative director of “Truth and Undeclared,” a film professor at Columbia University.

Leonberg’s involvement in the UMass virtual tour was assisted by officials at the Library of Congress, and a study abroad at the New Zealand Film Academy in Auckland. “I have New Zealand learned from people who had worked on The Lord of the Rings, which to someone who was in high school when those movies came out it was a huge deal,” he says.

His first award came when he was an undergraduate—he was a Michael B. Smith Award in Film Studies in 2009. His work has been featured in AvidWork, Vogue, and Fortune, and he has won recognition at SXSW and the Webby.

After graduation, Leonberg produced commercial videos, including one and during a Stanley Cup championship. It’s when Leonberg was in graduate school at Columbia University that his career shifted toward more of what he dubs “out there” productions.

Though making the UMass virtual tour was a lot of work, Leonberg enjoyed the deep memory lane while back on campus. He put himself in a story at the Atkins Reservoir where he and team members from the cross-country team used to run. “Every time I comeback to campus I’ve been super impressed with how much UMass has changed and grown,” he says. “There are so many new buildings and fantastic new resources.”

> JUSTIN C. CAMERON 2004
DAVID BERMAN MADE US FEEL LESS ALONE

SARAH LARSON ’95

David Berman ’95MFA, the ingenious poet, songwriter, and writer, died on July 17, 2019, at the age of 52. His music and lyrics are so indelible—so believed, like old friends—that his devotees carry them around with us, as part of the way we experience the world. Berman’s music seemed to acknowledge pain by the time it reached us, it had become beautiful, wistful, even humorous. He had a gift for articulating profound loneliness in ways that felt deadly familiar, which in turn made you feel less alone.

Berman grew up in Virginia, Ohio, and Texas. He went to college at the University of Virginia, and later got his graduate degree from the University of Massachusetts through the MFA Program for Poets and Writers. Circa 1994–95, I’d been in his distant orbit at UMass Amherst and at music shows in Amherst and Northampton. It was a heady era—great Western Mass bands, great UMass poets in the MFA program, run by James Tate. If you took a junior-year creative-writing class in the spring of 1994, you had a good chance of being taught by a future musical heavyweight. Berman or, in my case, Joe Pernice ’91, 95MFA, another indie-rock musician and writer.

Berman was a figure of admiration and mystique—tall and hand-some, with the aura of a Bowie oracle. I once saw Silver Jews at the Bowery Ballroom, on a rare tour. The show felt transcendent, almost too good to be true. At the end, when they played “Punks in the Beerlight,” from 2005, with Berman’s repeated shouts of “I love you to the max!,” I nearly floated from joy.

Later in the poem, in a boat, Berman wrote, “I looked up seahorses in a medical textbook and it suggested mouth-to-mouth respiration. So I reached in his aquarium and pulled him out.” I placed my mouth on his and put my thumb and forefinger on his abdomen and started breathing on his mouth.

I was honored to select a sentence I wrote—which was displayed under glass on the third floor of Hartle Hall—when I was a graduate student in the MFA in Poets and Writers program back in 2006. Now was my chance to speak with the Pulitzer Prize-winning poet and ’UMass English Professor James Tate. We were both at reading in Memorial Hall, so I sat next to him.

“I’d been in your orbit for about three years,” I told him. “I never knew you were a figure of admiration and mystique—tall and handsome.”

“Too bad,” he said. “But you have a good imagination, which I really liked. You have a way of seeing things that I’ve never seen before.”

Tate—Tate’s poems consistently end somewhere midway between funny, surreal, and heartbreaking, including those in his new collection. The Government Lake Last Poems—gathers prose poems he wrote in the final months of his life. A black and white photographs opens the book—it is his last photo, “sitting at my desk and contemplating what I had accomplished this year,” which was found in his top drawer at his death. “The Seabarer,” the collection’s fourth poem, is small and sumbral and heartbreaking. I wonder now what has become of that manuscript that “was acting sick this morning.”

George Wardlaw, a professor of poetry and English, and founder, passed away on July 15 at the age of 82. Throughout his lifetime, his paintings, metal work, and sculptures were exhibited in many art venues, including at the Metropolitan Museum of Art in New York and the National Gallery in Washington D.C.

Wardlaw’s vibrant curiosity and artistic genius did not wane as he aged. He continued making and exhibiting his work until the very end of his life. This fall the Herter Gallery featured this fall an exhibit of Wardlaw’s most recent work.

In 2017, he described his premise behind an exhibit on campus that featured paintings of windows, saying, “Windows are openings to vicarious adventure, the imaginative, flights of fantasy, invention, mystery, and contemplation. They are the object of daydreams and nightmares. There are two sides to windows: They are openings to vicarious adventure, the imaginative, flights of fantasy, invention, mystery, and contemplation. They are the object of daydreams and nightmares. There are two sides to windows: one side looks out, the other looks in.”

Tate’s sentence began to resonate with me. “I have hope.”

IN MEMORIAM

48 > UMASS FALL 2019 49 >
You can use your IRA to make an impact on UMass Amherst students today and receive tax benefits in return. Having given to UMass Amherst cross country for 40 years, Jim Parker wanted to ramp up his efforts to improve the student athlete experience. After he reached the age of 70½, Jim was in a position to make a gift using the required distribution from his IRA. This gift offers him tax benefits while also allowing him to see the impact his giving makes. As he puts it, "It’s a win-win-win situation."

Questions? Contact Theresa M. Curry, JD, at (413) 577-1418 or gift.planning@umass.edu.

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You can use your IRA to make an impact on UMass Amherst students today and receive tax benefits in return.

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1. Fill out this response card.
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We respect your privacy. Information collected here will not be shared outside of our organization.
HOW HAS THE ROLE OF TECHNOLOGY EXPANDED IN SOCIETY IN RECENT HISTORY?
The vast, overwhelming majority of people have a computer in their pocket that works better and faster and does more than any PC on campus did when I was in school. There is no “going” online now, because connected is the default state of being; now, it’s rare and deliberate to be offline. The baseline assumption of society has been turned on its head in the last 20 years. This was Star Trek stuff when I was a kid, now it’s just life.

WHAT WOULD YOU LIKE PEOPLE TO KNOW ABOUT THE ROLE OF TECHNOLOGY IN THEIR LIVES THAT MOST PEOPLE MAY NOT BE AWARE OF?
It sounds paranoid, but you’re being tracked in a hundred ways basically every time you go into a store, drive down the road, or spend non-cash money anywhere. It’s big, it’s systemic, and while you can take some commonsense precautions in life (use a password manager, don’t give random apps blanket permissions for your phone) there’s not a whole lot you, the individual, can change about the industrial-level data work, both lawful and criminal, going on all around you—and you’re less protected by the law than you might think. You need regulators and updated laws for them to enforce if you want that to change.

WHAT SHOULD WE THINK ABOUT BEFORE CONNECTING ALL OUR APPLIANCES, CARS, AND FITNESS TRACKERS INTO THE INTERNET OF THINGS*?
Be really thoughtful and mindful of what you choose to connect before you connect it. Most “smart” devices do have useful or convenient features (though some are just silly), but think hard and do your research about what the trade-offs and long-term costs might be. Think about what data of yours will be shared and with whom—if you wear a fitness tracker or connect your car to your insurance, for example. Think about what data belonging to others might be shared by you inadvertently, and with whom. And think hard about what the consequences of that could be, for everyone involved. Lots of things work great without talking to the cloud.

WHAT DOES EVERYONE NEED TO KNOW BEFORE USING SOCIAL MEDIA?
The hoary old adage in journalism is, “If your own mother says she loves you, call a second source.” That goes double for social media. Even if you see a tweet or a Facebook post from a source that looks legit, you never go wrong relying on “trust, but verify” before you amplify or share. Also, try to think about the motivations of people you see sharing content. Sometimes they’re good, sometimes they’re bad. Don’t become part of someone else’s mob dogpile.

HOW SHOULD WE APPROACH THE TOPIC OF KIDS AND SOCIAL MEDIA?
With extreme caution. Not only is anything put online there permanently, but in an era when it’s attached to your real name and location, and can follow you on and offline not only now but also in the future, you need to be really careful about what you choose to share and with whom you choose to share it. Always check your ad and privacy settings. Think twice, post once. Tag with care.

IT SOUNDS PARANOID, BUT YOU’RE BEING TRACKED IN A HUNDRED WAYS BASICALLY EVERY TIME YOU GO INTO A STORE, DRIVE DOWN THE ROAD, OR SPEND NON-CASH MONEY ANYWHERE.
Christian Duplan ’20 is the first in his family to attend college. He moved from Haiti to the United States at seven years old and now studies kinesiology with a pre-dental concentration. He volunteers as a personal trainer serving people with Down syndrome and is president of the Black Student Union.

“JUST HAVING THAT VALIDATION OF RECEIVING A SCHOLARSHIP—AND KNOWING THAT YOU’RE WORTH IT—GOES A LONG WAY. IT’S CHANGED MY LIFE.”