FALL 2016

UMass Lowell

MAGAZINE FOR ALUMNI AND FRIENDS

WILL ROBOTS RULE THE WORLD?

Page 34

FIRSTLOOK

BASQUE IN IT

Honors students traveled to San Sebastian, Spain, over the summer for a cultural immersion course with special emphasis on the Basque people and culture. In addition to intensive language instruction, students took excursions around the city, interacting with locals and absorbing the culture. They spent an entire day traveling throughout the city dressed in traditional Basque clothing.

FALL 2016

The UMass Lowell Alumni Magazine is published by:
Office of University Relations
University of Massachusetts Lowell
One University Avenue
Lowell, MA 01854
978-934-3224
Sarah_Corbett@uml.edu

Chancellor
Jacqueline Moloney '75, '92

Vice Chancellor of University Relations
Patricia McCafferty

Vice Chancellor for University Advancement
John Feudo

Executive Director of Marketing
Bryce Hoffman

Publisher Emeritus
Mary Lou Hubbell '85

Executive Director of Alumni Relations
Heather Makrez '06, '08

Communications Manager
Nichole Moreau

Editor
Sarah McAdams Corbett

Designer
Paul Shilale

Staff Writers
Edwin Aguirre
Karen Angelo
Ed Brennen
Beth Brosnan
Geoffrey Douglas
Christine Dunlap
Sheila Eppolito
Jill Gambon
Dave Perry
Katharine Webster

Contributing Photographers:
Edwin Aguirre, Ed Brennen, Tory Germann, Jim Higgins, Joson Images, Meghan Moore, Emily Antonelli Ray

uml.edu/alumni
facebook.com/umlowell
@UMassLowell
instagram.com/umasslowell

Please submit address changes to:
www.uml.edu/updateyourinfo

University of Massachusetts Lowell
Office of University Advancement
Charles J. Hoff Alumni Scholarship Center, 1 Perkins St.
Lowell, MA 01854-2882
alumni_office@uml.edu
978-934-2223

UMass Lowell is an Equal Opportunity/Affirmative Action, Title IX, H/V, ADA 1990 Employer.

University of Massachusetts Lowell
Learning with Purpose

A Message from
Chancellor Jacqueline Moloney '75, '92

It's been a busy fall here on campus. We jumped right in to the academic year with a larger, more diverse group of students than ever before. A few weeks ago, UMass Lowell's diversity was formally recognized with a Higher Education Excellence in Diversity Award from INSIGHT Into Diversity magazine—for the second year in a row.

Fostering a campus where everyone feels included—regardless of gender, race, nationality, religion, sexual identity or disabilities—is a top priority to us at UMass Lowell, and to me personally. Last month we were thrilled to learn that the NSF has awarded a $3.5 million grant for a Center for Women & Work project that aims to increase diversity and inclusion in STEM fields. I've been directly involved with the CWW effort and am pleased that the NSF has recognized the team's work.

But that's just the tip of iceberg when it comes to university honors. As you'll read in this issue, our U.S. News & World Report ranking jumped another four spots this year, making UMass Lowell the second-fastest-rising university in the country. The Chronicle of Higher Education, meanwhile, recently named us the ninth-fastest growing public doctoral institution in the nation.

It should be no surprise, then, that NASA entrusted university researchers with one of just four humanoid robots that it hopes will help make life on Mars possible. Read all about it—and our faculty's predictions for the future of robotics—in our cover story.

The rest of this issue has a little bit of everything—good music, delicious wine and dozens of updates on the great work being done by our students, faculty and alumni. That includes your strong support for *Our Legacy, Our Place*, the university's first-ever comprehensive fundraising campaign. Turn the page to dive in—and then consider stopping by campus to get a glimpse of the excitement firsthand.

Sincerely,

Jacquie Moloney '75, '92

FALL 2016

UMass Lowell

MAGAZINE FOR ALUMNI AND FRIENDS

VOLUME 19 NUMBER 1

Cover Story

Will Robots Rule the World?

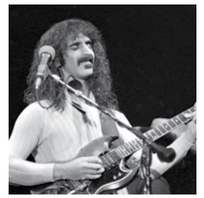
34

With companies like Google and Uber investing millions of dollars in the race to perfect the first self-driving car, there's a lively national debate about just how ingrained robots will become in our lives. A Pew Research Center study revealed that two-thirds of Americans think that in 50 years, robots and computers will do much of the work currently done by humans. UMass Lowell, meanwhile, is at the center of the robot revolution, serving as host to one of only four robots in the world that NASA hopes will allow us to one day live on Mars. Our experts weigh in on just how pervasive the robot revolution will be.

CONTENTS

4 Campus Life

26 Polling the Pollster



28 Rock 'n' Roll U

42 Face of Philanthropy

44 Passion Uncorked

47 Alumni Life

EDITOR'S NOTE: Please send comments to Editor Sarah McAdams Corbett at Sarah_Corbett@uml.edu. Submit class notes at www.uml.edu/advancement/classnotes.

The UMass Lowell Magazine for Alumni and Friends has been honored with multiple Hermes Creative Awards, a Silver Bell Ringer, a CASE District I Silver Excellence Award, an APEX Award of Excellence, a Higher Ed Marketing Award and honorable mentions in the PR Daily Awards and the PR Daily Nonprofit PR Awards.

LOWELL TEXTILE SCHOOL • MASSACHUSETTS STATE NORMAL SCHOOL • STATE TEACHERS COLLEGE AT LOWELL • LOWELL TEXTILE INSTITUTE
LOWELL TECHNOLOGICAL INSTITUTE • MASSACHUSETTS STATE COLLEGE AT LOWELL • LOWELL STATE COLLEGE • UNIVERSITY OF LOWELL

Campus Life

Inside...

UML AFTER DARK

Students took over University Crossing until 2 a.m. for the annual UC After Dark event, featuring arcade games, spin art, laser tag, a photo booth and a dance party.

New year launches with focus on ethics

In September, the university welcomed 2,900 incoming students—the largest-ever group of incoming new and transfer students—who became part of the nearly 18,000 students pursing their futures at UMass Lowell.

The 1,700-member freshman class is the most diverse ever and has the highest-ever average high-school GPA and average SAT score for UMass Lowell. The Class of 2020 also includes the first group of students—approximately 130 with an average high-school GPA of 3.7—to use the university's SAT-optional admissions program, which allows high schoolers to apply without test scores by completing other requirements.

The university community gathered at the Tsongas Center at UMass Lowell for Convocation, the traditional academic year kickoff. Business ethics expert and author Corey Ciocchetti delivered a lively key-note address, using his own experiences to illustrate that true success is not necessarily defined by wealth or in other ways that students might expect. He urged the students to seek peace and contentment, as well as true friendships, and to act with principle.

Acting with principle is a value the university wants to stress, and will be better able to do so thanks to a new $1 million gift from philanthropist Nancy Donahue to establish the Donahue Center for Business Ethics. The Donahue Center—which will be based in the Manning School of Business—will expand education in ethics to all majors, offer new research opportunities for faculty and students and develop ethics-focused programs and events for the university and the public.

HOME TURF

For the second year, UMass Lowell partnered with the city and downtown businesses to welcome students on a Thursday evening. The event, which drew hundreds of attendees, featured historical and cultural walking tours, live music and a Snapchat scavenger hunt. The band Gumbo in Congress pumped brassy funk into the evening air, leading a procession from the ICC up Central Street to Jackson Street, ending at retail and entertainment space Mill No. 5. Rowdy the River Hawk marched, too, drawing delighted looks from passersby on foot and in cars. Rowdy danced, posed with fans and slapped hands along the way. —*DP*

RAYS THE ROOF!

LOOK WHAT WE SAVED THIS SUMMER

New solar arrays on South Campus garage = reducing greenhouse gas emissions produced by 18 hours on power grid annually

Replacement of three 50-year-old steam boilers = same as taking 64 cars off the road each year

Efficient lighting in 12 buildings = reducing consumption of fuel oil by 69,636 gallons annually

Solar thermal hot water system in Inn & Conference Center = saving nearly 1,200 gallons of gasoline from being burned annually

OUR WORLD

TRENDING @ UMASS LOWELL

THE ELECTION.

Nov. 8 looms large and so does the battle between The Donald and Hillary. Both have been on campus. Trump rented the Tsongas Center for a campaign rally in January. Clinton's visit was in 1998, when then U.S. Rep. Marty Meehan (now UMass president) brought the first lady and a group of women members of Congress to campus for a forum on women's issues. Also having logged many hours on campus: Corey Lewandowski '96, Trump's former campaign manager and current CNN commentator, and an alumnus of our political science program. (Psst: Read about how **our students were in the middle of the action** at the Republican and Democratic conventions on Page 11.)

AND IN THIS CORNER...

Senior business major and professional wrestler Cameron Zagami starred on the first season of the Fox reality TV show "American Grit," which finished airing in June. He was cast on the military-inspired survival show after catching the eye of producers during an audition for "WWE Tough Enough," a USA Network reality show that awards the winner a pro wrestling contract. Though he didn't win "American Grit," he did get to meet WWE superstar (and West Newbury native) John Cena, the show's host. "They never told us who the host was, so in the first episode when we all run down the hill and see him for the first time, I was completely losing it," says Zagami, who has wanted to follow in Cena's wrestling shoes since seeing him in action at TD Garden arena in 2009.

CHECK OUT MORE TRENDING UMass Lowell news at uml.edu/news.

U.S. News & World Report bumped us **FOUR SPOTS TO NO.152** on its list of best national universities. That's a jump of 31 spots since 2010, making us the **second-fastest-rising university** in the nation over the last six years. UMass Lowell is the only institution, public or private, in the eastern United States to move up more than 30 spots in the same timeframe.

MOVIN' ON UP!

3.8M

OUR $3.8M IP DEAL.

When pharmaceutical giant Allergan acquired a startup named Anterios, **UMass Lowell saw its biggest-ever payday** for intellectual property. Anterios owned the rights to NDS—a technology for delivering therapeutic neurotoxins through the skin without needles. Its inventors: A research team led by engineering Prof. Stephen McCarthy and Prof. Emeritus Robert Nicolosi.

WHAT'S THIS HELMET FOR, ANYWAY?

A majority of Americans believe that concussions and brain injuries resulting from sports like football are a major problem and that leagues like the NFL are not doing enough to respond, according to a national poll released recently by the UMass Lowell Center for Public Opinion.

BLUE HAIRS.

Happy 50th to the UMass Lowell hockey program. But don't worry: there's no midlife crisis on the horizon. In late September, the team was tabbed fourth in the Hockey East preseason coaches' poll.

KEITH URBAN IS SO OBSESSED WITH US.

What is it with the country music star and UMass Lowell students? Two years ago, he plucked the twin Kender sisters, Laura ’16 and Elizabeth ’16, from the crowd when he saw their sign touting UMass Lowell lacrosse. This summer, he pulled music business major Rob Joyce (on right) on stage at the Bank of New Hampshire Pavilion in Gilford, N.H. Joyce strapped on Urban’s guitar and picked his way into the up-tempo rocker “Good Thing,” astounding both the crowd and Urban with his six-string fluency. The band, which had retreated offstage while Urban did his audience shtick, headed back on and joined in. Urban posted a post-show video laden with kudos for Joyce, “a massive shout-out of awesomeness to Rob, you killed it tonight on guitar!”

BOSS LADIES

In June, UMass Lowell’s first woman chancellor presided over the university’s inaugural Women’s Leadership Conference, which played to a sold-out crowd on campus. Among the speakers were HGTV designer Taniya Nayak ’97; former Massachusetts Lt. Gov. Evelyn Murphy, now president of The Wage Project; Lisa Brothers ’84, co-founder and chief executive of Nitsch Engineering; and Gina Barreca, professor of English and women’s studies at the University of Connecticut and author of “If You Lean In, Will Men Just Look Down Your Blouse?”

We’re getting pretty good at protecting secrets.

The NSA and the Department of Homeland Security designated UMass Lowell a “National Center of Academic Excellence in Cyber Defense Research” in recognition of the university’s intensive programs designed to protect national security and prepare a highly trained cyber-security workforce.

President Meehan’s Million-Dollar Investment

Call it the very best kind of “campaign promise.” In June, UMass President Marty Meehan ’78, a member of Congress from 1993 to 2007, officially closed his campaign committee and transferred more than $4 million in campaign funds to a new education foundation named for his parents, Marty and Alice Meehan. The foundation’s first gift: a $1 million gift to *Our Legacy, Our Place: The Campaign for UMass Lowell*, which will be used for student scholarships.

ART + MUSIC = MAGIC

FISHER RECITAL HALL was filled to capacity on an evening that combined the creative talents of students, alumni and faculty from the university’s Music and Art and Design departments.

In a first of its kind effort, John-Morgan Bush, lecturer and executive director of the UMass Lowell String Project and Youth Orchestra, and Pouya Afshar, assistant professor of art and design, teamed up to present musical selections with custom-created, live animation projected on performers and the walls of the recital hall.

“A select team of graphic design art students listened to each work, and created animations to complement them,” says Afshar.

The evening’s selections included the world premiere of “Serenade for Bass-Baritone, Horn and Strings” composed by Derek Weagle ’15, a contemporary composer and University String Project composer-in-residence.

“The composition weaves Bush’s love of poets including Walt Whitman, Ralph Waldo Emerson, Robert Frost, Langston Hughes, Edgar Allan Poe, e.e. cummings and Sara Teasdale,” says Weagle.

Solo vocalist Allyn McCourt ’15, a bass-baritone who is now pursuing vocal performance at the New England Conservatory, performed the work.

“John-Morgan Bush is my arts mentor—he has inspired me to fulfill my dream of becoming a composer, and this piece is my thank you to him,” says Weagle.—*SE*

REBIRTH OF AN ACRE ALLEY

For decades, an overgrown alley that runs between Salem and Merrimack Streets in Lowell's Acre neighborhood was a neighborhood blight that attracted nighttime criminal activity. No longer. Welcome to Decatur WAY (Water, Art and You), an urban oasis transformed through colorful art, poetry, community vision and sweat.

The cleanup of the L-shaped, 1,200-foot-long, 16-foot wide sliver off Decatur Street was made possible through a partnership between an Acre neighborhood group, the City of Lowell and UMass Lowell. The project was led by neighborhood activist Dave Ouellette, whose vision it was to transform a weedy blemish to a welcoming walkway of poetry, simple green technology and 108 works of art.

Decatur WAY features murals from dozens of community groups and a piece painted by Steve Mishol of the university's Art & Design Department, with his daughter, Sophie. The University Relations design team also painted a panel. *—DP*

Deactur Way, before the transformation

WITNESSING POLITICAL HISTORY

On the second night of the Democratic National Convention, Adeja Crearer '17 (above, bottom left) was heading out to the deserted media tents to edit footage for Agence-France Presse TV when a crowd of disappointed delegates for Sen. Bernie Sanders rushed out of the Wells Fargo Center chanting "Bernie! Bernie!" They took over a media tent and she went in with them—just as police moved to block the exits.

"So I'm trapped inside," she says. "I was in shock for one minute and then I realized, you can't live it, you have to start working."

She snapped into action, using her phone to take photos and record interviews with the protesting delegates. After a while, she was able to go to the AFP-TV tent, grab a camera and shoot some video. She edited it all together for an exclusive story. That was a thrill for the aspiring journalist.

"That was real. It was then that I knew—I love that feeling. It was a rush of adrenaline," says Crearer, an English major with a journalism concentration and a digital media minor from Piscataway, N.J.

Crearer was one of five students who went to either the Democratic or Republican convention in July through the university's partnership with The Washington Center for Internships and Academic Seminars. The students earned six credits for the two-week program, supported by scholarships from the College of Fine Arts, Humanities and Social Sciences. The first week, the students attended seminars with political and security experts. The second week, they interned, mostly for media organizations.

Assistant Dean Francis Talty says the convention program, which also was offered in 2008 and 2012, gives students a crash course in party politics. "For students interested in the political experience, this is Woodstock," says Talty, who manages the Washington Center partnership and serves as an academic seminar leader. "It's total immersion."

Political science major and Hillary Clinton volunteer David Todisco '19 (above, right) says it was gratifying to witness Clinton make history as the first woman nominated by a major party.

"You knew it was coming, but to see it finally happen and Bernie turn over his delegates—it was a very satisfying moment," he says. "I had the chills so many times from all the inspiring speeches. And that's what I crave: inspiration in American politics."

He says the convention, where he interned for NBC news, inspired him to run for local political office someday. He's already gaining plenty of political experience: first as an intern for a state representative, then as a Clinton volunteer and most recently as a summer intern for Massachusetts Sen. Elizabeth Warren.

Tyler Farley '18 (above, top left, first from left) worked as a runner for CNN at the Republican convention in Cleveland from 3 p.m. until lights out each night. For hours before his shift each day, he interviewed delegates for a research project with Asst. Prof. Morgan Marietta on the issues animating Donald Trump's supporters. Farley, an Honors College student double-majoring in political science and economics, says he found the convention fascinating.

"It was a fun, crazy week. It was what you would expect it to be with Trump as the nominee; there was controversy every night, always something dramatic, and it was exciting to be there—to be part of the show."*—KW*

OUR STUDENTS: HERE, THERE, EVERYWHERE

NURSES IN CHINA [A]
"Not too many nursing programs offer the chance to study abroad," says Srayluckyna Thach '16, who recently traveled to China with seven other nursing students and two faculty members on a cross-cultural exchange experience. "I was able to integrate academia with my love for travel. It was an amazing experience."

The 18-day study-abroad program—led by Asst. Prof. of Nursing Yuan Zhang and Clinical Asst. Prof. Valerie King—was part of the university's Global Health Experience course, designed to give students an international perspective as they compared the Chinese health-care delivery system and culture with those from the U.S. It was offered in partnership with Shandong University's School of Nursing, one of China's top nursing schools.

AN ENTERPRISING VIEW [B]
Manning School of Business junior Carina Marquez spent eight months as an enterprise architect intern at MFS Investment Management in Boston. "I was basically the middleman for software coming into the company," says Marquez, who enjoyed the fact that MFS chairman Robert Manning '84 is also the namesake of her business school.

SNEAKER MAN [C]
It was the final week of Matt Macioci's six-month co-op with the Manufacturing Innovation Team at New Balance in Lawrence, but it seemed as if the mechanical engineering major from Fitchburg had been with the athletic shoe company for years.

As Macioci prepared to feed a sheet of sneaker mesh through a dye-sublimation printer, which uses heat to turn special ink into a gas state that can then permeate the fiber of the material, a senior engineer pulled him aside to ask for his input on a separate project. Macioci quickly reviewed several PDFs and offered his thoughts.

"If someone had told me when I was a freshman that I'd be working at New Balance in two years, I wouldn't have believed it," says Macioci. "To come here and interact with these people—and actually put what we're talking about on paper—it's amazing what I've experienced."

SPACE ROADSHOW IN HAITI [D]
In June, a team of students and faculty took their "Astronomy Roadshow" to an elementary school in Les Cayes, Haiti. Part of the challenge, says junior math major Thomas Heywoszwas, was that they had to overcome more than just the language barrier and lack of supplies—they also had to figure out how to introduce a hands-on approach to learning.

Heywosz, who is participating in the UTeach program—which prepares STEM majors for teaching careers—helped the Haitian students build telescopes, generate electricity with solar panels and create a crystal radio.

"It took the students a while to open up but then they were so enthusiastic," he says. "The experience of teaching the Haitian students is something that I will never forget."

PRODUCING SOUNDTRACKS
Sound Recording Technology sophomore Duffy Byrne was the assistant to the senior production engineer at Soundtrack Group in Boston this summer.

TAKING CARE OF BUSINESS [E]
Asad Elmi did two important things following his six-month sales and marketing co-op job at Putnam Investments in Andover: The sophomore declared his major (business administration with concentrations in marketing and finance) and asked if he could stay on at Putnam in a part-time role. "After the six months I realized that this is exactly what I want to do. This is the career path," says Elmi, who has now been with the Boston-based global investment firm for two years and is on track to earn his degree this fall. "I found a home here and I haven't left since."

COOL STUFF WITH ROBOTS [F]
While working at iRobot this summer, mechanical engineering junior Qiana Curcuru helped design robots, made parts she designed, used a laser cutter and performed tests with robots. Curcuru was joined at the Bedford company by computer science junior Tyler Puleo, who spent his co-op working as a software engineer.

ART AND CINEMA IN PARIS
Several students traveled to Paris this summer for a faculty-led "Modernism in French Art and French Cinema and Society" course. Assoc. Prof. Carole Salmon, chair of world languages and cultures, says she was thrilled with student's enthusiasm and intellectual curiosity. "In the current international political climate that promotes division, imposed borders, and fear of the 'other,' the ability to positively contribute and participate in a truly rich dialogue of culture is an important step toward global peace," she says.

HELPING FLOOD VICTIMS IN THE SOUTH [G]
Chelsie Hebert and Rahman Sarwar were part of a group of Manning School of Business students who volunteered in Andrews, S.C., this summer through lecturer Olga Tines' course "Organizational Behavior in Action." The team helped rebuild homes for flood victims impacted by Hurricane Joaquin in October 2015.

TEACHING STUDENTS IN LOWELL [H]
This summer, Graduate School of Education student Alex Eden worked as a teaching assistant at Lowell High School. "I was told that summer school students would be very difficult to engage, but they all respected me and the instructor, and worked hard enough to complete the course," he says. "The experience has made me more confident in the fact that I want to be a teacher. I am now more excited than ever to continue on that path."

PLAY BALL! [I]
Not many summer internships have you drop candy from a helicopter, but that's one of the things junior business administration major Daniel Schmith got to do as a marketing and promotions associate for the Lowell Spinners, the Single-A affiliate of the Boston Red Sox who play their home games at the university's LeLacheur Park. "I learned so much about all the administrative and operational functions of a minor league baseball team," says Schmith, who still found time to train for his upcoming cross-country season despite the long work weeks.

SPEED RACER!

Plastics engineering senior Michael "Iron Mike" Akerstrom represented the United States at the 2016 UIM World Hydroplane Championship this summer in Estonia (his team came in sixth). Akerstrom drives for the Quincy-based U.S. A-Team, the only American outboard racing team dedicated to international competition. In previous summers, Akerstrom has raced in England, Poland and Italy. He funds his trips, he says, with the income he makes in co-ops and internships, having held engineering positions at Keurig, Bausch & Lomb and Lubrizol.

Photo by David Kidd

Tsongas Digital Archive Comes to Life

Over the course of 34,000 archived pages, students, scholars and anyone with a thirst for political history can now explore the legacy of Lowell's own Paul Tsongas.

For years, scholars and researchers had to visit UMass Lowell's O'Leary Library to view papers belonging to the late U.S. senator. Now, thanks to a project that began in 1986, anyone can access the Paul E. Tsongas Congressional Collection from his or her computer or smartphone.

The university unveiled its vast digital archive of papers belonging to Lowell-born Tsongas, who served his city and state before beginning a long battle with cancer, which eventually took his life. A presidential candidate in 1992, Tsongas died at 55 in 1997.

During a gathering at O'Leary Learning Commons, U.S. Rep. Niki Tsongas—Tsongas' widow—and Chancellor Jacquie Moloney snipped a ceremonial red ribbon across a flat screen beaming an image of Tsongas from the '70s.

"I remember Paul making the decision about where all his papers would go," said Tsongas. "He was a graduate of Dartmouth, but in the end Lowell is where his home is, where he knew they would be valued and taken care of."

The collection includes 720 boxes of Tsongas' political papers.

"Thankfully," his widow joked, "they're out of the attic."—*DP*

MISSION: **SPACE**

NASA recently awarded $200,000 to a team of UMass Lowell students to design and build a satellite the space agency hopes to launch into orbit in 2018. More than 50 UMass Lowell science and engineering students are developing the "SPACE HAUC" satellite under the direction of Physics Prof. Supriya Chakrabarti, who leads the university's Lowell Center for Space Science and Technology.

Once the spacecraft is ready, NASA hopes to deploy the satellite into orbit around the Earth for a yearlong mission to test its ability to collect and transmit research data at faster speeds than ever before possible. The satellite's name, pronounced "Space Hawk," is a nod to UMass Lowell's athletic teams, the River Hawks. The acronym stands for Science Program Around Communications Engineering with High-Achieving Undergraduate Cadres. —*EA*

Robert Forrant Named 2016 University Professor

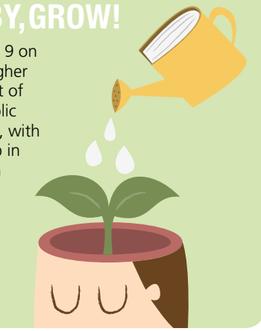
History Prof. Robert Forrant has been named UMass Lowell's 2016 University Professor for his outstanding contributions in research, teaching and public history projects in the community. Forrant has consulted with the U.N. Industrial Development Organization, the International Labour Organization, the Organization for Economic Cooperation and Development, the International Metalworkers Federation and other trade unions. He says he will use the three-year award, in part, to work with groups of students on researching and writing a history of the Coalition for a Better Acre, a community development corporation in Lowell's Acre neighborhood, and an exhibit on Portuguese immigration to Lowell for the university's Saab-Pedroso Center for Portuguese Culture and Research.

Last year, Forrant commemorated the 50th anniversary of the Voting Rights Act with a photo exhibit and events. As chairman of the Lawrence committee for the centennial of the 1912 Bread and Roses strike, he led walking tours, put on commemorative and educational events, created an honors seminar on the history of the strike and Lowell's connections to it and collaborated on two books on the strike and an exhibition for the Digital Public Library of America.—*KW*

GROW, BABY, GROW!

UMass Lowell is No. 9 on The Chronicle of Higher Education's 2016 list of fastest-growing public doctoral institutions, with a 54.9 percent jump in enrollment between 2004 and 2014.

54.9% JUMP



[HIDDEN GEMS]

— *PHOTOS BY* **TORY GERMANN** —

Sure, there's Allen House and its showy sunsets. The Saab Center's not too shabby, nor is the Rec Center. Hard to turn your nose up at the Riverwalk behind the Tsongas, hard to avoid the "Wicked Blue" turf alongside Cushing Field. But there are other, lesser known (or understood) gems on campus. Some of them are hidden in plain sight; others are just plain hidden.

[1] AN ARCH OPENING.
In the late 19th and early 20th centuries, American architects often left empty spaces in their blueprints with the text, "Guastavino here." One such space is now the arch at the entrance to Southwick Hall. Built in 1903 by Rafael Guastavino, who brought his celebrated "Tile Arch System" from Spain, the arch can be seen in major U.S. constructions like the Boston Public Library arch, the Plymouth Rock portico and the Queensboro Bridge in New York.

[2] HISTORY AT YOUR FEET.
Between the Tsongas Center at UMass Lowell and the Merrimack River is a cluster of small 19th century mill buildings. Demolished in the 1930s, the structures' foundations are today marked by granite stones throughout the grassy terraces behind the Tsongas Center. Three penstocks like this one—which held the water that was converted by turbines into power—are preserved.

[3] A WINDING PAST.
Today with offices and research facilities, the university is part of a masterful re-use and re-imagining of one of Lowell's mills, where the American Industrial Revolution was born. But where cotton was once king at Wannalancit Mills (known as Suffolk Mills from its 1830s birth to the 1950s), there remain monuments to its former life, like this "applecore" staircase where mill girls trod up and down to work.

1

2

4

5

[4] **THAT ’70S SHOW.**

(Previous page)

North Campus’s concrete creation Olsen Hall greets visitors with a lobby surprise—a retro modern look, with colorful panels placed strategically on the walls and artistically cupped black chairs to hold you. It’s a perfect spot to linger and dream of ‘70s grandeur.

[5] **BENCH WARMING.**

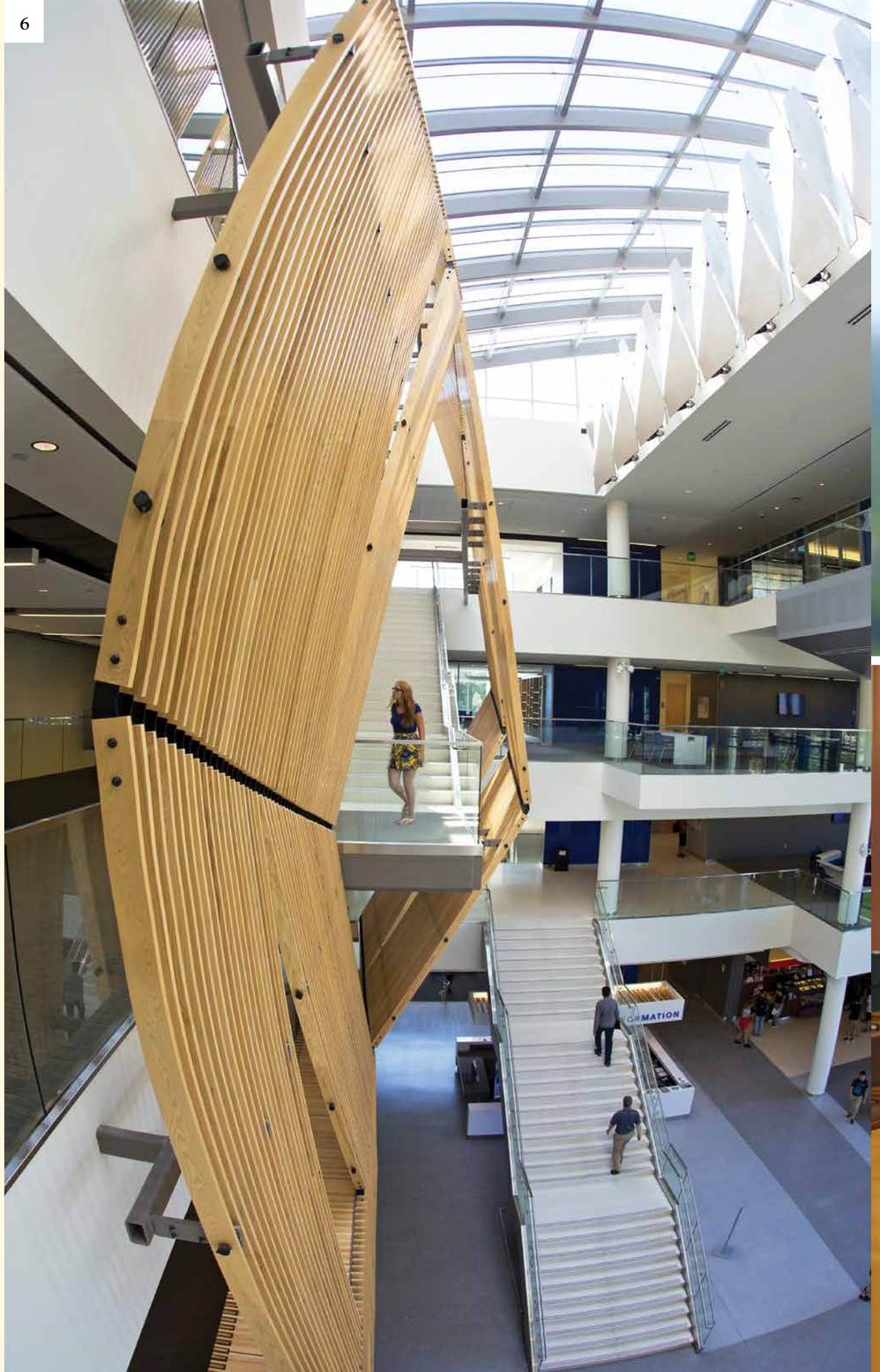
(Previous page)

Thought-provoking quotations were affixed to dozens of benches across campus between 2004 and 2006 as part of the “Take a Stand, Have a Seat” project. The idea was to celebrate diversity by displaying lines espousing social justice, equity and integrity. The notables vary greatly, from Goldie Hawn (“I have witnessed the softening of the hardest of hearts by a simple smile”) to Martin Luther King (“True peace is not merely the absence of tension; it is the presence of justice”).

[6] **SKY LADDER.**

The centerpiece of the atrium in University Crossing is the Lantern, a sculpture that reflects light and dampens sound. The polished panels and large wood lattices diffuse the light and give scale to the variety of central spaces. The changing play of natural light on the Forest Stewardship Council-certified wood tapestry is meant to evoke both the future and textile history of the university.

6



7

8

9

[7] **FOR THE BIRDS.**

When a peregrine falcons’ hideaway was discovered on the top of Fox Hall in 2007, the female had laid eggs on a bed of gravel on the roof, but the eggs didn’t hatch. The university’s carpentry shop, in consultation with the Division of Fisheries and Wildlife, designed and built upgraded digs for the endangered birds. Featuring HD-quality cameras that provide live, streaming video of the interior and exterior, the nest box has been home to the successful raising of more than two dozen chicks.

[8] **MYSTERY MAN.**

He sports a glorious handlebar mustache and fixes you with an arresting gaze as you descend the stairs from the first floor of Cumnock Hall. But no identification accompanies his portrait—who is he? He is Alexander G. Cumnock, the first president of the board of trustees of the Lowell Textile School, founded in 1895, as the earliest predecessor of UMass Lowell. An agent of the Boott Mills, Cumnock was respected for his technological expertise and his understanding of the economic and competitive forces challenging the textile industry at that time.

[9] **TREASURE TROVE.**

Down a hallway in the Patrick J. Mogan Cultural Center on French Street sit the treasures of Lowell, piece by piece. Sorted, organized and preserved are stories of Lowell’s people and places. It’s the university’s Center for Lowell History, established in in 1971. Perhaps the deepest vein of Lowell’s history, the center houses the university archives. Janine Whitcomb, shown here, manages special collections—including the new Kerouac Room, which houses the university’s Beat Literature collections and is open to the public.

[10] **STATE OF THE ART.**
These murals of mill girls at work and at leisure are the only visible examples of a set of murals painted by Works Progress Administration artists during the Great Depression and mounted in Coburn Hall. A large group of murals in the Assembly Room depicting students at Lowell State Teachers College was painted over by the early 1970s and awaits restoration, says Marie Frank, associate professor of art history and architecture.

[11] **CAST IN STONE.**
A series of 10 plaster casts of men on horses and a singing choir, made more than a century ago, hang in Coburn 205. The Boston-based Caproni Brothers made the casts from the frieze at the Parthenon, and they were installed in Coburn around 1911. They're rare and valuable—and when art history Prof. Marie Frank realized what they were, they'd been the victims of coal dust from an old heating system. Frank and her students painstakingly used conservation tools to heal the art.

[12] **WINDOW TO THE PAST.**
Coburn Hall, named for Frank F. Coburn, the first principal of Lowell Normal School, is unique among the university's structures. Dedicated in 1898, the four-story structure is a reminder of our roots as a school for educators. Designed by architects Stickney & Austin, it remains a sturdy study in grey brick and arched windows. Every now and then, its windows catch a timeless cloudscape.

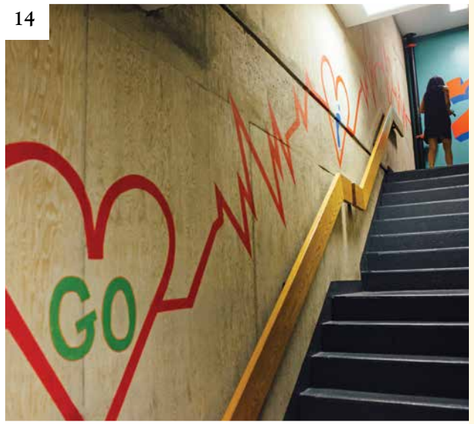
10

11

12

13

14



15

[13] **OH, JOAN.**
She is in a corner of Coburn 205, in plaster on a pedestal. She kneels, hands clasped in front of her, head slightly tilted back. She is Joan of Arc, and seems poised for instruction from the heavens. All over her are the signatures of former students, mostly from the 1960s, in pen and pencil. Like the casts that share the room, says Prof. Marie Frank, it is by the Boston-based sculpture studio Caproni, probably purchased around 1911 for Lowell Normal School.

[14] **HEART LINE.**
This heart is one of a series connected by an EKG line that graces the central stairwell at O'Leary Library. The Teen Arts Group from The Revolving Museum created the mural in the summer of 2008 as part of the Healthy Campus Initiative. Faculty in the College of Health Sciences also installed sensors to study whether motivational signs on the previously blank, concrete walls would inspire more people to climb the stairs instead of riding the elevators. They did, says Associate Dean Deirdra Murphy.

[15] **SIGN OF HONOR.**
It is fastened to the University Avenue side of the engineering-rich Ball Hall on North Campus, and it's easy to mistake the root of its design. The insignia is reminiscent of the Masonic "square and compasses" symbol, but it's actually the official symbol of Tau Beta Pi, the second-oldest collegiate honor society in the nation. It's a watch key with a bridge trestle as part of the design, says Plastics Engineering Department Chairman Robert Malloy.

OUR LEGACY, OUR PLACE

OUR STORIES

How do you measure impact? Numbers tell the story for *Our Legacy, Our Place*, UMass Lowell's first-ever comprehensive fundraising and alumni engagement campaign. Here are just a few:

$88+ million

The amount that alumni, faculty and staff, parents and friends have already donated

459

Endowed funds created to support student scholarships, faculty research, campus improvements and our Division I athletics program

2/3

We're more than two-thirds of the way toward our goal of raising $125 million by 2020.

Countless

The number of stories behind all those funds

These stories tell *everything* about the character of our place, the kind of legacy we have inherited—and the kind we can leave by supporting this campaign. On the facing page, we share one such story. Go to **uml.edu/ourlegacy-ourplace** to find more, and to learn how you can make your own impact.

OUR LEGACY OUR PLACE
THE CAMPAIGN FOR UMASS LOWELL

Sowing the Seeds

BY **BETH BROSNAN**

Capt. John Ogonowski '72,'03 (H) lost his life on 9/11, but his impact lives on at UMass Lowell

John Ogonowski '72, '03 (H) understood the power of a seed.

History remembers Ogonowski as the senior captain of American Airlines Flight 11. Fifteen years ago, he became one of the first casualties of 9/11 after terrorists hijacked his Boston-to-Los Angeles flight and flew the plane into the World Trade Center's North Tower.

Yet those who knew Ogonowski best remember him as a farmer—a young boy who grew up on a hundred-acre farm in Dracut, land his family has been farming since they emigrated from Poland in the early 1900s.

They remember the smart and capable kid who could drive a tractor by age 7. The youth so hardworking and good-natured that other farmers lined up to hire him. The gifted engineering student who came home on weekends to get the hay in. The skilled captain who flew Air Force transport planes in Vietnam and transcontinental flights for American Airlines, but who couldn't wait to get home to Dracut so that he could change into his work clothes, climb on his tractor and get back to work.

"A lot of people didn't even realize John was a pilot," says his mother, Theresa. "They thought he was a full-time farmer."

And no wonder. In addition to running the 150-acre farm where he lived with his wife, Peggy, and their three daughters, Ogonowski worked with New Entry Sustainable Farming Project, a nonprofit that places Cambodian refugees and other recent immigrants on local farms where they can raise their own commercial crops. He also helped found the Dracut Land Trust, to preserve farmland from commercial development.

"He did all this because he loved it," says his younger sister, Carol. "For John, farming was one big science-fair experiment. Every year he would try something new. He was always evolving, always learning."

❖ ❖ ❖

Trong Ngo '17 understands the power of learning.

From an early age, Ngo knew education was his ladder to a better future. Both his parents emigrated from Vietnam, eventually settling in Worcester, where Ngo grew up with his four brothers and sisters. His mother, the daughter of a U.S. serviceman, wasn't able to finish school. "She always stressed how important education is, so that you can have more opportunities," Ngo says. "One of my biggest motivations is to make her proud."

A gifted math student, Ngo enrolled at Worcester Technical High School, where he earned a certificate in computer-aided drafting and design along with his diploma. After a year at Quinsigamond Community College, he transferred to UMass Lowell to study mechanical engineering.

Like Ogonowski before him, he enrolled in the Air Force ROTC, Detachment 345. With courses in aerospace studies, leadership labs, a four-week field training unit and two years of professional officer coursework, "ROTC is almost like a second major," Ngo says. "It's demanding, but I've learned so much. And I've met people who I think will be friends for life."

Next May, Ngo will become the first member of his family to graduate from college. After receiving his commission as a second lieutenant, he hopes to fly remotely piloted aircraft or work as an Air Force engineer. He has another goal, as well.

"I've never met my American grandfather," Ngo says. "I'm so curious about him and his stories of Vietnam. I hope we'll meet some day, and that I can show him I've become an officer."

Continued

From top: John Ogonowski '72, '03 (H) and Trong Ngo '17

UMass Lowell observed the 15th anniversary of the Sept. 11 attacks in a service at the Unity memorial on campus (above, top), joined by members of the university community and family of the seven alumni and friends of the university killed on 9/11. In attendance were the family of John Ogonowski '72,'03 (H) and his widow, Peg Hatch (above, far left).

The Ogonowski family understands that learning can be the most special seed of all.

Even as they struggled with his loss, they were determined the qualities that made John special would somehow survive him.

With help from then-Congressman Marty Meehan '78, who secured more than $600,000 in federal funding, the Ogonowskis and other local conservationists were able to purchase 33 acres of farmland slated for development as a "living memorial" to Dracut's best-known farmer.

John's father, Alexander, chose a second "living memorial": an endowed scholarship at UMass Lowell, where John and his younger brothers, Jim '79 and Joe '85, received their degrees. A World War II veteran who served with the Army Air Corps, Alexander was a strong believer in service to country, says Theresa, and three of his five children followed him into the Air Force.

At his direction, the John Ogonowski Memorial Scholarship is awarded annually to top junior ROTC cadets who exemplify the Air Force's core values: "integrity first, service before self and excellence in all we do—qualities that were the pillars of John's life and accomplishments."

If 9/11 has changed the world in ways that John Ogonowski could not imagine, his scholarship is changing lives in ways he would surely recognize. Since 2002, more than 20 UMass Lowell students have been awarded the scholarship—including Trong Ngo.

"It's such an honor," says Ngo. "It pushes me to do my best work, and reminds me not to give up." Growing up in a post-9/11 world has fueled his patriotism, he says, "and my desire to be part of something larger than myself. I want to help keep the world as peaceful as possible." ■

Editor's note: John Ogonowski '72, '03 was one of five UMass Lowell graduates who lost their lives on Sept. 11, 2001. The others are Douglas Gowell '71, Robert Hayes '86, Brian Kinney '95 and Christopher Zarba '79, all of whom are honored in a memorial on UMass Lowell's East Campus, along with family members Patrick Quigley and Jessica Leigh Sachs. Kinney's employer, Price Waterhouse Coopers, endowed a scholarship fund in his memory, which has benefitted more than 30 UMass Lowell students.

Secure your income with a gift that pays you!

A charitable gift annuity is a gift to UMass Lowell that benefits you immediately with:

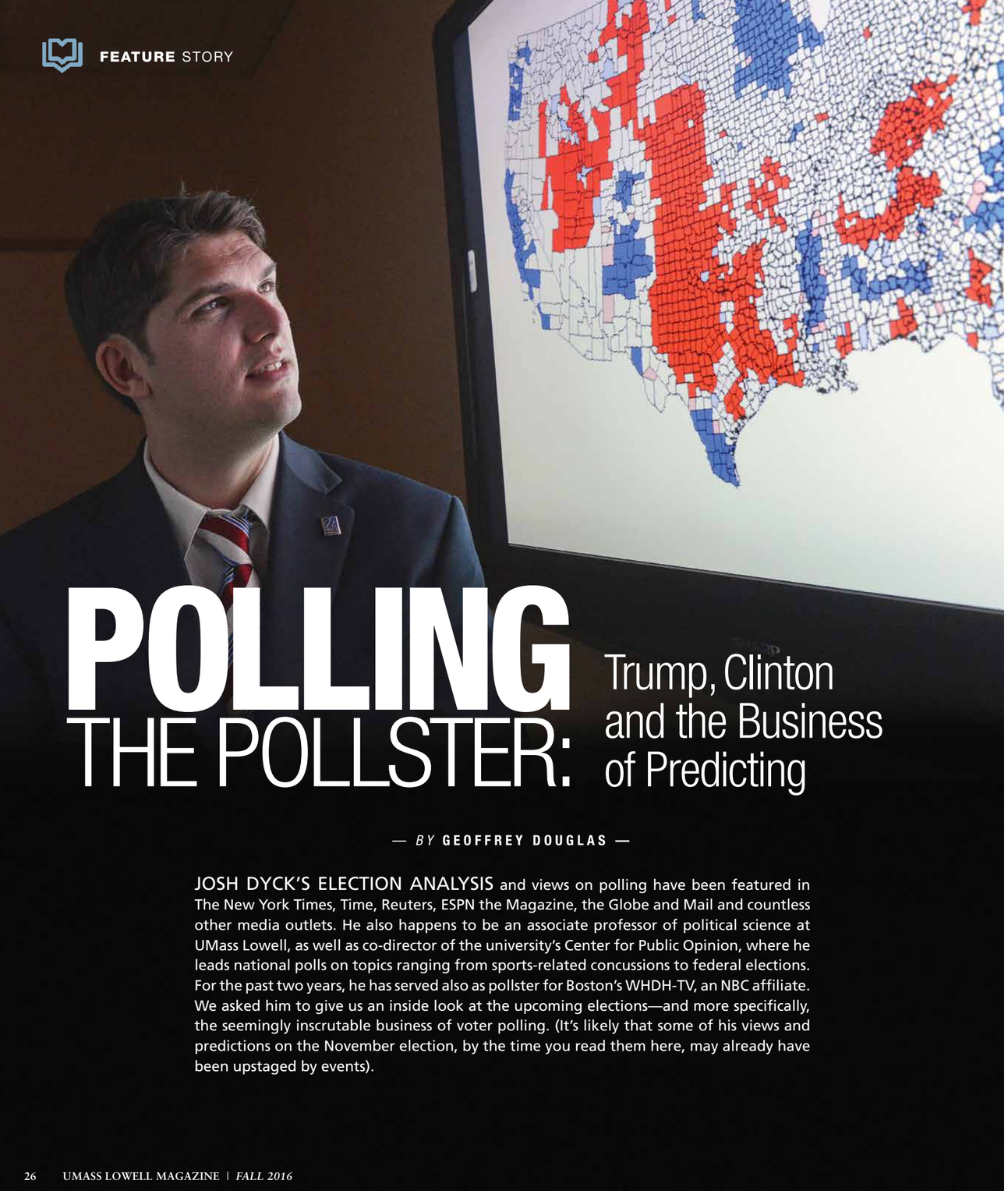
- A guaranteed fixed income for life
- A possible tax-free income
- A charitable income tax deduction for a portion of the gift's value
- The chance to make an impact on the next generation of students by supporting scholarships

Payout rates vary from 5 to 9 percent based on age and number of beneficiaries.
For more information, contact Executive Director of Development
Judy Sager, at 978-934-3564 or GiftPlanning@uml.edu.

Features

GET DOWN (TOWN)

UMass Lowell's Campus Activities Programming Association—run by students—brought acclaimed electro house DJ Steve Aoki to campus a few years ago. Aoki, shown here in front of a heritage trolley downtown, is just one of a long list of musicians to rock campus over the years. Turn to Page 28 to read about some of them.



POLLING THE POLLSTER: Trump, Clinton and the Business of Predicting

— *BY* **GEOFFREY DOUGLAS** —

JOSH DYCK'S ELECTION ANALYSIS and views on polling have been featured in The New York Times, Time, Reuters, ESPN the Magazine, the Globe and Mail and countless other media outlets. He also happens to be an associate professor of political science at UMass Lowell, as well as co-director of the university's Center for Public Opinion, where he leads national polls on topics ranging from sports-related concussions to federal elections. For the past two years, he has served also as pollster for Boston's WHDH-TV, an NBC affiliate. We asked him to give us an inside look at the upcoming elections—and more specifically, the seemingly inscrutable business of voter polling. (It's likely that some of his views and predictions on the November election, by the time you read them here, may already have been upstaged by events).

ALUMNI MAGAZINE: How has election polling changed with cellphones, the web and other technology?

JOSH DYCK: As you'd probably guess, 20 or 30 years ago everyone was doing their polling by phone. People were only just starting to use devices like caller ID or voicemail; they still didn't have much of a way to not answer the phone. As a result, response rates were higher than they are today, and polling results were generally more accurate. Since then, the world has gotten a lot more complicated. Most people today use cellphones, and response rates on them are much lower; even on landlines they've lowered over the years. Overall, the typical response rate we're getting today is between 10 and 15 percent. So achieving good samples is harder than it used to be, and more expensive.

AM: How do you compensate for this?

JD: One way some polls lower cost is by getting rid of live interviewers, using automated machines instead—robo-callers—and doing shorter polls. Another method is to conduct your polls online. The gold standard, though, is still to use live interviewers, and to do the poll by phone—both cellphone and landline.

AM: How do you get the cell numbers you call, since they're not publicly listed?

JD: Actually, they are. Pollsters get them the same way marketers do—people put their information on everything these days, and companies collect that data, which they sell.

AM: How do you choose whom you call?

JD: One way is just to use what we call random-digit dialing, where you're not controlling whom you call. The other way, for election polling, is to make calls from registered-voter lists.

AM: Which method does the Center use?

JD: We use random-digit dialing on pretty much all our calls. The problem with relying on voter lists is that you tend to miss the effect of "shocks"—shocking events, shocks to the system—like Donald Trump and Bernie Sanders this year during the primaries: both of them were bringing out people to vote who weren't typical voters, some of them who'd never voted before. So of course they didn't show up on the lists the pollsters were using. That can create a lot of uncertainty, which is why we prefer RDD.

AM: How do you know that the people you're reaching are a representative sample?

JD: They're probably not. For example, you're likely to get a disproportionate number of folks over 65 in your sample pool. And not enough in the 18-29 group. And we expect that. So we allow for it by using what we call "post-weighting"—we weight our responses to reflect the groups that might be underrepresented.

AM: What if response rates continue to drop? Is there a point at which you'll have to change your approach?

JD: Probably. In 10 years, say, if the rates drop to 2 percent, or 5 percent—to a point at which polling by phone is longer viable—pretty much everyone will be doing their polls online. We're not there yet, but it's approaching. It's something we have to continually assess. This is a field, definitely, that changes with technology.

AM: Do you ever think the polls themselves might be self-fulfilling? If one candidate, for instance, is shown to be far ahead, people might just go with him or her, despite their preference?

JD: There's not much evidence to support that. If anything, the opposite seems to be true: in the last week or two before an election, the polls generally tighten. If poll results were benefitting the front-runner, as you suggest, you'd expect the opposite. I think a lot of people miss one real value of polling: not necessarily always to tell us who's going to win, but to tell us when an election is close. When that happens, as it often does, the polls can actually put upward pressure on turnout.

AM: In your view, over the last several election cycles, what polls have been best and worst at predicting outcome?

JD: I'm going to give you a real non-answer answer: there's no single poll that's as good as the overall polling average. Statistics tell us this: the average of all the well-conducted polls will almost always hit the nail on the head. You can get those averages at RealClearPolitics.com or the Huffington Post.

As for the weaker polls, I'm not going to name any names, but generally the least reliable ones are those using automated voice responses as opposed to live interviewers.

AM: Based on what you see in the polls, who's your pick in November?

JD: History tells us that there are three basic pieces of data that can throw some real light on the question: (1) the president's approval rating going into the election; (2) the country's economic growth rate and (3) the poll averages following both conventions. I'd say the president's approval rating, which is OK at this point, probably gives an edge to Clinton; on the growth-rate factor, which is just barely OK, I might give a slight advantage to Trump.

This is a weird election in a lot of ways. To start with, you've got the two least popular major-party candidates ever. Then you have Hillary's scandal issues—a big trust factor—and, in Trump, a candidate who poses a huge question mark: not only are his negatives off the charts, but how do you deal with his seeming inability to stay out of these skirmishes he keeps getting into over race or gender or whatever. From a campaign strategist's perspective, it's difficult to figure out what to do with this guy to get him to 50 percent of the vote.

AM: So if you had to call it...?

JD: At this point, if I were handicapping the race, given Trump's issues I'd have to say Clinton's the favorite. But I wouldn't predict her winning because Trump's a total wild card, which could produce some really crazy swings.

A big part of the answer is going to lie in turnout. Who's more disenchanted: the Republicans with Trump, or the Democrats—particularly that Bernie Sanders wing—with Hillary? At this point, there's just no way of knowing.

I will say this: right now [in early September], it looks like Clinton is up by about 7-8 percentage points, which does make her about a 4-to-1 favorite to win the presidency if we go strictly by the numbers. Trump has also not shown a willingness or ability to moderate his campaign, reach out to centrist voters who are suspicious of both candidates, or put together an effective ground campaign in swing states to get out the vote.

By the numbers, Clinton is a favorite, but she's probably an even bigger favorite because the Trump campaign is not demonstrating the discipline necessary to turn out every vote. This is certainly a strange election. ■

Rock and Roll

— *BY* **DAVID PERRY** —

From Aerosmith to Zappa, from Dylan to Drake to the Dead.

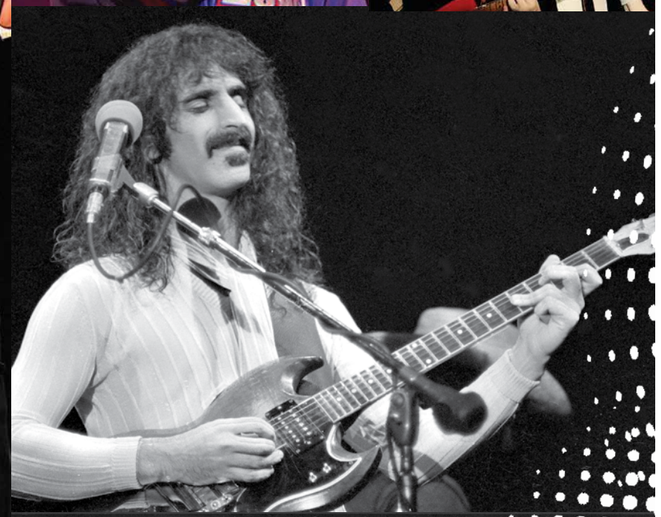
Those musicians and countless others have performed at UMass Lowell over the years, their music becoming part of the soundtrack of college for students lucky enough to snag a ticket.

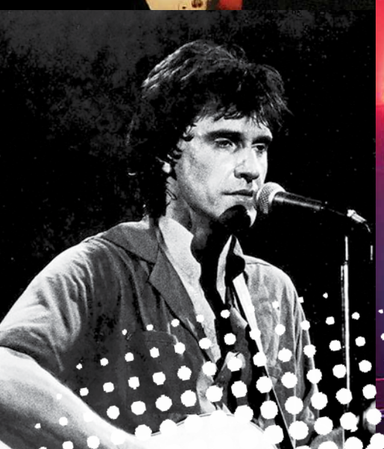
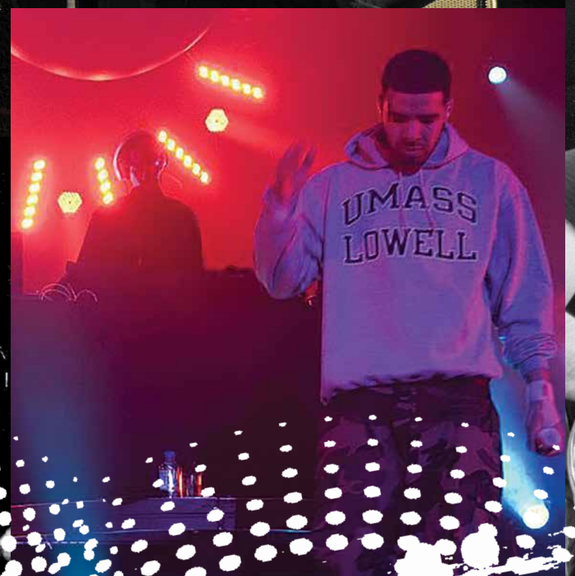
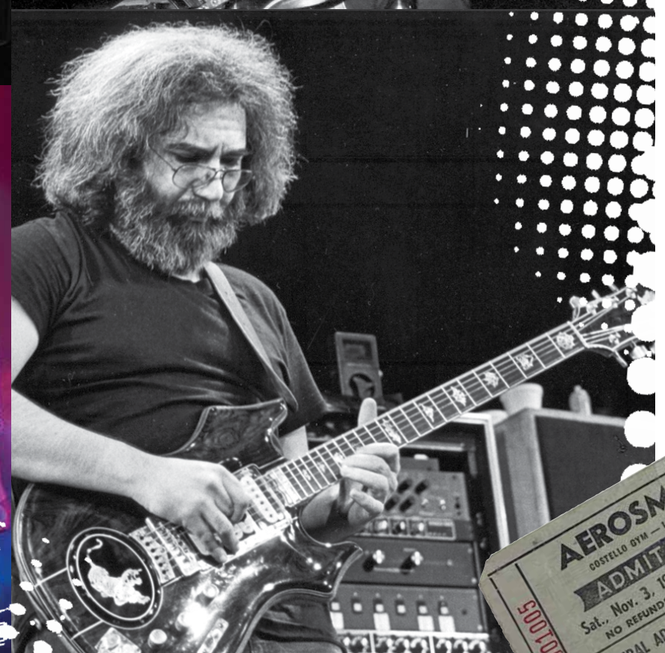
Some shows were legendary...







The Kinks left a recorded legacy of their UMass Lowell concert. A little-known Tom Waits opened for Frank Zappa at Costello Gymnasium. Pearl Jam's Eddie Vedder serenaded a capacity crowd in Cumnock Hall. Aerosmith and Cheech & Chong got randy in live interviews on the campus radio station. Talking Heads were rendered powerless and the Grateful Dead melted the ice at the Forum hockey rink in Billerica.

And the shows go on. Since UMass Lowell took over the Tsongas Center in February, 2010, dozens of concert tours have pulled through, including Drake, the 1975, Katy Perry and Bob Dylan.

In one of three performances he selected from dozens of bidding colleges, Billy Joel used story and song to commandeer Durgin Hall on Dec. 14, 2011 to serve up a two-hour master class.

There is more to come, including Schoolboy Q and country artist Kip Moore, acts that will descend on campus this fall, with dates booked at the Tsongas Center.

"It's great that students come together to enjoy music they love," said Chancellor Jacquie Moloney. "Young people today embrace music as a way of life, much like the students of the '70s did. The experience of seeing a concert can be important. Music is important."

As an undergrad student at Lowell State College, she was in the crowd for Jethro Tull's October 1971 concert at Costello Gym.

"We had some really great concerts when I was a student. I recall sitting on the floor of Costello Gym to see Jethro Tull, who were just getting big at the time. I remember thinking, 'What an amazing thing that we could have Jethro Tull at our gymnasium.'"

It's nearly impossible to track down every show on campus, but there are some notables:

THE DEAD ON ICE

Writer, historian and former Grateful Dead publicist Dennis McNally, author of "A Long Strange Trip: The Inside History of the Grateful Dead," knows well the reputation of the Dead's performance at the Forum in May 1979.

Not their best. In Dead lore, a show that was a bit … shaky.

The venue was not designed for concerts—it was home ice for the university's hockey team in addition to year-round community skating—but it would do for the university-sponsored show.

"So when the band came to play, the ice was covered," says McNally from San Francisco. "Apparently, not very well. And certainly not effectively."

Typically, lighting is hung from the ceiling of concert venues.

"For whatever reason they did not do that in Billerica," says McNally, "I don't know."

The lights were stacked on a truss that sat on the plywood covering the ice.

"And as the show progressed," says McNally, "the ice under the truss melted. They were playing a rock and roll concert and the lights began to sway. And when the lights are glaring down at you when they aren't supposed to be, this creates some anxiety. So there was considerable concern onstage that night. That may be what people heard in the music."

RIDING DYLAN'S WAVE

Bob Dylan brought his Rolling Thunder Revue to Costello Gym in November 1975, a storied show among fans and alumni who saw it. The highly anticipated tour featured a ragtag band including Joan Baez, Roger McGuinn, T-Bone Burnett and others.

Tony Janeczek '76, '86 (electrical engineering, computer science) recalls the buzz that swirled on campus in advance of the show. He was in a buddy's dorm room when a Student Activities committee member walked in and said, "Be in front of Cumnock Hall at 8 a.m. Monday."

He was. Tickets for the Dylan show were sold from a bus.

"It sold out quick," he recalls.

"It was general admission and people started lining up that morning. We got there in the afternoon, and when the doors opened, you just sort of rode in on the crowd, like a wave. Great show."

HEADS, INTERRUPTED

When Talking Heads took the stage at the Forum in 1983 they opened with their hit "Psycho Killer." Six songs later, the building's power blew, forcing the band to hit pause. Eventually, the show continued with a second set of 12 songs and the encore, "Life During Wartime."

Laura Dyer '87 (computer science) recalls the joy of having easy access to live music.

"I remember being so excited that music was right on campus. I loved going to concerts and eventually served for two years on the student activities committee. Having concerts on campus meant there was something to do right there. All you had to do was walk across the street."

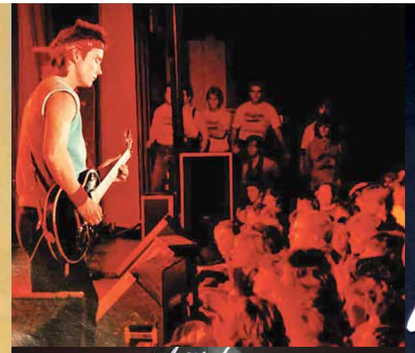
Other performers to hit campus during the '80s included Rock and Roll Hall of Famer Joan Jett & The Blackhearts, Squeeze, 'Til Tuesday and Huey Lewis & The News. Hip-hop legends Run DMC were among the performers on campus in the '90s.

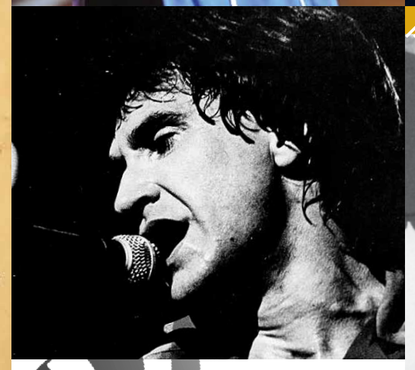
PEARL WHO?

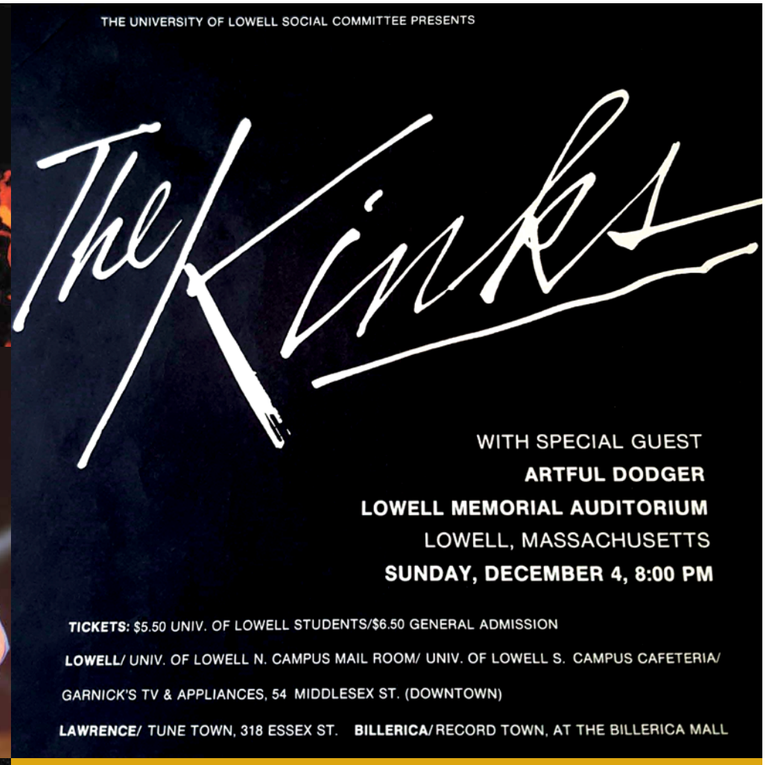
Rachel Chandler '95 was studying sociology when Pearl Jam blew through a 75-minute set in Cumnock Hall in April 1992. Seattle, and grunge, were about to explode and Pearl Jam was on the brink of stardom.

"And I had no idea who they were," Chandler says. "I was not a Pearl Jam fan. I was probably listening to show tunes and my boyfriend at the time liked hair bands.

Continued







I stood way in the back, much more interested in the social aspect of it."

DON'T BOGART THAT MIC!

Cheech & Chong rolled through Cumnock Hall in 1972 with their edgy, stoned humor. A member of the WLTI campus radio station talked the duo into visiting the studio for a post-performance interview, to the surprise of the student disc jockey.

"Cheech & Chong just took control and hammered the interviewer. The DJ was inexperienced and it was hilarious," says Nick Fountas '75 (plastics engineering), who worked at the station, including a stint as music director.

Janeczek remembers it was not particularly funny to Dean of Students Leo King. "He called the station and said, 'We've got to talk.'"

Similarly, a year later, Aerosmith played a show at Costello Gym following the release of their first album. A live interview on WLTI featured a slew of seriously off-color puns and juvenile humor, recalls Janeczek.

"And we got another call from Dean King."

WORKING OUT THE KINKS

Then there was The Kinks, who played a university-sponsored show at the Lowell Memorial Auditorium in March 1979.

"You never knew how good the sound would be when an act played the LMA," says Dean Johnson, a freelance writer and radio host. "But the Kinks were clearly on fire the night ULowell brought them in."

So hot that the band included two classics from that evening—"Where Have All the Good Times Gone" and the blazing "You Really Got Me"—on its live double LP, "One for the Road."

Fountas says during his time on campus, the shows were memorable despite the challenges of often being held in a gym, general admission seating and less-than-perfect acoustics.

"Enthusiasm carried the experience and we had some great acts come in," he says.

He recalled Zappa's November 1973 show at Costello Gym as, "his free-jazz work, amazingly complex stuff. Either you let it flow over you or you didn't like it."

"Frank Zappa didn't need to come to Lowell but they got him, and it was right here on campus. You didn't have to go to Boston." ■

> "ENTHUSIASM CARRIED THE EXPERIENCE AND WE HAD SOME GREAT ACTS COME IN."

WILL ROBOTS RULE THE WORLD?

— *BY* **ED BRENNEN** —

One of only four of its kind in the world, the $2 million, 6-foot-2, 300-pound humanoid robot named Valkyrie was entrusted to the university's New England Robotics Validation and Experimentation Center by NASA.

Maybe you're an accountant, or a chemical engineer. Perhaps you take care of the elderly, or teach high school Spanish or manage an IT team. Whatever the field, imagine that you're applying for a new position. Naturally, you speculate about your competition: Will they have more experience, better references, a lower price tag?

It's less likely, presumably, that you wonder if the other job candidate's brain is controlled by a computer.

But maybe you should.

Two-thirds of Americans polled by the Pew Research Center in 2015 said they believe robots and computers will do "much" of the work currently done by humans within 50 years. In many industries, it's already happening. For decades, robots have been fixtures on factory assembly lines. Many of the tasks done by travel agents, bank tellers, cashiers, toll-takers and librarians—to name just a handful of fields—have been taken over in recent years by the cost-effective convenience of self-scanners, ATMs and the internet.

Surgical robots are regularly used in operations on hard tissues (like bone), and a recent study at Children's National Medical Center in Washington, D.C., revealed that a supervised autonomous robot could also successfully perform more challenging soft-tissue surgery. In Japan, robot hotel workers are checking in guests and delivering room service; in China, robots are cooking and serving meals in restaurants; and on many Royal Caribbean cruises, they'll mix you up a fresh margarita. Meanwhile, companies like Tesla, Google, Uber and Ford are developing "fully autonomous" cars that they say will be available to consumers by 2021.

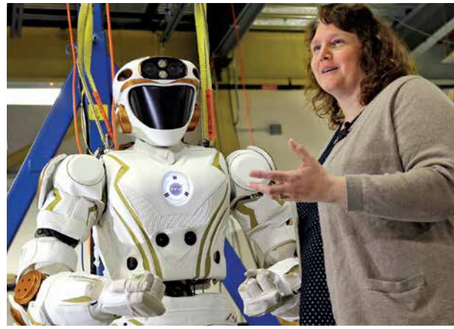
And if UMass Lowell researchers have their way, robots will allow us to one day live on Mars.

Despite all this, most people like to believe their profession will always be immune to automation; 80 percent of the same respondents in the Pew study believe their own jobs will still exist in their current forms in 50 years.

After all, even Mars-bound robots like Valkyrie, NASA's $2 million humanoid robot that graces the cover of this magazine and currently resides at the university's New England Robotics Validation and Experimentation (NERVE) Center, could never possess the emotional intelligence, the intangible creativity or the all-around nimbleness that makes each of us so special—and indispensable—at work. Right?

TIME TO LEARN SOME NEW SKILLS

The good news is you probably don't need to dust off your résumé just yet. But experts across the university agree that rapid, oncoming advances in artificial intelligence and machine learning will continue to revolutionize the role of robots in the workplace, changing life as we know it.



"It's not that we won't have jobs; we'll just see a shift," says computer science Prof. Holly Yanco (at right), director of the NERVE Center and founder of the UMass Lowell Robotics Lab. "Look what's happened with technology over the years. We don't make buggy whips anymore, right? If robots are now doing jobs that people used to do, like picking and placing goods in an e-commerce situation, well, now we need people to build the robots and program the robots and take care of the robots."

Computer science Assoc. Prof. Ben Liu sees three driving forces behind the robot revolution. The first is advances in machine-learning algorithms, the "brains" of a robot that are designed to adapt through an endless process of trial and error, teaching them how to navigate a world beyond traditional computer programming. The second is the explosion of big data from across the globe, and the third is exponential improvements in computation power to crunch all this data.

Continued

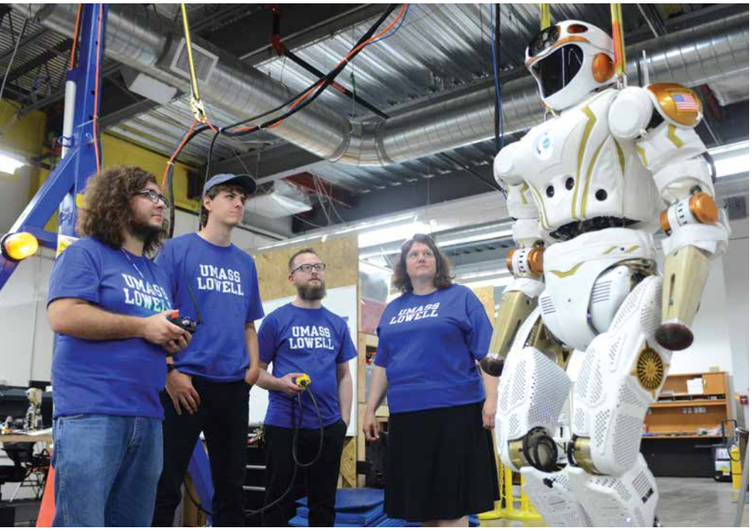
> "The NERVE Center is the most incredible robot test-bed I've ever seen."
>
> —Kimberly Hambuchen, *NASA's deputy manager for human robotics systems*

"Ten years ago, even with the best algorithm, we still were not able to run computers fast enough to learn from the data. Now, it's hard to see where it's going to hit the limit," says Liu, who has little doubt that the resulting rise of robots in the workplace will have a major impact on society. "It will replace more and more cognitive, white-collar work, that's for sure. The challenge for us will be to adapt and learn new skills."

With the confluence of those factors, there's never been a better time to work in robotics. And, with apologies to Silicon Valley, there's no better place to do it than right here in Massachusetts, where more than 150 robotics companies currently employ around 3,200 of the area's best and brightest computer science and engineering minds. Conveniently enough for UMass Lowell, the three biggest robotics companies (in terms of number of employees) are all located within a 15-minute drive from campus: Brooks Automation in Chelmsford, Amazon Robotics in North Reading and iRobot in Bedford.

"We're developing a real robot ecosystem in the area," says Yanco, co-chair of the Mass Technology Leadership Council Robotics Cluster, which was formed in 2005 to spur industry growth through knowledge-sharing and relationship-building among the region's leading robotic companies, academic research labs and policy-makers. Rather than operate in silos in the race to build a better robot, the Robotics Cluster encourages companies to take advantage of the area's wealth of world-class universities and R&D resources.

Front and center is the NERVE Center, which is one of only three robot test facilities in the country with courses designed in conjunction with the National Institute of Standards and Technology. Inside the 10,000-square-foot facility located just two miles from the campus center, developers can take their robots for a spin on a variety of terrains and inclines, run them through obstacles and water, and test their manipulation capabilities, receiving the all-important third-party validation needed before taking them to market.



The collaborative efforts are paying off. Led by the likes of iRobot's Roomba and Amazon Robotics' warehouse fulfillment robots, sales of Massachusetts-made robots are approaching $2 billion annually—and growing. The global robotics industry, already a $71 billion market in 2015, is expected to nearly double to $135 billion by 2019, according to tech research firm IDC.

Boosting UMass Lowell's stock in the robotics industry is Yanco, who is widely recognized as a leader in the field. "Holly is very plugged in," says Vice Chancellor for Research and Innovation Julie Chen, "and I've learned in talking with her that robotics is a very close-knit community. Everybody is separated by two degrees."

Kimberly Hambuchen, NASA's deputy manager for human robotics systems, is excited that Yanco's team has been entrusted with Valkyrie.

"The NERVE Center is the most incredible robot test-bed area I've ever seen, and Holly is one of the leading experts in the field of human-robot interfaces, so I'm really excited to see what sort of work Holly and her team can bring to the table," says Hambuchen, who visited campus in September to deliver a guest lecture called Exploring Space with Robots: Do We Need People? "We're expecting to get a lot of good things out of them, things that won't be replicated with the other university robots."

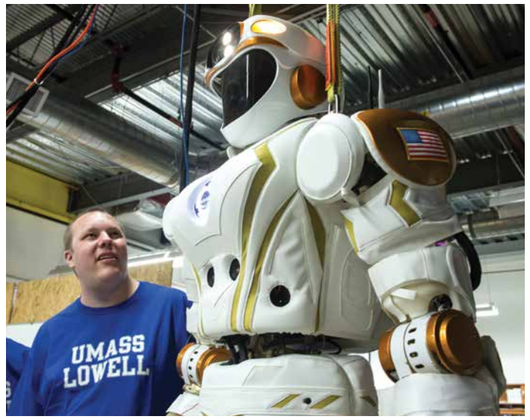
BIG BOT ON CAMPUS

Most robots on the market today are single-purpose, such as the industrial robot arms that are programmed to perform repetitive tasks on assembly lines. Service robots, like Roomba vacuums and bomb-disposal units used by law enforcement, are another type growing in popularity, designed to do jobs deemed too dull or dangerous for humans. Then there are the more complex collaborative robots, or "co-bots," which are designed to work autonomously alongside humans in a variety of settings, from offices to hospitals to stores to farms.

Or, in the case of Valkyrie, on Mars.

Developed by NASA's Robonaut program, Valkyrie has become a campus celebrity since arriving at the NERVE Center in April, drawing the attention of all of the major Boston news outlets, as well as nationally from the Associated Press, the History Channel and National Geographic. One look at the 6-foot-2, 300-pound R5 (as Valkyrie is technically known) and it's easy to understand the fascination. With a gloss-white frame highlighted by gold trim, a sleek black visor and helmet-mounted lights and sensors, Valkyrie looks like a life-size "Star Wars" action figure. Of course, NASA has much bigger plans for her. The space agency hopes she's the prototype for a next-generation version that will travel to Mars and pave the way for human exploration—all within the next 25 years.

But before Valkyrie version 2.0 can set foot on the Red Planet, Valkyrie version 1.0 must learn how to walk in Lowell.



"It's amazing to have Valkyrie here," says Yanco, who is leading a team of more than a dozen student researchers from UMass Lowell, in collaboration with Northeastern University, over the next two years to teach Valkyrie how to walk, manipulate objects and understand the world around her. "She falls sometimes, but we're learning to program her to walk better and balance better."

Valkyrie is actually a quadruplet—her three sisters reside at MIT, the University of Edinburgh in Scotland and NASA's Johnson Space Center in Houston. Chen says that having one of four Valkyries in the world here on campus is a coup for the university. "Everyone can appreciate going to Mars," she says. "It's helpful in getting people to appreciate and understand science and technology."

Since Valkyrie arrived on campus, the NERVE team has been painstakingly fine-tuning the algorithms that control her balance and motor functions, slowly teaching her to walk.

"It definitely makes me appreciate the human machine," says Jordan Allspaw, an undergraduate computer science major who spent two weeks in January at the Johnson Space Center learning how to train and maintain an R5.

Computer science graduate student Carlos Ibarra Lopez, who in 2013 was part of the UMass Lowell "Rover Hawk" team that won NASA's Robo-Ops competition in Houston, says that working on a groundbreaking project like Valkyrie is as thrilling as it is challenging.

"The idea that anything we're working on would end up on Mars is pretty amazing," says Ibarra Lopez, who also trained in Houston in January. "But since it hasn't been done before, you can't really just Google something to find how to solve problems. We have to contact NASA."

While her NU counterparts, professors Taskin Padir and Robert Platt, are primarily focused on Valkyrie's balance, movement and ability to grasp objects, Yanco is busy analyzing how the robot will interact with humans. Valkyrie can't talk (yet), and although her black facemask may serve her well in a poker game, it doesn't really let her convey emotions. For now, she relies on a glowing NASA emblem

Continued

NEXT STOP: MARS

It's been 40 years since NASA successfully landed its first spacecraft, Viking 1, on Mars. Since then, there have been a half-dozen more missions to send "rovers" to explore the Red Planet, including the most recent six-wheeled Curiosity rover that touched down in 2012 and began transmitting selfies back to Earth that looked like they could have been taken in the desert outside of Vegas.

One of the instruments on Curiosity is ChemCam, a laser that it shoots at rocks and soils to see if they have been altered by water and contain chemicals necessary for life. Noureddine Melikechi, the new dean of UMass Lowell's Kennedy College of Sciences, is a member of the NASA ChemCam team—and is now part of a team working on a SuperCam that will be used in the space agency's planned Mars 2020 rover mission.

SuperCam will quickly tell scientists what rocks on Mars are made of, says Melikechi, who previously served as dean of mathematics, natural sciences and technology at Delaware State University. "About 4 billion years ago, the conditions for habitability, including flowing water, did exist on Mars. What happened since? Where did the water go? What is the habitability situation on Mars today? Answers to these questions may help us better understand the state of our planet."

Even though NASA already has several laser-shooting rovers scouring the Red Planet to study its atmosphere and geology, there's still a long way to go, and many obstacles to overcome, before human astronauts can make the trip.

For starters, there's literally a long way to go. The average distance between Earth and Mars is 140 million miles (depending on where they are in their orbits around the sun), so a round-trip human voyage could take more than two years. No astronaut's ever been in space for that duration, and there are serious potential health risks involved with extended stays in microgravity and prolonged exposure to space radiation outside of low Earth orbit.

And then there's the issue of weight. It's one thing to send a golf cart-sized 400-pound rover to Mars aboard a spacecraft that only needs enough fuel for a one-way trip. It's quite another to send several astronauts, along with the food, tools and supplies necessary for an extended mission, aboard a spacecraft that would also need enough fuel to return home. And there's the catch-22: The heavier the payload, the more fuel is needed to propel it through space.

That's where Valkyrie comes in.

If NASA can develop humanoid robots like her to the point where they can travel to Mars and build a human habitat ahead of time, then the mission becomes much more feasible. Robots like Valkyrie could even work alongside astronauts on Mars, using the same tools and handling tasks that are too dangerous for humans.

"It's so expensive to send equipment into space, so if you can use the same equipment they're sending up for astronauts, there's a big cost savings," says computer science Prof. Holly Yanco, director of the NERVE Center. "Even though it's harder to control a humanoid robot's balance, NASA wants it to look like an astronaut and use all the things that they're already sending into space for the astronauts."

So Valkyrie will be put through her paces for the next year on the NERVE Center's test courses, gradually taking on different terrain like sand, gravel, ramps and steps. Yanco and her team will also validate the autonomous skills needed on a space mission, such as exiting an airlock or collecting rock samples.

And if all goes as planned, two decades from now a descendent of Valkyrie will be taking a giant leap for robotkind on Mars.—*EB*

Valkyrie

HIGH-TECH BACKPACK

The backpack contains a 2-kilowatt-hour rechargeable battery to power the robot's sensors and motors as well as a fast wireless network for transmitting data. The backpack also houses Valkyrie's "brain"—two Intel Core i7 COM Express processors loaded with Ubuntu Linux and custom control software. One computer is used for low-level functions like controlling joint movements while the other is for high-level functions like processing data from the robot's array of sensors.

SOPHISTICATED SENSORS

As part of the Carnegie Robotics MultiSense SL sensor package, a pair of video cameras on Valkyrie's head allows for 3-D viewing (with the help of four sets of LED lights for illumination). Another pair of cameras mounted on the robot's abdomen provides the operator a second set of eyes. Behind the dark visor, a spinning lidar system uses laser scanning to survey and map Valkyrie's surroundings at high resolution, allowing her to navigate safely around hazards and obstacles. The NASA emblem on Valkyrie's chest is a color-coded status indicator that alerts people when the robot or its motors are running or on standby.

PROTECTIVE ARMOR

Valkyrie's fitted panels of fabric-wrapped foam armor on her body and arms and polymer covers for her legs are designed to protect the robot's critical joints, sensors and electronics from impact should she fall or get hit by an object. Holes in the hard plastic covers help reduce weight and provide ventilation for the motors.

Text and photo by Edwin L. Aguirre

HUMANLIKE ANATOMY

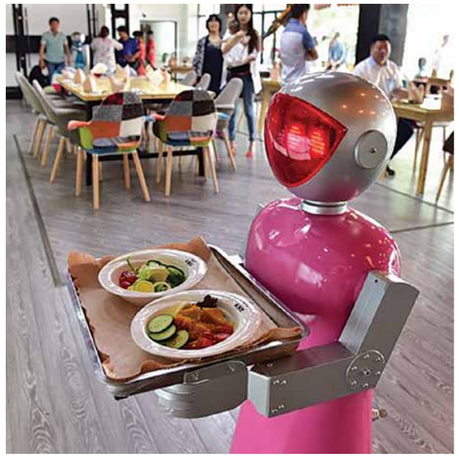
Valkyrie's motorized and articulated hands, wrists, elbows, shoulders, neck, waist, hip, knees and ankles have a total of 44 degrees of freedom (e.g., rotational movements), giving the robot the dexterity to operate tools and conduct a wide variety of duties and experiments. These autonomous skills will help her perform tasks in future planetary exploration missions—such as descending a ladder to reach the Martian surface, collecting rock samples and helping to build permanent bases on the Moon and Mars.

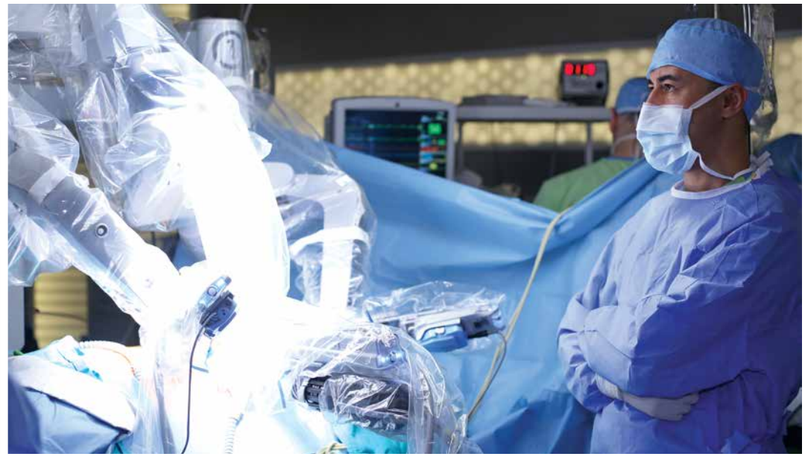
ONE STEP AT A TIME

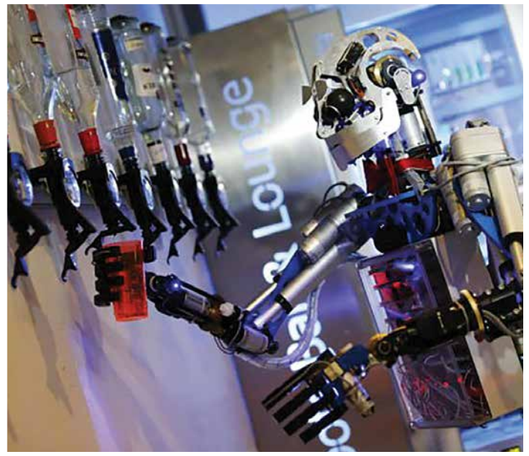
Valkyrie's feet are equipped with pressure sensors to keep the robot upright and steady. The sensors also assist her in maintaining balance while walking on uneven terrain or climbing a stair.

BIONIC LEGS

Valkyrie's legs and ankles contain motors that control rotational and linear movement and walking. Her legs and arms are both removable, with a quick mechanical and electrical disconnect between the first two joints that allows for easy transport and servicing. Valkyrie's limbs are designed to operate independently. They are also engineered to be interchangeable and easily fixed—a damaged arm or leg can be quickly replaced with a new one or, if needed, the left limb can even be replaced with the right limb, or vice versa, since they are built identically.







Clockwise from top left: Robots wait tables in restaurants in China; robots can now perform soft and hard tissue surgery; companies are spending billions of dollars to perfect driverless cars; in Germany, robots tend bar; robotic room service isn't unusual in Japanese hotels; in Australia, Domino's self-driving robot delivers pizza.

on her chest plate to communicate some basic concepts and interact with those around her.

"There's a very broad range of human-robot interaction, which I find very interesting to think about," Yanco says. "For less-capable robots, the interaction could be using a joystick to control a bomb disposal robot. If you're talking Valkyrie on Mars, the interaction is a little different. It might have to send messages back to NASA saying it's having trouble. One of my grad students is running a survey on the internet to see what icons people could look at and say, 'I understand it means the robot needs help.'"

And then there's the question of how Valkyrie, or any autonomous robot, can best communicate with people around them who aren't familiar with them. Yanco sees the impending proliferation of self-driving cars as the most obvious example of this problem.

"When we cross the street we make eye contact with the driver of a car. What do you do with an autonomous car? There's no one to make eye contact with. How do you know it's safe and they recognize that you're there?" she says. "As more and more autonomous systems are deployed, we need to understand what they're doing. Are they moving? Are they not moving? Can we get near them? Should we not get near them?"

In addition to studying this human-robot interaction and validating the autonomous skills that Valkyrie would need for deep space missions, Yanco and her team are helping NASA develop test courses for the 2017 Space Robotics Challenge, in which teams from around the country will control a virtual Valkyrie through a series of tasks.

"There aren't many other places in the world where I could be working with a robot like this," Lopez says.

SOCIO-ECONOMIC IMPLICATIONS

Earlier this year, researchers and academics, including Sociology Department Chair and Assoc. Prof. Mignon Duffy, gathered at Mount Holyoke College for a conference on "The Future of Jobs: The Dual Challenges of Globalization and Robotization." Duffy's research focuses on care work such as health care, child care and education, one of the fastest growing sectors of the labor market.

"It's also one of the most resistant to being fully automated, given the need for human responsiveness and relationships," says Duffy, who is also associate director for the Center for Women and Work. "The conference was specifically focused on work and workers, but I do think that is one of the major things we need to think about with the rise of artificial intelligence: How does this impact jobs as we know them? It has the potential to have a huge impact."

While Duffy believes care jobs require "invisible pieces" such as human relationships and emotional responsiveness that even the most advanced robots just can't imitate, she is concerned that the rise of artificial intelligence could change the way society thinks about those whose job it is to care for others.

"Since we often do not recognize and value the important emotional and relational work that people like teachers and nurses do, could we then try to reduce their jobs to a series of tasks that could be automated?" she says. "In some ways automation is the next stage of standardization; if we think something can be standardized, broken down into a series of tasks, then it can be automated."

Looking 50 years down the road, Scott Latham, associate professor of management in the Manning School of Business, sees workplace automation creating an even wider socio-economic divide than exists today.

"There will be no more minimum-wage jobs. Robots will take over a lot of those jobs—everything from landscaping to working in restaurants to home care," says Latham, who researches business strategy. "The jobs will be in industries like robotics and biotechnology, where higher knowledge workers are required. Unfortunately, that means there will be an even greater disparity in wealth."

To counteract this disparity, Liu says that the workforce will simply need to adapt and keep learning new skills, just as it has always done when technology evolves.

"I think we're in a unique position at UMass Lowell," Liu says, "because of our technology advances and lifelong learning and job training, to provide these opportunities." ■

WHAT PHYSICAL THERAPY CAN TEACH ROBOTS (AND VICE VERSA)

In June, the NERVE Center received a $123,000 grant from the UMass President's Science & Technology Initiatives Fund for its project "Designing Better Robot Systems for People." The project, which is led by computer science Prof. Holly Yanco in partnership with the UMass Medical School, seeks to expand the capabilities of the NERVE Center to test and model both humans and robots performing a wide variety of tasks to develop better assistive and wearable robots and devices.

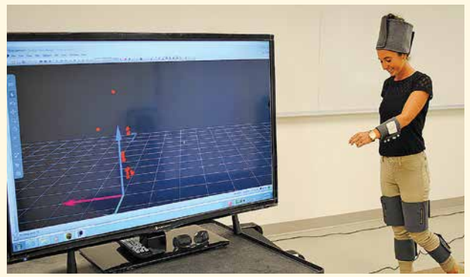
"This is really exciting to start collaborating with folks in health sciences and physical therapy," says Yanco, who is partnering with assistant professors Pei-Chun Kao and Yi-Ning Wu from physical therapy, along with computer science Assoc. Prof. Haim Levkowitz and work environment Prof. Bryan Buchholz. "I really think there's a lot to learn from them because people have been walking for a lot longer than these robots have been walking."

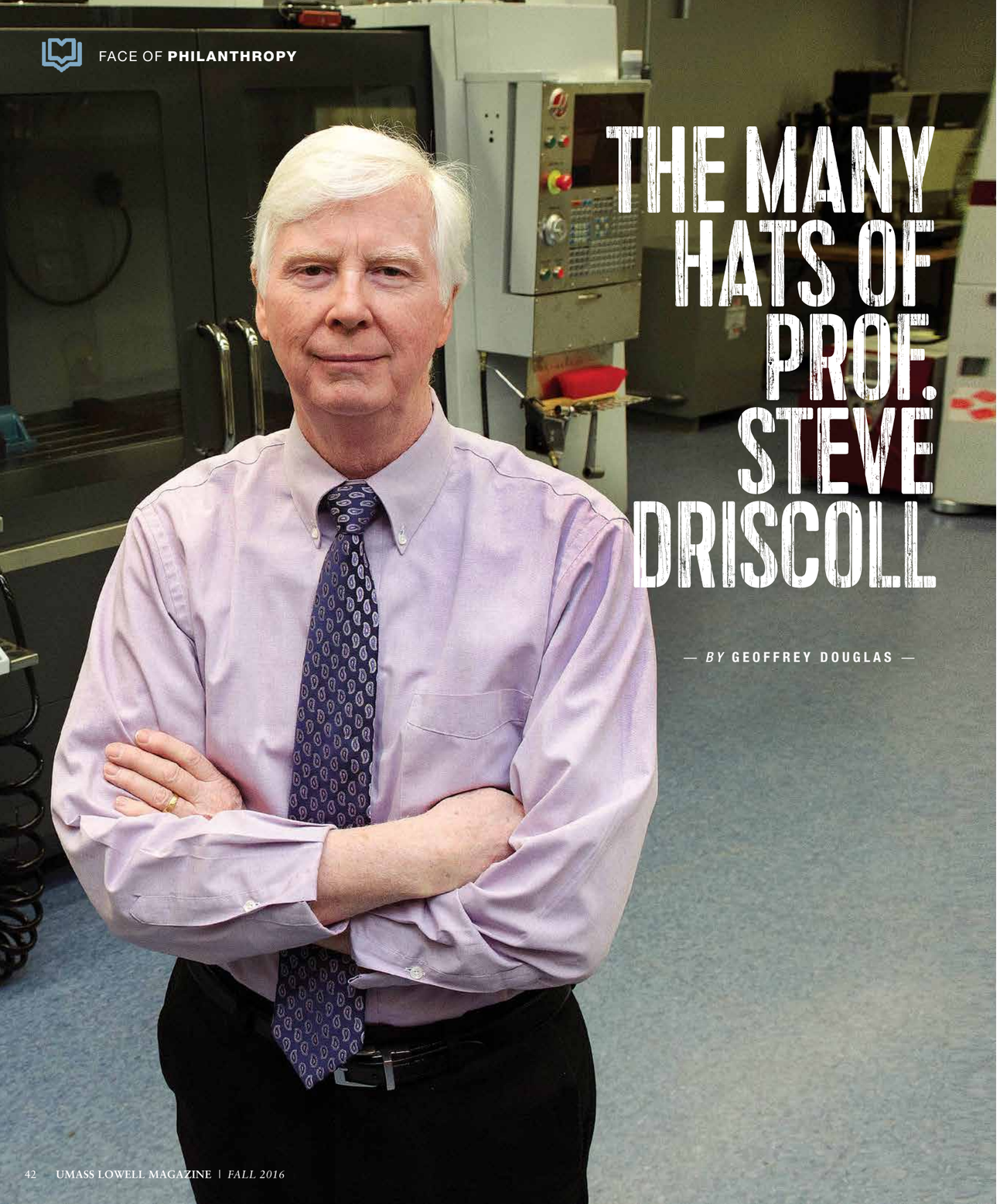
At the Health Assessment Lab at Riverview Suites, Kao works with student research assistants to evaluate patients' motor performance. Here, a patient can attach multiple sensors to her body and walk on a treadmill, while a ring of cameras positioned around the room captures the sensors' motion, measuring things like movement, acceleration and joint angles. The data is crunched by special software, which creates a computer image showing the patient's gait. A similar system will be used at the NERVE Center to analyze how Valkyrie, or someone wearing a robotic assistive device, moves.

"One way to make a better robot is to get data from healthy individuals and see what their normal walking pattern is," Kao says. "We can use that for the programming part and make the humanoid robot walk better. Or, we can reverse it. How does a humanoid robot learn to walk? What's their strategy? We can analyze that and then use the data to help stroke patients."

Wu, who researches technology-based rehabilitation for children with brain injuries and cerebral palsy, says robotic therapy for single, lower-extremity joints (such as the knee or ankle) is already well developed. She hopes the new research at the NERVE Center will help lead to better robotic therapy for the upper extremities, which are far more complicated.

"There's an infinite combination of joints," Wu says. "We really want to evaluate the human and then modify the algorithms for the robot. If we understand the robot, then we can help the human. Not only are we sending things to Mars, but at the same time we can develop a better assistive device for patients and the elderly population here on Earth." —*EB*





THE MANY HATS OF PROF. STEVE DRISCOLL

— *BY* GEOFFREY DOUGLAS —

PROF. STEVE DRISCOLL '66, '72 was in Mumbai last January, teaching a class of 45 employees of the largest plastics firm in India. "I was on my feet all day," he says, "from morning to night, answering all the questions they had. But in the process, I think I learned as much as I taught."

He has been in India often over the last 30 years, far too often to count. And in Taiwan, Israel, Japan, Germany, Mexico, France, Canada and England. Mostly he travels in the summer, or over semester breaks, when the classes he teaches in Lowell are in adjournment. And always, he says, "the best challenge is to learn about the students' lives and work, to share in their industry's problems. And the more you learn about them, the more knowledge you bring back, the better it is for your students stateside."

Driscoll has taught plastics engineering at UMass Lowell for 49 years. He spent another six here before that, earning his bachelor's and master's degrees. To his students (to judge by a sampling of their online comments) he is "a great professor," "very understanding and fun," "full of knowledge and wisdom," who "will go out of his way to help you with anything at all"—while to the university, which honored him earlier this year with its 2016 University Alumni Award, he is among the faculty's most honored professors, with "an unwavering commitment to alumni engagement and student success."

Certainly he is all of this. But maybe as much as anything else, he is a worldwide ambassador for his school.

It began more than 30 years ago, when he was first named a consulting fellow to the UN Industrial Development Organization and was sent abroad to teach in developing countries—most of which, like India, he says, were "strong emerging industrial countries" still new to modern technology, but "trying hard to capture the opportunities" afforded by plastics. Over the years, as these countries grew more prosperous and technologically advanced, and the university's reputation grew alongside, more and more of their students began arriving in Lowell. India today contributes more students to UMass Lowell than any other foreign country, a large percentage of them in the plastics engineering program.

But Prof. Driscoll doesn't meet them all in person. Over at least the last decade or so, as one of the earliest faculty advocates of online education, he has also been teaching web-based courses from his on-campus office—literally hundreds by now—to students from all over the globe.

"You don't get the same intimacy you do in the classroom," he says, 'but you compensate by reaching people from all the continents, from all over the world. You watch people from different backgrounds, different cultures, getting to know each other, expanding their knowledge that way. It's a wonderful thing to see."

> "HOW CAN YOU EXPECT THE STUDENTS TO SUPPORT THE UNIVERSITY IF THE FACULTY WON'T DO IT THEMSELVES? IF YOU'RE GOING TO MAKE A CAREER HERE, YOU'VE GOT TO HAVE SOME SKIN IN THE GAME."

Often, he says, he will announce to his students, well in advance of a semester's final exam, that the exam is to be a "team effort" that will require the use of the class's online discussion board: "So they're forced to interact with each other—all these students from all over the globe, working together to solve problems."

Once, while teaching in India not long ago, he met a former student who, as it turned out, had been the first online student to earn a plastics-engineering certificate from UMass Lowell, more than a decade before: "And he said he remembered that he'd taken two of the courses from me. He thanked me; he was so grateful. I'll always remember that. It really reaffirmed my belief in the value of online education."

Meanwhile, the students he teaches in foreign-based classrooms are more than matched by those who arrive in Lowell from all over the U.S. to study at seminars—multi-day workshops featuring state-of-the-art labs and classroom instruction—taught by him and others:

"Companies from all over the country send their people. The department is in big demand [within] the plastics industry. We have a truly great reputation."

His pride in the university clearly runs deep—it goes back a long way, and doesn't stop with himself. Decades ago, not long after he'd earned his M.S. degree in early 1972, his wife Ritva undertook her pursuit of what would be the first of three degrees, in business and computer science, at what was then the Lowell Technological Institute. Her next two would be earned at ULowell, the immediate predecessor to today's university.

"She was a perpetual student here for awhile," he says. "And so committed to it. I remember back in about 1975, when she was very, very pregnant—so large that the little desk in the classroom was jabbing her in the stomach—but she was determined to finish before our son was born. As it turned out, I think she ended up with the highest GPA in the department."

It didn't take long before Driscoll started giving back to the university.

"It was years ago," he says, "and a bunch of us [in the department] just got together and decided that we'd each contribute something every year. We did that for a while. Then I just decided I wanted to do something on my own."

The fund that resulted, the Stephen Burke Driscoll Scholarship Fund, to benefit UMass Lowell students of plastics engineering, is fully endowed today. But it was only the beginning. Next came the Students of India Fund, underwritten, he says, by the honoraria he had been paid over the years for his teaching trips to that country. Then, 10 years ago, the Pi Lambda Fraternity Fund was established; that was followed by the Ruth Dubey and Gail Sheehey Fund, honoring the department's two administrative assistants, because, says Driscoll, "They're the ones who hold us all together." All four funds benefit plastics engineering students, and all are fully endowed, with at least $25,000 each.

Finally, last year, he made an opening contribution to a fifth fund, this one named for Chemistry Professor Emeritus William Bannister, who died August 2015 at the age of 86. He plans to put off retirement, he says, at least until this last fund is fully endowed: "Bill was a good man. I need to honor that commitment."

"Steve Driscoll is more than an asset to this university," says Chancellor Jacquie Moloney. "He's a treasure—as a professor, an alumnus, a generous donor, and a representative of our campus worldwide. That's an extraordinarily rare combination of roles."

So what motivates him to donate, to continue to look for new people and causes to honor? He answers that question with one of his own:

"How can you expect the students to support the university if the faculty won't do it themselves? If you're going to make a career here, you've got to have some skin in the game."

His own investment—his "skin," if you will—goes far beyond the years he's invested or the dollars he's given. Somehow, between all his foreign travels, campus seminars and his UMass Lowell teaching schedule, he has found the time to be a friend and mentor to many of the students he teaches, and some of those he doesn't. Over the years he has served as a faculty adviser, not only to several student societies within the engineering department, but also to the Pi Lambda Phi fraternity and the university's Interfraternity and Sorority Council. One of the roles he continues in today is as adviser to the Thai Student Association.

"It's a social sort of thing," he says. "We go out to dinner together sometimes, everybody just gets to know each other. We have a lot of fun."

Asked why it is that he seems to be a favorite of so many student groups, he confesses to being puzzled: "I really don't know why," he answers. "Maybe I'm just seen as approachable." ■

Passion UNCORKED

Alumnus's Career as Cellar Master Flourishes

— *BY* **JILL GAMBON** —

CESAR ARBOLEDA stands atop a hill overlooking row upon row of grapevines and takes in the view. It's early summer, a perfect 10 of an afternoon, and the land is bursting in 50 shades of green. By his own admission, Arboleda '96 doesn't often stop to soak up the scenery, a winery and vineyard on 11 acres of rolling countryside in Amherst, N.H., that he and his wife Amy LaBelle opened four years ago. Most days Arboleda is too focused on the work at hand—bottling wine, meeting customers and overseeing sales, among his other responsibilities as cellar master—to take note of the lush setting.

"If I stepped back and looked I would be amazed, but this is work. There are always things to do," he says.

Located in southern New Hampshire, about 30 miles north of Lowell, LaBelle Winery has established itself not only as an award-winning producer of wine and gourmet products but also as a destination for weddings, corporate and community events, cooking classes and private functions. LaBelle produces 80,000 gallons of wine per year, and with an annual growth rate of 140 percent since opening in 2012, it is among the fastest growing wine producers in New England. Seven varieties of grapes are cultivated on site (LaBelle also purchases grapes and other fruit from local growers to supplement its harvest) and the winery produces 31 types of wine and counting. Its products are now sold in 300 stores in New Hampshire. The winery has a bistro and an art gallery and hosts tastings and events like weekly yoga classes in the vineyard.

Running a winery was never a career aspiration of Arboleda, who earned a bachelor's degree in criminal justice. The business was LaBelle's vision—an idea she nurtured for years in her spare time while practicing corporate law.

"This wasn't my dream, but I am blessed to be a part of it," Arboleda says. "I take satisfaction in helping Amy fulfill her dreams."

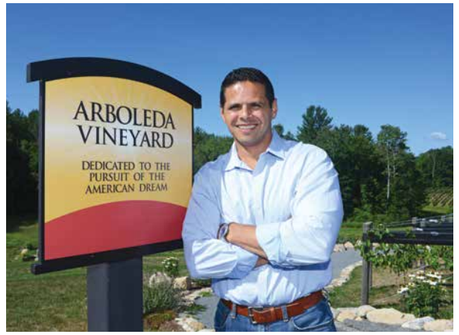
Continued

Amy LaBelle and Cesar Arboleda '96 opened LaBelle Winery in 2012.

Born in Medellín, Colombia, Arboleda attended public schools. His parents, who worked in Lowell's factories, set an example of hard work for him and his two sisters. After graduating from Lowell High School, Arboleda enrolled at UMass Lowell, where he could walk to campus and the tuition was affordable enough that he could put himself through school. He had plans for a law enforcement career, but after graduation he took a different path when he applied for a temporary job at Sun Microsystems. It was 1996 and the tech business was booming.

"My brother-in-law worked there and told me they needed part-time help at night. It was a way to make some money,"

"The biggest hurdle is having the courage to start. And you need the grit to keep it going."



Arboleda recalls. The part-time position led to full-time work and then promotions. Before he knew it, he had a career in information technology. Next came a job in network security at Fidelity Investments. The money was good and he was good at the work.

It was at Fidelity that he met his wife, a corporate lawyer at the financial giant who spent her spare time drawing up plans to open a winery.

LaBelle says she had an "a-ha moment" on a 2001 trip to a Nova Scotia winery.

"I walked in and it hit me like a ton of bricks. This is what I should be doing," she says. But with a mountain of law school debt, she wasn't ready to make a radical move.

"It wasn't practical to quit my job but I couldn't ignore the desire to open a winery. I couldn't stop thinking about it."

LaBelle started making wine in her Boston apartment and studied viticulture through online courses at the University of California Davis. In 2005, she began producing wine commercially at Alyson's Orchard in Walpole, N.H., and selling it at farmers' markets, local stores and wine tastings. After the couple married in 2006, she began making wine in a barn behind their home in Amherst. The wine production continued to grow and the couple had two sons, who are now 9 and 7. Arboleda left Fidelity in 2008 to devote his time to the business and LaBelle quit her job there in 2012 when the winery opened.

Now, LaBelle makes the wine and oversees product development, branding and marketing and business development while Arboleda is responsible for bottling, sales and customer relations. His approach from the start has been "one customer at a time."

LaBelle Winery in Amherst, N.H., is one of the fastest growing wineries in New England.

"We make them fall in love with us," he says. "We create an experience."

He enjoys interacting with customers. One afternoon in June, his seventh grade teacher from Lowell's Bartlett Community Partnership School came in for her annual visit to the winery's bistro for lunch. Arboleda stopped by her table to chat.

"I think I found my calling doing this," he says.

The couple is a model of perseverance. When they went looking for financing to build the winery, four banks turned down their loan application. In 2010, with the economy still shell-shocked from the Great Recession, credit was tight. Banks weren't interested in taking a chance on a business that relied on growing grapes in New England's unpredictable climate. The couple persisted and finally, Enterprise Bank in Lowell gave them the green light. In recognition of their success, the bank honored them with its 2016 Entrepreneurs of the Year Award.

Still, there are constant business challenges. One of the steepest is finding skilled workers. The winery employed 25 people when it opened in 2012. It now employs 85. While the number of wineries in New Hampshire is rising—the state's winery association now boasts more than two dozen members—there still isn't an established talent pool from which to draw.

"Recruiting, managing and retaining employees is one of the toughest parts of the business," LaBelle says.

But that challenge isn't tamping down their plans. They have a proposal before town officials for a 24-room inn and a distillery across the street from their current location. The expansion would allow them to move into the spirits market and offer lodging to customers who hold weddings and other events at the winery.

"The constant growth, the need for change, it's almost like the tech industry," says Arboleda. "You can't stay stagnant. You have to keep innovating."

The hillside opposite the winery entrance is called Arboleda Vineyard. A sign at the top of the hill bears the name and the notation: "Dedicated to the Pursuit of the American Dream."

For LaBelle and Arboleda, that pursuit unfolds every day, on the 11 surrounding acres.

"The biggest hurdle is having the courage to start. And you need the grit to keep it going," Arboleda says. ■

Alumni Life

LIVING SMALL

After the tiny house they designed outside of Portland, Ore., was featured on "Tiny House Nation," engineering alumni Tina '11, '13 and Luke '11 Orlando received thousands of calls from people all over the country looking to do the same. Read their story on Page 58.

Alfred Jacobs '56 spent four years at Lowell State College on the GI Bill, then went on to teach music, first in Massachusetts, then for 22 years in St. Croix. These days, he follows the sun. At 92, and retired now for 30-plus years, he travels between the climates of New England and Puerto Rico. It's the only way he can ensure the year-round pursuit of his passions: biking, swimming and climbing mountains (well into his 80s, he climbed up to 20 a year).

Looking Back at 100

In December 1936, six months before Betty Keller '37 graduated from Lowell State Teachers College, the heir to the British throne, Edward VIII, captivated the world with his announcement that he would renounce his birthright to marry a divorced American socialite. On the day of Edward's abdication speech, Betty remembers, her science professor brought a radio to class to share the moment with his students.

"I remember the king saying that he could not reign without the woman he loved beside him," writes Keller today from her home in Hawaii, where she recently celebrated her 100th birthday. The students, she recalls, "listened to the speech spellbound."

Her memories ring of a different time. It was a time when women, who had won the right to vote less than a generation before, had limited options in life. Some, perhaps most, chose to marry; for those who didn't, writes Betty, the choices were basically three: "teacher, nurse or secretary. There are many more choices today."

She recalls other differences as well: "Living in Baltimore during World War II, I saw black people denied access to department stores above the first floor. Traveling south by train once, I remember seeing a black soldier in uniform being told to move to a segregated car when the train reached Washington, D.C."

She marvels at today's technological advances—especially "the cell phones that allow people to stay in touch and be so much safer"—and the ease and speed of transportation. But there were blessings to be had too, she writes, in her era's slower pace of things:

"I commuted to Lowell from my home in Methuen by taking a streetcar from Lawrence. There were no buses. It was a lovely ride along the Merrimack."—*GD*

SAVE THE DATE!

REUNION WEEKEND - MAY 12-13

50th Reunion (Class of 1967)
60th Reunion (Class of 1957)
Golden Alumni Reunion (1966 and prior)

Want to be a part of your reunion planning committee? Contact Alumni_Office@uml.edu or 978-934-3140.

1958

Robert H. Mack retired from dental practice after 47 years.

1964

Wallace H. Chaplin recently moved to Del Webb Sun City Hilton Head in Bluffton, S.C.

James A. Karalun and his wife have been cruising all over the world, including a recent trip around Cape Horn, South America.

1965

Betsy B. Moore '65 '94 recently moved to Port Orange, Fla., after living in Sun City Hilton Head, Bluffton, S.C., for 11 years.

1966

June B. Bowser-Barrett '66 '79 recently retired and moved to Sandwich on Cape Cod. She is writing plays and has had several short plays produced over the past five years. She was a semi-finalist in the Neil Simon Theater's New Play Contest in 2015.

Dennis J. Serpone is this year celebrating the 36th anniversary of his founding of New England Restaurant Brokers. He is a nationally recognized author and frequent radio co-host.

1970

Frank B. Crawford and Dorothy M. Van Hook wed on June 13, 2015, at the Calvary Baptist Church in Kingman, Ariz.

Carol Simone retired this spring from St. Joseph School in Haverhill after 46 years serving as a teacher, religious education program director and as principal since 2004.

1971

Robert C. Hanson recently retired as professor of finance from Eastern Michigan University after 19 years of service. Robert served as an Air Force meteorologist before entering the University of Utah doctoral program in business administration. He was awarded a Ph.D. in 1987 and taught at San Diego State University before joining Eastern Michigan University. He resides in Ann Arbor, Mich.

1973

Charles W. Harrington, Jr. is celebrating 30 years of employment at Nova Southeastern University in Davie, Fla., where he serves as a lecturer in economics.

1974

Peter S. Fortin was named senior water market project director at Woolpert, a national architecture, engineering and geospatial firm. He has 42 years of experience in the planning, design and construction of water-related projects.

1975

George E. Ryan became president of the Greater Lowell Retired Police Officers Association.

1976

George A. Spencer retired from the U.S. Air Force Reserves as a colonel after 30 years of service.

Joyce M. Suslovic is a history teacher at the Henninger High School in Syracuse, N.Y. She was featured in the online newspaper Syracuse.com for her remarkable work with students.

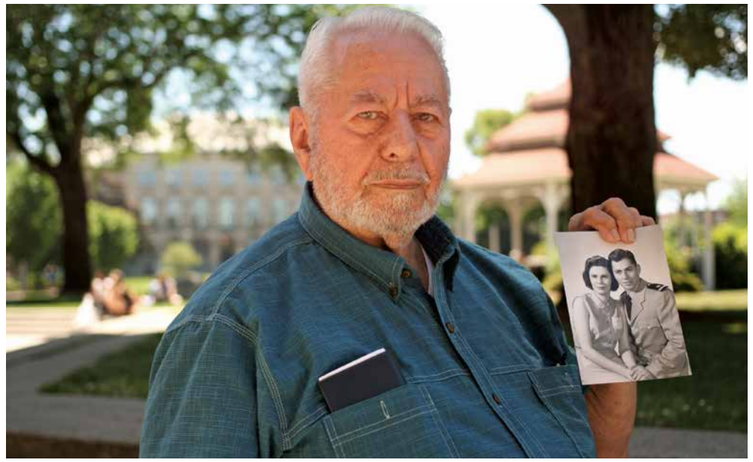
Continued on P. 50

Register for your 40th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

CLOSE-UP CLASS OF 1952

Developing Story

University reunites George Scagos '52, '58 with long-lost photo of himself and late wife, Pearl



George Scagos '52, '58 still remembers the day—April 12, 1953—when he and his new bride, Pearl, visited photographer George Poirier's studio at the foot of the old Moody Street Bridge, across the Merrimack River from the Lowell Technological Institute. They sat for a portrait, George in his crisp U.S. Navy service dress khakis and Pearl in a beautiful sleeveless dress with a neat string of (what else?) pearls cascading from her collar.

It was the couple's most treasured photo of themselves—and one they thought they'd lost forever when a small fire broke out at their Rhode Island home in the early 1960s.

In 2014, Pearl lost a lengthy battle to cancer at age 84, leaving George a widower after 61 years of marriage. This May, while attending the university's Golden Alumni Weekend, he asked the event photographer if she knew what had become of the archives of the legendary Poirier, who had died a month earlier at age 89. Told that Poirier's entire collection of more than a million negatives and prints had been donated to the university, Scagos decided to start calling around to see if someone could track down the negative of his long-lost print.

One month later, on a perfect June morning, the 86-year-old Scagos returned to campus and was presented with new prints of the photo.

"Oh my goodness … My goodness," Scagos said as he laid eyes on the image for the first time in more than 50 years. "Unreal. I can't believe it. She was a beauty. And geez, who's that guy there?"

The special presentation at the O'Leary Learning Commons was arranged by Libraries Director George Hart and Project and Program Coordinator Mehmed Ali, along with Executive Director of Alumni Relations Heather Makrez '06, '08 and Special Adviser Diane Earl. Ali said Poirier's "invaluable" archives, which are now kept at the Center for Lowell History, were so well-organized that it took him a matter of minutes to track down the image Scagos was looking for.

For Scagos, who earned his bachelor's and master's degrees in textile chemistry from Lowell Tech, seeing the photo opened an attic door of memories. Born in Manlius, N.Y., in 1930, he recalled moving to Lowell at age 6 after losing both his parents in a two-year span. Scagos and his two siblings lived with their aunt and uncle and their seven children, first in the Acre neighborhood and then Pawtucketville. Scagos remembered going to a friend's house when he was around 13 and seeing his friend's older sister, who was around 16. It was Pearl.

"I said, 'My goodness, how come I never saw her before?' " Scagos recalled. "He said, 'She's shy. She doesn't associate with people.' "

After several years of persistence, Pearl finally agreed to associate with George. After he finished his bachelor's degree, and before the Navy shipped him off to the Korean War, they got married in July 1952. Upon earning his master's degree in 1958, George took a job as technical service rep at Raffi & Swanson (now AllCoat Technology) in Wilmington, Mass., selling paint to the costume jewelry industry. The company moved him to Barrington, R.I., in 1960, where he and Pearl raised two sons, Richard and Michael. George spent his entire career with the company and still lives in the same house. Every Wednesday he makes the 80-mile drive up to Lowell to have lunch with his sister at the Olympia Restaurant.

"It's nice to have this photo back," Scagos said as he departed O'Leary and headed to the Olympia. "Pearl was a nice-looking girl. I had no idea she was so smart when I married her. She put her mind to something and she did it. She was a beauty." —*EB*

Librarian Mehmed Ali, left, presents George Scagos '52, '58 with lost photos of him and his wife, Pearl.

CLASS OF **1976**

25 YEARS OF FIGHTING CANCER

Michael J. Morin, who received a baccalaureate in biology in 1976, is currently president and chief scientific officer of Immunome, a biotech startup developing immunotherapy cancer treatments.. He has spent over 25 years in pharmaceutical research and development of cancer therapies, both in academia and industry, including 17 years at Pfizer, where he was vice president of global research and development, overseeing immunology, anti-bacterials and cancer drug discovery. Michael is the long-standing co-chair of the NCI Experimental Therapeutics review panel, chair of the Drug Discovery Initiative of the Children's Tumor Foundtion and a member of the scientific advisory board of the Ontario Institute of Cancer Research. ■

1977

Alice E. Donovan, who lives in Haverhill, recently celebrated 40 years of teaching piano with a special recital, featuring present and former students. Alice estimates that she taught over 750 students over the years.

1978

George Condo had a solo exhibit of his work this summer at the Heydar Aliyev Center in Baku, Azerbaijan. Featuring over 70 canvases and sculptures by Condo, an avant-garde artist, the exhibit, called "George Condo. Selections from a Private Collection," was inspired by American cartoons and Greek mythology. Condo's products bring together expressionism, cubism and satirical cartooning. His art varies from monumental bronze statues to mystical portraits. To better identify his works, Condo coined the term Artificial Realism.

1979

David J. Calvo is a woodcarver, sculptor and painter. He was featured in the Gloucester Times for his wood carving sign for the Brass Monkey on Main Street.

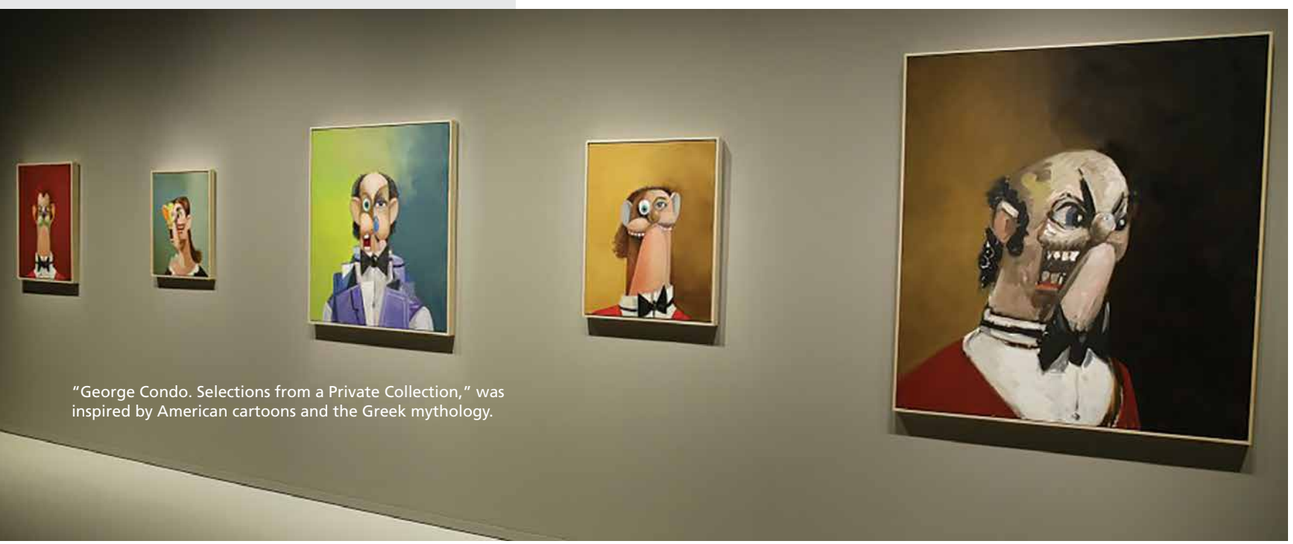
Register for your 35th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

1980

Lawrence F. Broderick was recently named senior vice president of business banking at Belmont Savings Bank. Lawrence joined the business banking team in 2013 with a particular focus on the municipal segment. He resides in Londonderry, N.H.

David A. Rardin is celebrating 10 years practicing intellectual property law at MCR-IP in Nashua, N.H. David specializes in "unavailable inventor" patent applications and methods for accelerating patent protection internationally. He says the physics he learned at Lowell comes in handy when explaining inventions while applying for patents for his clients.

Maura A. Walsh recently retired after a 29-year career with HCA Gulf Coast Division, a network of hospitals, outpatient surgery centers, emergency centers and diagnostic imaging facilities in the greater Houston area. She served in a number of different executive capacities, most recently as president. Maura began her healthcare career in 1980, holding executive roles at hospitals in Vermont, Arkansas and Texas.



"George Condo. Selections from a Private Collection," was inspired by American cartoons and the Greek mythology.

1981

Richard S. Danforth has been named CEO of San Diego-based LRAD Corp., the world's leading provider of acoustic hailing devices and advanced mass notification systems. Richard has over 30 years of defense and aerospace industry experience including executive leadership positions with two of the world's largest defense contractors, Raytheon Company and DRS Technologies Inc.

Stephen J. McWhirter was awarded a patent, assigned to Bank of America. A Hamilton resident, this is Stephen's second U.S. patent in his access management series.

1983

Stephen J. Churchill and his wife, Terry (Theresa Young) Churchill, have moved back to their home state of Massachusetts. After 33 years working in the engineering industry in Los Angeles, Calif., area they are happy to be enjoying the retired life.

Scott D. Cleveland has published a new recording entitled "Short Pieces for Solo Piano." Scott, a pianist, singer, composer and jazz piano teacher, has served a lecturer at the University of Maine Augusta since 1972. After earning a bachelor's degree from the Berklee College of Music in 1976, he earned a master's degree in music theory and composition at the University of Lowell in 1983 and a master of divinity degree from Boston University School of Theology in 1994.

Continued on P. 52

CLOSE-UP CLASS OF 1984

AMERICAN FARMER

BY **GEOFFREY DOUGLAS**

Dave and Caroline Owens started out, in the mid-1980s, pretty much like a lot of other couples: looking for a home and some land they could afford. They looked first in Massachusetts; when there was nothing there—"We couldn't find anything even close to our price range," says Dave '84—they moved the search north to New Hampshire. Finally, in Pelham, they found an old house on 13 acres of land.

The idea at first was just to raise a few sheep: "We certainly weren't on any sort of mission to start a farm," says Dave, who earned his ULowell B.S. in engineering and was working at the time in the computer field.

But then 13 acres in Pelham became 112 acres in central Pennsylvania. The livestock population expanded from sheep to horses and pigs, as well as chickens, turkeys, working border collies and an apiary for honeybees. Over time, even the function of the place widened: Owens Farm today is not only a conventional farm, but also a kind of agricultural theme park and learning center that attracts visitors from all over the world.

You can bring your kids for an overnight "farm stay," a week of "sheep camp" (halter training, wool making, lamb races) or a "lambing slumber party" ("Sleep at the farm during that magical time of year when the lambs are coming thick and fast"). For curious adults and farmers-to-be, there are lambing clinics, farm tours and a "Pastured Pork Day." The lambs' fleece and the bees's honey are both for sale, of course, as are the sheep and lambs themselves.

What makes it all possible, and keeps it working, says Dave, are the "complementary skill sets" of the Owens family. Caroline, a former vocational agriculture teacher who has also worked in marketing communications, "is very good with mammals," he says, as well as the marketing end of things. Their daughter, Melissa, a lover of all things equestrian, takes care of the horses. "And I'm in charge of maintenance, of anything that breaks," as well as the poultry and bees.

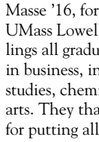
"A farm is a system of parts you have to put together," says Dave, who left a job at Hewlett-Packard in the mid-'90s but still does some consulting online. "And the engineering training I got [at ULowell] helps give me the confidence to make it all happen." ■

1983

Stephen R. Masse congratulates his last sibling, Kimberly Masse '16, for graduating from UMass Lowell. The five siblings all graduated with honors in business, international studies, chemistry and liberal arts. They thank their parents for putting all five children through college. Stephen spent the last decade building a post-and-beam, energy-efficient home in Dracut. It can be heated with a candle.

Ali Rafieymehr '83, '93 was named vice president of academic affairs at River Valley Community College in Keene, N.H. Previously, Ali served as a workforce development consultant and dean of Dyn University at Dynamic Network Services in Manchester, N.H., dean and director of the Manchester campus of the University of New Hampshire, dean of the Division of Information Technology and Sciences at Champlain College in Burlington, Vt., and chairman of the Computer Science and Information Technology Department at Western New England University in Springfield.

1984



Laurie A. Brennan '84 '94 was named president of Technical Education Research Centers in Cambridge, a not-for-profit education research and development organization dedicated to improving mathematics, science and technology teaching and learning.

1985

Margaret Alfonso was named secretary of the board of directors at Sacred Heart School in Kingston. Margaret is a project management consultant in the financial services industry, currently with Whitridge Associates in Quincy. She lives in Middleton with husband, Joseph Parisi.

Douglas J. Browne recently joined Sunrise Labs, a medical device product development firm in Auburn, N.H., as director of mechanical engineering and design transfer. He is also a member of the UMass Lowell advisory board of mechanical engineering.

Kathleen Carroll is business manager at the Syracuse, N.Y., division of Covanta Energy Corp., one of the nation's largest energy-from-waste companies. It operates the Onondaga County Resource Recovery Agency plant, which burns trash and garbage that isn't recycled, generating electricity to power about 32,000 homes. Kathleen has worked at the plant since it was under construction in 1995.

William A. McCarthy was named fire chief of the North Andover fire department, where he has worked for over 30 years.

Register for your 30th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

Eric Resnick was appointed vice president and chief technology officer at West Pharmaceutical Services.

Pamela J. Wamala held an art exhibit called "Peace of the Sea," at the Whistler House Museum of Art in Lowell.

Yang Yang '88, '92 is the Carol and Lawrence E. Tannas, Jr., chair in Engineering and a professor of materials science and engineering at the UCLA Henry Samueli School of Engineering and Applied Science. He studies devices including photovoltaic cells, digital memory units, light-emitting diodes and thin film transistors. In January, he was named one of "the world's most influential scientific minds" by Thompson Reuters IP & Science.

1989

Daniel R. Cote is the director of product marketing for Windows App Delivery at Citrix, where he leads the team overseeing global product launches, messaging and positioning, content development and demand generation for the market-leading XenApp and XenDesktop products.

Dennis Keough '89, '92 has been named vice president of power generation at BOND, a Boston-based building, civil, utility and energy construction firm. A licensed professional engineer, Dennis previously worked at Stantec as principal, senior engineering consultant, within the Power and Energy Division, and at CB&I Power as senior engineering manager.

1992

Gregory R. Chiklis is the CEO of ZeptoMetrix, based in Franklin, which works with diagnostic and pharmaceutical research products. He was featured in the Franklin Country Gazette, explaining ZeptoMetrix's innovations to Senator Karen Spilka, MA Life Science Center CEO Travis McCready and State Representative Jeff Roy.

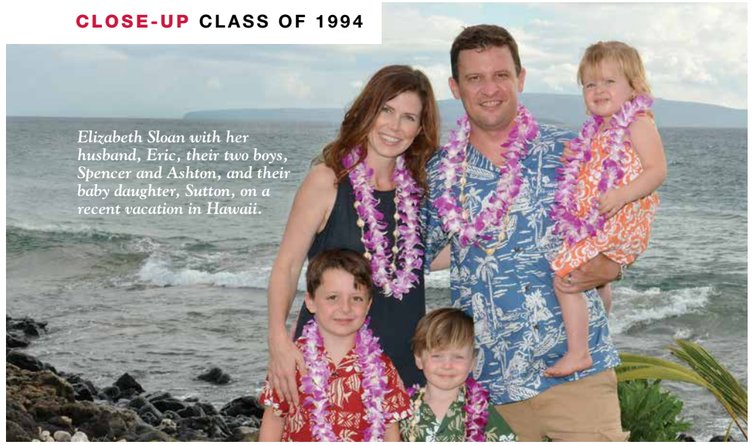
Richard E. Latini has been appointed chief engineer at Howard Stein Hudson, a transportation company based in in Boston.

Steve P. McElligott '91, '93 was named director of transit and rail systems at Vanasse Hangen Brustlin Inc., which provides transportation planning and engineering, planning and design, land development and environmental services.

CLASS OF **1986**

On a June night in Vernazza—a small village along Italy's Cinque Terra—**Sunit Shah '86, '88** was enjoying some local seafood and pasta while vacationing with his wife, Radhi, son, Reyaan, and daughter, Aash. At the next table, University Relations staff writer Sheila Eppolito was doing the same with her husband, Larry, and daughters Grace, Rose and Sophie. They all started talking, and Eppolito and Shah quickly bonded over the university. Shah, whose master's degrees are in polymer science and plastics engineering, says, "My time there was really quite rewarding. I made some great friends, and the education and experience gained were a stepping stone to a career in plastics." That career has been mostly in technology development, but recently shifted into marketing with Lyondellbasell, a global polymer and chemicals company. "I hear that Lowell and the surrounding areas have changed quite a bit, and unfortunately, I have been back only once since I graduated," says Shah, who lives in Dallas. "I look forward to visiting again soon."—*SE*

CLOSE-UP CLASS OF 1994



Elizabeth Sloan with her husband, Eric, their two boys, Spencer and Ashton, and their baby daughter, Sutton, on a recent vacation in Hawaii.

From TV Land: Alumna Tracks the Tastes of a Nation of Viewers

When "Once Upon a Time," ABC-TV's fantasy series, premiered in the fall of 2011, the country, still beleaguered from the effects of the worst recession in decades, badly needed an escape. And the show provided one: Peopled by fairy-tale characters living in a Maine village under a curse from an evil queen, it drew over 12 million viewers that fall, placing it among the season's top-rated TV offerings. Today, four years into its run, the show still attracts a sizable audience, and remains one of ABC's top dramas.

"People were feeling stressed, they needed some escapist viewing," says Elizabeth Sloan '94, senior vice president of consumer insights for ABC Entertainment, ABC Studios and ABC News. "It's important, always, to pay close attention to the country's mood."

Mood-watching is a big part of Sloan's job as the network's front-line scout of consumer tastes and attitudes. And it comes in a range of forms: questionnaires, consumer interviews, the testing of pilots (both in viewers' homes and in the ABC "lab"), sometimes, she says, even the practice of "watching people watch TV, or observing how they move between their different devices. Whatever you can do to know the consumer that much better."

In a typical season, she says, the network will review roughly 24 pilots; how many make the cut will depend in turn on the success of the previous season—the more shows being renewed, the fewer open spots there will be. In the upcoming TV season, nine new shows are scheduled to premiere.

"It's an incredibly competitive environment," Sloan says. "The stakes are really high. Every bit of knowledge is important."

As a UMass Lowell graduate in the mid-'90s with a degree in business administration, the only clear goal she had—"the big dream," she calls it today—was to live and work in New York. Through a contact of her father's, who worked as a building manager at WBZ in Boston, she was introduced to someone at Westinghouse Broadcasting, where she was offered her a job. A year later, when Westinghouse bought CBS, she found herself working for that network. "So as far as my path into the entertainment field," she says, "I just really kind of fell into it."

By the fall of 2001, she had landed at ABC as a director of research. It wasn't until several years later, though, while working toward her MBA at UCLA, that she knew for sure that she wanted to focus on the consumer end of things.

"It fascinates me," she says today from her home near the UCLA campus. "Studying people's behaviors, why they do what they do, the strategy aspect of it all. I think of my job as researching that information, then using it in support of art."—*GD*

1992

Lisa Dana '92, '01 has worked in the Danvers public school system for 26 years, 13 years as superintendent—making her one of the town's longest-serving superintendents. While a middle school science teacher, she earned her master's degree in curriculum and instruction in 1991. With encouragement from Dean Anita Greenwood, she earned a doctorate in 2001. Lisa stays connected to the university by serving on the Graduate School of Education advisory board and volunteering at events such as the DifferenceMaker Idea Challenge.

1992

Tom Bradley has been named head coach for the Tewksbury Memorial High School boys' basketball team. Tom served as assistant coach for the team for the past five years. A 1989 graduate of Tewksbury High, he starred in football, basketball and baseball for the Redmen, and was elected to the TMHS Hall of Fame in 2010. He is a member of the university's Hall of Fame after an outstanding career as a wide receiver.

Anne M. Manning-Martin is on the ballot in the race for Essex County sheriff. She currently works as Deputy Superintendent in the Massachusetts Department of Correction.

1993

Vincent DeInnocentiis retired from the U.S. Navy after 29 years of service.

Debra Willard-Webb was named safety management consultant by the MEMIC Group, leading specialist in workers' compensation insurance. Debra has more than 20 years of healthcare experience with 10 years as a certified occupational health nurse-specialist with a focus on safety.

1994

Benford L. Panulo established the first medical laboratory science program at the University of Eastern Africa Baraton, located in Kenya. The university is the first to be registered by the Kenya Medical Laboratory Technicians and Technologist Board as a four-year degree program in medical laboratory sciences.

Continued on P. 54

Register for your 25th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

CLOSE-UP CLASS OF 1995

SRT Grad Wins Daytime Emmy

Matt Pavolaitis '95 thought his own good fortune might sink him. Not many folks get nominated for a Daytime Emmy Award, let alone two. In the same year. In the same category, Outstanding Original Song for a Drama Series.

The UMass Lowell Sound Recording Technology graduate had two of the five nods, as composer of the songs "Lost in Time" and "Love's Masterpiece" from the CBS daytime drama "The Bold and the Beautiful."

He figured his votes would be split.

"And when they called my name," said Pavolaitis by phone from his Orange County home, "it was shocking. Completely shocking. But a lot of fun." "Lost in Time" won.

His agent helps find the work, but Pavolaitis credits his time at UMass Lowell for his breadth of knowledge and career direction. He also says the university played another important role in his life: It's where he met his wife, Colleen Rourke '97 (music business).

"I loved it there, it was a challenge and I learned so much," Pavolaitis says.

In his final semester, he spotted a bulletin board post in Durgin Hall saying the composer and producer Hans Zimmer was looking for an assistant. He landed the job. "The day I graduated, I flew to California," he says.

He later worked for the bands Incubus and 30 Seconds to Mars, whose lead singer is actor Jared Leto.

"I don't know where I'd be if I hadn't read that post on working for Hans Zimmer outside Room 213," says Pavolaitis. "But probably not where I am now."

Pavolaitis and Rourke now work (often together) among legions of aspiring singers, songwriters and producers in L.A.'s hotbed of music and television.

Their latest scoring work, "Cloudstreet: Soaring the American West," is a made-for-IMAX journey from the perspective of a glider pilot.

Rourke is a solo recording artist with a few albums under her belt, her songs used in "The Art of Getting By" and "The To-Do List" feature films. Her ethereal style lends itself well to TV shows, and her work has been used in nearly two dozen of them, including "Cold Case" and "Army Wives." *—DP*

1994

Michael P. Plisinski was promoted to CEO of Rudolph Technologies in November 2015. Rudolph Technologies, headquartered in Wilmington, supplies advanced semiconductor processing equipment and software to chip manufacturers around the globe.

1995

Daniel G. Smith has been appointed chief of administration for the city of Gloucester.

Timothy N. Johnson is a retired Military (Army) who served two tours of duty in Iraq. He helped found the Paul E. Tsongas Memorial and the Graduate Student Association Scholarship, which turned 28 years old this summer. He was president of the Graduate Student Association from 1988-1989 when the school was known as University of Lowell.

1996

Nick Ithomitis is relocating to Beaufort, S.C., where he has been named head of school for Bridges Prep School.

1997

Phil J. Cootey is an entrepreneurial software engineer and former bass player with a special interest in the informal music played in Newburyport during the American Revolution. He is also a youth baseball coach in the Newburyport-based Pioneer baseball and softball leagues. He and his wife, Nobuko Cootey, who also graduated from UMass Lowell in '97, have three children.

Joel R. Plante won a Grammy for his work on the surround sound remaster of Roger Waters' 1992 solo album, "Amused to Death."

1998

Denise M. Berry, a retired major with the U.S. Army, is director of the Military Student Affairs Office at Saginaw Valley State University in Michigan.

1999

George N. Koumantzelis founded a local, non-profit, environmental group called The Pow-Wow Oak Protectors, which recently dedicated a piece of a historic tree from Clark Road in Lowell, along with a plaque, at the Reilly Elementary School in Lowell.

2000

John B. Cook was recently named president of Springfield Technical Community College. John has served as vice president of academic affairs at Manchester (N.H.) Community College since 2012. Prior to arriving at MCC, John was an assistant dean of faculty at Granite State College in Concord, N.H. John holds an undergraduate degree in psychology and anthropology from St. Lawrence University, a master's degree in community/social psychology from UMass Lowell and a Ph.D. in education from the University of New Hampshire.

Scott D. Falldorf '00, '03 is a physical therapist at Ramsey Rehab in Clinton, specializing in vertigo and balance related issues. He was featured in the local media recently for his work with the New England Amputee Association.

John Holmes Jr. is engaged to Jennifer Suisman. The bride-to-be is a graduate of the Loomis Chaffee School, Windsor, Conn., and Ohio Wesleyan University. She is employed by Standard Life Investments in Boston. John is the owner/operator of Sawdust Sport Fishing and South Shore Junior Angler Camp. He is also a custom builder.

Keely Taylor received a Boston/New England Emmy Award for Community/Public Service Single Spot for a public service announcement that she helped direct, film and edit for the Prostate Cancer Foundation in 2015.

Register for your 20th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

CLOSE-UP CLASS OF 1996

Cheryl Henry: Planning Menus, Building Buildings, Fighting Storms

"Follow your dream" is the oldest of old saws among graduation day mantras. And it's all well and good if it works for you. But sometimes, as Cheryl Henry '96 would be among the first to acknowledge, sometimes life just happens.

"I had no specific plan," says Henry, a Medford native who graduated with a degree in political science. "I had thoughts of maybe being an environmental attorney, so I'd taken some science and engineering courses along the way. But then I realized I didn't see my future in the law. I wasn't sure where I was headed, which left me open to try anything."

Twenty years later, midway through a career path that has embraced everything from government and politics to real estate and restaurant development—and has landed her today at the pinnacle of a hugely competitive industry—it seems clear that, sometimes, heading off into life without a plan can work pretty well as a plan of its own.

Henry was recently named president of Florida-based Ruth's Hospitality Group, the largest fine-dining company in the world, with 4,300 employees, $370 million in revenue and more than 140 restaurants worldwide, most of them in the U.S. It's a big job—mostly because it's not one job but more like three.

"I oversee everything to do with food," she says. "I also run the real estate division"—negotiating new site acquisitions, overseeing the building of new restaurants—"and HR reports to me."

What does a "Cowboy Ribeye" (a "22-ounce, perfectly marbled cut" of steak) have to do with a building site in Dallas or a new employee in Denver? The answer to the question, or at least part of it, may lie in a look back at where Henry has been along the way: a succession of career moves that combine, almost perfectly, the skills and interests that define her job today.

Her first stop after graduation, leveraging her political science degree, was as public information officer for Horry County, S.C., home base of Myrtle Beach—where she honed her people skills putting the best face on things, including a devastating hurricane, Floyd, in the fall of 1999, that put the county under 18 inches of water. Later came a marketing stint with NBA City, an Orlando restaurant and sports bar, where the culinary end of things came into play.

She followed that with three years at a Florida marketing firm, a job she held while earning her MBA at Rollins College. Later still, in the fall of 2004, while working with a volunteer group during yet another major hurricane, Charley, she met Orlando Mayor Buddy Dyer, who offered her the job as the city's press secretary, and later as chief of staff. Dyer's vision for the city was all about real estate: a new arena, a performing arts center—"which taught me a lot," she says, "and I'd always been drawn to the idea of real estate development."

All of which sheds light on the seeming anomaly of a people manager who also selects properties and plans menus.

"Actually, they all kind of link together when you think about it—the layout of a restaurant, the food selections, the training. They're all part of the whole," she says. "Which is what makes the job so interesting. And challenging."*—GD*

Register for your 25th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

2001

Jason Lonergan has been named interim assistant principal at Laconia High School. Jason has worked the past four years as the assistant principal at Pennichuck Middle School in Nashua, N.H., and was the assistant principal at Nashua High School South from 2007 to 2012. He worked in the juvenile justice system with at-risk youth from 2002 to 2003. Jason earned a master's degree in educational studies from Rivier College in Nashua, and holds certifications as a special education teacher and as a school principal.

2002

Daniel Bowen is currently assigned as the Medical Logistics Flight Commander, 60th Medical Support Squadron, Travis Air Force Base, Calif. Bowen, a Dracut native, enlisted in the Air Force in 1994 and spent five years as an F-15 Aircraft Armament Systems Specialist. He separated from the Air Force in 2000 and accepted an AFROTC scholarship at the UMass Lowell. Upon graduation in 2002, Bowen was commissioned as a second lieutenant and joined the Medical Service Corps.

Kate Cook was recently named one of this year's Unsung Heroines by the Massachusetts Commission on the Status of Women for her work in the region, including with Foster Kids of the Merrimack Valley. Cook serves as director of sales and marketing with Comfort Home Care, a visiting nursing agency in Methuen, and is a member of the board of directors of Foster Kids of the Merrimack Valley.

Kristine M. Drust, who was a two-time All-American catcher at UMass-Lowell, played professionally for the New England Riptide of the National Pro Fastpitch League before retiring in 2006. She is currently the softball coach at Cheshire, Conn., High School and was featured in the Hartford Courant for the team's win in the Class LL Finals.

2003

Matthew L. Beyranevand '03, '10 is the K-12 mathematics and science coordinator for the Chelmsford Public Schools. His website, MathWithMatthew.com, offers podcasts, music videos, educational resources and a video blog to help improve student interest and engagement in mathematics.

Kimberly A. Sanford was recently engaged to Robert Dooley.

Jonathan Whitney has been promoted to director of business development at Mack Molding Inc., a custom injection molding company based in Arlington, Vt. Jonathan has been with the firm for three years.

Danielle S. (Carey) Mullins '03 and **Thomas F. Mullins** '10 both received bachelor degrees from the College of Fine Arts, Humanities and Social Sciences. Danielle earned a master's degree in education from Rivier College in 2005 and is a former teacher and senior graduate admission counselor for the M.Ed. programs. Tom earned an MBA in operations management from Southern

Continued on P. 56

New Hampshire University in 2012. He works at BAE Systems in Nashua N.H., as the operations program manager for the F-35 Lightning II Program. The college sweethearts married and reside in Derry, N.H., where they enjoy being a new family with their daughter, Gretchen Rose Mullins.

2004

Dave Casey has been named All-star Boys Track & Field coach of the year by the Lowell Sun. Dave led the Lowell High School Red Raiders to an undefeated season and capturing the Merrimack Valley Conference Division 1 title. The team went on to capture the MVC league championship meet for the fourth time since 2006. Dave was voted as the MVC Division 1 Coach of the Year for the sixth time in his 10 years as coach.

Nicole C. Lemay recently began a new position as human service coordinator for the Department of Mental Health in Lowell. She married David Lemay in 2012 and obtained a master's degree that same year.

Matthew M. McDonald was promoted to vice president of engineering at Nasuni in Natick, an enterprise storage, data protection and mobile access firm.

2005

Stephen D. Jussaume has joined the board of directors of the South Shore Young Professionals, an affiliate of South Shore Chamber of Commerce. He is a commercial loan officer with Boston Private Bank & Trust Company.

2006

Aaron Krasnick interned as a sound engineer at Sony Music Studios in New York after graduation and worked for Scharff Weisburg Inc. as a sound engineer for live events. He received a doctor of audiology in clinical audiology from the Graduate Center at the City University of New York in 2013 and is now audiologist at Sutton Hearing & Balance.

2007

James V. Hoyt IV has been named senior project engineer at Tata & Howard, Inc, a leading environmental engineering firm.

Justin J. Maillet was recently engaged to Aryel Patricia Paolini. Justin holds a master of finance from degree Harvard University, where he is also employed.

Ryan C. Noonan '07, '10 and **Alana L. Noonan** '07, '10 were married on June 21, 2015, after meeting at UMass Lowell. They graduated together from the undergraduate exercise physiology and the physical therapy graduate programs.

2008

Mary-Ellen Cooper '08, '09 is the co-founder of Into Action Recovery Inc., a non-profit organization that helps fight the opiate crisis in the Tewksbury and Lowell communities. The organization is in the process of opening a long-term, 12-step recovery center for adults.

Register for your 10th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

Ellen R. (Heerlein) Ellsworth married Garret Ellsworth in October 2015.

Susan James, a professor emeritus at Curry College, recently was elected chairwoman of the Sandwich board of selectmen.

John Anthony Volpe completed his first season this past spring as director of the River's Edge Chorale, a music program of the Hudson-based River's Edge Arts Alliance.

2009

Gregory Bendel recently won a seat as member of the board of selectman in Wilmington.

Yelena Halstrom recently joined the Concord office of Hammond Residential Real Estate.

Amy M. Osgood has helped grow a Denver startup to national heights. The Passport Program, a curated drinking guide that offers discounts on the best adult beverages in town, is currently active in 12 cities across the country.

William D. Shipley has had his book, "M.A.I.A.," published by New York City-based Page Publishing. The book tells the story of a courageous sniper who is oppressed by technology and the chip in his mind.

2010

Carter J. Hutton then goaltender for the Nashville Predator's hockey team, was nominated for the Bill Masterton Memorial Trophy, awarded to the NHL player "who best exemplifies the qualities of perseverance, sportsmanship and dedication to hockey." He is now a goaltender for the St. Louis Blues.

Kimberly L. (Vecchione) Zimmerman married Robert Zimmerman in June 2015. They recently relocated to Waco, Texas, where Kim is working as a quality engineer with L-3 Communications.

2011

Courtney L. Andersen recently completed a Ph.D. in molecular pharmacology at the University of Pittsburgh School of Medicine.

GOOD TASTE.

After receiving a master's degree in clinical lab science, **Shanshan Chen '07**—known as Tella—went on to become a runner-up in China's first cooking reality show, "The Taste." That was in 2013. Today, she is a low-calorie cooking expert; her nutrition blog has over 300,000 followers. A nutritionist for China's second-largest food company Shinho, Chen has published two cookbooks. ■

CLASS OF 2010

David P. Martineau '10, **Philip J. Boisvert** '10, **Paul R. Lamontagne** '12, **Morgan L. Milardo** '11 founded the band Bearstronaut while classmates at UMass Lowell. Boston Magazine noted their win for Best College Band at the Boston Music Awards in 2008. Bearstronaut has been a CMJ Music Festival "top band to see." ■

2011

Devin P. Ferreira wrote a new theme song for the Boston Marathon called "Unstoppable," which was played by CBS' Channel 4 the day of the 2015 marathon.

Christopher K. Lyon this year earned a Ph.D. in organic and polymer chemistry at the University of New Hampshire.

Michael J. Mastrullo was named principal of Concord-Carlisle High School.

Tonisha M. Pinckney '11, '12, '14 has been named director of graduate and undergraduate criminal justice programs at Anna Maria College in Paxton. A criminologist and criminal justice expert, Tonisha joined Anna Maria after two years as the director of the criminal justice and legal studies programs at Newbury College in Brookline. She was also the assistant dean of adult and professional studies, online learning and institutional partnerships at Newbury.

Continued on P. 59

CLOSE-UP CLASS OF 2012

A Hero Steps Down

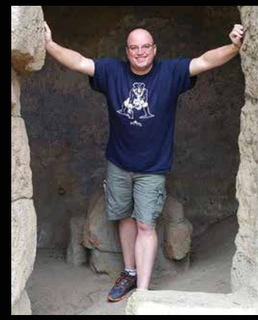
For nearly two years he worked every day, first from a hospital bed, later on crutches, finally on foot—weight bearing, stretching, daily rehab—to regain enough strength to reclaim his old job. And in May of last year, it seemed that he had made it: back to his post as an MBTA cop in Boston, now with the new rank of sergeant.

But it didn't last. Nine months later, in early February, Richard "Dic" Donohue '12, shot through the femoral artery and nearly killed in a gun battle with the Tsarnaev brothers following the 2013 Boston Marathon bombing, announced that he was retiring. The pain, he said, was too much.

"In our time of need, he was the first to show up and put his life on the line—and he almost lost it," said former Watertown Police Chief Ed Deveau, who led the manhunt for the Tsarnaevs. "He's someone I think about pretty much every day."

Donohue, who nearly bled out at the scene in Watertown before being rushed to the hospital, has traded his MBTA beat for a classroom: he is today an adjunct professor of criminal justice at Fisher College in Boston, as well as a frequent public speaker. His goal in both roles, as he describes it, is to share the message of "hope, determination, hard work and community support" that served him so well. ■

MARS: THE BLUE PLANET?



Scientists have wondered: Is it possible Mars was once a watery planet? Not as much the Red Planet, as a blue one? Evidence gathered by the Curiosity rover and others has supported the idea.

Kevin Gill '09 asked himself, too. And in 2013, he created a visual he dubbed "A Living Mars," using software he invented called jdem846, depicting Mars as lush.

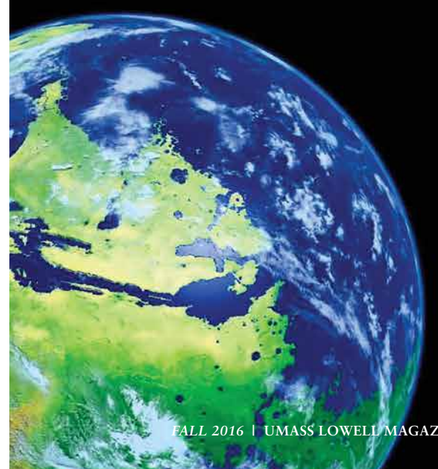
Now a Science Data Software Engineer at NASA's Jet Propulsion Laboratory in Pasadena, Calif., Gill is known for his astonishingly detailed renderings, especially the ones of what Mars may have looked like with oceans and verdant landscape.

He caught NASA's attention, "both by the Mars work and by another set of websites I had created," he says, "which focused on visualizations of custom planets, near-earth and potentially hazardous asteroids, satellite tracking, solar system modeling and lunar phase modeling."

He is currently working on analysis and visualization of climate-change and sea-level related data.

Gill spent four years in the U.S. Marine Corps before coming to UMass Lowell to pursue a bachelor's degree in information technology. He worked as a computer technician in the service and wherever he was stationed—California, Japan, North and South Carolina—he earned computer certificates to further his expertise.

Gill, who says his time at UMass Lowell "made a huge difference and I still use things taught by a couple of my professors there," doesn't describe himself as an artist. "But I was always into space as a little kid. I had the big Time-Life Universe book and I used to draw my own versions of what was in it." —*DP*



BY GEOFFREY DOUGLAS

LIVING SMALL:

Two Pioneers of the 'Tiny House' Movement

The average monthly rent for a one-bedroom apartment in Portland, Ore., in the spring of 2014—when Tina and Luke Orlando, newly married, moved into their apartment just outside town—was around $1,140. A year later it was $1,315. Within two years, it would rise to over $1,500.

"It was just rising, rising, rising," says Luke '11 (mechanical engineering) today. "We couldn't afford it anymore. We knew there had to be a better option."

Both engineers—Tina '11, 13 (civil and environmental engineering) is also an alum—they set out to design one. It took them 18 months of mock-ups, 3-D models, zoning constraints and plumbing issues. Once the design was finalized, they hired a specialty firm to construct it.

But today they live in it: a two-floor, redwood-sided, solar-powered, 204-square-foot "tiny house" with an upstairs sleeping loft, downstairs living area (with L-shaped convertible sofa), walk-in kitchen, fenced roof deck, redwood counters and cabinets complete with wall-mounted TV, composting toilet and shower, rainwater collection system and propane-fueled cooking—all mounted on a three-axle trailer 20 minutes southwest of Portland.

It was a remarkable feat of engineering: fully off the grid, with not an inch wasted. There is storage space in every wall and corner (even the chairs and tables are storable). And most of the skills they brought to the task, they say, they learned at UMass Lowell.

"No question," says Tina. "The training, the knowledge, they definitely came from there." Her favorite professor, she says, was Clifford Bruell, who "not only made classes relatable—he was funny, and a phenomenal role model as well." For Luke, a class in renewable energy was particularly relevant to the tiny house challenge. "The training we got there, it was very real-world," he says.

But the completion of their small home was just the beginning of big things for the couple. On June 25, they were featured on "Tiny House Nation," an FYI Network television series now in its third year. As soon as the show aired, the calls began to come in. Three weeks later, they were still coming.

"Sometimes thousands in a day, from all over the world," Tina reported in mid-July, explaining that the callers all want help or advice on how to build their own tiny houses. She guesses that roughly 10 percent of the calls are to likely lead to something—more than enough, she figures, to build a business around.

Their short-term plan, they say, is to offer their designs to buyers for around $300, roughly a fifth less than their competitors (the Pacific Northwest is the epicenter of the tiny house movement, so competition is plentiful), and to offer more options—such as specialty designs for off-grid and pet-friendly homes such as theirs, and, eventually perhaps, custom homes for retirees and vets. (For more details, visit their website at www.backcountrytinyhomes.com.)

Longer term, they hope to partner with regional building contractors who would take care of the construction end of things. A typical tiny house, they say, measures between 150 and 300 square feet and costs between $30,000 and $60,000 to build.

Meanwhile, says Luke, "The goal is to keep our prices low, do good work, offer more, and that way create a reputation for ourselves."

Judging from early signs, they're off to a promising start. ■

2012

Sophie E. Hansen received a master of social work degree from Simmons College. She recently moved to Columbus, Ohio, and is working at an elementary school as a therapist.

Annie Hansbury has been named Central Michigan University assistant field hockey coach. Annie has served as an assistant coach at Colby College for the past four years, helping the Mules to a 31-29 record. She will be primarily responsible for coaching midfield and defense at CMU. Annie was a two-time All-American at UMass Lowell from 2008-11, helping lead the River Hawks to two Northeast-10 Conference championships and the 2010 NCAA Division II title. She served as the team captain in 2011, when the River Hawks finished as the NCAA runner-up.

Alexandros C. Hondros was recently sworn in as police officer with the Manchester, N.H., Police Department.

2013

Derek M. Da Silva was named home financing consultant at Align Credit Union in Lowell.

William F. Enright was sworn in as a police officer with the North Andover Police Department.

Jared F. Ide recently traveled to Iceland and backpacked in British Columbia. In July this year he was in Nicaragua to build houses for Habitat for Humanity.

2014

Jessica Lange has joined Lotus Digital, which provides web design and development and social media marketing. She thanks UMass Lowell for accepting her as a transfer student, encouraging the importance of education when her daughter was born, and helping her develop her passion.

Adam Russell and Ema Rodrigues welcomed their second child, Claudia Amanda Russell, on March 22, 2016.

Eric S. Truesdale married Mary Janene Sullivan in June 2015 in a ceremony in Groveland.

Christopher A. Reynolds has been named a product line manager by New England Mountain Equipment.

2015

Jamal Grant was featured in The Boston Globe for his life-changing experience at Camp Harbor View and has founded a nonprofit mentoring firm.

Continued on P. 61

Register for your 5th Reunion during Homecoming Weekend, Oct. 21-22 by visiting alumni.uml.edu/Reunion2016.

CLOSE-UP CLASS OF 2012

BUILDING TOWARD THE FUTURE, PIECING TOGETHER THE PAST

Top: In memorial to the nearly 2 million lives lost during the Cambodian genocide in the 1970s, visitors leave colorful bracelets outside the Choeung Ek Genocidal Center in Phnom Penh.

Inset: Seven of eight daughters (including Chanthu Phauk '12, third from right) of David and Soeun Phauk of Lowell. After escaping the killing fields of Cambodia during the reign of the Khmer Rouge, the Phauks put 10 of their 12 children through UMass Lowell. Their youngest is on track to become the 11th in 2018.

Chanthu Phauk '12 knows nothing of what her parents endured in Cambodia during the four-year bloodbath of the Khmer Rouge, or how they were able to escape the fate of the 1.5 million of their countrymen who starved to death or were murdered. She knows nothing of their lives before the genocide—where they lived, whom they knew, what they did for a living. She has no knowledge of any aunts or uncles or other relatives who went before. Even her grandparents are a collective blank to her. It's as though her family never had a past.

What she knows is that her parents, David and Soeun, arrived in the U.S. in 1982 with their two small children, following more than a year in a Thailand refugee camp, and that they lived briefly in Washington, D.C., before settling in Lowell, where they remain today.

"They never talk about it," says Chanthu. "I've always known it's a sensitive thing for them, so I've never wanted to ask." She says as a child she would sometimes accompany her mother on her trips to "the doctor": group therapy sessions for Cambodian genocide survivors ("Over time, I just kind of figured it out"). Even today, the mention of those years can cause the older woman to break down. "She remembers too much," says Chanthu.

Several years ago, while still a UMass Lowell undergraduate, and wanting to know more about what happened back then, she enrolled in a course on genocide: "That helped me to understand better," she says, "how it is that little things can sometimes trigger my parents. And just why they are the way they are."

She's never been to Cambodia herself, but hopes to go someday, probably with her father ("I know my mom would never go back"), and to learn more, she says, about "what happened to them, who they are and where we all come from."

It has been four years now since she earned her degree—in criminal justice, with a minor in psychology—and nearly that long since she left the city behind. Following a career path that has its origins in a class she took at Lowell ("Crime Analysis and Mapping"), Chanthu today is the senior crime analyst, and supervisor, for the Roanoke, Va., Police Department, in charge of a team of analysts who study crime trends, "hotspots," informant networks and the associations of known offenders—all with the goal of predicting and preventing future crime. She is also an instructor with the Roanoke Police Academy, teaching crime analysis to police recruits.

She had not yet been born when David and Soeun arrived in Lowell 34 years ago. Nor had nine of her 11 siblings. (Of the two oldest, the first was born in Cambodia before they left there, the next in the Thailand refugee camp.) All 12 children were raised in the city. Ten of the 12 have graduated from UMass Lowell—with degrees in English, biology, math, business, fine arts, nursing and criminal justice—and are now working at jobs throughout the Merrimack Valley (Chanthu so far is the only one to leave the area) as teachers, business managers, a project manager, a nurse, a medical technician and a painter. The youngest, Taezy, an engineering major, will graduate in 2018.

"We're very close. We always have been," says Chanthu. "A lot of it, I think, is because of what they went through back then, all the losses they had and what they took away from it—that in the end, we only have each other."—*GD*

Samantha Lovewell will begin teaching music at the Bigelow Middle School in Newton this fall. Previously, she taught at Clinton Middle School in Clinton. Over the summer, she was a member of the choir in the "Hunchback of Notre Dame" at the Playhouse Theater in Ogunquit, Maine.

Kyle J. Rodrick started a new career at the New Hampshire Department of Transportation construction bureau.

Josh Stachowski '15, '16 has joined the staff at the Lowell Association for the Blind as adult program coordinator. Josh earned both an undergraduate degree in psychology and master's degree in community social psychology at UMass Lowell. His experience includes working with Thrive Communities of Massachusetts based in Lowell and The Decibels Foundation, based in Maynard, which serves those who are deaf of hard of hearing.

2016

Margaret George participated in a summer internship at the Washington Regional Threat Analysis Center through The Washington Center in Washington, D.C.

Alexandra Sneider is a Ph.D. candidate in chemical and biomolecular engineering at Johns Hopkins University. ■

CLASS OF **2012**

Alumna Leading Turnaround at Southbridge Public Schools

Jessica Huizenga '12 was once a homeless teenager. "I was lost but someone believed in me," she says. "I found my calling in education. I am passionate about helping all students realize their full potential. If I can do it, they can, too."

The teacher-turned-administrator was appointed in March to lead the turnaround at Southbridge Public Schools, which are under state receivership. She's diving in to get the district back on track, using the skills she learned in the UMass Lowell Graduate School of Education.

Huizenga earned her doctorate in leadership in schooling and her master's in educational administration. The programs prepared her, she says, for the challenges she faced as a principal and superintendent and now as the appointed receiver in Southbridge.

"Some kids are dealing with poverty, disabilities, language barriers and more," says Huizenga. "The critical thinking skills I learned at UMass Lowell have helped me lead schools and establish educational programs that support each and every student's continuous development." ■

Gene Bakinowski proves it's never too late to go back to school

It had been nearly 50 years since Gene Bakinowski's last exam at Lowell State College. So when he decided to return to the university in 2012 to finish his degree, it's no wonder he was nervous when finals rolled around.

"My hand was shaking so bad I couldn't write. I was scared. I hadn't done this in a long time," says Bakinowski, who managed to calm his nerves and not only get through the final, but also the next four years of school. In May, at the age of 68, Bakinowski received a bachelor of liberal arts degree with concentrations in history and English.

Bakinowski, a Chelsea native, originally enrolled at Lowell State in 1965 to study music. But after two years of 70-mile round trips between home and campus, during a time when many young men his age were being drafted to fight in Vietnam, Bakinowski says he just lost interest in school.

"I didn't decide to leave, it just happened," he says. "All these people were getting killed, there was this uproar around the country, and I felt like I wasn't part of anything."

So Bakinowski began playing the organ at churches around Boston, picking up "gigs" for weddings and funerals. He also started teaching piano at local schools; at one point he estimates he taught music to 500 students a week, in addition to the private piano lessons he offered. He met and married his wife of 42 years, Cathy, and they bought a house overlooking a pond in North Reading. Life was good.

But the work slowly waned as fewer people were going to church. Bakinowski tried his hand at sales ("I hated it. I love talking to people, but you always feel like you have an angle.") and then, in 2000, as an investment broker. "I took the exams and studied, and that got me thinking that I could still do something," he says.

In 2012, the Bakinowskis refinanced their home. When the appraiser left, Cathy said to Gene, "That's something you could do."

Bakinowski looked into it and discovered he needed a college degree. So he called his alma mater's Division of Online and Continuing Education and spoke with Advising Services Manager Kathy Hamilton. He was stunned to learn that some of his old Lowell State credits could still be applied to his degree.

"I was dancing," says Bakinowski, who started taking night classes on campus (and eventually higher level courses online) every semester while apprenticing during the day with North Atlantic Appraisal—and still picking up the occasional church gigs.

"There were some days, no lie, my head would hit the pillow at 6 a.m., I'd sleep half an hour, and then be back out the door," he says. "There were some nights I'd fall asleep at the computer and I'd say, 'What the heck am I doing here? This is just too much work.' But what are you going to do? You have to keep going."

While most people his age are happily settling into retirement, Bakinowski is excited to start the next chapter of his career.

"When people talk about retirement, I say retire to what? What are you going to do? Sit there and watch the sky? I do that now and I love it," he says, pointing to the view of the pond out his kitchen window. "Plus, with my job now I'm outside, going to houses, meeting people, walking around. I love it.

"Age is up in your head," he adds. "I hear people say, 'I'm too old' and I say, 'You're not old, you're older.' If you want to learn something new, you'll learn. You just have to start changing your old habits. That's the key." —*EB*

‘KULTUUR’ SHOCK

BY **ED BRENNEN**

Electrical Engineering Grad Richard Asirifi ’16 Also Has Designs on Fashion Career

Of all the designers invited to showcase their latest lines at New York Fashion Week in February, it’s a safe bet that Richard Asirifi ’16 was the only one simultaneously finishing up a degree in electrical engineering.

Asirifi is founder and CEO of Lief Kultuur, a clothing line he started four years ago as a sophomore in the Francis College of Engineering.

“I made this African infinity scarf,” Asirifi recalls, “and when I started wearing it around campus people were like, ‘That’s really nice.’ Then people started seeing it on Facebook and saying, ‘Wow, I need one.’ ”

Four years later, Lief Kultuur (which is pronounced “Lee-ay Culture” and means “love culture” in the Dutch Afrikaans language) is turning heads far beyond campus with its colorful and abstract line of men’s and women’s “athleisure” wear, a $97 billion market that Asirifi has quickly tapped into.

“It’s become such a blessing. I thank God,” says the 24-year-old Asirifi, who was born in Ghana and moved with his family to Worcester when he was 8. “I thought I was just going to do this for fun on the side, and it’s just propelled into this massive thing.”

Of course, Asirifi really is running Lief Kultuur (and its six-person staff) on the side. His day job is at National Technical Systems in Boxborough, where he’s worked as an electrical engineer since March.

“It’s a difficult balance, but it keeps me grounded,” says Asirifi, who used to tag along with his father, Samuel, a church electrician. “Being an electrical engineer reminds you that you know nothing about anything. Every single day comes with a challenge. With a clothing line people see your stuff and you see the ‘wow’ factor in their faces, and you can begin to commend yourself. And then you get to work and you have an 80-hour week ahead of you

because this resistor is blowing up and this other one has to be in compliance, and then you’re like, I’m really not all that.”

But in the fashion world, Asirifi is all that. Last winter, Cleveland Cavaliers guard Iman Shumpert and his wife, recording artist Teyana Taylor, posted a photo of themselves on social media wearing matching Lief Kultuur jackets.

“They reached out to us and said, ‘We like your stuff,’ which was pretty nice,” says Asirifi, who adds that the company has yet to spend a dime on marketing. “It’s all just social media—friends being friends and putting us out there.”

Asirifi discovered his eye for fashion at an early age, when he began getting compliments on the outfits he wore to church. Then, when he was 15, Asirifi thought, “Why am I spending $50 on Ralph Lauren shirts when I could just make them myself?” So he bought $10 worth of fabric and asked his mom, Grace, to teach him how to sew.

As his interest in fashion began to grow, Asirifi approached a friend, Samuel Boakye, about starting a business. Boakye had some friends in the New York fashion industry, including Malika Cuffie, “an absolute killer designer who can make anything from scratch,” Asirifi says. Boakye is now Lief Kultuur’s creative director, while Cuffie’s title is lead design engineer.

To get the business off the ground, Asirifi turned to the Merrimack Valley Sandbox (now EforAll), an organization that seeks to revitalize cities by investing in entrepreneurs.

“The Sandbox was the launcher,” Asirifi says. “I was just a kid with a dream and some sewing materials, but I didn’t have capital. The Sandbox invested in me, starting with $500, and convinced us to believe in this dream.”

Asirifi also took part in the DifferenceMaker program (his solar electric vehicles team took second) and was a Student Alumni Ambassador, experiences he sees as deeply influential on his new careers.

“Working with Marty Meehan, Jacquie Moloney, Steve Tello, Ralph Jordan … they built this entrepreneurial spirit in me,” says Asirifi, who hopes to one day build Lief Kultuur into a global brand — with a conscience. “Ten years from now, if Lief Kultuur can be self-sustaining, take care of everybody that’s working for it, and give back daily to those in need, then I’m good.”

Lief Kultuur doesn’t have a brick-and-mortar store yet (although it does have a partnership with Humanity, a boutique in downtown Lowell), which means nearly all of its sales come through its website. “But I would love to see Lief Kultuur in every major city in the world someday, just like you see Zara,” Asirifi says.

As CEO, Asirifi says the biggest challenge is maintaining morale and communication on the team, which is scattered across the Northeast. Boakye, an MBA student at D’Youville College in Buffalo, N.Y., handles most of the day-to-day operations of the company but will check in with Asirifi by phone several times a week.

“For me, it matters that I have a working relationship and a personal relationship with everyone on my team,” Asirifi says. “I think anything can be done from a structural point of view, but when life comes into play, that’s the hardest part. This is like having another family that’s been backing you from Day-One, and you have to care about them.”

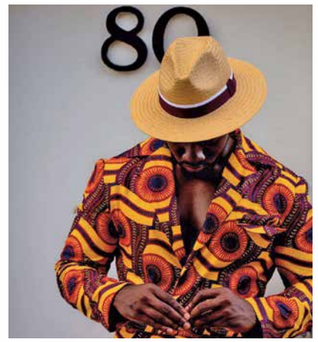
Production is another hurdle that Asirifi is learning to manage. Most of the line, which is aimed at the 18-25 crowd, is produced in Pakistan and China, but Asirifi is trying to make headway in Ghana and also build manufacturing relationships in the U.S. and Canada. While some of the items (such as the $199 printed blazers or $150 peacock tier skirt) are a little pricey for the average college student, Asirifi says he strives to produce pieces that everyone can afford.

“It’s about ‘love culture,’ so you can’t say ‘love’ and then only tend to the upper class,” he says. “You have to make sure everyone feels like they’re on the same level.”

After appearing in a handful of fashion shows their first two years, Asirifi and his team have been invited to around 20 this year, including February’s New York Fashion Week.

“That was mind-blowing,” says Asirifi, who spoke with a fellow designer there who had waited 20 years for an invite. “I’m not a business major. I’m not a marketing major. I’m an electrical engineer, and me and five other people have been able to make this happen in four years. That’s an amazing feeling, to have this dream come true.” ■

“Working with Marty Meehan, Jacquie Moloney, Steve Tello, Ralph Jordan … they built this entrepreneurial spirit in me,” says Asirifi.



‘THE LONGEST NIGHT OF MY LIFE’

BY ED BRENNEN

FAHSS Grad Finds Himself on Frontlines of Turkish Coup Attempt

While the world watched on television as the failed coup d’état played out in Turkey this summer, one recent UMass Lowell grad found himself on the frontlines of history.

Burhan Colak ‘15, a captain in the Turkish Armed Forces, came to the United States in 2012 to get his master’s degree in community social psychology from the College of Fine Arts, Humanities & Social Sciences. After receiving his degree last spring, Colak returned home to continue his military service and was assigned as chief of security in Dŏgubayazit, a city near Turkey’s border with Iran.

On July 15, a faction within the Turkish Armed Forces calling itself the “Peace at Home Council” attempted to oust President Recep Tayyip Erdogan and seize control of several key locations, including Ankara (the capital), Istanbul and Dŏgubayazit.

“A tank brigade moved to take control of our city; however, we managed to convince them to stop,” says Colak, who quickly realized that many of the advancing troops were unwitting co-conspirators in the coup attempt.

“I contacted battalion commanders, who were lied to about the real reason of the military operation, and then I convinced them to withdraw to their base,” Colak says. “Finally, we arrested the brigade general and some other plotters in the headquarters.

“That was the longest night of my life.”

When it was all over the next day, the failed coup attempt reportedly claimed 270 lives, while more than 2,100 were injured. More than 10,000 military personnel (out of a force of nearly 640,000) were arrested, while an additional 1,389 were expelled.

“Even though the attack caused a lot of casualties and destruction throughout the country, it was not successful,” Colak says. “Although the military in Turkey is known for its tough stance on secularism and democracy, the headquarters had been infiltrated by members of a religious group and they successfully disguised themselves until recently. When the intelligence service revealed the plot, the conspirators (moved up) the attack.”

During his two years at UMass Lowell, Colak actively promoted better cultural understanding. He helped initiate a program that paired international students with faculty and staff members over the holidays and was part of the DifferenceMaker Idea Challenge team “Buddies Without Borders,” which spawned the Pair-Up Program now run by the International Students and Scholars Office.

All that now seems a world away for Colak, who is thankful he and his fellow officers were not harmed in the recent skirmish. But he wonders what the future holds for his country, which lies at the crossroads between Europe and the Middle East.

“I am OK, for now,” Colak says. “I miss the peace, love and trust which are currently scarce in the country and region.” ■

Events Calendar

For more information or to register for events, go to **www.alumni.uml.edu/events**, call 978-934-3140 or email alumni_office@uml.edu.

Track & Field Kick-Off Banquet: Friday, Dec. 2, 7 p.m., UMass Lowell Inn & Conference Center. Cost: $50/person. Join us in kicking off the track & field season. Proceeds benefit the track program.

UMass Lowell On The Road in Florida: Saturday, March 11. As part of our annual Florida alumni celebrations, march in a St. Patrick’s Day Parade. Stay tuned for other events in Florida that week.

Sixth Annual Sigma Phi Omicron Chris Sullivan Memorial 5K: Sunday, April 23, 10 a.m. Run or walk to support the UMass Lowell Pershing Fund for Student Veterans, the NEADS Organization and the Chris Sullivan Memorial Scholarship Fund. www.chrissullivanmemorial5k.com

50th and Golden Reunion Weekend 2017: May 12-13. The university celebrates these milestone golden reunions for alumni in the classes of 1967 and prior the same weekend that a new class of alumni are welcomed during the 2017 commencement ceremonies.

Commencement Eve Celebration: Friday, May 12. Join us in reflecting on the successes of the academic year; welcoming honorary degree recipients, speakers and distinguished alumni; and honoring the achievements of our talented students. Proceeds benefit UMass Lowell scholarships.

MEN’S ICE HOCKEY AND ALUMNI & FRIENDS REUNIONS

Alumni and friends are invited to join us for one of UMass Lowell’s proudest traditions: the excitement of men’s ice hockey. Enjoy a pre-game reception before rooting on the River Hawks, entering their 50th anniversary season this year. Alumni receptions and games take place at the Tsongas Center in Lowell.

25th and 40th Reunion, UML vs. St. Lawrence University: Friday, Oct. 21, 5:30 p.m. reunion in the Talon Club and 7:15 p.m. game.

Greek Life Reunion, UML vs. St. Lawrence University: Friday, Oct. 21, 5:30 p.m. reception in Club Rooms West and North and 7:15 p.m. game.

Parent and Family Reception Night, UML vs. Clarkson University: Saturday, Oct. 22, 6 p.m. reception in the Talon Club and 7 p.m. game.

Men’s Ice Hockey Legends of Lowell and Riley Reunion, UML vs. Clarkson University: Saturday, Oct. 22, 7 p.m. game and 9 p.m. reception in the Talon Club.

Manning School of Business Alumni & Friends Night, UML vs. University of Vermont: Saturday, Nov. 5, 6 p.m. reception in the Talon Club and 7 p.m. game.

Football Alumni Reunion, UML vs. Merrimack College: Friday, Dec. 9, 6 p.m. reception in the Talon Club and 7 p.m. game.

Graduate School of Education Alumni & Friends Night, UML vs. Northeastern University: Friday, Jan. 27, 5:15 p.m. reception in the Talon Club and 6:15 p.m. game.

Track & Field George Davis Night Reunion, UML vs. University of New Hampshire: Saturday, Feb. 4, 6 p.m. reception in the Talon Club and 7 p.m. game.

Sigma Phi Omicron Reunion, UML vs. University of New Hampshire: Saturday, Feb. 4, 6 p.m. reception in the Concourse Club Rooms and 7 p.m. game.

Kennedy College of Sciences Alumni & Friends Night, UML vs. Boston University: Friday, Feb. 10, 6 p.m. reception in the Talon Club and 7:15 p.m. game.

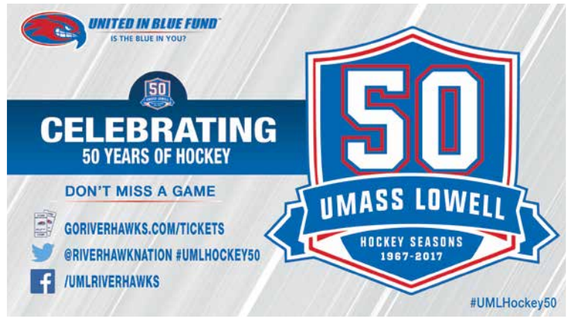
CHANCELLOR’S CELEBRATION OF MUSIC 2016-2017

Highlighting the talent within the UMass Lowell Music Department, this series shines a spotlight on the astounding range of music creation and performance at UMass Lowell and the impressive professional accomplishments of our graduates.

“Reaching Out:” Saturday, Nov. 19, 5:30-6:30 p.m. pre-reception and 7-8:30 p.m. performance at the United Teen Equality Center, Lowell. This performance focuses on UMass Lowell’s many partnerships with the Greater Lowell community.

“Powering Up:” Saturday, Feb. 25, 5:30-6:30 p.m. pre-reception at Alumni Hall and 7-8:30 p.m. performance in Perry Atrium, Mark and Elisia Saab Emerging Technologies and Innovation Center. This performance features the creative works and professional craft developed within UMass Lowell’s sound recording technology and composition in new media programs.

“Showing Off!:” Friday, March 31, 6:30 p.m., pre-reception and 8 p.m. performance in Durgin Concert Hall. A chance for UMass Lowell’s graduating seniors and our renowned student ensembles to demonstrate the highlights of our concert season and the culmination of their musical training at UML.



Our Legacy, Our Place Kicks Off!

Our Legacy, Our Place Kicks Off!

UMass Lowell celebrated the official kickoff of *Our Legacy, Our Place* on April 15. The campaign will raise $125 million for student scholarships and support for faculty research, campus improvements and our Division I Athletics program.

[1] *As part of the kickoff, Chancellor Jacquie Moloney '75, '92 (center) presented the 2016 University Alumni Awards to (from left) Paul Marion '76, '05, Amy Hoey '88, William Rhodes III '82, Kazeem Dayo Ibraheem '02, Ciana Abdollahian '09, Patrick Kaplo '04,Stephen Burke Driscoll '66, '72 and Edward Gallagher '84.*

[2] *Members of UMass Lowell's Opera Workshop and String Ensemble performed a flash mob version of "Make Our Garden Grow" by Leonard Bernstein.*

[3] *The UMass Lowell Pep Band led the audience in the university's Fight Song.*

[4] *Chancellor Moloney welcomes guests. The evening drew more than 300 alumni, faculty, staff and community friends and partners.*

[5] *Mark Saab '81, '13 (H) visits with Julie Chen, vice chancellor for research and innovation.*

[6] *UMass President Marty Meehan '78 (left) greets Donna '85, '91, '11 (H) and Rob '84, '11 (H) Manning, the campaign's chair, who made a $1 million gift to Our Legacy, Our Place.*

[7] *Professor Steve Driscoll '66, '72 checks out the Our Legacy, Our Place license plate frames designed and produced by the Plastics Engineering Department.*

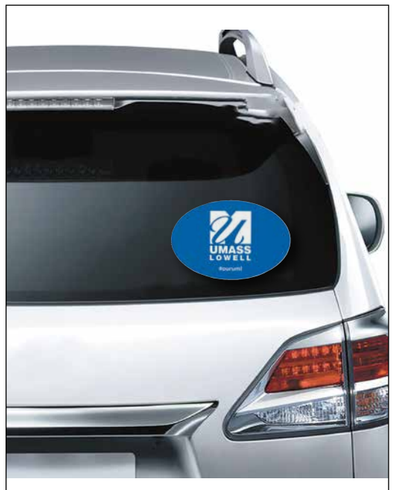
[8] *The campus community gathered at University Crossing on April 15 to celebrate "Opening Day" for Our Legacy, Our Place. Speakers included Chancellor Jacquie Moloney '75, '92, Professor Deb Finch '03, '06, '12 and Senior Class President Christopher Nunez '16.*

[9] *On hand for the celebration were (from left) Erik Pettaway '19, Stephanie Carnazzo '19, Student Activities Associate Director Amy Liss, Dezanae Boston Bernier '15, Winny Rojas '19 and Hector Rivera '15.*

[10] *Together with Chancellor Jacquie Moloney '75, '92 (right), acclaimed Broadway producers Stewart Lane and Bonnie Comley '81 hosted an Our Legacy, Our Place reception for several dozen guests in their New York City home on April 27.*

[11] *UMass Lowell students who intern with the Washington Center got the opportunity to network with alumni in the D.C. area at an Our Legacy, Our Place reception held May 5 at the National Press Club, featuring Roger Cressey '87 (not shown) and many more distinguished alumni. From left: Vice Chancellor for University Advancement John Feudo, Carry Somboune, Sydney Rebello '16 and Emily Thorpe '16.*

Our Legacy, Our Place Kicks Off!



Make a gift before Nov. 30, and let us thank you for sticking with us with this one-of-a-kind UMass Lowell decal.

UMASS LOWELL

#ouruml
www.uml.edu/give

[1] *Mark Cocozza '71 (right) and his wife, Susan '69 (second from right) visit with Chancellor Jacquie Moloney '75, '92 and her husband, Ed.*

[2] *Coach Norm Bazin '94, '99, left, talks with James Donovan '70. Bazin, one of the event's featured speakers, gave a preview of the upcoming 50th anniversary season for men's ice hockey.*

[3] *With its panoramic views of Boston, the UMass Club was a spectacular setting for a June 16 Our Legacy, Our Place reception, which drew more than 100 Boston-area alumni and friends.*

[4] *Guests included (from left) Hannah Snow, Meghan Le '16, Devina Thiona '15, Takaya Weckle '15, Chancellor Moloney, Andrea Byrne '15 and Jeremy Achin.*

River Hawks On The Road

[5] *Alumnus Nate Kutt '97 and his family enjoying a BBQ with Wally the Green Monster at Jet Blue Park in Fort Myers. From left: Joseph Kutt (grandfather), Konrad, Nikolas, and Lukas Kutt (grandsons), Lorena and Nate '97 Kutt (parents) and Nancy Kutt (grandmother).*

[6] *UMass Lowell Alumna Merrytime Ebhohon '12, center, with husband Esosa Omo, left, and UMass Lowell alum Koffi Selom Egbeto '12, '14 gather with other Dallas-area alumni for a reception at the home of Russ '67, '74 and Jennie LeClaire. Alumni from seven decades were well-represented at the regional event.*

[7] *A large gathering of UMass Lowell alumni and friends at the Red Sox Spring Training Game, a favorite annual event with UMass System.*

[8] *Omicron Pi families gather for a reunion at the home of Rick and Chris Hoeske. From left: Chris Hoeske, Barbara Milensky, Rick Hoeske '66, Executive Director of Alumni Relations Heather Makrez '06, '08, and Carol Dauksys.*

[9] *West Palm Beach alumni and friends gather at the Four Seasons for the Florida launch of the university's Our Legacy, Our Place Campaign. From left: Kevin Ryan, Judy Windsor-Brunelas and Charles Brunelas '82, '90.*

[10] *University benefactor John Kennedy '70, '16 (H) welcomed dozens of alumni to his home in Naples to help celebrate the launch of Our Legacy, Our Place: The Campaign for UMass Lowell. Both Kennedy and Chancellor Jacquie Moloney '75, '92 shared stories of their college experiences with the crowd, and the chancellor offered an update on the university's rapid growth and many recent accomplishments. From left: Frank Spinola '66, Chancellor Jacquie Moloney '75, '92, Reddy Godula '93, and Jerry '78 and Joyce '77 Colella.*

River Hawk Reunion Weekend

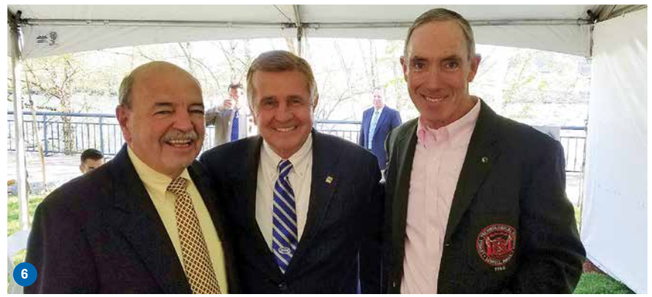

1


2


3


4


5


6

[1] *Class of '64 state teachers' alumnae Roberta Boyd '62, left, Pauline Golec '62 and Georgina Dodge '62 during Golden Alumni Weekend.*

[2] *Members of Lowell Tech Class of 1956 return to campus to celebrate their 60th reunion. Front row from left: Fred Obear '56, '85, Mary (Czekanski) Szczepanik '56, '91, Richard Peckham '56, Carol (Dunn) Canovai '56, and Nicholas Dadoly '57. Back row from left: Richard Aldrich '56, Francis Raudelunas '56, Gerry Gallagher '56, Lt. Col. Brian Noe, Paul Law '56, Al Denio '56, '57, Executive Director of Alumni Relations Heather Makrez '06, '08 and Ed Koza '56.*

[3] *Members of Lowell State Class of 1956 celebrate their 60th reunion. Front row from left: Margaret Doyle '55, Barbara McGovern '57, Jane (Fredette) Gallagher '56, and Theresa (Rochette) Pomerleau '57, '84. Back row from left: Dorothy (McNamara) Clark '55, Raymond Masse '57, Rick Santos '57, and Therese (Rousseau) Morin '57, '71.*

[4] *Elaine Vigneau, left, James '66 and Janet McSheffrey reminisce about the good ol' days at Lowell Tech.*

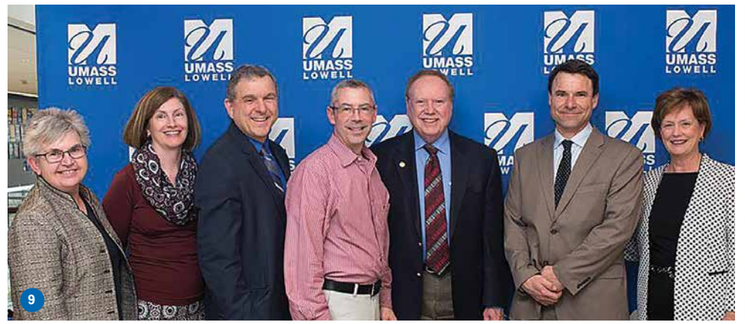
[5] *Frank Spinola'66 and his wife Mary Jo Spionola '66 dance during the 50th and 60th class reunion celebration.*

[6] *Rick Hoeske '66, Charlie Hoff '66, '04 (H) and Jerry Lydon'66 reconnect during the 50th reunion celebration.*

Alumni on Campus and in the Community


7


8



9


10

[7] *Alumni shared career advice with a group of students at the Multicultural Student-Alumni Social. From left: Cleopatra Lewis, Shanice Ayala, Fredny Laporte '07, Kenya Semexant '16, Manica Thelusca and Tonia Greene.*

[8] *Emmanuel Lamour '05, '16, left, Dean of Student Affairs & Events Brenda Evans '94, '95, and Benjamin Johnson '08, '15 shared memories and reconnected at the UMass Club in Boston at the National Society of Black Engineers Alumni & Friends Reunion.*

[9] *Graduate School of Education alumni served as judges in the university's DifferenceMaker Idea Challenge, including, from left, Dean Anita Greenwood '84, '92; Danvers Superintendent Lisa Dana, '92, '01; TK Superintendent John McDonough '95, Dean of STEAM Ed Roberts 88,'90 and retired superintendent Charles Gobron '06. At right are TK Title John Brown '06 and Chancellor Jacqueline Moloney '75, '92.*

[10] *At the Alumni Speaker Showcase, Kennedy College of Sciences alumnus Douglas Williams '80, CEO of Codiak BioSciences, discussed his career and secrets to success with students, faculty and staff.*

Special thanks to our most generous sponsors of the 2016 Commencement Eve Celebration.

We are grateful for your support of our university. Your gifts are an investment in tomorrow's experts, leaders and difference makers.

FELLOWS CIRCLE ($25,000)
Aramark Corporation
Gerald '78 & Joyce '77 Colella
Nancy Donahue '13 (H)
John Kennedy '70
L. Donald '59, '07 (H) & Gloria LaTorre
Robert '84,'11 (H) & Donna '85,'11,'91 (H) Manning
Mark '81, '13 (H) & Elisia '13 (H) Saab
Jack & Judi Wilson

INNOVATORS CIRCLE ($10,000)
Circle Health (Lowell General Hospital)
Richard '66 & Maryellen Denning
Jacqueline '75, '92 & Edward Moloney
Professor Emeritus Bernard '56* & Yana Shapiro

PRINCIPALS CIRCLE ($5,000)
Enterprise Bank
Commencement Photos, Inc.
Jack & Thérèse O'Connor
Red Mill Graphics

PATRONS CIRCLE ($2,500)
Lawrence Ardito '69 & Linda Carpenter '89
Casella Waste Systems
Lahey Health
Stuart Mandell '11 (H)
Pepsi

* = deceased

Alumni on Campus and in the Community

[1] *Alumnus and owner of Apex Information Security, Bill Rizos '02, center, mentors students after a keynote speech by alumnus Rob Manning '84 , '11 (H) (not shown), co-CEO and president of MFS Investment Management, at the MSB Alumni Networking Event.*

[2] *Greek alumni give advice to Greek Life students at the Greek Alumni Council Speaker Series. From left: Rob Palmer '08, Ryan McCluskey '10, Nicole Lemay '04, Gianni Falzone '13, '15, Amanda Tuner '10, '15, Christine Bork '08, '12 and Adam Hogue '03.*

[3] *Alumnae of Alpha Sigma Tau attended the annual Yellow Rose Formal hosted by the collegiate women of the Beta Tau Chapter. Alumnae enjoyed meeting new sisters and reminiscing about their college days, along with a night of awards, raffle prizes and dancing. From left: Nicole Lemay '04, Jessica Salgueiro '06, Joy Whitbeck '03, Katie Cook, Tiffany Saragian '06, Sarah Catalano and Christyn Bergquist '03.*

[4] *Volleyball alumnae reunite to take on current River Hawks at Costello Athletic Center. Front row from left: Masha Yelsukova '18, Alexa Toth '17, Megan Young '17, Mal McIver '18, Lindsey Visvardis '19, Erica Cappellino '19, and Haley Shimon '19; Back row from left: Delaney Mendez '19, Vicky Wong '11, Lauren Bennett '17, Olivia Parkins '14, Kiana Raposo '14, Lade Adeniyi '19, Sarah Coscia '11, Carolyn Eddy '14, Rachel Arnason '17 and Elima Ahzi '17.*

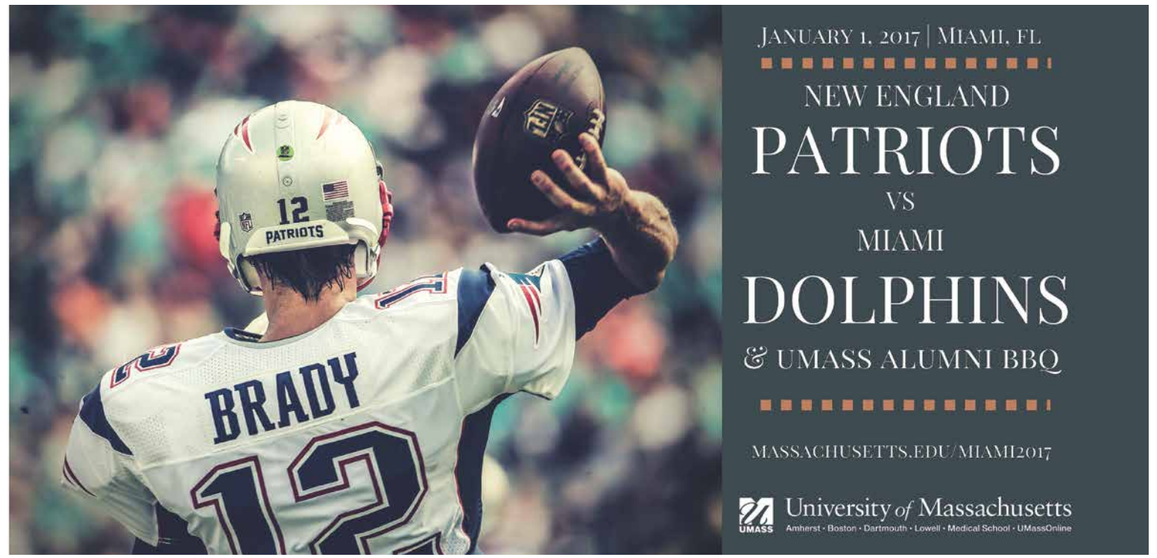
[5] *Steve Paganis, in sunglasses, Glenn Morgan '86, behind Paganis, and Michelle Paganis '93. Paganis' mom, along with other alumni and community members, pulled together to clean the canal during Lowell's Earth Day celebration.*

[6] *Adam Hogue '03, Janice Lane '15, center, and Ciana Abdollahian '09 build connections at the Young Alumni Council's Meet-Up in Burlington.*

[7] *Men's Soccer alumni reunite for their annual alumni game at the Cushing Field Complex.*

[8] *Associate Director of Student Activities Leadership Amy Liss, left, Alex Roy '17 and Catherine York '18 celebrate with fellow Student Alumni Ambassadors and university administrators at their annual final dinner.*

[9] *Alumni gather for a fun evening of Lowell Spinners baseball with old friends. Front row from left: Bob Mullin '69, Kevin MacLaughlan '64, Jack McSwiggin '70, Joe Sacoco '70, Jack Wolstencroft '69, Ken Martin '71, Roger Landry '67. Second row from left: John McSheehy '68, '71 and Jim Mooney '69. Back row from left: Walter McGrail '70, '73, Dan O'Neill '71, Jim McMahon '58, Paul Sullivan '65, Bob Boehm '70, '77, Al "Skip" Roper '68, Pat McCartin '72, Bill Quirk '70, '77, Ralph Bennett '67 and Frank Georges '62.*



Bernie Shapiro ’56: Professor, Mentor, Benefactor, Friend

The remembrances go on and on—from Florida, California, Georgia, New Jersey, Montreal and all across New England. Some speak of his brilliance as a teacher; others remember his mentoring, his mountain climbing, his road-running, his humor, his friendship—and, nearly always, his warmth.

He was Bernie Shapiro ‘56, for 47 years a member of the UMass Lowell faculty—as a professor of math, business, economics, engineering, continuing ed and whatever else was needed at the time. And he was loved. Not just admired, respected or revered. Loved. If you doubt it, take the time to Google his name, go to his online obituary—he died in April of this year—and scroll through the messages, from former students and colleagues, that follow: He was a “legend,” a “mentor,” a “true mensch,” “my guru,” “my buddy,” “an amazing professor,’” “the coolest professor,” “an inspiration,” “a cornerstone of the university,” “a second father to me.” And much more.

“I enjoyed offering the students advice,” he told this magazine last year. “I enjoyed learning about their lives, their challenges, their problems, sometimes even poking my nose in when they’d let me. I think it was my favorite part of the job.”

But for all that, he may never have known how many lives he touched, or how deeply. “Never in his wildest dreams,” says his widow Yana, herself a UMass Lowell staff member for 34 years, “would Bernie have expected the kind of response there’s been to his passing. I’m sorry he isn’t here to see it. He would be so, so touched.”

He began as a freshman at Lowell Tech in the fall of 1952, left for several years to study at the U.S. Naval Academy, later to earn his master’s at MIT—then returned, never to leave again. His first job, in 1962, was as assistant professor in what was then the university’s Department of Economics and Management; he would join the math department four years later, where he would help create LTI’s new business administration major.

He seemed always a step ahead. In the early ‘80s, just a year or so following the launch of the first IBM personal computer, he would usher in the university’s first computer-science courses, sometimes lobbying his business majors to declare a minor in the field. “He had the vision,” remembers one of those students, Robert Manning ’84, former UMass Board chairman and chief benefactor behind today’s Manning School of Business. “He literally tackled me in the hall.”

Bernie and Yana were marred in 1958, two years after his Lowell Tech graduation: two kids from neighboring towns—he from Lowell, she from Haverhill—“just part of the crowd of kids that ran around together,” Yana says today. His departure leaves behind their three children, all long since grown: Mark, Judi and Stevi Ann; and two grandchildren, Courtney and Jordan.

It leaves behind, also, something else: Three separate scholarships—the Bernard and Yana Shapiro Scholarship Funds—one each to benefit students in business, mathematical sciences and continuing ed, awarded yearly, on merit: “the three areas we gave our time to,” Yana told the magazine last year. “It seems most fitting that way.”

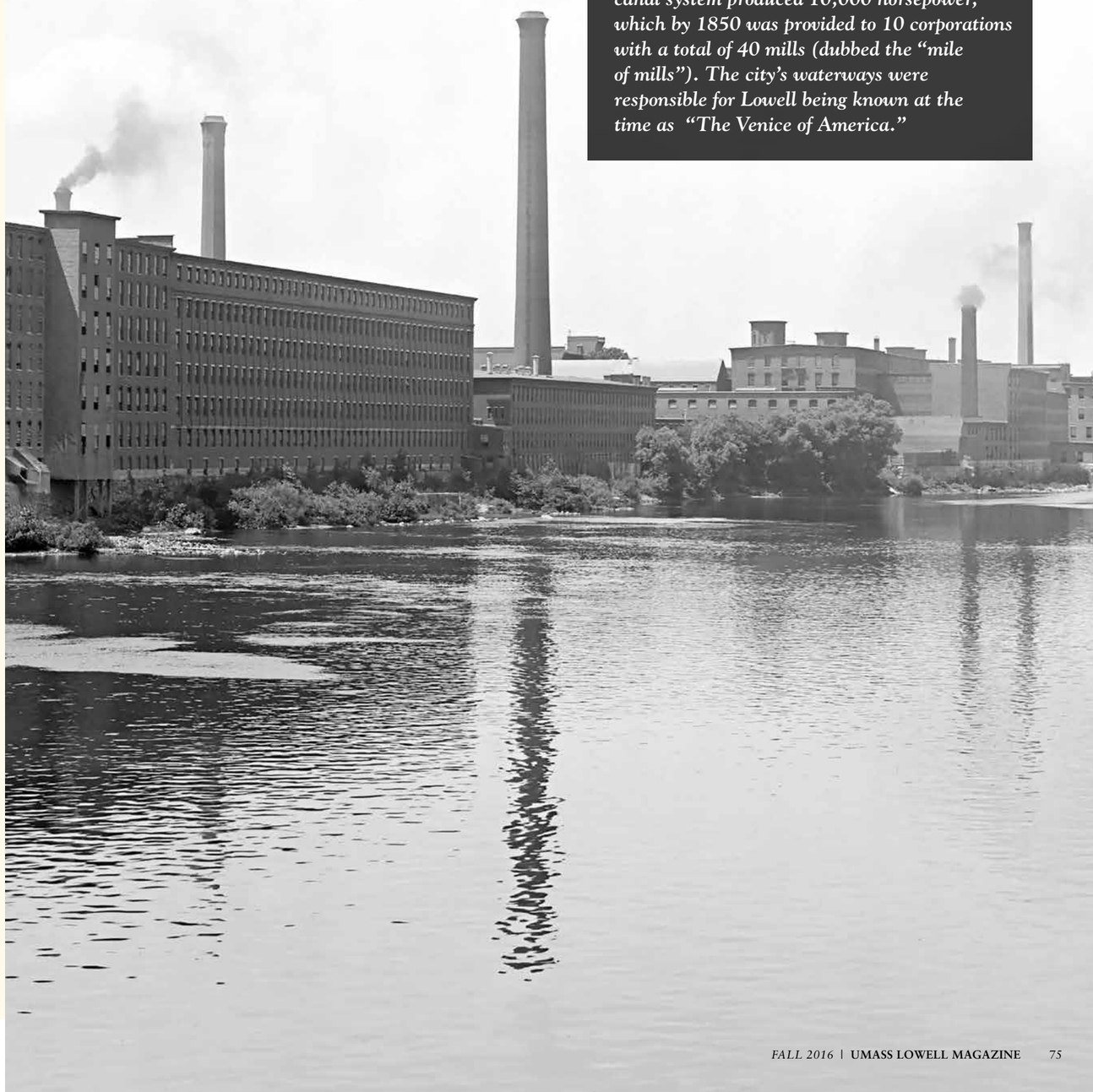
“He had two great loves,” she says today. “His family and the university. They were his life. Now they’re his legacy.”—*GD*

DECEASED

YEAR	NAME
1917	Lawrence M. Gentleman
1917	Marion L. Thompson
1922	Cecilia A. O’Shea
1926	Alice E. Sullivan
1933	Margaret P. (Garvin) Dyleski
1934	Joanna R. McCorry
1937	Rose C. (Desmond) Kimball
1937	Margaret Fowler
1938	Mary L. (Hart) Gilley
1941	S. Kathleen (O’Malley) Hines
1941	Catherine L. (Meloy) Sullivan
1941	Lester A. Macktez
1941	F. Vincent Mahoney
1941	Seymour Okun
1942	Barbara (Teeven) Blair
1942	Catherine E. (Mahoney) Burke
1942	Thomas F. Cryan
1943	Bernice L. (Chadwick) Billewicz
1943	R. George Hochschild
1945	Virginia M. (Gile) Heggarty
1945	Elizabeth K. (Brennan) Hartigan
1947	Davida (Vinecour) Merker
1947	Jean G. (Shinnick) Beaulieu
1948	Leo F. Fanning
1948	Charles A. Whitehead
1949	Peter M. Kormos
1949	Phillip A. Gruber
1950	Bryant L. Carpenter
1950	John F. Dulken
1951	Regina M. McCarthy
1951	Raymond J. Quinn
1951	Katherine E. McCarthy
1953	Donald D. Dooley
1954	Joseph A. Genereux
1954	Edward A. Glasheen
1955	Edward K. Dudgeon
1956	Dolores M. (Rich) Devellis
1956	Eugene P. Schwartz
1956	Edward K. Yellman
1956	Bernard Shapiro
1957	Frank W. Major
1957	Abraham O. Okorodudu
1958	Irene C. (Turilli) Bourne
1958	Vernon H. Ure
1959	Paul M. Lambert
1959	Donald H. Caless
1960	Charles H. Kiklis
1960	Kenneth E. Dolfe
1960	Joseph Diprimo
1961	Lorraine F. (Fox) Noble
1961	William R. Hersey
1961	Terry R. Peterson
1961	John M. Vaughan
1961	John F. Fantasia
1962	David A. Burns
1963	Andrew T. Dudek
1963	Francis J. Murphy
1963	Karol Rochelson
1964	Catherine (Paparisis) Garas
1964	Richard M. Shifman
1965	Donald R. Susla
1965	Andrew J. Borsa
1966	Linda A. (Hering) Digney
1966	Ralph J. Barberio
1966	Peter J. Foley
1966	David G. Murphy
1966	Charles B. Cahill
1967	Gertrude (Garside) Patenaude
1967	James M. Dillahunty
1968	Katherine M. Kerins
1968	Michael J. Moriarty
1968	Richard E. Gage
1968	Alfred E. Vervaert
1969	Walter L. Armstrong
1969	Robert J. Pianowski
1969	Mary I. Callahan
1969	John G. Andrews
1969	Nicholas Theochares
1970	Bruce P. Devito
1970	Martin J. Damian
1970	Roger J. Montminy
1970	Rodger F. Martin
1971	Patricia A. (McCallum) Maglio
1971	Jayne D. Biagiotti
1971	Mary B. Lingane
1971	James B. Muckerheide
1972	Patricia (Cammett) Garwich
1972	Roger G. Roux
1972	Enrico C. Caranfa
1972	Dennis A. Josephson
1973	Gerald R. Marsella
1973	Donna M. Beaubien
1973	John A. Carvalho
1974	Daniel J. Herlihy
1974	James J. Kiley
1974	Eugene F. Cavanaugh
1974	Bruce E. Dewitte
1975	Ellen L. (Wilson) Elliott
1975	Roger P. Foucher
1975	Barbara M. Saunders
1976	Karen P. (Dailey) Geoffroy
1976	Barry N. Glass
1976	Thomas M. Higgins
1976	Stephen G. Bouchard
1976	Marie E. Clark
1976	James B. Lynch
1976	Alfred Duemling
1977	James W. Armitage
1977	Leonard T. Wholey
1977	Virginia P. Ecklund
1977	David P. Saba
1977	Harry O. Alexanian
1977	Alvin Portnoy
1978	Nancy J. (Ashe) Brown
1978	Stephen M. Pollock
1978	Robert M. Rooseboom
1978	Paul J. Cardoso
1978	Stephen E. Moffett
1979	Mary E. (Andros) Clarke
1979	Angelo P. Rinaldi
1979	Elaine M. Foderaro
1979	Perry D. Stanley
1979	Carmen A. Hubbard
1979	Virginia Noseworthy
1980	Timothy J. Ebacher
1980	George B. Gregoire
1980	Charles A. Gargiulo
1981	Richard J. Brousseau
1981	Christopher J. Miele
1981	Gary E. Lebarron
1981	Richard B. McManimon
1981	Sally A. Weber
1982	Doris E. (Pratt) Thompson
1982	James R. Holloway
1982	Steven P. Martin
1982	Leslie J. Langlois
1982	John D. Talty
1983	Thomas R. Ronan
1983	Maureen M. Lein-Chisolm
1983	Michael L. Neptune
1983	Daniel J. Wilkins
1983	Robert J. Schmitt
1983	William H. Gronemeyer
1984	Arthur W. Julier
1984	James W. Nollet
1984	James J. McLaughlin
1985	Steve L. Smith
1985	Michael J. Loycano
1985	Susan B. Metheny
1986	Joseph W. Rajewski
1986	Jay S. Dion
1986	Robert M. Neault
1986	Richard E. Abbott
1989	David D. Getty
1991	Sarah C. (Axtman) Blake
1993	Jacquelyn M. Ayotte
1994	Donna M. (Santoro) Judge
1994	Edward J. Smith
1995	Maurice D. Jones
1996	Gerard R. Brodeur
1996	Nathan H. Butler
1996	Angelo G. Dickerson
1997	Margaret M. Graham
2000	Stephen Philip Ricci
2002	Dennis G. Bretton
2003	Shad W. Smith
2005	Christopher M. Gould
2005	Robert J. Andersen
2005	Tamar A. Rizk-Allan
2006	Michael T. McAuliffe
2006	Melissa Ann Boyd
2006	William A. Beaulieu
2008	Derek James Fall
2008	Debra Ann Dew
2009	Andrew Thomas Pearson
2012	Mary C. Crane
2013	Frank Scott Imhoff
2016	Brianna T. Gainley
	Sabino W. Caputo
	Francis T. Worrell
	Donald R. Berry
	Albert M. Cederlund
	Paul D. Burnell
	Ernest A. Langlois
	Theresa A. Carpentier
	James O’Hara
	Richard Bourgeois
	Frances Broderick
	David Lustick
	M. Brendan Fleming
	Klaus Bibl
	Bernard Franckowiak
	Richard C. Healy

Then...

Lowell would not have become the birthplace of the American Industrial Revolution without the water power delivered by the Merrimack River, whose falls provided an energy source to the mills that were the root of the city’s economy for a century. The 5.6-mile-long canal system produced 10,000 horsepower, which by 1850 was provided to 10 corporations with a total of 40 mills (dubbed the “mile of mills”). The city’s waterways were responsible for Lowell being known at the time as “The Venice of America.”



Now...

The university's Welcome Back Night in September culminated in a special one-night lighting display at the Swamp Locks canal complex in the Hamilton Canal District. The Waterways Vitality Project—a collaboration between the city, national park and several community organizations—aims to enhance the experience of Lowell residents and visitors by making the city's distinctive waterways more active and vibrant. While the canals continue as a sustainable energy source, they also today serve as cultural and recreational attractions.

University of Massachusetts Lowell
UMASS
Learning with Purpose

Office of Alumni Relations
Charles J. Hoff Alumni Scholarship Center
1 Perkins St.
Lowell, MA 01854-2882

Change Service Requested

NONPROFIT ORG
US POSTAGE
PAID
PERMIT 69
N. READING, MA

MARKETING & COMMUNICATIONS

Spread the word about our events and programs!

- Become a *Social Media Ambassador* by sharing news on Facebook, Twitter and LinkedIn.
- Submit a class note.
- Call or email your classmates to encourage them to attend an event.

CAREER SERVICES

Recruit a River Hawk!

- Mentor alumni and students in person or through our online platforms.
- Post jobs and internships for alumni and students on CareerLINK.
- Make connections by serving on a panel or as a class speaker.

SCHOLARSHIP SUPPORT

You make the difference!

- Identify creative ways to fundraise for student organizations and scholarships.
- Sign letters, send emails or make phone calls to encourage alumni to participate in specific initiatives.
- Host a reception at your home.

ALUMNI PROGRAMS

Help us plan and recruit for events geared toward professional development, networking and lifelong learning, including:

- Social and pregame gatherings.
- Affinity programs (based on student experience, cultural identity or professional affiliation).
- Lectures or workshops with industry experts.

Volunteering

WANT TO CHANGE LIVES—INCLUDING YOUR OWN?

Become a UMass Lowell volunteer. You'll make a difference in the lives of alumni and students, while also building your résumé and making connections that can last a lifetime.

ADMISSIONS

Share your story with prospective students across the country!

- Attend a college fair on behalf of the university.
- Host an admissions reception in your area.
- Make congratulatory calls to admitted students.

To learn more about how you can be involved, contact the Office of Alumni Relations at 978-934-3140 or Alumni_Office@uml.edu.

OUR LEGACY
OUR PLACE
THE CAMPAIGN FOR UMASS LOWELL

alumni.uml.edu/volunteer