

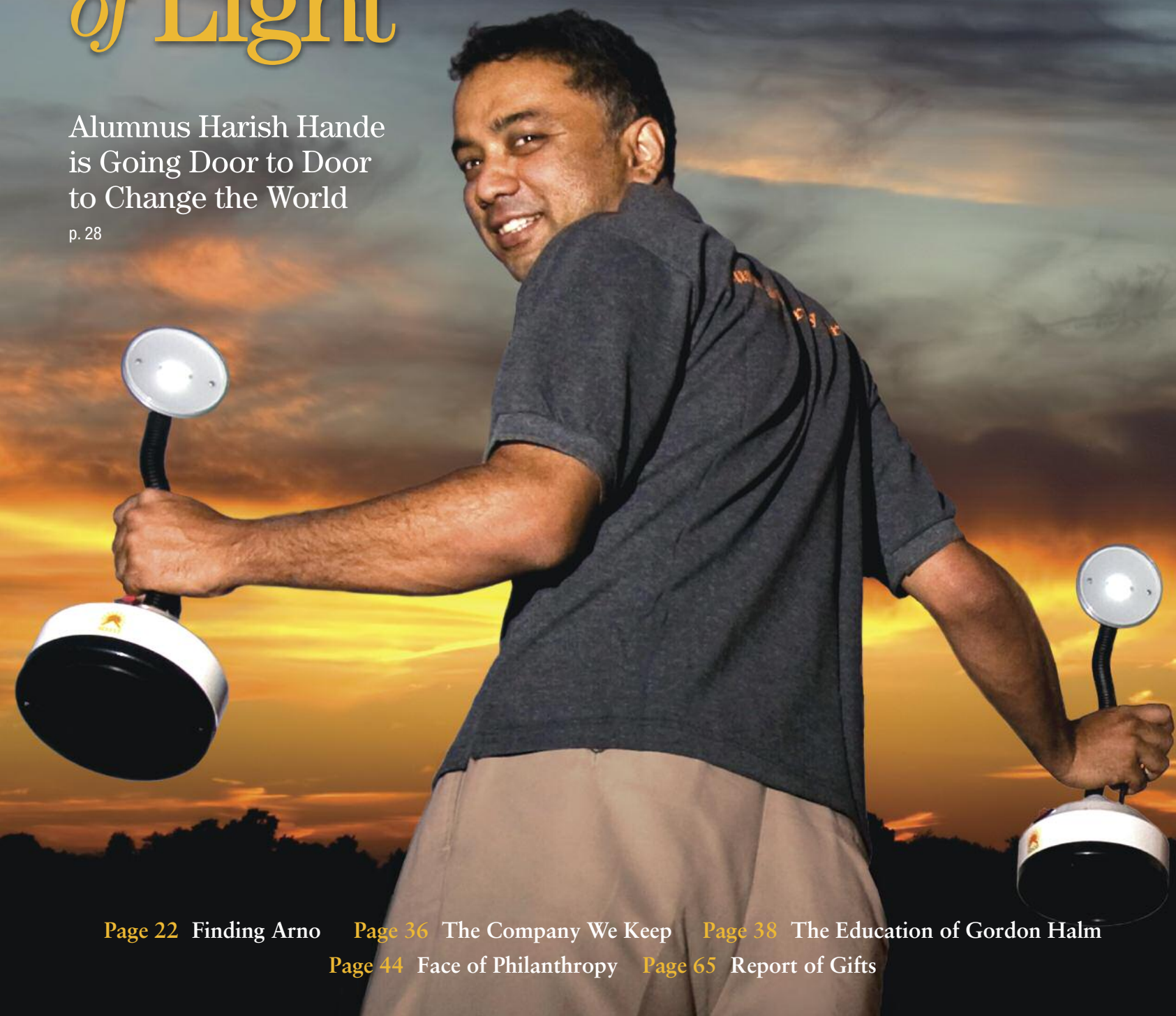
UMass Lowell

MAGAZINE FOR ALUMNI AND FRIENDS

India's Merchant of Light

Alumnus Harish Hande
is Going Door to Door
to Change the World

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Fall 2012

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Learning with Purpose

A Message From **Chancellor Martin T. Meehan '78**



It is one thing for a University to say it prepares students for work, life and the world; it's another thing to actually accomplish it. At UMass Lowell, we have leveraged our strong foundation in teaching, research and engagement to build a dramatically transformed campus that is propelling both the campus and our students to new levels of achievement.

There are many factors contributing to our success: a talented and dedicated faculty; top-notch research facilities; a commitment to diversity and globalization; strong partnerships with industry and community; and academic programs that address the challenges facing the world today.

But the overriding factor in our success is the entrepreneurial spirit that permeates everything we do. We have revamped our management strategies and organizational structure and enhanced revenue efforts to attain financial stability and to reallocate resources to markedly improve student life and students' academic experience.

We have enhanced every academic program with an eye toward teaching students to find solutions, build relationships and harness creativity.

As Robert Eggers, founder of DC Kitchen, told incoming freshmen during opening week this fall: "Make this University your laboratory. If you have an idea, this University wants to help make it a reality. This is a rare experiment."

We place innovation, entrepreneurship and experiential learning at the core of all student experiences so that they will become the difference-makers the world needs.

You will read about our DifferenceMakers program in this issue of the UMass Lowell Magazine, along with a look at the history of innovation on this campus and how we are pushing the concept to greater levels of achievement.

I invite you to peruse these pages, to go to uml.edu to learn more about what we are doing and, best of all, drop by the campus and see the changes and feel the excitement.

A handwritten signature in blue ink, reading "Martin T. Meehan".

Martin T. Meehan '78
Chancellor

CALENDAR OF EVENTS

Annual Alumni Appreciation Night and Hockey Game: Saturday, Dec. 1, Tsongas Center at UMass Lowell, 6 p.m. reception in the Club Rooms (behind section 112), 7 p.m. game. Reconnect with UMass Lowell while watching the River Hawks hockey team vs. University of New Hampshire Wildcats. Cost: \$5.

Reception and Dinner in Mumbai, India: Wednesday, Dec. 5, for alumni, parents and friends, location and time TBD. Sigma Phi Omicron Reunion and Hockey Game: Saturday, Jan. 26, 2013, Tsongas Center at UMass Lowell, 5:30 p.m. reception in the Talon Club, 7 p.m. game. Reconnect while you watch the River Hawks vs. Boston University Terriers. Cost: \$5.

Delta Kappa Phi Reunion and Hockey Game: Saturday, Feb. 23, 2013, Tsongas Center at UMass Lowell, 5:30 p.m. reception in the Talon Club, 7 p.m. game. Reconnect while you watch the River Hawks hockey team! Cost: \$5.

Alumni Dinners in Hong Kong and Tokyo: February 2013, more information to come.

UMass Lowell Comes to Florida: March 2013, more information to come. Join us for coast-to-coast events, including Red Sox spring training, a St. Patrick's Day parade and a golf tournament.

UMass Lowell

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VOLUME 15 NUMBER 2

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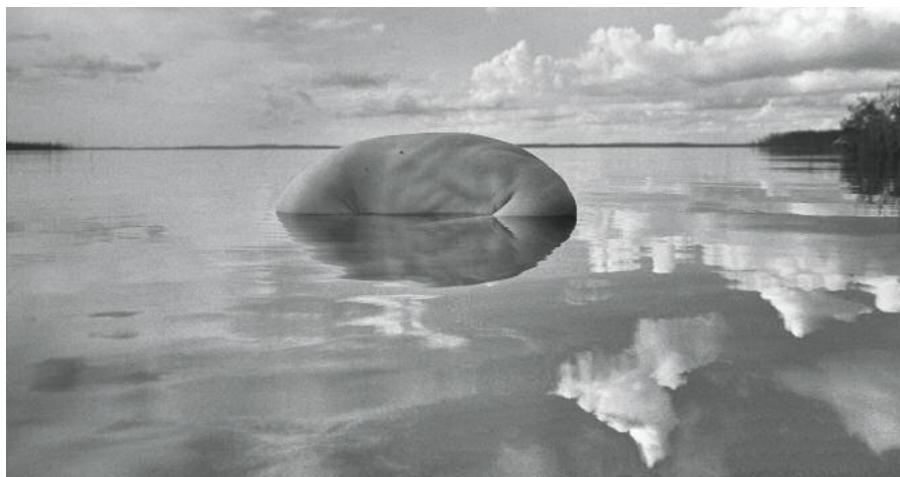


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Editor's Note

Please send comments to Editor Sarah McAdams Corbett at Sarah_Corbett@uml.edu. Submit class notes to: Class Notes Editor, Southwick 250, 1 University Ave., Lowell, MA 01854 or www.uml.edu/advancement/classnotes.

Campus Life

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In September, male students participated in the annual “Walk a Mile in Her Shoes” event on campus, which raises awareness to help prevent sexual and gender violence.

Senate Debate Puts UMass Lowell on National Stage

The Oct. 1 U.S. Senate debate between Sen. Scott Brown (R) and Elizabeth Warren (D) put the candidates under the spotlight and UMass Lowell on the national stage.

The race was one of the most closely watched political contests in the country as the outcome had the potential to tip the balance of the Senate's partisan divide. (Warren ended up winning the Nov. 6 race.)

Demand for tickets to the UMass Lowell/Boston Herald event was unprecedented. A full house of more than 5,000 filled the Tsongas Center at UMass Lowell, with hundreds of thousands more tuning in from all over the globe.

Representatives of international, national, regional and local media covered the event—everyone from the Swiss daily *Le Temps* to *The Daytime*, the student newspaper of Day Middle School in Newton, Mass. Nearly 150 members of print, network and local television, radio and online media were in attendance, from Massachusetts and New Hampshire news outlets to national network TV like NBC News, which broadcast live from the event.

Journalists from national print and online outlets like *The New York Times*, *Esquire*, *Bloomberg News*, *The Huffington Post*, *The Nation* and *Politico* were also at the Tsongas for the debate.

About one in four households in the Boston market—or 338,000 viewers—watched, crushing the competition on other stations. Thousands more watched broadcasts on NECN and



NBC's David Gregory, host of "Meet the Press," moderated the debate.



NBC News' Kelly O'Donnell broadcast live from campus for "The Today Show."

C-SPAN and listened on Boston-area radio stations WBZ-AM and WRKO-AM.

The debate was also live-streamed at uml.edu, on BostonHerald.com and via the Associated Press, whose feed was viewed around the globe, with more than 155,000 total streams in the U.S., Canada, Malaysia, Japan, Korea, Brazil, Italy, France, South Africa and the Russian Federation, among other places.

The next day, "The Today Show" and MSNBC News broadcast live from Lowell with recaps of the debate.

"We're thrilled and grateful to have hosted such a successful event—and with the incredible viewership all over the world," says Chancellor Marty Meehan. "And by allowing students to sit on the stage, and even ask questions of the candidates, we were able to give them a rare opportunity to engage in the electoral process." ■



Profs Win Largest-Ever GSE Grant

The National Science Foundation awarded a \$2.2 million grant to a team of researchers, including two Graduate School of Education (GSE) professors, to study how informal learning impacts the public's understanding of climate change science. The three-year grant is the largest ever awarded to GSE faculty.

Dubbed the Science Express, the project aims to assess whether advertising space on subway platforms and trains is an effective means to engage commuters in learning about climate science. Principal investigators include GSE Assoc. Prof. David Lustick and Asst. Prof. Jill Lohmeier along with Prof. Robert

Chen of the UMass School of Marine Sciences, David Rabkin, director of current science and technology at the Museum of Science, Boston and Hofstra University Asst. Prof. Rick Wilson.

Two ad agencies, Brodeur Partners and Bowman Global Change, will develop the media and an advisory board with about two dozen members from the MBTA, the Smithsonian Institution, the University of Washington, WGBH and other organizations will provide input.

"We have a powerful interdisciplinary team working together," Lustick says.

Lustick believes that out-of-home media, which include subway placards, billboards and mobile phone

applications, have the potential to grab people's attention. And he expects commuters will be attuned to the content since preliminary research showed that 80 percent of MBTA subway riders surveyed indicated they were interested in learning more about climate science, he says.

The MBTA is donating \$180,000 in advertising space on subway cars and platforms where posters or placards with information related to climate science will appear. Since the subway system will have 100 percent Wi-Fi connectivity by year's end, the plan is to include applications that transit riders can access with their smart-phones.

THE COMING: Stephen King

Stephen King's words have thrilled and chilled fans for three decades, but opportunities to hear those words spoken by the author himself are rare.

For one night only, the author will take to the stage at the Tsongas Center at UMass Lowell, offering fans the chance to hear King read his work, ask him questions and listen to him discuss his passion for writing and his advice for aspiring authors.

"A Conversation with Stephen King"—set for Friday, Dec. 7 at 7:30 p.m.—will be moderated by Andre Dubus III, bestselling author and professor in UMass Lowell's English Department, the program's co-sponsor.

"Writing requires not just a creative mind and some good ideas, but also dedication to the craft. I look forward to sharing my experiences as a writer and the lessons I have learned with UMass Lowell students and the public," says King, who will hold a special master class for UMass Lowell creative writing majors during his visit to the University.

To further support UMass Lowell students, King and his wife, Tabitha, will endow a new scholarship fund in their names. King will donate his fee from the UMass Lowell appearance and at least \$5 from every ticket sold will go to this scholarship fund.

For tickets and information, visit www.tsongascenter.com. For corporate sponsorship opportunities, call 978-934-3243.



NURSING DEPARTMENT WINS \$1 MILLION GRANT

The Department of Nursing received a three-year \$996,584 grant from the U.S. Department of Health and Human Services to recruit, retain and graduate nurses who can effectively interact with patients across diverse cultures and ethnic backgrounds.

The project, Bring Diversity and Leadership to Nursing, will raise awareness of nursing as a career through workshops, clubs and demonstrations with elementary, middle and high school students in Lowell and Lawrence.

Eligible students enrolled in the nursing program will receive support such as scholarships, stipends, equipment, tutoring, mentoring and leadership opportunities—all designed to help them graduate and work in local communities.

Moody and the Muse

Writer Rick Moody (author of "The Ice Storm" and "Garden State") and musician Tanya Donelly (of Throwing Muses, The Breeders and Belly) melded their considerable talents on stage at O'Leary Library recently. As part of the UMass Lowell-sponsored Jack Kerouac Literary Festival, the pair performed and discussed songwriting, influence and inspiration.

KAY DOYLE '77, '86: 'A GREAT CAREER AND LIFE'

Prof. Kay Doyle's passion for the success of her students has never wavered, even after 32 years of teaching. And, true to form, she turned her retirement celebration into an opportunity to support students by giving the gift of education.

Doyle's celebration attracted more than 130 colleagues, friends and family members who recognized her legacy as a pioneer, scientist and teacher. The event raised \$20,000 for the new Kay Doyle Endowed Scholarship Fund.

Knowing that many students put themselves



through school and are first in their families to attend college, Doyle—who received master's and Ph.D. degrees at the University in 1977 and 1986, respectively—was always driven to help them succeed.

"I think of UMass Lowell as the 'American Dream University,'" says Doyle, retired program director of the Clinical Laboratory and

Nutritional Sciences Department. "I am very honored to have this scholarship in my name. We have many deserving students. I know firsthand the effect that a first-class education can have on a life, on a family."

Doyle has dedicated her career to creating the best medical laboratory science program in the country. As director of the program, she continuously garnered support from 18 medical laboratories to provide rotations for students. She also led the accreditation of the program in 2010, receiving a perfect score from the National Accrediting Agency for Clinical Laboratory Sciences.

"I will never forget my time here and I will never

forget you," she says. "Thank you for making this a great career and a great life."

NEW DEAN ON THE FINE ARTS SCENE

Luis Falcón is the new dean of the University's College of Fine Arts, Humanities and Social Sciences. The former Northeastern University sociology professor was chosen after a nationwide search.

"In the time that I have spent on campus, I have come to appreciate the energy and commitment of the faculty and administrators to the success of the college and the University," he says.

Falcón served on the Northeastern faculty since 1989, and was vice provost



for graduate education from 2004 to 2011. He also served as vice provost for faculty, associate dean for faculty, director of the College of Arts and Sciences graduate school and as chairman and graduate studies director of its Department of Sociology and Anthropology.

Falcón succeeds Dean Nina Coppens, who is stepping down.

Campus Transformation Continues

The transformation of the UMass Lowell campus continued at a rapid pace over the summer, with more than 40 projects large and small bringing more stunning changes, including new buildings for learning and living, more and better dining options, increased parking and updated research and lab spaces.

The two major new research and academic buildings—the Emerging Technologies and Innovation Center (ETIC) on North Campus and the Health and Social Sciences Building (HSSB) on South—are, respectively, completed and nearing completion. (see P. 8 for details on the former.)

Two new residential halls are also under way. University Suites, on East Campus, broke ground in April and is set to open in the fall of 2013, providing housing for 472 students in four- and six-bed suites. Riverview Suites, on South Campus, also broke ground in the spring. The all-suites facility, which will house 500 students, is also scheduled to open in the fall of 2013.

Upgraded eating options start with an entirely reimagined dining facility on the second floor of Fox Hall. Once classes ended in May, the former facility was completely gutted and reopened this fall. The new front entrance opens onto a large brick pizza oven and students have seven cooking stations with different kinds of food to choose from. The décor and furnishings are

fresh, contemporary and comfortable. An after-hours room with fireplace, big-screen TV and comfortable seating provide students a place in which to snack and socialize late into the night.

Meanwhile, an Einstein Brothers Bagels shop was installed in the lobby of Olney Building on North Campus. It opened for business in the fall, providing new coffee and snack options.

The North Campus parking garage, which adds 550 parking spaces to the North Campus inventory, opened at the start of fall classes. A new garage on South Campus, located between Mahoney Hall and the Riverview Parking Lot, is currently under construction. This will provide 600 new spaces when it is completed in the spring of 2013.

The transformation this summer of University Crossing, formerly St. Joseph's Hospital, included a complete interior renovation of the newer buildings at the rear of the site, demolition of the older buildings at the front of the site and construction of a new four-story campus center. Construction of the new building will be completed in 2014. Situated at the center of the UMass Lowell campus, University Crossing will serve as a hub of student activity with a large new bookstore, food court and event spaces. Several cen-



tralized services will also be located there for single-stop convenience, such as UCAPs, Parking and Transportation, Student Financial Services, Registrar, Police, IT and Environmental Health and Safety.

The Tsongas Center at UMass Lowell was also enhanced with renovated luxury boxes and a new kitchen on the third floor to provide better quality food service. The Tsongas Center was also treated to electrical efficiency upgrades. ■



- A. University Crossing
- B. Health and Social Sciences Building (HSSB)
- C. Emerging Technologies and Innovation Center (ETIC)
- D. ETIC Lobby
- E. University Suites
- F. Tsongas Center at UMass Lowell
- G. North Campus Parking Garage
- H. HSSB Hospital Simulation Room
- I. HSSB Classroom



Campus Welcomes First New Academic Building in More Than Three Decades

The newest light in the dramatically transforming UMass Lowell campus—the Emerging Technologies and Innovation Center (ETIC)—officially opened on Oct. 11. The cutting-edge facility will be home to advanced research in nanotechnology, molecular biology, plastics engineering and optics.

More than 600 UMass Lowell community members, public officials and industry leaders officially opened ETIC, an 84,000-square-foot, \$80 million research center and the first new academic building constructed on campus in more than three decades.

The project was funded through \$35 million from the Massachusetts Economic Investment Act of 2006, \$5 million from the federal government, bonding through the UMass Building Authority, a \$10 million

grant from the Massachusetts Life Sciences Center, and industry and individual donors.

Alumni and friends contributed over \$10 million to the project. Most of the facilities and laboratories within the building have been named after generous benefactors, including the William J. Kennedy Jr. Nanotechnology Research and Development Center, funded by Alumnus John F. Kennedy; the Barry and Janice Perry Atrium and Lobby; the Robert and Gail Ward Biomedical Materials Development Laboratory; the Mark and Elisia Saab High Bay Plastics Manufacturing Center; and the Frank McKone Executive Administration Center.





1. Over 600 attended the grand opening ceremony for the ETIC.

2. Gov. Deval Patrick addresses the crowd during the ceremony.

3. Joining in the ribbon-cutting ceremony are, in the back row, from left: Frank McKone '56, '00 (H), Barry Perry '68, William Hellmuth '77 and Adrian King representing Gloucester Engineering, Mark Saab '81, and L. Donald LaTorre '59, '07 (H). Front row, from left: Mark Boden of Boston Scientific, Robert Ward '71, Lawrence Acquarulo '81, Elisia Saab, University of Massachusetts President Robert Caret, Chancellor Marty Meehan '78, Paul Ferraro and Michael Del Checcolo of Raytheon, and Executive Vice Chancellor Jacqueline Moloney '75, '92.

4. Chair of the Plastics Engineering Department Robert Malloy '79, '83, '88 shows the new Mark and Elisia Saab High Bay Plastics Manufacturing Center to James '80 and Deb Dandeneau, sponsors of the Dandeneau Conference and Seminar Center, and Lawrence Acquarulo '81, sponsor of the Acquarulo Family Conference and Seminar Center.

5. Jeff Cosiol '67, Provost Ahmed Abdelal, University of Massachusetts President Emeritus Jack Wilson, Executive Vice Chancellor Jacqueline Moloney '75, '92, Charles Hoff '66, '00 (H) and John Pulichino '67 enjoy a reception in the Perry Atrium and Lobby in the ETIC.

6. Robert '71 and Gail Ward tour the newly completed Robert and Gail Ward Biomedical Materials Development Laboratory.

7. Janice and Barry '68 Perry view the Perry Atrium and Lobby, named in their honor.

8. Guests enjoy tours and refreshments in the Mark & Elisia Saab High Bay Plastics Manufacturing Center.

9. Elisia and Mark A. Saab '81, president and co-founder of Advanced Polymers Inc., enjoy a reception in the new ETIC. The Mark and Elisia Saab High Bay Plastics Manufacturing Center was named in their honor.

10. Leadership donors are recognized during the ETIC's grand opening ceremony.



Jack Wilson Brings His Entrepreneurial Expertise to the Classroom

UMass Lowell Jack M. Wilson, who resigned in the summer of 2011 after eight years as president of the University of Massachusetts, has since traded hats—from executive to academic – and has made UMass Lowell his teaching home. As the University's interim dean of the School of Engineering—and newly designated Distinguished Professor of Higher Education, Emerging Technologies, and Innovation—he's in his second year in the classroom here.

The course he is teaching this fall, Starting New Ventures, draws on his years as founder, CEO and chairman of the LearnLinc Corp., a spinoff of his prior university research, which he founded in 1993 and built over eight years through three rounds of venture capital before selling it in 2003.

The course, he says, is designed to “examine all angles of the new-venture process, from the legal work and funding, and creating partnerships, to the ethical

issues that arise.” There is an urgency behind what he is teaching, he feels, as innovation and entrepreneurship have never been more critical than now:

“The world is changing so rapidly—the only way to keep pace is to be able to convert learning, particularly university learning, into the solutions we'll need to solve the problems we create.”

There are different models of innovator, he says:

“There's the ‘I created a company and made \$1 billion’ model— that's the familiar one, the one we all know. Then there's the other, the social-issue innovator, the guy who's more interested in solving problems than making a fortune. That's where you get into micro-lending, administering insulin without needles, addressing issues of hunger and such...

“Some people take their profit in pleasure, others in dollars. Both are good. We need both.”—GD

UMASS LOWELL HOSTS ELITE INTERNATIONAL SPORTS CONFERENCE

In July, more than 250 researchers, sports engineers and equipment manufacturers from all over the world converged on campus to talk about one subject: sports engineering.

Patrick Drane '00, '03, assistant director of UMass Lowell's Baseball Research Center (BRC), chaired this year's International Sports Engineering Conference, which has been presented biennially by the U.K.-based International Sports Engineering Association (ISEA) since 1996.

This was only the second time in the ISEA's 16-year

history that the conference was held in the United States, and the first in New England.

“As this is an Olympic year, sports engineering and technology have been at center stage, beginning with this conference, where researchers shared the results of their most recent research among their peers,” says ISEA President Kim Blair. “The conference is the world's largest forum for the sharing of research and insights into science and engineering in sports.”

UMass Lowell was selected as this year's host

site through a competitive process by the ISEA because of the University's pioneering work in sports engineering and education, especially the efforts of the Baseball Research Center. The center studies bat and ball performance and durability for Major League Baseball and other leagues.

“Having personally presented papers at the past five sports engineering conferences in places like Kyoto, Munich and Vienna, it is great to be able to showcase UMass Lowell and count us among the leaders in the global field of sports engineering,” Drane says. —EA



World-renowned composer Robert W. Smith (above) visited campus in July to rehearse a piece commissioned of him by music Prof. Debra-Nicole Huber. He led more than 120 youngsters participating in this year's Mary Jo Leahey Symphonic Band Camp. The young musicians performed the world-premiere of the piece a few days later at their concert in honor of Leahey '37, who died late last year.



Ruben Sanca '09, '10: Olympic Runner

Alumnus Ruben Sanca, now business manager in the Office of Student Affairs, represented his native Cape Verde Islands in the 2012 Summer Olympics in the 5,000-meter run. Unfortunately, he didn't qualify for the final. "Just being here is a blessing," Sanca said at the time.

He especially enjoyed living in Olympic Village and being around other elite athletes. "Some of [the Olympians] have really inspiring stories about how they got here and it's really cool to hear their stories and say 'Hey, we've been through the same thing,'" he told the Boston Globe.

Sanca graduated with a bachelor's degree in business in 2009 and a master's of business administration in 2010. Since then, he has racked up several impressive titles and appearances in three international competitions, all of which contributed to his Olympics selection. He is Cape Verde's record-holder in the 3,000 meter (8:07.50) and marathon (2:18.43).

He led the River Hawks in becoming the first non-Division 1 school to win the cross-country New England championships. Sanca was a four-time All-American, three-time New England champ and is considered to be one of the top-five distance runners in UMass Lowell history. —RM



RESEARCHERS HELP BOOST SPEED OF OLYMPIC BOBSLED TEAM

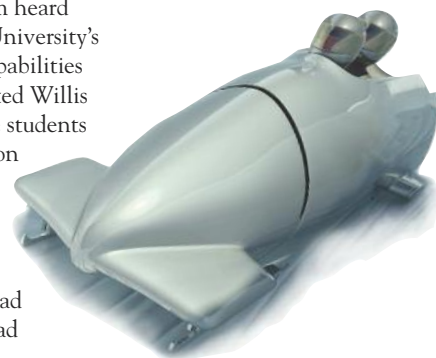
A group of mechanical engineering students advised by Asst. Profs. David Willis and Stephen Johnston are putting their engineering skills to work helping the Israeli Bobsled and Skeleton

Federation (IBSF) team prepare for the 2014 Winter Olympics in Sochi, Russia.

The team heard about the University's research capabilities and contacted Willis last year. The students took on the skeleton project for their senior capstone research, working closely with skeleton racer Brad Chalupski and Chad

Omweg, a sled designer associated with the IBSF.

"We conducted research on how to improve the aerodynamic properties of the sled," says Richard Poillucci, who graduated in May and is now pursuing a master's degree in mechanical engineering. —EA



UMASS LOWELL'S OLYMPIC HISTORY

Ruben Sanca '09, '10 is one of several former UMass Lowell athletes to compete at the Olympic level:

Former rower **Shelagh Donohoe '88**, now the head rowing coach at the University of Rhode Island, was a silver medalist in the women's four at Barcelona in 1992.

Mark Kumpel '83 was a member of the U.S. hockey team in Sarajevo in 1984.

Yorick Treille '02, Laurent Meunier '02 and Baptiste Amar '03 all played hockey for France in Salt Lake City in 2002.

David Delfino '88 played hockey for Italy at Albertville in 1992, Lillehammer in 1994 and Nagano in 1998.

Ring of Fire

Photographer and public affairs staffer Edwin Aguirre and his wife, photographer Imelda Joson, traveled to Page, Ariz., to observe the May 20 annular solar eclipse, the first visible in the United States in nearly 18 years. An annular eclipse is when the moon covers up most of the sun except for the its outer fringe, leaving visible a ring of fire, or "annulus," which is Latin for ring. This is one of the shots the pair took.



MCCARTHY NAMED UNIVERSITY PROFESSOR

Prof. Stephen McCarthy of the Plastics Engineering Department, lauded by his peers and students for his exemplary teaching, outstanding research and extraordinary service to UMass Lowell for nearly three decades, has been named University Professor.

In his nomination letter, mechanical engineering professor Robert Parkin said, "Students flock to his elective classes, as can be seen by the very high enrollments. Possibly the most impressive aspect of his professional



life is the number of students he has mentored and who have received their master's degrees and doctorates under his tutelage, both in plastics engineering and biomedical engineering. By my count, he has graduated 25 doctoral students and several times this number of master's students."

McCarthy's research, meanwhile, has earned him respect around the world.

As principal investigator, he has obtained nearly \$9 million in externally sponsored research grants and contracts, plus nearly \$33 million in intellectual property donations to UMass Lowell. With a grant of \$4 million from the Commonwealth of Massachusetts, he founded the Massachusetts Medical Device Development Center, a signature program for the campus. He has also published widely, with more than 100 peer-reviewed papers, and holds eight U.S. and two international patents.

McCarthy's three-year term will run from September 2012 through August 2015. —EA



John Kerry to Students: Politics Isn't an 'Adult Food Fight'

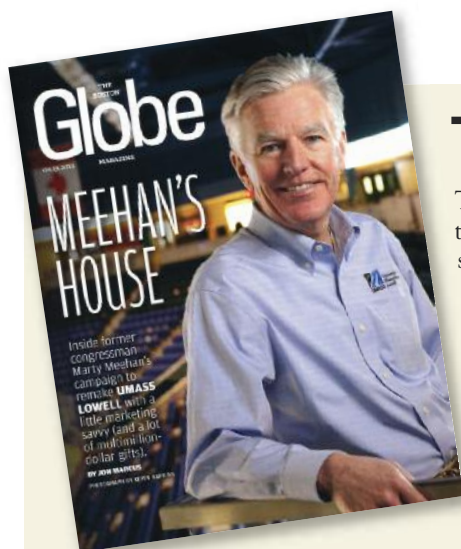
During a visit to campus recently, U.S. Sen. John Kerry told students that young people can help Congress get its priorities straight.

"This is not some adult food fight you can hold at arm's length and think, 'These guys suck. I'm glad I have my life.' It affects you," said Kerry, who was a guest speaker in a political science class taught by Chancellor Marty Meehan '78 and Prof. Patricia Sullivan Talty '78.

The country has needs in higher education, in energy, in infrastructure investments and long-term economic strategies, he told students. After providing a short history lesson on how the country had landed where it is today, Kerry took questions from students.

"I am proud of the values we in the United States espouse," he said in response to a question on the possibilities for peace in the world. Having spoken the day before with the leaders of Sudan and South Sudan, both "on the brink" of renewed war, he said, "It takes time to work through the conflicts of tribalism. I am more aware of how fundamental tribalism is to decision-making in many parts of the world," building up centuries of habit and practice.

"Our ways of doing things seem abrupt and disruptive to those patterns," he said. —SS



The UMass Lowell Makeover

The Aug. 19 Boston Globe Magazine profiled the transformation of UMass Lowell in the five years since Marty Meehan was named Chancellor. Wrote Jon Marcus: "Meehan has already bought a downtown hotel and transformed it into, among other things, living space for 400 students. He's building two dorms, a student center and a new food court, and a couple of parking garages. Then there's the \$80 million technology and innovation center, which opens this fall, a new \$40 million health and social sciences building, and plans for a new home for the business school.

"Few outside Lowell may have noticed all of this activity. But students have. UMass Lowell is suddenly hot. Its ambitious upgrades, along with an aggressive recruiting push, have helped triple the number of applications in the past five years, from 3,439 to nearly 10,000. Enrollment has increased 37 percent while Meehan has been chancellor, to more than 15,000, while the number of students at flagship UMass Amherst edged up only a third as much. The average SAT score among incoming freshmen has jumped by 44 points."

Read the whole story at www.uml.edu/globe.

Jack's Back!

October's Jack Kerouac Literary Festival was anchored by the world premiere of "Beat Generation"—the author's only play. The staged reading, which was held at the Merrimack Repertory Theater and sponsored by UMass Lowell, attracted thousands of fans.

Happy Birthday to Us!

60:

Underground radio has been thriving at UMass Lowell for six decades—as WLTJ, WJUL and now WUML. Tune into 91.5 for student-run programming.

40:

The Department of Nursing—which boasts the oldest Family Health Nursing Program in New England—celebrates the big 4-0 this fall.

25:

The Department of Work Environment has been advancing occupational and environmental health and safety around the globe for a quarter of a century.

BUSINESS SCHOOL OFFERS PH.D. PROGRAM

The Manning School of Business began offering a Ph.D. in management this fall, in three separate tracks: technology management, finance and management information systems. Tracks in leadership and international business will be added next year.

So far, four new faculty members have been hired and plans call for adding four more, says Asst. Prof. Scott Latham, who directs the program. Admission will be highly selective; only three to six students will be accepted into each track. Students accepted into the program will have extensive work experience.

"We hope to attract mid-career professionals who have already achieved success and possibly want to become professors," says Latham. "With the shortage of business Ph.D.s, graduates of this program will have jobs waiting for them both locally and nationally."

The four-year program will consist of two years of coursework focusing on research skills through core classes in research design and research methods. The third and fourth years will include teaching experience and completing dissertations. —JG

BUG OFF!

Researchers Help Save Trees

A team of UMass Lowell researchers led by Physics Prof. Jayant Kumar is using photonics, or light technology, to mimic the color of a nasty beetle—the emerald ash borer—which has already killed tens of millions of ash trees across more than a dozen states in the U.S. and two provinces in Canada.

“Many insects, including butterflies, exhibit color due to micro/nano structures on their wings,” says Kumar, who directs UMass Lowell’s Center for Advanced Materials. “In the case of this beetle, its color is bright iridescent green and serves as an initial mating signal to the male. The idea is to have artificial beetle decoys that simulate the color to attract the males. Hopefully, this will give us an idea of the level of infestation in an affected area so we can take appropriate action to save the trees.”

The emerald ash borer is considered one of the most destructive invasive insects in the United States. The female lays its eggs on the bark of the tree’s trunk and branches. The eggs hatch into tiny larvae, which then bore through the bark and into the wood. As they feed, the larvae create a network of tunnels under the bark, disrupting the tree’s ability to absorb water and essential nutrients. The trees gradually weaken and die, with heavy, falling branches posing a great risk to people as well as to homes, buildings, cars and other properties. Millions of dollars are being spent in destroying infested trees, replacing them and using chemical and biological agents to control the spread of the beetle.

Kumar says their collaborators at Penn State University, which is funding the project, will fabricate the decoys and deploy them in the field. —EA

DRUG OFFERS HOPE FOR LUNG CANCER PATIENTS



A team of researchers in the Chemistry Department is studying a new drug developed by a biopharmaceutical company that could someday treat a form of lung cancer. “The molecule we are working on is a man-made form of a naturally occurring human protein that plays an important role in the establishment and functioning of the body’s immune system,”

says chemistry Asst. Prof. Jin Xu, the principal investigator for the project.

The study is currently funded with a \$665,000 grant from Agennix AG, a German-based company focused on developing novel drug therapies to combat a wide variety of diseases.

Lung cancer is the leading cause of cancer death and the second most-diagnosed cancer in both men and women in the United States.

Solar Lawnmower Slashes Pollution, Noise—and Grass

Each weekend, an estimated 54 million Americans mow their lawns, consuming about 800 million gallons of gasoline every year and producing tons of air pollutants.

According to the U.S. Environmental Protection Agency, lawn mowers (like snow blowers, chain saws, leaf blowers and similar gas-powered garden equipment) emit high levels of carbon monoxide, a colorless, odorless, poisonous gas.

Electrical engineering alumnus Samuel Hamill ’12 created a prototype solar-powered push mower to help cut down on air pollution, gas consumption and noise.



“It’s a sustainable, environmentally friendly way of maintaining one’s lawn,” says Hamill, who designed the lawnmower as part of his capstone project, with Prof. Sam Mil’shtein as faculty adviser.

Hamill’s solar panel generates up to 160 watts, enough to power two small DC motors—one for driving the blades of a regular reel mower to cut grass and the other for turning the solar panel. A pair of photoresistors helps the panel keep track of the sun as the mower moves back and forth across the lawn.

“You don’t need a storage battery to operate the mower,” explains Hamill. “It will run directly off the solar panel. But you can certainly add a battery if you want to mow on a cloudy day. On a sunny day, the panel can run the mower and recharge the battery at the same time.” —EA

IPHONE APP SPEAKS FOR THOSE WHO CAN’T



Two computer engineering graduates have developed an Apple app designed to help people with speech disabilities communicate with their friends, families and caregivers. “Our app brings the power of text-to-speech to the iPhone,” says Matthew Campelli ’12 of Chelmsford who, together with Ken Cramer ’12 of Mansfield, created the app as part of their senior capstone project.

“After typing in sentences using an on-screen keyboard, users can make the iPhone play the sentences out of the handheld device’s speaker by pushing the play button,” Campelli says.

Named Assistive TTS, the app is available via iTunes and the Apple App Store for free.

FOR GRANTED...

UMass' annual research expenditures climbed to \$587 million in fiscal year 2011; that same year, UMass Lowell generated \$36.5 million in revenues from faculty discovery and innovation. Here is a selection of more recent awards:

\$10 million: to the University from the Massachusetts Life Sciences Center to help build a laboratory in the Emerging Technologies and Innovation Center.

\$750,000: to Electrical and Computer Engineering **Assoc. Prof. Xuejun Lu** from the Air Force Office of Scientific Research to improve infrared sensing and imaging in missile defense technology.

\$750,000: to Computer Science **Prof. Holly Yanco** (to establish the NE Robotics Validation & Experimentation Center) and Physics and Applied Physics **Prof. Robert Giles** (to develop terahertz-imaging technologies for imaging skin cancer cells) from the UMass President's Science & Technology Initiatives Fund.

\$773,000: to Computer Science **Asst. Prof. Tingjian Ge** from the National Science Foundation to support his research projects MUSE (managing uncertain scientific experimental data) and RURAL (querying rich uncertain data in real time).

\$725,000: to Chemical Engineering **Asst. Prof. Prakash Rai** to study a nanotechnology-based diagnostic/therapeutic strategy for the treatment of two subtypes of breast cancer.

\$650,000: to Electrical and Computer Engineering **Assoc. Prof. Alkim Akyurtlu** from the Air Force Office of Scientific Research to develop a "perfect" lens for super-resolution imaging.

\$505,373: to plastics engineering researchers led by **Asst. Prof. Bridgette Budhlall** from Raytheon to design, develop and evaluate polymers in applications in a chemical sensor device.

\$450,000: to Physics **Prof. Erno Sajo** from the U.S. Nuclear Regulatory Commission to support nuclear engineering and radiological sciences programs.

\$422,000: to Civil and Environmental Engineering **Prof. Pradeep Kurup** to develop an electronic "tongue" that will detect toxic materials in the environment.

\$417,000: to Physics **Prof. Mengyan Shen** from the National Science Foundation to manufacture hydrocarbon fuels from sunlight, carbon dioxide and water using metal nanostructures.

\$345,000: to Chemistry **Prof. James Whitten** from the U.S. Army Research Office to study gas-sensing materials with the goal of protecting soldiers from toxic chemical agents.

Steampunk Project Mends Art and Autism

People on the autism spectrum are uniquely qualified to participate in the Steampunk movement, says Psychology Asst. Prof. Ashleigh Hillier.

"Steampunkinetics: Building Art into Science" is an art and technology program aimed at adolescents and young adults with autism spectrum disorders (ASD). Directed by Hillier, who conducts research and runs a number of programs for ASD youth, the program includes collaboration with working artists: Bruce Rosenbaum, head of ModVic, a steampunk design company; and Mauricio Cordero, executive director of Mill No. 5 in Lowell.

The effort is funded by a Joseph P. Healey grant, awarded by the UMass President's Office and UMass Lowell's Vice Provost for Research.

Steampunk is an artistic movement that melds elements of Victorian-era history, particularly steam power, with modern technology and fantasy. Works of steampunk often feature futuristic ideas as Victorians might have envisioned them.

"Steampunk is a good fit for those with ASD, whose skills often include phenomenal attention to detail, highly creative and divergent thinking and an emphasis on mechanics," says Hillier. Participants will design and create kinetic art objects, incorporating technology and engineering, working in small groups led by undergraduate and graduate students. —SS



PROGRAMMING ROBOTS TO COMPLETE DANGEROUS TASKS



Imagine being able to control a robot by simply speaking to it or sending it a text message.

That's the goal of a joint project being conducted by a team of researchers from UMass Lowell, UMass Amherst, the University of Pennsylvania, Cornell University, Stanford University and George Mason University.

Called Situation Understanding Bot Through Language and Environment (SUBTLE), the project uses a fully autonomous robot to carry out tasks, particularly in situations that are far too dangerous for humans.

"We are working with computational linguists to enable a person to command a robot using voice commands similar to those

between people," says Daniel Brooks, a graduate student in the University's Robotics Lab. "While such systems have been created in the past, the language was usually limited to pre-scripted commands. Our goal is to allow people to communicate with the robot more naturally."

The robot can be given commands to be executed immediately—"such as 'search the floor for hostages,'" he says. "It can also be given standing orders for use over the entire run, like 'Let me know if you see any bombs.'" —EA



Students visit Victoria Peak in Hong Kong.

Off to See the World

More than three dozen UMass Lowell students kicked off their summer by traveling overseas in four different faculty-led study abroad programs.

One group of students collaborated with peers at Hong Kong City University on research projects, heard first-hand about security operations at a recent Lady Gaga concert at the AsiaWorld-Expo entertainment complex and sampled local specialties like turtle jelly. In Beijing, others participated in business seminars, toured one of the world's leading PC makers and visited the Great Wall of China. Another group studied Greek history in Athens, toured Grecian ruins and debated theories about the Battle of Marathon at the site of the famed clash. And in Prague, another group studied immigration issues at Charles University and attended lectures with Czech faculty. They cruised on the Vltava River and mastered the city's public transportation system.

History: Dig it!

UMass Lowell students teamed up with archaeologists from Queen's University in Belfast, Northern Ireland to resume the dig for Irish history in Lowell. In July, the group spent a week digging on the grounds of St. Patrick's Church, once the site of an encampment by the city's first wave of Irish immigrants. Those early settlers came to Lowell in the 1800s to build the city's network of canals.

So far, the digs have uncovered thousands of artifacts from life in the encampment at St. Patrick's in the 19th century, including rosary beads, clay pipes, iron nails, thimbles, doll parts and marbles. The researchers also uncovered

remains of a shanty and a 14-foot well at what they believe was the home site of one-time parish priest, the Rev. James McDermott.

This is the third annual dig conducted by students under the tutelage of representatives of the Centre for Archaeological Fieldwork at Queen's University in partnership with UMass Lowell's Center for Irish Partnerships.



The Revolution Races in the Nationals

The UMass Lowell concrete canoe team finished 13th overall in the 2012 American Society of Civil Engineers national finals hosted by the University of Nevada in Reno. The team beat nine other collegiate teams from across the country, including Clemson, Oregon State, Louisiana Tech and Rutgers. The team's entry—called the "Revolution"—placed seventh in the contest's Final Product category.

The Revolution, molded from a specially formulated lightweight concrete mix and reinforced with carbon-fiber mesh, measures 20 feet long, 30 inches wide and 14 inches deep, and weighs 208 pounds. Its half-inch-thick concrete hull is light yet very strong — it has a tensile strength of 520 pounds per square inch and a compression strength of nearly 3,000 pounds per square inch. To qualify for racing, it had to pass a "swamp" test in which the canoe is filled with water and pushed below the surface; the canoe must resurface on its own.

UMass Lowell earned a spot in the finals because of its strong second-place finish behind the Université Laval during the Spring regionals.





EATING IT UP

Students enjoy the completely refurbished University Dining Commons in Fox Hall, which opened in September after a multi-million dollar renovation. Everything—from the chairs to the appliances to the plates—is brand new, including eight cooking stations and a cozy late-night café with a fireplace and comfy seating.

Students Work Republican, Democratic Conventions

Junior Corey Lanier studied the 2012 presidential campaign in his political science class last semester, learning about the electoral process through class discussions, research and assigned reading. In August, he saw the workings of presidential politics first-hand at the Republican National Convention in Tampa.

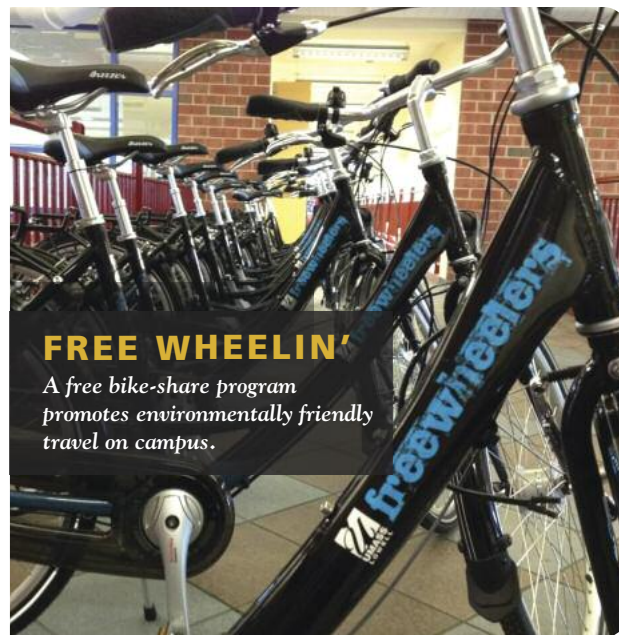
Lanier participated in The Washington Center's Republican National Convention seminar from Aug. 18 to 31. The program combined one week of classes on convention-related topics and a week of hands-on fieldwork at the convention site. Lanier's work assignment was with CNN, where he helped out on the cable network's political assignment desk. He also blogged for the Boston Herald during the event.

"It's an unbelievable opportunity, to learn how conventions really work, what

happens behind-the-scenes," says Lanier, who has a dual major in criminal justice and political science.

Participating from the other side of the aisle, meanwhile, was senior Analissa Iversen, who attended the National Democratic Convention in Charlotte, N.C., from Aug. 25 to Sept. 7. In addition to attending classes that covered everything from the history of political conventions to campaign finance, Iversen worked for the National Women's Political Caucus for her fieldwork at the convention.

"I'm not a political junkie. I wanted to get more knowledge about how politics work," says Iversen, a sociology major who would like to work for a non-profit. "I thought it would be a cool opportunity and it was!"—JG



FREE WHEELIN'

A free bike-share program promotes environmentally friendly travel on campus.

225

—The number of undergrads in the class of 2015 participating in the new Research, Community and Enterprise Co-op Scholars program this academic year. They're working on a diverse array of campus and community projects involving organic chemistry, atmospheric science and climate change, business and radio broadcasting and the Lowell Association for the Blind.

They Make All the Difference

During opening week, the 1,500 members of the Class of 2016 were introduced to UMass Lowell's new DifferenceMaker program, which sponsors programs and activities that encourage students to solve problems through innovative and entrepreneurial action.





Softball Coach Jen Yee: 'The Best Bat Possible'

If there is one motto that Jennifer Yee has always lived by, it's to be the best and train accordingly. Whether it be leading the nation in batting average her senior year for the Georgia Tech softball team or making strides as a graduate student in UMass Lowell's Baseball Research Center trying to build better bats, Yee doesn't settle for mediocre.

Just ask the Canadian Olympic softball team that Yee played for in 2008 and helped finish fourth. They would agree, after Yee led the Olympic tournament in runs batted in.

"It's unfortunate that softball was only an Olympic sport for a short time," Yee said. "But although [the Olympics] created publicity for me as a player, I still need to prove myself as an engineer. I hope to one day use my experience as a player to help in bat design, but I'm not there yet."

The 25-year-old from North Delta, British Columbia has hit in the heart of Canada's national team order for several years. The lefty-swinging Yee was one of the stars of the national team's Bronze-Medal effort at the 2010 world championships in Venezuela. That same year, she led the NCAA in batting average after batting .568 in 62 games as a senior with Georgia Tech. She lost out to longtime national teammate Danielle Lawrie, then with Washington, for USA Softball Collegiate player of the year. The 5-foot-6 Yee was also part of the Canadian squad that finished fourth at the 2008 Olympic Games in Beijing.

Yee is currently pursuing a graduate degree in mechanical engineering, spending much of her time here on a computer, simulating how bats of assorted materials react to pitches of various

velocities. She is also an assistant coach on the UMass Lowell softball team.

"It was more of a pipe dream when I was younger, but the more I was able to travel and meet people, the more I was able to realize that I can actually make a career in bat design," she says. "I'm working on the characterization of softballs and softball bats, then in turn studying their interactions and designing for maximum performance."

Yee has already received a job offer from Combat Sports in Ottawa, where she will work after graduation, helping the Canadian company become the market leader in composite bats.

"I want to work with athletes and use their feedback to make the best bat possible," she says. "I'm just trying to take what I've learned to like about bats over the years to design one someday." —RM

O'DONNELL WINS ECAC MARSH AWARD

Director of Athletic Media Relations Chris O'Donnell was named the 2012 recipient of the Irving T. Marsh Award for excellence in sports information by the Eastern College Athletic Conference-Sports Information Directors' Association. O'Donnell has been with the University since 1999, during which time he has consistently placed UMass Lowell on the national stage, successfully pitching stories to The Boston Globe, Boston Herald, The New York Times and National Public Radio. He has also helped place six athletes and coaches in Sports Illustrated's "Faces in the Crowd."



Senior Joanna Sutton staged a wedding in which she married athletic mascot Rowdy the River Hawk, as part of the Athletic Department's recent "Rowdiest Fan" photo contest. Her first-place prize? The Rowdy mascot costume that was retired in 2008.



ALL IN!

Both campus and Facebook are plastered with cool posters like these, many of which feature River Hawks athletes as part of the Athletic Department's Mission: All In campaign, which aims to increase student attendance at home games and other campus events. By scanning their IDs at games and events, students accumulate points which are tallied online—and can help them win things like cash, parking passes, free books for a semester, free meal plans and housing lottery picks. Pictured from left: Diamond Jones and Nicole Giaquinto, Neil Lavanchy and Kayla McDonald.

Hockey Team Looks to Build Same 'Unique Chemistry'

This season, look for the River Hawks hockey team to pick up where it left off last year, having graduated only four players. With a 24-13-1 record—and a national ranking of ninth—the team ended the 2011-12 season in the regional finals of the NCAA tournament, with a 4-2 loss to Union College.

"Last year the team built a unique chemistry, which grew as the season progressed," says Head Coach Norm Bazin '94, '99. "We hope our core of leaders can create that strong bond again this season. Doug Carr had a special season last year and the challenge will be for him to have a similar effort this year."

Net minder Carr, a junior, is joined by senior captain Riley Wetmore, who returns after leading the squad in both assists (14) and total points (39) last year.

The River Hawks roster also features freshman goaltender Connor Hellebuyck (Commerce, Mich.) and Dmitry Sinitsyn (Moscow, Russia), both of whom were chosen in the NHL draft in June. Sinitsyn was a red-shirted freshman last season, so he'll have a full impact on this year's squad. Four other players participated at NHL development camps and their talent, coupled with the experience they gained from last season's run, is what will make them another dominant contender in Hockey East.

Improving their chances is Bazin, 2011-12 Hockey East Coach of the Year, who not only helped UMass Lowell pick up 19 additional wins over the year before, but eliminated its 16-year playoff drought.

"We hope to continue to execute offensively to make up for the most recent graduating class," the coach says. "We had several players attend NHL development camps which should ultimately build confidence. Our team is anxious to prove themselves in an ultra-competitive league."

"Every year we hope to compete for the three major championships and this year will be no different. We expect to improve. That is our only focus at this time."



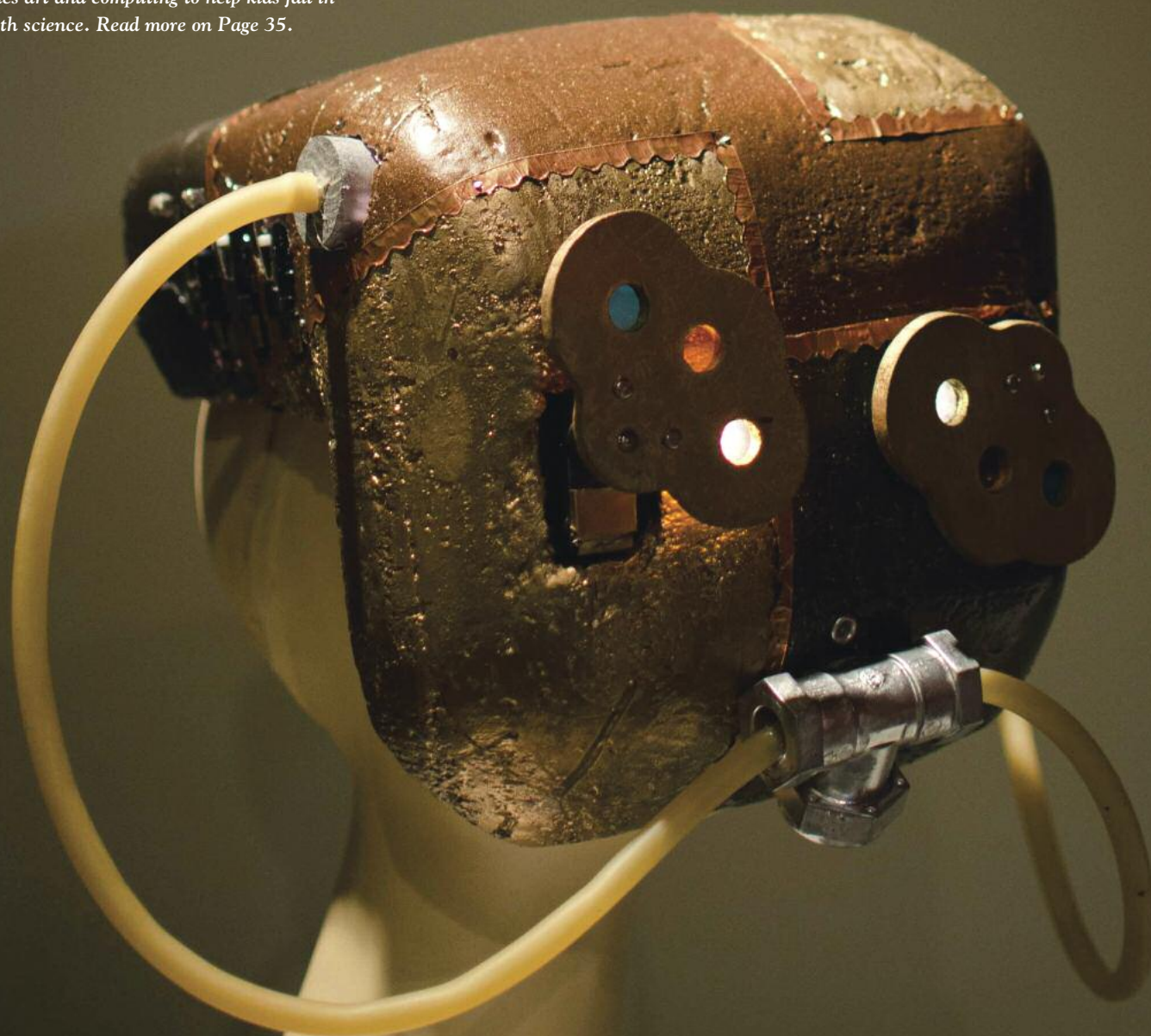
Check out the team's schedule at
www.goriverhawks.com.

Features

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- 44 FACE OF PHILANTHROPY

The University's innovative Artbotics program combines art and computing to help kids fall in love with science. Read more on Page 35.





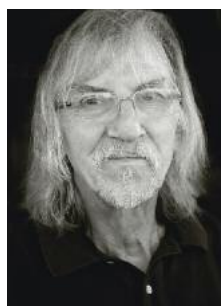
FINDING ARNO

By Sheila Eppolito

"Oulunjärvi Afternoon" by Arno Minkkinen

It is, after all, the stuff of great film: the movie star-beautiful mother gives birth to a baby deformed by a cleft palate. Not quite “Beauty and the Beast,” but not far from it. Prof. Arno Minkkinen, world-renowned photographer, is that child. And now—more than 60 years later—he’s ready to tell his story.

In his soon-to-be published, semi-autobiographical screenplay “The Rain House,” his young character, Aku, is teased relentlessly. Called “rabbit,” he was often excluded from games. “They think if I play too hard my lip will split open,” says Aku, who always looks down to try and hide his face.



“I was a pretty lonely kid,” says Minkkinen, who is the 2012 Nancy Donahue Endowed Professor of the Arts.

Born in 1945 in Finland to parents Reino and Riitta Minkkinen, he

knew early on what was expected of him. His father—born in Japan to Finnish Lutheran missionaries—wanted Arno to go to Japan himself and spread the word.

“My father heard the calling, but the war got in the way,” he says. “So he left that dream to me.”

It wasn’t to be.

In a scene from the screenplay, his character mocks the Biblical Jonah story as he resists his father’s pressure. “It’s not my dream, not my desire, not my whale,” he says.

In real life, the conversation occurred over the phone.

“I called my father from college, when I knew I wanted to change my major from pre-seminary to English,” Minkkinen says. It was the last time they spoke. His father—a strict teetotaler—served as archivist and diplomatic secretary at the Finnish consulate in New York City. In a dark twist of irony, he died lifting a case of alcohol in preparation for a celebration for dignitaries.

“I never got to make amends with my father,” he says. “That’s part of the reason I wanted to write my story.”



Minkkinen chats with his father in Brooklyn, N.Y., in 1953.

As a student at New York’s Wagner College, Minkkinen had little self-confidence. Then, he “pole vaulted over his insecurity” by asking out one of the most beautiful girls on campus—the captain of the cheerleading squad.

“She said she’d have to ask her boyfriend, Jay, the quarterback of the football team,” he recalls. “I still remember the night—how it felt to be with this beautiful woman, standing on the deck of the Staten Island Ferry on the way to dinner and a show.”

Bolstered by the lovely evening, and by the new way people looked at him, he asked out another girl. And 16 more, always telling them it would be just once—“I’m working on something”—until one night on a frat party dance floor he laid eyes on Sandra Hughes, and she on him. (They’ve been together since.) The couple hitchhiked through Switzerland, Italy, France, Spain, England and The Netherlands after finishing Wagner’s study-abroad program in Bregenz, Austria.

Eventually, the pair moved back to New York to look for work.

Fans of Minkkinen’s iconic photography—he is best known for black-and-white nude self-portraits in natural settings—may be surprised to know that the camera was not his first artistic love affair.

“I wanted to write—maybe the Great Finnish-American novel—so [in college] I studied English,” he says. His choice was remarkable for someone who, at age 6, had emigrated to the United States speaking no English, and who couldn’t

Continued



**“I FOUND
A MIRROR,
AND BEGAN
USING IT—
AND MY BODY—
CREATING
IMAGES
LIKE NONE I’D
SEEN BEFORE.”**

read until the fifth grade. But, he realized he “hadn’t lived enough” to write fiction, so he took his brother Ari’s suggestion and chased down a job in advertising.

“I met with a headhunter in New York about a copywriting job at a Madison Avenue ad agency working on a camera account,” Minkkinen says. “The guy asked me if I knew anything about photography, and I muttered something about how I liked to tinker with my father’s Linhof camera.”

He got the job, but “it became clear pretty quickly that I wasn’t qualified,” he says.

Two weeks later, after reading everything he could find about cameras and photography, he was presented to the client—camera giant Minolta—as the expert on the account.

In a bit of foreshadowing, Minkkinen wrote Minolta’s classic tag line “What happens inside your mind can happen inside a camera.” Other clients included Peugeot automobiles and J&B Scotch—the famous “Jingle Bells” Christmastime billboard is also his.

Working on the Minolta account regenerated a nascent interest in photography. Minkkinen began using his father’s camera, experimenting with aperture, focus and depth of field. He put together a portfolio of his best hits, and applied to the Rhode Island School of Design. He was rejected.

So he applied to a summer workshop in Millerton, N.Y., to study with Diane Arbus—the artistic equivalent of working with Andy Warhol—and was accepted.

Two weeks prior to the workshop, it was cancelled abruptly. Arbus had killed herself. John Benson from the Moore College of Art took over.

The second day, Benson looked at Minkkinen’s work—juvenile shots of barns and cows like those he’d submitted to RISD—and told him to go home. “Give me better advice,” Minkkinen pleaded.

“Take a day off,” Benson said.

Says Minkkinen: “I wandered around, doing some soul searching and snapping shots. I found a mirror, and began using it—and my body—creating images like none I’d seen before.

“That forced day off changed me forever.”

Minkkinen and Sandy married, and he continued working in a variety of agencies, while longing to pursue photography in a lifetime career as an artist. He continued to experiment. Using his body in choreographed, dangerous and seemingly impossible positions, he created a portfolio of work. He reapplied to RISD, and was accepted.

Continued

Suddenly it happens. Five geese stop to read a stop sign.

At any moment they could scatter, along with your picture.

Your eye goes straight to the viewfinder.

With a Minolta SR-T 101, it stays there, as you frame, focus, and adjust exposure.



Nothing could be faster with built-in shutter speed scale and a lens opening indicator inside the viewfinder. A viewfinder always at maximum brightness.

With a Minolta SR-T 101, nothing interrupts your photographic dream of consciousness.

Click.

Honk! Honk! Honk! Honk!

Minolta

Minolta SR-T cameras are equipped with a patented "CLC" through-the-lens exposure system that automatically compensates to produce uniform exposure of dark areas in high contrast situations.

Now, instead of a "dark area" in the scene, you see a "bright area" in the viewfinder. The CLC system represents a radical step toward the "bright area" concept, automatically adjusting exposure to produce a uniform, bright image with a shutter speed of 1/125 or 1/250 second.

For more information, write to Minolta Corporation, 200 Park Avenue South, New York, N.Y. 10003, or Canada ArgusPhoto Ltd., P.O.

Suddenly two little hands pop out of nowhere. At any moment they could disappear, along with your picture.

To close in on the hands and squeeze the balcony railing together, you switch to a long telephoto.

With a Minolta SR-T 101 that switches happens in seconds. Shutter becomes mount. No aperture or ASA settings to readjust.

Then your eye goes straight to the viewfinder, where it stays, as you frame, focus, and adjust exposure.

Nothing could be faster with both a shutter speed scale and a lens opening indicator inside the viewfinder. A viewfinder always at maximum brightness.

With a Minolta SR-T 101, your photographic stream of consciousness remains undisturbed.

"Joey!"

Click.

"Get away from the balcony!"

Minolta




Minolta SR-T cameras are equipped with a patented "CLC" through-the-lens exposure system that automatically compensates to produce uniform exposure of dark areas in high contrast situations.

Now, instead of a "dark area" in the scene, you see a "bright area" in the viewfinder. The CLC system represents a radical step toward the "bright area" concept, automatically adjusting exposure to produce a uniform, bright image with a shutter speed of 1/125 or 1/250 second.

For more information, write to Minolta Corporation, 200 Park Avenue South, New York, N.Y. 10003, or Canada ArgusPhoto Ltd., P.O.

A rusty iron fence overgrowth in a landscape on your face ever walked.

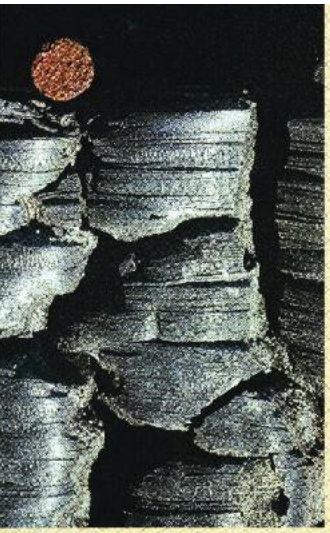

There's an undiscovered world you don't have to be an astronaut to see. A world of simple, ordinary things. Near the horizon and rest your eye here.

All you need is a Minolta SR-T 101. And an MC Rokkor macro lens.

Macro photography has never been easier. Built-in shutter speed scale and a lens opening indicator are inside the viewfinder. A viewfinder always at maximum brightness.

With a Minolta SR-T 101, nothing interrupts your photographic stream of consciousness.

Minolta

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Prof. Arno Minkinen was the copywriter for many award-winning ad campaigns of the 1960s and 1970s.

Between the bugs and the benz, there's a balanced machine.

If you combined the features that make a Mercedes-Benz famous with the features that make a Volkswagen economical, you'd have a more economical car.

A car that saves you money on gas and maintenance while offering you a higher standard of living on the road.

In other words, a perfectly balanced machine.

Now you can drive such a car. The new Peugeot 304.

Inside, you sense the work of an interior decorator, not a mechanic. You have a Peugeot styled, door-to-door carpeted living room by day. A cozy French bedroom by night. The plush front bucket seats are fully reclining.

Outside, and under the hood, you have the work of engineers. A car you can take corners in without sliding out, without feeling that little bit of fear you get going into a fast turn.

With Peugeot's front wheel drive pulling you through the curve, four solid independent suspension keeping the car level, Michelin radial tires gripping the road, and rack and pinion steering making the turn precise, that little bit of fear may just turn into a little bit of fun.

When faced with sudden stops, you have Peugeot's power-assisted front disc brakes to compensate for the time it takes you to react.

And what makes all this luxury so economical? Up to 30 miles to every gallon of gas!

That's because the machine. The new Peugeot 304. Let's more than have transportation at a price that shouldn't give you a fever.



What happens inside your mind, can happen inside a camera.

Sometimes it's easier to see a photograph with your eyes closed. Then your imagination can run free.

When your mind creates an image, the interpretations of it are infinite.

Is David Hamilton's photograph a childhood memory? Is the girl listening to a voice coming from the sea?

You can see more of a Hamilton's imagination in his book, "Dreams of a Young Girl."

There's a visual wealth to be discovered inside everyone. To uncover it, just close your eyes.

To capture it on film, choose a camera that lets your mind express itself.




Jingle Belle

Have a Dickens of a Christmas. Give J&B Rare Scotch.



When you open the back of a Contax, lifting the hood of a Porsche.

The Porsche Design Group, the same people who made Porsche the best-selling car in the world, have designed the fully automatic Contax RTS (Rangefinder Teleskop System) camera.

Like the design to drive a Porsche, the Contax is sophisticated, with a Contax is a masterpiece. The body resembles the hood. Everything is strategically located so both hands stay in their position. Your fingers don't have to find their place on the camera. They find it on their own.

To shoot requires only a touch of the button. Your impulses conveyed mechanically, immediately. The viewfinder gives both aperture and shutter speed scales. And either or, in auto mode, bright LED's.

Signa lock, completely variable shutter speeds, and a built-in auto-focus system. The optical Contax mirror system is built into the camera body. The body of the Contax is built into the camera body. The body of the Contax is built into the camera body.

The new auto-focus system of the Contax is built into the camera body. The body of the Contax is built into the camera body. The body of the Contax is built into the camera body.




John Gorman makes three wheels turn faster than four... just like the Good Old Days.

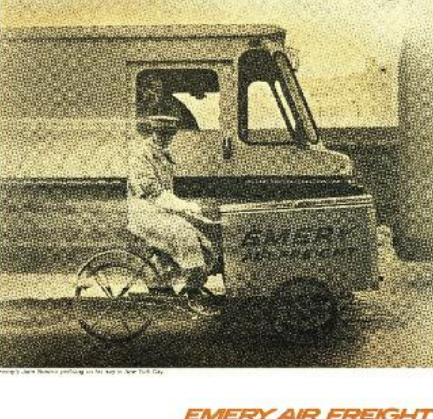
While most railroad men have built their careers along by the rails, John Gorman has built his career by the wheels.

Of course, his job requires him to travel. But when he's not on the road, he's in the good old days.

John Gorman is a man who makes three wheels turn faster than four. Just like the Good Old Days.

John Gorman is a man who makes three wheels turn faster than four. Just like the Good Old Days.

John Gorman is a man who makes three wheels turn faster than four. Just like the Good Old Days.



If the rear axle won't give, the passengers may have to.

Big rear axle means the rear axle won't give. The rear axle won't give. The rear axle won't give.

Big rear axle means the rear axle won't give. The rear axle won't give. The rear axle won't give.

Big rear axle means the rear axle won't give. The rear axle won't give. The rear axle won't give.






Prof. Arno Minkinen and Nancy Donahue look over his book "Saga: The Journey of Arno Rafael Minkinen" during a retrospective of his Spirit Level V Road Trip: Lowell to Lexington. The trip was supported by the Nancy Donahue Endowed Professorship.

"I studied with the great Harry Callahan, who would never give direction, just subtle feedback," he says. "Harry liked walking along the critique wall viewing 20 or more images in a row, but I only had two images to show for two weeks of work, so I placed one at the beginning and the other at the end and made Harry walk."

It worked. And not long after, word spread about Minkinen's talent.

"I wanted to bring Sandy to Finland, so we toured around my homeland," he says, adding that, soon after, he received an invitation to show at the Finnish Museum of Photography and a teaching position at Helsinki's University of Art and Design.

Finishing his last semester in Helsinki, Minkinen applied for a job in New York, but didn't get it. Instead, he returned to advertising and Madison Avenue, copywriting for clients such as Ilford photographic supplies, Yashica and Fuji film and cameras.

He didn't have to wait long for a great break: an assistant professorship at the Creative Photography Lab within MIT's architecture department. A four-year stint at MIT was followed by a visiting artist professorship at the Philadelphia College of Art (now University of the Arts). Then it was back to the ad game, this time in Boston, working for Friendly's Ice Cream and the Providence Journal Bulletin.

"FORCES OF LUCK BROUGHT ME [TO UMASS LOWELL], I LOVE MY STUDENTS, AND I AM ABLE TO WORK CREATIVELY AND COLLABORATIVELY. I AM IN THE RIGHT PLACE."

When Minkinen refused to write copy for an account for goggles needed in fly-over bombing missions, he was handed a pink slip, which he immediately placed back in his boss' pocket. That same year, Polaroid Corp. invited him to create a series of large 20 x 24 prints at the School of the Museum of Fine Arts Boston.

Minkinen finally left the Boston agency on his own terms when a letter arrived with an offer—teaching positions at both The University of Art and Design in Helsinki and the Lahti Institute of Design in Lahti, Finland. Two years later, he was offered a permanent professorship there.

"As thrilled as I was about the possibility of returning to my homeland, I knew the position was all about me—it wasn't what Sandy wanted for her life," he says.

By then, the couple had welcomed son Dan into their lives, making career decisions far more complicated. (Dan, a 2005 alumnus, followed his father's footsteps, studying photography. He now works as a digital imaging

specialist. Sandy recently retired from MIT Press, where she held a senior post for 22 years.)

"I cried, but knew I was doing what I needed for my family," Minkinen says, noting that he was able to negotiate with the Helsinki school for a lifetime position as docent—a "professor on call"—allowing him to stay in the U.S.

One last spell in advertising—at yet a different agency for his fourth and final stint—ended when he accepted a position in the UMass Lowell's Art Department. "Forces of luck brought me here," he says. "I love my students, and I am able to work creatively and collaboratively. I am in the right place."

Students agree—especially those fortunate enough to have participated in his popular Spirit Level foreign exchange trips. Since 1996, he's taken lucky students to Italy, Mexico and Eastern Europe. In each case, students create work that is exhibited and published, offering each of them a ready-made, professional portfolio.

This fall the Art Department announced a formal exchange program with the École Supérieure des Arts & Médias de Caen/Cherbourg in France where Minkinen lectured last fall.

And in October, six students from the University (joined by students and faculty from France and Norway) took an American road trip, with a several-days stop at photographer Sally Mann's Virginia farm, visits to the George Eastman House and the Museum of Art at RISD.

"Thanks to the Nancy Donahue Endowed Professorship in the Arts, we're able to offset some of the costs of the trip," says Minkinen, explaining that the professorship strengthens the University's arts programs by nurturing talent and passion in students.

Concurrent spring exhibits in Oslo, Norway; Caen, France and the University Gallery will showcase student work made on the journey.

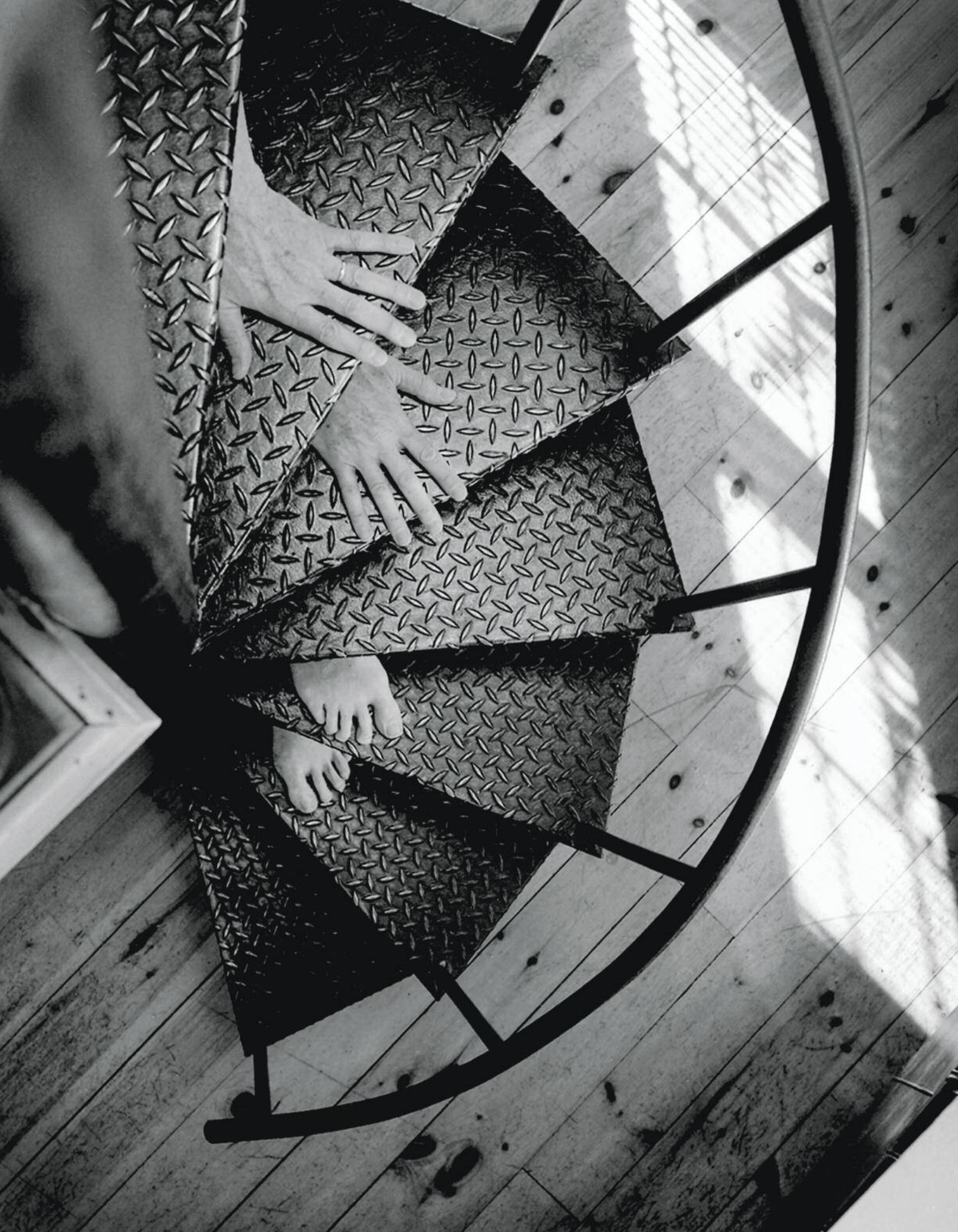
About a month before the trip, Minkinen sat on his deck overlooking Foster's Pond in Andover, talking about his larger life's journey.

He grabbed a piece of paper, and folded it carefully into three sections—two smaller outside sections flanking a wider center patch.

"If you think of life as a movie, there are 120 minutes," he says. "The first 30 minutes of my life's movie is the time I spent in advertising. Then, this bigger middle section, taking the next 60 minutes, is my photography. The last 30 minutes are my screenplay."

More paper, please. ■

"Nude Descending a Staircase" taken in Rockport, Maine, by Arno Minkinen



Coverstory

India's Merchant of Light

BY GEOFFREY DOUGLAS



Alumnus Harish Hande is Going Door to Door to Change the World

Harish Hande's "eureka moment"—a moment that upended his own life, and has raised the lives and prospects for more than half a million of India's poor—came in 1991, on a student trip to the Dominican Republic. He was 24 at the time, a native of Bangalore, India, pursuing a master's degree at UMass Lowell. His intended thesis was on thermodynamics.

It was on that trip that he met a man, a former Westinghouse engineer named Richard Hansen, who had launched a small company to provide solar power to poor households in rural Dominican villages.

What Hansen was doing was remarkable to the young Indian graduate student, a grand innovation rooted (as true innovations so often are) in the barest sort of simplicity: selling to the people only as much as they needed, often only 10 or 20 watts of power, for four or five hours in the evening to light their homes—for less than they had been spending on kerosene and candles.

"He was making technology affordable to the poor," Hande says today, "linking poverty to sustainable energy, and making it all work. That changed everything for me. Everything. I came back to Lowell, and threw my thesis in the Merrimack River. I knew I had found what I needed to do, and I didn't want to be tempted."

Continued



“HARISH BECAME FOCUSED ON HELPING THE POOR. TO ME, HE EPITOMIZES THE IDEAL OF HELPING THEM, IN AN ECONOMICALLY AND ENVIRONMENTALLY SUSTAINABLE WAY. I’M PROUD TO HAVE HAD A PART IN THAT.”

— Prof. John Duffy

Indian silk farmers use SELCO’s solar lamps to feed worms at night.

At about that time, he crossed paths with another solar-power advocate, a former anti-Vietnam War activist named Neville Williams, who had just been awarded a \$40,000 grant to install solar lighting in rural Indian homes. Williams asked Hande if he’d be willing to run the project for him. He came close to agreeing, he remembers, but in the end the answer was no.

“You do a project [like that], you take photographs, you show them to the fund manager, and that’s it,” Hande would say later, in a preview of the thinking that would guide his course from then on: “But what happens to the people? Let’s look at the long term. Let’s look at a company [instead].”

UMASS LOWELL: INNOVATION INCUBATOR

As it happened, he was in the right place, at the right time, to be thinking in such terms. UMass Lowell in the early ’90s was among the very few U.S. universities offering courses on renewable energy and sustainability, which were still looked on as innovative at the time. (“No one was even talking about it,” Hande says). So when he approached his thesis advisor, engineering Prof. John Duffy, with the proposal to change his focus from technology to the socio-economic dimensions of solar power—to write instead about his plan to bring affordable energy to his home country, where 57 percent of the people lived without electricity—the professor was supportive.

“Harish became focused on helping the poor,” Duffy would say later. “To me, he epitomizes the ideal of helping them, in an economically and environmentally sustainable way. I’m proud to have had a part in that.”

His academic affairs now in order, Hande returned home. For the next two years, he traveled between villages in the southern-India state of Karnataka, subsisting on savings, working when he had to—at one point as a laborer in a bus station—living among the villagers, trying to convince them that solar energy could work.

“I was going house-to-house with my solar panels, and at every one it was the same: ‘What is this?’ they would ask me, ‘What is this thing you have there? Are you telling me that will light my house?’”

Toward the end of his second year, he met a farmer named Arvind Rai—who, like all the others before him, was unconvinced that the new technology could work. But his 75-year-old mother felt otherwise—and one day, when Arvind was not at home, Hande quietly installed the system, then left.

“I have never seen my mother so happy,” Arvind told him the next day. And that was the beginning.

Not long after, he did the same thing at a Catholic church in the village of Pavur—where, over time, through the villagers who attended Mass every Sunday, the word began to spread. The church’s priest, Hande would say later, “always jokes that he is the marketing man.”

POWER BY THE HOUR

Meanwhile, of course, there was the matter of financing: Even if the villagers would agree to use his systems, how would they afford it? “How do you sell anything,” he asks, “to a man who earns 15 dollars a month?”

His answer to this relies on the same blend of simplicity and innovation as his approach to the original problem: first, he says, you determine just what the cost will be—then how it might be lowered: “Do you really need four lights in the house? Could you get by with one between the dining room and kitchen? How can we create the optimal use?”

Once the need is established—and for each customer it is different—the next step is to seek funding. With this in mind, Hande began approaching rural banks, usually in the company of his would-be customer, in an effort to arrange financing. If a home-lighting system were to cost \$300, for instance, the user might agree to pay a small amount down and then \$4 or \$5 a month over a five-year

Continued



Harish Hande '98, '00 helps install solar panels on a rooftop in rural India.





Harish Hande '98, '00 visits with a solar customer in rural India.



**“LINKING
POVERTY TO
SUSTAINABLE
ENERGY, AND
MAKING IT ALL
WORK. THAT
CHANGED
EVERYTHING
FOR ME.
EVERYTHING.”**

—Harish Hande

period. At the same time, he might find himself generating extra income as a result of the added work-time made possible by the newfound evening light. Or his children's education might benefit now that they could study after sunset. All in all, Hande would argue to the lenders, it was a worthy investment in the social infrastructure of a region.

Two rural banks signed on. There would be more later, but that was all it took. In 1995, four years and half a world away from the birth of an idea, a new company, co-founded by Hande and Neville Williams, was launched in Bangalore: Solar Electric Company (SELCO India), devoted to the delivery of customized solar lighting systems to India's rural poor.

“The premise has always been that the poor can't afford technology,” Hande says, “that they are on the bottom of the pyramid and can only be helped through charity. I wanted to challenge this—to prove that, if the right approach is taken, the poor can be made full partners in the system, can be empowered to create their own assets.”

It was a struggle every step of the way. Following the first few months of his efforts, just 14 houses in three villages were being lighted with solar power. But the number grew quickly. As of today, SELCO, now with 192 employees in 26 service centers, reaches 145,000 homes and 5,500 institutions (churches, mosques, community centers)—more than half a million people in all—across the Indian states of Karnataka, Kerala and Gujarat. Its energy systems provide power not only for lighting, but also for cooking, computing, communications and small appliances.

For all this to happen, hundreds of grassroots partners sell, install and maintain the systems—not only to households, but to farmers, midwives and street vendors, who buy their power by the hour to earn the rupees that feed their families and fuel the economies of their villages. (Like India's rose-pickers, working in the pre-dawn darkness, who used to have to hold a lamp in one hand and pick roses with the other, but now—thanks to solar-

powered headlamps acquired through SELCO—can pick with both hands, raising their output and their earnings.) The synergy keeps spreading.

‘SOCIAL ENTREPRENEUR OF THE YEAR’

The world has taken notice. Last August in Manila, Harish Hande was on hand to accept the Philippines' Ramon Magsaysay Award—the Asian equivalent of the Nobel Prize—for “his passionate and pragmatic efforts to put solar-power technology in the hands of the poor, through a social enterprise that brings customized, affordable and sustainable electricity to India's vast rural populace.”

Already by then, he had been named by the Schwab Foundation for Social Entrepreneurship as its 2007 “Social Entrepreneur of the Year,” and by Business Today as one of its “21 Young Leaders for India's 21st Century.” He has received awards from Al Gore and Prince Charles. In 2007, he was the featured speaker at the Clinton Global Initiative.

“Harish is an extraordinary example of combining humanitarianism with business in bringing renewable power to the people,” says John Duffy, his old UMass Lowell professor. (Hande earned his master's in 1998 and his Ph.D. in 2000. His thesis, says Duffy, was “essentially a business plan for SELCO.”) “In our renewable-energy engineering program, many of the students look to him as a role model.”

The Magsaysay award came with a \$50,000 cash prize, which Hande has been using mostly to provide capital to “young, poor entrepreneurs, to encourage them to replicate SELCO in different parts of India and the world.” It is all part, he says, of a larger, slow-unfolding plan.

“We can't stop with just this,” he says. “There are 2 billion people today without access to reliable electricity. Two billion, most of them in poor, rural areas. We have a model here that will work; we can teach it to others in the [rest of] India, Asia, Latin America—clean, reliable energy that will light homes, build assets, improve lives. There's no excuse for stopping now.” ■



INNOVATION & ENTREPRENEURSHIP:

WHETHER IT'S BEAN SPROUTS OR CANCER DRUGS, IT ALL BEGINS WITH AN IDEA

It used to be, if you thought you had an idea for a better mousetrap, you might try to sell it to a pest-control company. Or you might look for a marketer and hope he could sell it for you. Or maybe you'd just stand on the corner, pass out free samples and hope for the best. Any way you approached it, the odds against you would be long.

That may be changing. There's the web now, for one thing. And there are more middlemen—entrepreneurs, venture capitalists—around today than there once were, willing to gamble on new ideas. But maybe the best news for today's better-mousetrap people: there is an explosion of new venues, like those now at UMass Lowell, whose sole purpose is the fertilization of new ideas.

Among the most visible examples is the University's Office of Commercial and Intellectual Property (CVIP), now nearly 20 years old, whose chief mission is the movement of innovative technologies—new ideas—from UMass Lowell's laboratories and research centers toward the businesses that can market them, and finally into the mainstream where they belong. CVIP's roles include the evaluation and licensing of new technologies, the development of partnerships between faculty researchers and outside businesses, or even, where advisable, the launching of new companies.

This summer, CVIP helped facilitate a licensing agreement for a patent based on University research that will result in the com-

mercialization—through a Waltham technology firm—of nutritional supplements to enhance cognitive functioning.

"Technology and science innovations are moving at incredible speeds already," says Management Prof. Valerie Kijewski. "What is [still] lacking is the connection between the new science and the practical problems that can be solved in a way that [allows] the owners of the science to make money on what they have created. This is the purpose of our training on technology entrepreneurship."

M2D2: A BRIDGE BETWEEN INVENTION AND PRODUCTION

Much the same mission, though with a more targeted focus, is being achieved through the efforts of the Massachusetts Medical Device Development Center (M2D2), a joint venture of the University's Lowell and Worcester campuses, which works with new Massachusetts-based medical-device companies to bridge the gap between invention and production.

Housed in UMass Lowell's Wannalancit Mills complex, M2D2 serves as both an incubator and brain-trust for medical start-ups in the state, providing research facilities and grant money, as well as liaisons with some of the venture-capital firms that serve as a source of funding.

Last year alone, four Massachusetts companies, including one that developed a device to improve screening for prostate cancer and another that offers promise of non-invasive skin-grafting, were able to raise \$5 million in funding as a result of grants obtained under an M2D2 program.

STUDENTS ARE ENTREPRENEURS FROM DAY ONE

But not all, or even most, of the new ideas are coming from outside the classroom. One of the grandest of them all, in fact, is an idea that begins and ends with students: the Manning School of Business's three year-old MSITE program—Master of Science in Innovation and Technological Entrepreneurship—which, by combining courses in business education (entrepreneurship, accounting, marketing, finance, etc.) with the University's traditional strengths in engineering and the sciences, allows students to earn both bachelor's and master's degrees in five years. The idea behind it, of course, is to equip them with the tools to parlay their technological know-how into business success, ideally without necessitating the use of outside capital.

"This degree gives students the tools to develop solutions and a business around them," said Management Prof. Steven Tello at the time of MSITE's launching. "Our economy needs this." But the spirit of innovation doesn't

and economic development. "Every kid in freshman orientation, for instance, participates in what we call our 'Difference-Maker' sessions, where we talk about the meaning of entrepreneurship, and just making a difference in the world."

Making a difference, the students learn early, can take many forms. One recent example, an initiative to come out of Tello's office, is the Climate Activity Committee, which awards prize money to students for new ideas related to the environment. Last year's bike-share program—"FreeWheelers"—is one example; another is "Lowell Sprouts," run by UMass Lowell student Mary Skelley, which uses school gardens as a vehicle to teach local middle-school children the rudiments of sustainable, organic agriculture.

"Whether it's bikes, bean sprouts or some of the more technical stuff," says Tello, "the goal is to build an entrepreneurial ecosystem across all disciplines—technology, nature, the arts and humanities—and to do it in ways that have value for our community. And once we've done that, we hope to keep these people here, rather than lose them to Silicon Valley." ■



take seed by itself: "Our goal is to get the students engaged in the idea of entrepreneurship right from the day they arrive on campus," says Tello, who serves also as the University's associate vice chancellor for entrepreneurship



InnovationNation

A ROUND-UP OF EXAMPLES FROM OUR LONG HISTORY OF INGENUITY



EAMONN HOBBS '80: 30 YEARS OF CHALLENGE, RISK AND CHANGE

If you were to scour the world for the prototype of the entrepreneurial spirit, your search might end with **Eamonn Hobbs '80**. He's a man who takes risks for a living: creates products, dreams up inventions, founds companies, jumps out of planes (or used to—he only flies them today). He was appointed to the Air Force Academy to be an astronaut, then quit when they told him his eyes weren't good enough; he went to UMass Lowell instead, where he ran a business out of his dorm room selling stereo equipment. ("I made a lot of money," he said about it later. "It led me to thinking that business was easy. That's one of the beautiful things about being young and stupid."). Somehow he found the time to graduate, with a degree in plastics engineering. He got recruited by a multibillion dollar company, where it took him three years to decide he'd do better on his own. A year later he had his own company, the first of two he would found.

Hobbs is a biomedical engineer, with nearly 30 years' experience selling medical devices. Today he is president and CEO of Delcath Systems in New York City, a company that specializes in the localized saturation of cancer drugs. It is a small company, with high risks, but that is the Eamonn Hobbs way. He's worked there three years, since the summer of 2009, when he left Angiosystems—which he founded, and ran for 20

years—to pursue what he calls his entrepreneurial interests.

Angiosystems, a medical-device firm in Queensbury, N.Y., is a pioneer in the delivery of minimally invasive cancer and vascular-disease treatments. It is also extraordinarily successful, with sales of more than \$215 million a year, hailed by Forbes as one of the 200 Best Small Companies the U.S.

There have been other companies along the way, and other achievements: he sits on too many boards to mention and has 30 patents to his name. His path has been varied and whirling, but the theme, always, has been challenge. Challenge and enterprise and endless energy.

"When I left [UMass Lowell], I felt both confident and empowered to succeed. It was an incredible education," he says.

STUDENTS SEE THE WORLD—AND CHANGE IT

As innovation yields solutions to some of the world's most urgent problems, it also shrinks the world. That's why **Erin Webster and David Harrington**, both senior engineering students at UMass Lowell last year, ended up in Turkey the summer before last. And in India, for nearly a month—together with two fellow students and two members of the University staff—the summer prior to that.

Webster and Harrington are creators of the "Mind Mouse"—a device that uses brain waves to control a software package, which in turn enables victims of crippling nerve diseases to communicate via tablets or PCs—and potentially, says Harrington, "to open them up to the world of computer games, music and the Web."

The India trip came after they were invited to spend nearly a month teaching assistive technology at two Indian institutions. The trip to Turkey was the product of a \$50,000 grant from the National Science Foundation (NSF) to fund an international workshop on assistive technology.

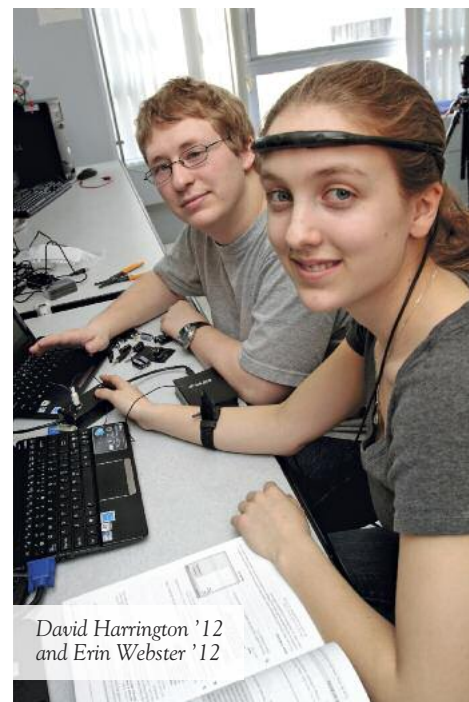
Both trips, as well as the Mind Mouse itself and a host of other innovative student projects conceived over the past two years, are the outgrowth of a bold new venture: the **Merrimack Valley Sandbox**, launched in December 2010 with funding from the Deshpande Foundation. Based at UMass Lowell, the Sandbox is a collaboration of regional businesses, nonprofits and educational leaders designed to encourage and incubate new companies that will, in turn, create new jobs in the region and address pressing social needs. It is modeled on two other "sandbox" initiatives, in India and Canada, both also co-founded by Gururaj "Desh" Deshpande, an Indian entrepreneur and philanthropist, who co-chairs a national council to support the President's strategy on entrepreneurship and innovation.

Erin Webster credits the opportunities offered at the University for much of the project's—and her own—success: "It's part of the reason I came to UMass Lowell. I turned down other universities because you can't get into their labs till you're a grad student. I [didn't] want to wait that long."

ANCIENT HISTORY COMES TO LIFE ON CAMPUS

Swords clashing, spears flying and disagreements over the origin of chain mail. Just your average history class at UMass Lowell.

To bring ancient history to the classroom, the History Department



David Harrington '12
and Erin Webster '12

sponsored a visit by Higgins Armory Museum educators to **Prof. Ethan Spanier's Warfare in the Ancient World and Byzantine History classes**. A demonstration in front of Sheehy Hall featured a fully costumed reenactment of battle between a Celtic warrior and a Roman soldier.

"I really believe experiential learning activities like this—seeing the weapons and hearing the history in context—bring a new sense of understanding for my students," says Spanier.



STUDENTS GET CASH FOR IDEAS IN THREE-MINUTE PITCH CONTEST

At freshman Convocation this fall, the Center for Innovation & Entrepreneurship hosted a contest in which **three student inventor groups vied for a \$1,500 grant** from The Merrimack Valley Sandbox.

"The pitch contest was a reminder to all freshmen that this University values their commitment to changing the world through innovation, creative problem-solving and entrepreneurship," says Steve Tello, associate vice chancellor of entrepreneurship and economic development.

After each team presented a three-minute "pitch" the students in the audience were asked to take out their cell phones and to text vote for their favorite venture. The results were shown live on a screen as the votes rolled in.

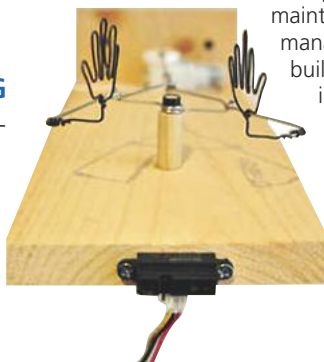
The winning team, Supporting Devices—led by mechanical engineering graduate students Adam McLaughlin and Jordan Tye—will use the money to improve their customized crutch grip, which uses integrated electronics to provide long-term crutch users with easy access to iPods, cell phones and related devices.

Second-place team Proto2Go (led by electrical and computer engineering alumni David Harrington and Erin Webster) received \$1,000 to offer product prototyping solutions to start-up companies without engineering backgrounds. Third-place team Green Bikes of Lowell (led by business senior Peter Cote and alumnus Samir ElKamouny) received \$500 for their plans for a bicycle-share program in the city.

"Pitch contests force students to closely consider and refine their ideas—they must choose their words wisely in order to present a compelling story that demonstrates how the proposed solution addresses a pressing need," Tello says.

ARTBOTICS: COMBINING ART AND COMPUTING

An innovative collaboration between UMass Lowell's Computer Science and Art departments, **Artbotics**



IN 2011, UMASS LOWELL GENERATED \$36.5 MILLION IN REVENUES FROM FACULTY DISCOVERY AND INNOVATION.

unites art and robotics—bringing science to life for more than 1,000 students and educators throughout greater Lowell.

"Some people think robots and science are cold and emotionless, but Artbotics changes their perceptions," says Adam Norton '10, who co-directs the program after participating in it as a student here. The workshops he holds at the region's schools help students get excited about an industry in desperate need of skilled professionals.

"They can gain a different experience of programming other than staring at a screen, because they can make the robot perform an action and then see it right away," Norton explains. "Artbotics students see robotics as art and expression—we learn more about science while creating."

ATTACKING ASTHMA WHERE IT LIVES

Instead of sitting in their offices and labs doing research on asthma, professors on **UMass Lowell's Healthy Homes Program** team, decided to go to the source—visiting 160 Lowell homes with 237 asthmatic children. Environmental health workers assessed risks such as mold and pests, and tested dust samples in a lab to identify the presence of dust mites, cockroaches and mice, which can trigger attacks.

They then educated families and offered solutions.

A year later, the researchers surveyed the parents and discovered that asthma attacks decreased by 76 percent, hospital emergency room visits decreased by 81 percent and the physical and emotional health of the children improved substantially.

To sustain the program, the team also conducted training on healthy home practices with maintenance and facility managers of apartment buildings, housing inspectors, day care providers, first-time homebuyers and health professionals.

ALUM PRAISED FOR INNOVATION IN ACTION

Susan Gordon '12 is passionate about finding ways to provide better health care for the influx of older adults in America.

One of her ideas—a restraint-free environment on a neuroscience floor at Brigham & Women's Hospital in Boston, where she is nursing director—earned her a spot as a national finalist for the Innovations in Practice Award by the National Gerontological Nurses Association.

Gordon, who has dual nurse practitioner certification in adult acute care and gerontology, graduated from UMass Lowell's Doctor of Nursing Practice this spring.

"I have a broader view of health-care issues because I was in class with financial and business people as well as with other nurses," says Gordon, who developed the restraint-free project for one of her UMass Lowell classes. "It's not a cookie cutter program. In most classes, I was able to do research or projects on subjects that interested me that I could apply to my job today."

REVOLUTIONIZING EDUCATION

In 1996, America was going online. Although Twitter, YouTube and Facebook were still years away, more people were booting up and dialing in every day. Just as the digital revolution was starting to transform everything from buying a car to booking airline tickets, UMass Lowell launched its **online and continuing education program, one of the first of its kind in the country.**

"It really was the first time we had an opportunity to create a new model for education," says Jacqueline Moloney, UMass Lowell's executive vice chancellor and the driving force behind the launch of the online program.

The program started with seven information technology classes and a total of 87 enrollments. It has grown steadily ever since, now boasting about 900 courses across a range of disciplines, from biochemistry to international law, with more than 20,000 enrollments during the past

academic year. Students can now earn seven different undergraduate degrees, 10 graduate degrees, 15 graduate-level certificates and 11 undergraduate certificates—all without ever stepping foot on campus.

The online program has received numerous awards for excellence in teaching, faculty development and leadership from The Sloan Consortium, or Sloan-C, an international organization promoting quality in online education.

USING MILITARY DEFENSE INGENUITY TO FIGHT SKIN CANCER

Physics Prof. Robert Giles, who directs UMass Lowell's Submillimeter-Wave Technology Laboratory, received a grant recently to develop **terahertz-imaging technologies currently used in government and military defense for biomedical and health-care** industry applications. The technologies will be used for imaging skin cancer cells, screening for cancerous tissues and testing for exposure effects of terahertz radiation.



GREENER WIND ENERGY

Researchers here were awarded \$1.5 million by the National Science Foundation to develop the next generation of wind-turbine blades. **The team will create new sustainable, bio-derived materials for manufacturing greener, more cost-effective blades.**

"We will assess and understand the impact this blade conversion will have on the economy, wind industry, environment and society," says mechanical engineering Prof. Christopher Niezrecki, who is the principal investigator for the project and a member of the University's Wind Energy Research Group. ■

EMC

EMC

Written in the Clouds

BY DAVID PERRY

The UMass Lowell-EMC Partnership Was Meant to Be

Jeff Brown '83 is a computer-world problem solver. Heather Healy '93 is a world-class executive and mentor, and Andrew Chanler '06, '07 spends his days at work on a data storage product he calls the "Cadillac" of its class.

All are employees at EMC Corp., the Bay State-rooted data storage powerhouse whose influence wraps around the globe and through the sky, thanks to its "cloud" storage solutions.

Each is also a UMass Lowell grad, thankful for the basics he or she learned here. And they feel comfortable returning to the well.

"When I've had an opportunity to do so over the years, I've hired part-time employees, interns," says Brown, pictured below. "And I always try to go back to Lowell."

Healy visited the school not long ago to speak to students about the pitfalls of Facebook and prospective employers.

"It's a good relationship between us and EMC," says William Moloney, a veteran computer science professor. "We'd had an especially strong relationship with Data General, including internships. And EMC bought them. So we'd had a lot of graduates who were absorbed, already there."

Moloney also does consulting work for EMC, "which enables me to alert them to prospects we have within the department."

UMass Lowell's Computer Science program is "a nuts and bolts experience for the kids.



They are well-versed in a lot of details of a lot of the work that is done at EMC, so it is a good fit. Our graduates leave us very, very well prepared," he says.

As a distinguished engineer at EMC, Jeff Brown, pictured above, can attest to that: "[The University] prepared us to think about how to think about problems," says the 52-year-old. "How to break things down. How to work through them to get a solution and put an end to the problem."

A graduate among pioneers with the first University of Lowell computer science class, Brown found his job with Data General upon graduation, and has stayed on since EMC purchased Data General in 1999.

Based in Hopkinton and founded in 1979, EMC is a leading developer of information infrastructure technology and solutions. It is a global venture with more than 55,000 employees.

More than 250 of those are UMass Lowell alumni.

"We have a strong partnership with UMass Lowell," says Marie Gunning, EMC's campus recruitment coordinator. "It is one of the top schools we recruit from year after year for all of our business and technology needs. We hire interns and full-timers."

Gunning says UMass Lowell students "stand out" as "hard-working, dedicated employees. Their energy and enthusiasm have been a great transition into EMC's culture."

For UMass Lowell's computer science graduates, a spot in EMC's massive workforce is more than a job.

Andrew Chanler, 29, pictured below, earned both undergraduate and graduate degrees in computer science at UMass Lowell. And then he walked into a job at EMC.



UMass Lowell first popped up on the New Jersey native's radar because of its unique and intensive Sound Recording Technology program, which yields some of the best-trained sonic professionals on the map. But before he left the Garden State for Lowell, he decided to switch to computer science, "and by my second year, I knew I'd made the right choice. I was getting involved in the department," he says.

Now a principal software engineer in the Enterprise Storage Division at EMC, he designs, implements and debugs software for the Symmetrix VMAX product, which he calls the "Cadillac of data storage systems." He calls EMC "a great place to work."

When Chanler was a sophomore, Prof. Fred Martin offered him a lab job between semesters, working on an interactive tool to help teach math to children. That led to work with Prof. Holly Yanco, whose lab included graduate students. Their experience and enthusiasm rubbed off on Chanler, and his work branched out to robotics and artificial intelligence.

He later worked as a teaching assistant in the department.

"It was quite a learning experience," says Chanler. "It was such a plus, in addition to what I learned in the classroom."

Moloney told him he should check out EMC's recruitment night, an open house where prospects and the company checked one another out. The company sent a bus to various schools and drove them to Hopkinton. In a sense, Chanler never left the bus.

Chelmsford native Heather Healy, pictured below, began her time at the University in 1985. She did not make it easy on herself,



working full-time at Digital Equipment Corp. in Nashua, N.H., after her freshman year while carrying a full course load.

"I really wanted the work experience," she says, adding that she changed her major from computer science to management information systems along the way. "It turned out to be ideal for my career."

Healy was one of but a few women in computer science.

She seems to have maintained her collegiate pace. She stayed with Digital for six years, also earning a master's degree in software engineering from Brandeis University. Since joining EMC 13 years ago, Healy has become a highly touted executive known for thinking strategically, and was named a Mass High-Tech Woman to Watch in 2008.

Says Healy: "The greatest thing I got from my experience at the University was confidence. I tried a lot of different things. And I found I could do pretty much anything I wanted to. So I discovered a sort of fearlessness. The program itself was pretty forgiving if you wanted to try something.

"I could sprinkle myself into a lot of different types of courses. And that gave me a broad background. When I graduated, between school and my work experience, I could sit in an interview and handle it, no problem. It was definitely a great experience."

Now vice president and business unit CIO for EMC's global Centers of Excellence, Healy is the highest-ranking UMass Lowell graduate at EMC. ■



By David Perry

The Education of Gordon Halm

HOW A 51-YEAR-OLD FROM GHANA FOUND HIMSELF ONSTAGE AT THE TSONGAS CENTER



At 4 a.m. on a Saturday in late May, Gordon Halm gives up on sleep. He slips from bed and leaves his West Sixth Street home in Lowell's Centralville neighborhood to walk his dog and buy the morning paper. He returns home to help his wife, Beatrice, ready his sons for the big day.

Gordon slips on his cap and gown. He looks in the mirror. Yes, he thinks, *this is real now, my dream made flesh.*

He arrives at the Tsongas Center with his family at 7:50 a.m. At 8:30, he joins his classmates.

Gordon's smile is beatific.

Draped in robes and capped with mortarboards, the students appear indistinguishable. Some wear sneakers, others heels. Some wear suits, some cutoffs.

The drape of the black graduation gowns hides individual style. For nearly three hours, they are simply the Class of 2012.

But there is something different about this man in his early 50s with the big smile. He is a father of three boys, 5,000 miles from his birthplace—Winneba, Ghana, a coastal West African fishing town.

Gordon's line nudges forward. Students hand name cards forth. The reading of each name sets off a micro-eruption among family and friends seated in the arena's bowl.

Some of the graduates show little emotion.

The line shortens. Gordon shifts from foot to foot, anxiously. He closes his eyes, to freeze the moment.

In the seats up front, one graduate blows bubbles. The soapy orbs tumble a few feet through the air before they pop, plop onto another gown or plummet to the arena floor.

Others bellow recognition as classmates they know cross the threshold and grasp their diplomas.

Continued



Gordon Halm celebrates his degree after Commencement at the Tsongas Center.

**“WHERE I
COME FROM
THIS IS A VERY
BIG THING.”**

— Gordon Halm

Gordon is more than twice the age of most of the graduates. He is there to grasp something “no one can ever take away from me.”

He moves in line behind his fellow liberal arts classmates. Around his neck is draped a graduation gift: a colorful scarf Beatrice had made in Ghana. Its bright green, red and yellow stripes pop off of a black background.

Twenty-nine minutes after the first 2012 graduate gets a diploma, Gordon stands at the lip of the stage of the vast Tsongas Center. He hands his name card up to the stage.

“Gordon Halm,” says the woman.

Gordon looks up. Climbs the eight steps to the stage. He grasps his bachelor’s degree. Liberal arts, with a concentration in psychology and sociology.

‘YOU CAN’T FORECLOSE ON MY EDUCATION’

The Tsongas Center is packed with graduates and their families. For the fifth consecutive year, there are more graduates than ever, a reflection of UMass Lowell’s growth since Chancellor Marty Meehan arrived. There are for the first time two ceremonies, at 9 a.m. for undergraduates and at 2 p.m. for graduate students.

The Class of 2012 arrives at the threshold of graduation from 69 nations. They hail from 39 U.S. states. Eight grads have amassed perfect 4.0 grade averages, and 36 percent earn academic honors.

Meehan lends context to their time at the University in the form of a challenge. The Class of 2012 has been witness to conflict, economic crisis and more, he says. Their time in the classroom was preparation, “to help forge the solutions we desperately need in today’s world. ... This commonwealth and this country need you.”

The Commencement keynote speaker, U.S. Secretary of the Interior Ken Salazar, recalls growing up with little means on a ranch in the vast American west. He salutes the University, its urban National Park and the man of vision who moved mountains, money and skeptics to make it happen: U.S. Sen. Paul Tsongas, for whom the arena is named.

“My father would often tell us that he couldn’t leave us a legacy of material things, but what he and my mom could do was make sure we received a good education,” Salazar told the graduates. “He would say he preferred it that way because no one could ever take your education away.”

Gordon Halm thinks of his parents often. One of 11 children, he saw them work endless days and nights making and selling palm oil from palm kernels. They were frugal by necessity. One day, they told him, you will beat the odds.

“My parents knew the power of education even if they were not educated themselves,” Gordon says, sipping steaming tea at the South Campus Starbucks a week before graduation. “As I see it, you can foreclose upon my home, but I do not think there is any way to foreclose on my education.”

His first grade classes at Winneba Anglican Primary School were held outdoors, under a tree. The students used rocks for chairs, and five shared one textbook. Gordon hated school. His grades faltered. He felt shame.

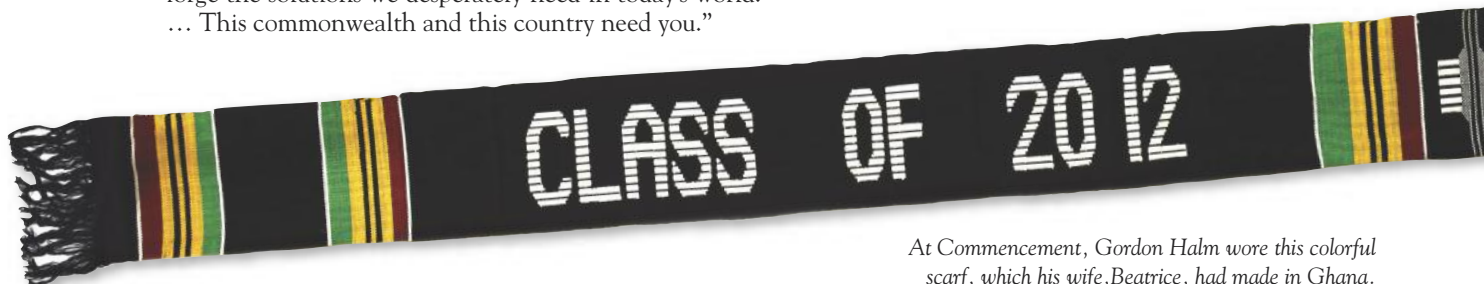
In third grade, he decided it was time “to get serious.” He vaulted from last to second among the 25 kids in his class. School administrators took his report card from class to class, along with Gordon. Look, they said, this is what you can achieve if you try.

“They clapped for me,” he says, sipping the peppermint tea. He remembers the pride.

But Ghana wasn’t his destiny.

In 1986, Gordon stuffed a knapsack with his possessions and headed for Liberia. He met Beatrice Stevens. In 1989, they exchanged wedding vows. She moved to the U.S.; Gordon promised to follow later. Civil war broke out in Liberia. It would last seven years and claim 200,000 lives. Gordon lived in fear, once narrowly escaping the intimidation of soldiers by jumping on a passing city bus.

Gordon reached the U.S. in 1995. He came to Lowell to reunite with Beatrice, who had graduated from Lowell High School, and would eventually earn degrees at Middlesex Community College and UMass Lowell.



At Commencement, Gordon Halm wore this colorful scarf, which his wife, Beatrice, had made in Ghana.

HARD WORK PAYS OFF

Once in Massachusetts, Gordon kept himself busy.

He earned his GED in 2000. He worked at New England Pediatric Care as a nurse's aide and earned an associate's degree in Human Services from Middlesex Community College in 2005. He went on to work at LifeLinks as a program supervisor.

An elder at Elliot Presbyterian Church, he organizes the annual Thanksgiving dinner, serving those who would otherwise go without.

At the University, he presided over the Club of Ghana. He reigned over the campus intramural table tennis competition. He is vice president of the Ghana Association of Greater Lowell. In this city of festivals, Gordon founded Lowell's annual African Cultural Festival.

A dozen years ago, Gordon built the Dankoh-Halm Charitable Organization to bolster the school where a tree and stones once comprised a classroom. He sends computers, sports equipment and books.

He was an active parent at Lowell Community Charter Public School and went to work full time as the school's community liaison until budget cuts slashed his position in 2010.

He saw opportunity to return to school full-time. He sat his sons down.

"Dad needs your help," he told them. "I need for you to do your best in school so I can focus on my own education." They did.

"When the kids did well in school my grades would go up," says Gordon. "It goes the other way, too. It affects your mental capacity. Last semester, they worked hard and did well. I made the Dean's List."

Gordon thanks Beatrice for the trail she blazed.

"It's pretty exciting to know all of his hard work is paying off," says Beatrice, a full-time group home manager for LifeLinks, working with developmentally challenged people. "He did everything, working so hard. He did homework. Cooked. He was in the library until midnight. And he had to be a father."

Sons RaySam, 15, Isaac, 13, and Tyler, 9, agree.

"I'm really proud of him," says RaySam. "It just shows what you can do. It inspires me."

Today, Gordon holds a volunteer position in the office of Lowell's mayor. Thanks to Gordon, Lowell is a sister city to Winneba.



Gordon Halm relaxes at home in Lowell with, from left, sons RaySam and Tyler, wife, Beatrice, and son Isaac.

in U. S. history. She revisits their work from the slave forts of Ghana to sugar plantations in Cuba, to the Ocean State.

After nearly 87 minutes, the lights went on.

Gordon raised his hand. He knew one of the buildings, the Cape Castle slave fort. He grew up playing soccer in the shadow of the fort. He could never see what was going on there, and didn't understand the massive building's purpose until years later.

The classroom fell silent.

Now, Cape Castle is a museum, a reminder of man's inhumanity. Gordon said everyone leaving the place looked sad.

"It was a riveting moment in the classroom, a learning experience, this impromptu, first-hand account that only he could have supplied," says Bell. "It was the beginning of getting to know Gordon. He has taught me a lot."

Several months after Bell played that documentary, Chancellor Meehan is shaking the hand of each graduate. *Congratulations*, he tells them.

As he approaches the Chancellor, Gordon drops to his knees and raises his hands in a gesture of sheer, exultant joy. Meehan smiles, then chuckles. Gordon heads down the ramp and off the stage, smiling.

"Where I come from this is a very big thing," he says, a couple of weeks later.

He savors the moment with his family, then walks home, still in graduation garb. A victory walk. He clutches his diploma, red roses and cards of congratulations. Cars pass with honks and shouts of affirmation. He celebrates at home among family, including his niece, Priscilla Stevens, 22, who graduated with him. Food piles up. Liberian-style dry rice, kala, doughnuts, meat on a stick and stew.

Gordon does not plan to leave the city or the campus that have become home. He took summer classes in Community Conflict, beginning work toward a master's degree from UMass Lowell's Peace and Conflict Studies Program. He wants to effect change through policy. Perhaps at the United Nations.

There is more work to do. He is ready. ■

"MY FATHER WOULD OFTEN TELL US THAT HE COULDN'T LEAVE US A LEGACY OF MATERIAL THINGS, BUT WHAT HE AND MY MOM COULD DO WAS MAKE SURE WE RECEIVED A GOOD EDUCATION."

— Ken Salazar

'A VERY BIG THING'

In 2008 Caryn Bell showed a documentary, "Traces of the Trade," to her Slavery & Abolition class. It is a personal story writ large, a nation's shame in microcosm. Rhode Island

filmmaker Katrina Browne traced her roots after discovering her family was the largest slave-trading family





While a Record Number Graduate, \$700,000 is Raised for Student Scholarships

In what has become one of the University's most heralded traditions, the May 25 Commencement Eve Celebration raised nearly \$700,000 for student scholarships. Like much else about graduation, the 2012 version was a record-breaker. In its first five years, the tradition begun by Chancellor Marty Meehan has raised a combined \$2.2 million while honoring the achievements of the UMass Lowell community.

Designed to raise funds for students and introduce the Commencement speaker and honorary degree recipients, the evening is set in the UMass Lowell Inn & Conference Center. The event celebrates and affirms the scholarship, generosity and service the University holds dear.

The next day, a record number of graduates—2,900—were awarded diplomas at the Tsongas Center at UMass Lowell.

"I wholeheartedly believe that each and every one of us here today has the potential to find a goal worth pursuing and to make a lasting impression on society. Why? Because we are River Hawks: Work-ready, life-ready, world-ready," said student speaker Bonie Rosario Jr. of Brockton, a computer engineering major who will continue on at UMass Lowell this fall in pursuit of a master of science degree in innovation and technological entrepreneurship.

1. Chancellor Marty Meehan '78, right, greets U.S. Rep. Edward Markey and honorary degree recipient Rear Adm. Susan J. Blumenthal (ret.) during the Commencement Eve Celebration.
2. Chancellor Meehan acknowledges the University of Massachusetts Board of Trustees. From left: James Tarr '12, student trustee; R. Norman Peters; Richard Campbell; and Zoila Gomez '00.
3. UMass Lowell honored Dr. Nina Coppens, former dean of the College of Fine Arts, Humanities & Social Sciences. She stands with her husband, Paul, and their two daughters Lindsay, left, and Katie, right.
4. Rowdy the River Hawk and Edward Hajduk, lecturer in civil and environmental engineering
5. State Sen. Eileen Donoghue and U.S. Rep. Niki Tsongas
6. Commencement speaker U.S. Secretary of the Interior Ken Salazar



River Hawks Under40

Call for Nominations...

Nominate alumni under 40 years of age who exemplify what it is to be a River Hawk:

- Inspiring.
- Successful.
- Thriving.
- Full of passion for career and life.

We will feature selected River Hawks Under 40 alumni in future editions of the UMass Lowell Magazine for Alumni and Friends.

Submit your nomination:

<http://alumni.uml.edu/riverhawksunder40>



Learning with Purpose



Paper industry chief Frank McKone '56, '00 (H) continues to support the alma mater he calls 'as fine as they come.'

GOOD ON PAPER

By Geoffrey Douglas

It isn't easy to get Frank McKone '56, '00 (H) to talk about himself. When you bring up his successes as a student at Lowell Tech, he deflects you with an account of his professors' dedication. When the discussion turns to his years aboard a Navy destroyer, he's more comfortable recalling the several seas he sailed. And when you question him on the remarkable worldwide growth of the company he ran for 20 years, he seems to prefer to talk about those who ran it before him.

McKone is an understated man. Like many of his generation, and the one that preceded it—Tom Brokaw's "Greatest Generation"—he was raised in a simpler, harder, less acquisitive time, a time whose values were forged by a Depression at home and a war in Europe, when sacrifice was universal, hard work was a given and character was measured in different ways.

He was born in Lowell at the peak of the Depression, raised in Dracut the son of a textile plant supervisor. He went to school locally, first at a small Catholic high school—Keith Academy—that is gone from the scene today, later at LTI, where, in 1956, he earned his degree in engineering.

The year after graduation, he joined the Navy, where he served as an officer onboard a destroyer out of Newport, R.I. "We spent a lot of time at sea," he says. "The Mediterranean, the Caribbean—I got pretty used to



Tonita and Frank '56, '00 (H)
McKone in the new Emerging
Technologies and Innovation Center

being onboard a ship, but as far as action there wasn't much going on."

Then came graduate school at Rensselaer Polytech, from which he received his master's in Management Engineering.

In 1964, McKone went to work for what was then still a relatively small company, Albany Felt, on the banks of the Hudson River in Albany, N.Y., a manufacturer of fabrics for the papermaking industry. His starting position was as an engineer in the company's Press Fabrics Group, though he wouldn't stay put for long.

His move up was, in fact, almost meteoric. In 1972, just 38 years old—"after a series of technical and marketing assignments"—he was made vice president in charge of Canadian operations; four years later he was promoted again, this time to group vice president of U.S. operations. In 1981, he took over responsibility for the company's papermaking products worldwide. Three years later he was president. By 1993 he would be CEO, then board chairman five years after that.

He may have had an edge. The man from whom he took over the presidency, Robert Sloan, was also an LTI graduate (1950), as were two earlier presidents, John Standish and Everett Reed.

"There were several other graduates at the company as well," McKone says [including Al Drinkwater, plant manager for 40 years]. "The University was very well-regarded there. But Standish, Everett and Sloan were the top ones. I worked under the last two. The company grew enormously under their watch."

It would continue to grow under his. In 1969 and 1970, about five years after McKone's arrival, Albany Felt took a giant leap forward, merging with two other companies: first Appleton Wire Works, the largest U.S. manufacturer of forming fabrics, then Nordiska Maskinfilt, a leading supplier to the Scandinavian paper industry, as well as a major exporter throughout Europe and the U.S. At that point the company rechristened itself: it would thenceforth be Albany International.

"That was a time of tremendous growth for the industry," McKone says. "Heavy paper, corrugated paper, the demand for packaging in all forms—it was just really booming then, both in the U.S. and the world. It was probably the biggest growth period the industry has seen, next to the big demand for paperboard that came in World War II."

Throughout the 1970s and '80s, Albany continued to grow, acquiring manufacturing companies in England, Brazil and Norway, as well as in the U.S.—largely in the South and Southwest, says McKone.

The McKone years were among the most dynamic in the company's history. Having gone public in 1974 with a listing on the New York Exchange, then going private again nine years later in a leveraged buy-out, Albany consolidated its operations and, under the leadership of McKone as president, went public for a second time in 1987. All the while, it continued to expand, modernize and acquire new properties.

Albany today, now headquartered in Rochester, N.H., is a global company, well over a century old, with manufacturing facilities in 11 countries, 4,300 employees worldwide and annual sales of more than \$800 million. It remains the world's leading producer of custom-designed fabrics essential to paper production. More than half of its sales are from outside the U.S.

McKone retired in 2001, though only recently from the board of Albany International. He remains a board member at Kadant Inc., a paper-machine equipment company in Massachusetts, and of the Advisory Board of the Business School of the College of St. Rose, where his wife, Tonita, earned her bachelor's and master's degrees. He is also on the boards at his two alma maters, Rensselaer Polytech and the UMass Lowell Francis College of Engineering.

But, he says, "I'm trying to pull back where I can." He and his wife divide their time between homes on Cape Cod and in southern California. The couple share six grown children between them.

As hard as it is to get him to talk about himself, it is nearly as hard to induce him to discuss his generosity to UMass Lowell. But, it has been extraordinary. Over the last 15 years, McKone has created three endowed funds at the University, each of which tops \$250,000 in assets. The Francis McKone Endowed Scholarship Fund supports deserving engineering students with high financial need, the Francis College of Engineering Endowed Fund supports academic programs within the college and the McKone Chancellor's Endowed Fund provides funds directly to the Chancellor to develop programs of excellence.

Recently he became a leadership donor for the University's new Emerging Technologies and Innovation Center, funding the construction of the center's Francis McKone Executive Administration Center. A recent inductee to the UMass Lowell Circle of Distinction—made up of those who have contributed over \$1 million to the University during their lifetimes—he was among the earliest to understand that, as he says today: "States no longer have the ability, as they once had, to be the primary source of education funds. More and more today, it has to come from private sources."

Says Chancellor Marty Meehan: "His years of generosity to UMass Lowell simply can't be overstated. His legacy is powerful, and will continue, for many years to come, to touch generations of students."

McKone was among the pioneer donors to the Engineering Department, says John Davis, executive director of principal programs. "In the 20 years I've known him," says Davis, "he's always been right there for the University—from taking the reins of the [Engineering Department's] Advisory Board when it first needed leadership years ago, right up to the present day. He's always stepped up to the challenge for us."

It all goes back, McKone will tell you, to his own LTI education, which was, he says, "as fine as they come. I had a good time there, and a first-rate education. The professors were competent and dedicated; the classes were up-to-date."


Of the University today, he says, one of its greatest strengths remains its ability to adapt to the changes around it:

"The times are always changing, and never more than now—in the sciences especially. [UMass Lowell] has continued to do a really good job of recognizing those changes, seeing them coming and adjusting to meet them, staying on top of things with their curriculum and the range of studies they offer. That's an impressive asset, I think." ■

Alumni Life

Inside...

- 48 ALUMNI EVENTS
- 51 CLASS NOTES
- 62 IN MEMORIAM



Photographer Allie Burke '93, owner of Natural Images by Allie, won a 2012 Business of the Year Award from the Exeter, N.H., Area Chamber of Commerce. Burke shoots family and high school portraits, weddings, architecture shots, business head shots and sports and action photos (like this one of hot-air balloons). Allie began shooting during college at UMass Lowell, where she majored in criminal justice and photography. "People made me want to get into photography, I love people," she says.



University Alumni Awards

1. The 2012 University Alumni Award recipients, from left: James Regan '88, Robert LeFort '83, Linda FitzPatrick '68, Richard Miner '86, '89, '97, Michael Jarvis '06, Steven DiNoto '94 and Alice Bonner '89 (Not pictured)

2. From left, Prof. Tom Costello, Prof. Jim Canning, Richard Miner '86, '89, '97, Prof. Pat Krolak (deceased)

3. From left, Kathy Allen '77, Linda FitzPatrick '68, Executive Vice Chancellor Jacquie Moloney '75, '92



The 2012 40th and 50th reunions

1. Members of the Class of 1962 gather for their 50th reunion.

In the back row, from left: Francis Georges, Tom Tobin, Brenda Regan Connors, Nancy Scanlon Begley, Patricia Flynn Hornby, Anna Caravoulas Paradis, Virginia Carnavale Sheehan, Ann Gaudette Meservey, Roberta Kowalski McCabe, Nancy Greska, Pauline Golec, Donna Baranowski Afflerbach, Robert Kidd

In the center row, from left: Gail Ralls Desmond, Elizabeth Callahan Silva, Kathleen Giallongo Indigaro, M. Joan McCarthy Stackpole, Eleanor Reilly Duncan, Mary Lynch Wilde, Carol Gillis Buchanan, Stasia Kohanski Simrall, Ellen Maccone Winsor, Roberta Murray Boyd, Janice Cory Hudzik, Georgia Denas Dodge, Carol Howe Collins, Bonnie Bees Atzl, Lorraine Ferrari Hamilton, Marcella Praetz Quandt, Suellen O'Hare LeBosquet

In the front row, from left: Joan McDonald O'Brien, Patricia Burns Kelley, Connie Cutrumbes Kalavritinos, Jean Arren Clark, Stella Martakos Mitsakos, Jennie Margosian Zantuhos



2. Members of the Class of 1972 celebrate their 40th reunion.



1. Alumni from the Lowell Tech class of 1962 enjoy their reunion and reconnect with classmates.



2. Alumni from the Lowell State Class of 1962

Second Annual Sunset Social Event Benefits Track and Field and Cross Country programs

1. The 1991 championship cross country Team, from left: John Doherty '93, David Cremin '92, Mike Chamberas '92, George Davis, Scott Bridges '93

2. Patrick Morasse '06 and Coach Gary Gardner



1



Alumni and friends gather for a lobster clam bake and sunset boat rides.



2

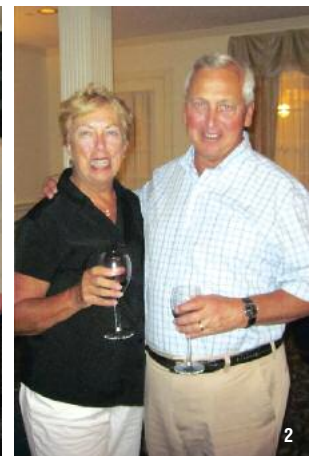
Gathering for Alumni and Friends at Vesper Country Club

1. The reception host committee gathers during the event at Vesper Country Club in Tyngsboro. Back row, from left: Edward Moloney, John Connolly '61, George Popp '84, Bill Lemos, Ken Gys '87, Ken Kaiser '83, Angelos Sakelarios '78. Front row, from left: Executive Vice Chancellor Jacqueline Moloney '75, '92, Jo Anne Connolly '61, Major Gift Officer Deme Gys, Colleen Kaiser '82, Susan Sakelarios '77, Deb Lemos, Anne and Jack Clancy '80

2. Mary Jo '66 and Francis M. '66 Spinola enjoy the reception.



1



2



The 2012 Men's Soccer Alumni Game

50 alumni spanning nearly 15 years attended the 2012 UMass Lowell Men's Soccer alumni game at the Cushing Field Complex. Members included former standout Oscar Acevedo '00, UMass Lowell's first All-Conference player of the modern era; members of the 2003 and 2008 teams, which advanced to the NCAA Tournament quarterfinal rounds, and many from more recent years.



2012 Hockey Alumni and Friends Golf Tournament

1. Tom Cullen, Mike Opre, Ray Bourque and George Olsen 2. Jim Lister, Peter Tormey '05, Rene Gauthier '07 and Mark Pandolfo '06

Political Science Reception

3. Dwight Robson '93 and Lena Robinson '92, center, were the Distinguished Alumni Awardees honored at the Political Science Reception, shown here, with, from left, Prof. Frank Talty '77, Chancellor Marty Meehan '78, Chair Emeritus Nick Minton and Chair Fred Lewis.



New York City Art Show

4. New York area alumni enjoyed a 50-year retrospective of the paintings of internationally renowned artist Ed Adler '53 at the City Hall Gallery, sponsored by the Manhattan Borough President Scott M. Stringer. From left, Adler, Roseanne Foley '92, Alumni Relations Special Advisor Diane Earl and Marie Patrick





Sigma Phi Omicron/Wounded Warrior Race

Hundreds of alumni and friends came out for a fundraiser 5K run/walk in honor of fallen soldier Chris Sullivan '98, including Hank Brown '67, Mike Jarvis '06 and Adam Hogue '03. Sullivan, who received a mechanical engineering degree from UMass Lowell, was killed in a bomb explosion in Baghdad in 2005—three weeks before he was scheduled to come home. Hosted annually by Sigma Phi Omicron, the race will be held on April 20, 2013 next year.

1950

ALLEN MERRILL is retired and says he is still chugging along.

1953

Don Finegold has published his eighth novel, "The Israeli Caper," by Infinity Publishers. It may be viewed on Amazon.com or at Infinity's website, www.bbotw.com. Don says he hopes that some of his Pi Lambda Phi brothers and other 1953 classmates as well as those in the surrounding years will look him up.

1962

Jim Belfiore was the grand marshal for the annual 75 lap Ollie Silva Memorial Summer Classic at the Lee (N.H.) Speedway. A native of Haverhill, Jim was a charter member of the New England Super Modified Racing Association organization.

1968

George Ouellette retired recently and closed his company, CS Plastics Consulting LLC. He says he now enjoys spending time with his grandson, fiancé and playing golf.

1969

Rich Gambale worked for CR Bard Cardiology and Endoscopy between 1980 and 2005, creating medical devices and receiving his 50th medical device patent. On all but eight patents he was listed as the primary inventor. Rich received his bachelor's degree in mechanical engineering in 1969 and his master's in M.E. in 1980.

1971

Susan Hamilton is an assistant professor of nursing at the MGH Institute of Health Professions in Boston. She received her bachelor's degree in nursing in 1971 and earned a Ph.D. in nursing in 2012. She also earned a graduate certificate in nursing education in 2008.

Richard Sasseville retired as director of public works for the town of Northbridge on Oct. 15, 2011.

1973

William Blake has been appointed CTO of Cray Inc., the global supercomputer company previously known as GM of Parallel Computing Platforms of Microsoft (after the acquisition of Interactive Supercomputing Inc., where he was CEO).



Christine Cournoyer has been appointed chief executive officer of N-of-One, a provider

of diagnostic and treatment strategies for personalized cancer care. Christine has more than 25 years of executive leadership experience in health care technology and previously was president and chief operating officer of Picis, a provider of health information software solutions.

Richard Cutts established his own civil engineering consulting firm, Linden Engineering Partners LLC in 2010, specializing in site design and permitting and peer review services.

Nobuyuki Fujita is working on the Small Modular Reactor project. He says he attempted to climb the north face of Eiger this past winter but retreated due to bad weather. It was too warm, he says, but adds that he will try again.



1974

Juan Linares recently retired to Boquete, Panama. He started his own catering company, Chef a la Orden, and is now writing a blog: www.latinamericancook.blogspot.com.

1976

Joanne Yestramski, who oversees a multimillion dollar budget as the University's vice chancellor of finance and operations, traveled to Germany in October to evaluate best financial management practices at U.S. and German universities. Part of a German-American Fulbright Commission and Institute of International Education exchange program, "Do More with Less—Implementing Change in Higher Education," illustrated how German universities have responded to financial reforms in their country over the last decade.

1977

Prof. Kay Doyle was recently elected chairperson of the Certification Maintenance Program Committee for the American Society for Clinical Pathology's Board of Certification. Certification maintenance demonstrates that medical laboratory professionals certified by ASCP are staying current with the practice of laboratory medicine.

William McNally is president of the non profit Samuel L. Blumenfeld Literacy Foundation. For more information visit: www.SBLiteracyFoundation.com

► CLOSE-UP CLASS OF 1976

Al LePage: Living History

After receiving a bachelor's degree in biology, Al LePage decided to teach, but, at 38, a mid-life crisis forced him to discover his passions. "I hopped on a bus headed to Oregon with \$200 in my pocket," he says.

Today, LePage, now 58, wears two hats: one as non profit director, the other as actor.

"My first role as director of the National Coast Trail Association supports my love of hiking and the coast, allowing me to help develop hiking trails and preserve coastal land," he says.

LePage began retracing the footsteps of the first Euro-Americans to explore the Oregon coast to promote their historic value. Dressed like mountain man Jedediah Smith, he trekked 200 miles of his historic coastal route.

"My first 'living history' performance was at the National Park historic site where Smith showed up in 1828, portraying him in a short one-act play," he says. "Given the opportunity to volunteer at this historic fort site for special events, I said yes, portraying many different characters over the next seven years throughout the Pacific Northwest."

LePage eventually gave up volunteering and began presenting Charles Dickens' "A Christmas Carol" in the United States and abroad. Appearing as a 19th-century Victorian-era Englishman—"Thomas Hutchinson, Traveling Thespian"—he gives dramatic reading performances of Dickens' classic story.

He donates all proceeds to worthy causes, "as part of my quest to live the message of generosity," he says.

His Dec. 9 "One Man, 18 Characters" show at St. Anne's Episcopal Church in Lowell—half organ music and half story—will support the UMass Lowell Dickens' Scholarship Endowment. Reserve tickets at BrownPaperTickets.com.



1979

Rev. David Hanks has been selected as the new pastor of Rollstone Congregational Church in Fitchburg. After receiving his UMass Lowell bachelor's degree, David graduated from Andover-Newton Theological School in Newton and has served in churches in Lowell, Chelmsford, Dracut, Andover, Methuen and Hudson, N.H.



Elena Parsons says she will be moving to Oregon within the next six months. She has begun a blog about benefits of guided imagery at guidedimagery.info.

1980

Kevin St. Cyr has joined CommScope Inc., of Hickory, N.C., as senior vice president of enterprise solutions. He will lead engineering, R&D and product line management for the company segment that serves business enterprises around the world.

1981

Ted Cawley has been named senior vice president, commercial lending, at Lowell-Bank. Ted most recently held the same position at the Lowell Five Cent Savings Bank.

Hal Charnley, CEO of NetClarity Inc., addressed the National Information Security Group's Securanoia Boston conference in May.

1982

Eric Forman, who graduated with an education specialist degree in administration, planning and policy in May, is director of bands for the North Reading Public Schools. Eric received his master's degree in 1988.

Marc Thomas is CEO of Dyesol Inc., and general manager of Dyesol's Global Glass Business Group. Marc, who earned his degree in plastics engineering, has held technical, manufacturing and business development posts at a number of companies.

1983

Kenneth DeMoura has launched DeMoura/Smith LLP, a Boston law firm, but says he will continue to represent businesses and individuals as a trial lawyer and counselor. He is listed in the 2012 edition of The Best Lawyers in America for his product liability and mass torts practice and he is a fellow in the Litigation Counsel of America, a trial lawyer honorary society composed of less than one half of one percent of American lawyers.

Ken Kaiser and **George Popp** '84 played 117 holes of golf, from 4:45 a.m. until dark, at the Vesper Country Club in Tyngsboro one day this summer to raise money in their fourth annual marathon to benefit breast cancer research at the Dana-Farber Cancer Institute.

Ali Rafiymehr, who for the last four years has been dean of the Division of Information Technology and Sciences at Vermont's Champlain College, has been appointed Dean of the University of New Hampshire at Manchester. He previously served in teaching and other capacities at Western New England University, St. Anselm College, UMass Lowell and Merrimack College. He earned a doctorate in computer science '93 and a master of science degree in computer engineering '83 at UMass Lowell.

1984

George Popp and **Ken Kaiser** '83 played 117 holes of golf, from 4:45 a.m. until dark, at the Vesper Country Club in Tyngsboro one day this summer to raise money in their fourth annual marathon to benefit breast cancer research at the Dana-Farber Institute.

1985



Chuck Dwyer has been promoted to the rank of senior vice president of Middlesex Savings Bank. He heads a

team of four commercial lending professionals in the Middlesex Commercial South Group's office in Franklin. Chuck received his bachelor's degree in management from UMass Lowell and a master's in finance from Bentley. He lives in Medway with his wife and three children.

1986

John Pinette, who graduated with a degree in accounting but soon abandoned that career to become a stand-up comedian, performed at the South Shore Music Circus in Cohasset and the Cape Cod Melody Tent in Hyannis this summer. During his 25 years in show business, John has opened for Frank Sinatra in Las Vegas and has appeared in movies, on television and on Broadway.

1987

William Goneau was married on March 5, 2011.



1988

Jim Regan is chief executive of the Digital Federal Credit Union, which opened its newest office recently at the intersection of Bridge and West Sixth streets in Lowell's Centralville section.

1990

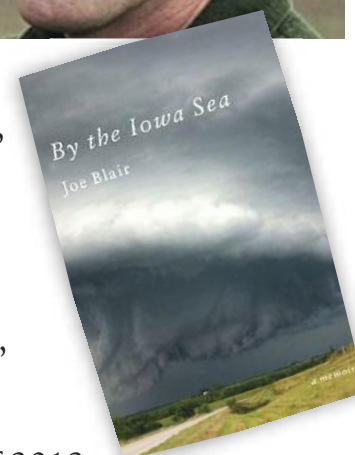
Bill Carino has joined Extraprise as vice president of sales. Bill most recently was sales director at ClickSquared Inc.

John Oteri has been named the new headmaster of Somerville High School where, for 13 years, he has served the city's youth as a mentor, teacher and instructional leader. John most recently had been the school's assistant principal. An alumnus of the University of Notre Dame, he earned his master's of education degree at UMass Lowell.

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► CLOSE-UP CLASS OF 1991

JOSEPH BLAIR had his memoir, "By the Iowa Sea," published this past March. The book has already received the following honors: Barnes and Noble "Discover Great New Writers" program for Spring 2012, one of the Publisher's Weekly Top Ten Memoirs of 2012, one of BookPage's 30 Most Anticipated Books of 2012, Elle Magazine Reader's Prize Pick for April 2012, book of the week by Oprah.com, and a finalist for the Midwestern Independent Booksellers award of 2012.





► CLOSE-UP CLASS OF 1976

Planet Organic: A Natural Revolution

Renée (Jurgelon) Elliott, founder of the United Kingdom's largest independent organic grocer, traces her passion for healthy eating to a book on the required reading list for an elective class at UMass Lowell. She read "Diet for a Small Planet" for a nutrition course here and it transformed her attitude about food.

"That book changed my life," recalls Elliott, the founding director of Planet Organic and one of England's leading proponents of healthy eating. "I became a vegetarian as a result."

Since Elliott opened the first Planet Organic supermarket 17 years ago in London's fashionable Notting Hill district, the business has grown into a five-store chain, offering produce, meat, baked goods, beauty items and natural remedies. She has also written three cookbooks, one with a partner and two on her own. The most recent, "Me, You & the Kids, Too: The Ultimate Time-Saving Cookbook with Recipe Variations for the Whole Family," was published this year.

The youngest of four children, Elliott graduated from Georgetown High School and came to UMass Lowell without any definite career plans. Since the high-tech industry was taking off, a computer science degree seemed like a smart bet. However, she quickly realized studying algorithms and writing code wasn't for her so she switched her major to English. Her path from English major to expat entrepreneur was an unconventional one, guided more by serendipity than design.

To cultivate her love of writing, she joined the Connector staff, penning reviews and editing features for the campus newspaper. Determined to get hands-on professional experience, she landed an internship at WBZ-TV, working for arts and entertainment reporter Joyce Kulhawik, who remains a great friend.

"You make your own opportunities," says Elliott. "No one handed that to me."

On a summer trip to London before her senior year, she met Englishman Brian Elliott on a bus and they began dating. After graduating, she returned to London to resume the romance and the couple married in 1990.

Her first job in England was as a wine writer but a trip back to the United States for a six-month leadership class planted the seed of the idea for an organic grocery business. She had shopped regularly at a health food store and was inspired to bring the concept of an organic supermarket back to her adopted home. She was bursting with ideas but short on experience.

"I had no idea what a profit and loss statement was," she says.

To get up to speed on business operations, she went to work at London's largest health food store and later took a class to learn how to write a business plan. She was then able to attract investors to finance the organic supermarket. Her goal was to bring organic food into the mainstream through a company committed to ethically produced food.

Elliott has become an advocate for sustainable farming and serves as a trustee of England's Soil Association, a non-profit that inspects and certifies organic farms and businesses.

After years of living at a frenetic pace, the Elliots decided to dial back their lifestyle. In 2009, they bought and fixed up an old house in Tuscany and moved there year-round with their three children, Jess, 10, Nicholas, 7 and Cassie, 4, growing olives, figs and other fruits and vegetables on their seven-acre spread.

"We have powered down and are leading a simpler life," Elliott says.

She has stepped back from Planet Organics' day-to-day operations but remains involved with training, publicity and recipe development for the company, which has managed to grow sales despite the weak economy.

"I'm the brand guardian," she says.

She expects the family will move back to England next year and settle outside of London. Looking ahead, she's awaiting word on two more book proposals and has ideas for others. She's intrigued with the idea of running a bakery-café that would serve a nutritious menu or teaching classes that show people how to prepare healthy, simple meals with natural, seasonal ingredients.

"I love inspiring people," she says. "I am so not done yet." —JG

1991

Judith Dickerman-Nelson recently released a book, titled "Believe in Me."

Brian Gadbois has been ordained as a permanent deacon in the Roman Catholic Diocese of Worcester. Permanent deacons perform such duties as preaching, administering the sacrament of baptism, and presiding over funeral and burial services. Brian and his wife, Nissa, live in Charlton. He is director of operations for Partridge Hill Media.

By unanimous vote, the Wellesley School Committee has chosen **David Lussier** as the district's new superintendent. Once a high school social science teacher in Massachusetts, Dave returns to the Bay State from Texas where he has been executive director of the Office of Educator Quality for the city of Austin.

Joseph Murphy has been selected as one of three winners in this year's Rhode Island



Federal Employees of the Year Award from the Naval Undersea Warfare Center (NUWC)

Division Newport. His contributions in the areas of professional accomplishments, technical excellence and compliance have earned him this distinguished recognition from the Rhode Island Federal Executive Council.

1992

Jay Anderson is the new general manager of the Marblehead Light Department. He was chosen to head the department after having served as technical operations manager.

Brenda Bond has co-edited a book with alumna Erika Gebo. "Looking Beyond Suppression:

Community Strategies to Reduce Gang Violence" (2012) explores a demonstration project funded by the state of Massachusetts beginning in 2006. The book describes the implementation of the Comprehensive Gang Model in several Massachusetts communities and serves as a guide for policymakers and practitioners interested in customized gang violence responses.

James McGaugh has been appointed market president of Boston, a new role within Citibank's U.S. Consumer and Commercial Banking business. In this new post, Jim will collaborate with community stakeholders, business groups, civic organizations and government partners. He also serves as the bank's vice president and director for government relations in New England.

1993

Robert Corcoran has been appointed senior vice president, quality, at Inspiration Biopharmaceuticals Inc., of Cambridge. Bob served most recently as vice president of quality at Aegerion Pharmaceuticals.

David Stevens played professional hockey in the U.K. and Germany until 2004, when he



returned to Victoria, British Columbia. He is married, with a 7-year-old son, and says he enjoys his

work as a real estate agent. Dave has been with Royal LePage Coast Capital Realty since 2007.

1994

Michael Moore has joined Aerodyne Research Inc. of Billerica as an engineering associate in the company's Center for Atmospheric and Environmental Chemistry.

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► CLOSE-UP CLASS OF 1988

Diane Stokes Makes Strides in Cancer Care

It seems like it would have been a no-brainer. Yet, for all that is invested in preventing and beating cancer, a program of physical rehabilitation from the assault that accompanies cancer treatment didn't exist.

So Diane Stokes '88 and her business partner Dr. Julie Silver—a physician, Harvard Medical School assistant professor and breast cancer survivor—made it their business to provide a protocol for it. And in the three years since they founded Oncology Rehab Partners, 50 hospitals and cancer treatment centers across the country have adopted it.

Stokes, who left UMass Lowell with an industrial technology engineering degree, is a 2012 recipient of The One Hundred, a Massachusetts General Hospital Award given to the 100 people in the U.S. making the biggest strides in cancer care.

It was a winding road there for Stokes, a Chelmsford native and 1984 Chelmsford High graduate, but she has been adept at handling life's turns and listening for inner guidance. She's gone from computer science to corporate sales and marketing to teaching math. Along the way, Stokes earned a master's in business administration from Clark University and discovered a passion for triathlons, in which she continues to compete.

She had already built the skills to design and package business ideas. But it was while she coached others that she discovered the importance of the calling that would lead her to the cutting edge of post-treatment cancer care.

"I'd gotten into triathlons and decided to become a coach," says Stokes. "And one of my clients was a cancer survivor. And I noticed that no one was more excited about crossing the finish line."

From that moment, she says, "I knew I had to do something with this." Stokes and Silver incorporated Oncology Rehab Partners in 2009.

In her time at the University, Stokes joined ROTC, was a cheerleader for three semesters, made "a lot of good friends" and was able to help care for her ailing single mother. Not enough? She worked full-time at a Little Peach store.

"I was probably the only engineering major/cheerleader/ROTC cadet the school produced, at least to that point," says Stokes. —DP

Diane Stokes works with a client on post-cancer rehabilitation.



Michael, who earned his degree in electrical engineering, brings an expertise in solid state electronics to the company.

1995

Paul Glynn has founded a continuing education company called PT in Collaboration, a hybrid-based model of on-line and classroom learning. He published the only current textbook on clinical prediction rules. Titled "Clinical Prediction Rules: A Physical Therapy Reference Manual," it has been made into an iPhone/Pad and Android application. Paul also won the Chattanooga Research Award from the APTA, which recognizes the best published research study in the PT Journal.

Lynn Greenlay of Haverhill has been promoted to vice president of Enterprise Bank. She joined the bank in 2004 and was named assistant controller in 2009. Lynn has assumed growing responsibilities in the bank's accounting and finance areas. She holds a master's degree in accounting from Bentley University, a bachelor's degree from UMass Lowell and is a certified public accountant.

Daniel O'Grady has worked for University Information Technology at Tufts University for more than eight years. He is also on the board of directors of Crimeline of Southern NH, a non-profit organization whose members alert police regarding suspected criminal activity. Dan also

is a member of the board of the Manchester Monarchs Booster Club.

1996

Chris Bramanti, who was coach of the freshman boys' basketball team at Westford Academy for more than a dozen years and then assistant varsity coach, has been appointed head coach of the Grey Ghosts. A graduate of Salem State College, Chris earned a master's degree at UMass Lowell.

Jim Connelly received the Joe Concannon Hockey East Media Award from Hockey East. As a writer for U.S. College Hockey Online (USCHO), Jim begins his 15th year covering the league in 2012-13. Jim also co-writes a weekly national column, "Tuesday Morning Quarterback," and co-hosts USCHO's weekly radio show, "USCHO Live." He has also been published in The Hockey News as well as on a number of national hockey websites. He has made television appearances on CBS Sports Network and NESN. Since 2008, he has also served as a part-time color analyst for University of Vermont radio when the team travels to the Boston area. Jim began his career in hockey as an equipment manager at UMass Lowell.

1998

Satish Bhagavatula has been named chief architect, chief information officer and chief technology officer in the telecom division of Crexendo, a cloud-based infrastructure firm.

► CLOSE-UP CLASS OF 1991

Great Education Makes for Bad Animals

Tom McGurk '91 has been in situations where he realized he'd been given not only great ears, but a superior education in the University's Sound Recording Technology program. These realizations began when he was an intern at a small studio outside Seattle, fresh from having graduated from UMass Lowell (then University of Lowell). He would know how to fix things some seasoned pros didn't.

Since 1999, McGurk and partners Mike McAuliffe, Dave Howe and Charlie Nordstrom have shared ownership of Bad Animal Studios, at first famous for its association with the band Heart, then as a mainstay of grunge recordings in the '90s. Nirvana, Pearl Jam and Soundgarden are among the legions who have recorded there. McGurk has won seven Emmy Awards for work behind the board, especially while he sound designed and mixed for "Bill Nye the Science Guy."

"When I talk about the SRT program, and I do every chance I get, I tell people how amazing it is," says McGurk by phone from Seattle, where he lives with wife Danielle McGurk (formerly Hughey) '92, and their son, Connor, 12. "It's a true engineering program. It's calculus, it's engineering and it's music performance in a very real sense. They make sure you are equipped to step right into a role and success. There's nothing else like it, and Professor [William] Moylan is absolutely the best teacher I have ever had. I don't know anyone who stayed with it and made it through the course who isn't doing well."

Though McGurk, now 47, found both his education and future wife at the University, he might have missed them both. In the '80s, the Chelmsford High School grad's musical ambition wasn't popular at home. Though he sang and played jazz guitar, his parents wanted him to find a more secure path.

He earned an associate's degree in computer programming from Middlesex Community College. When he enrolled at ULowell, he told his parents he was an accounting major. He was not.

"I'd always been infatuated with music and effects, and I had a four-track cassette recorder I fooled around with in my



room," he recalls. "When I started taking classes at Lowell, I knew it was a no-brainer. *This is what I want to do.*"

He played guitar and sang, including with an opera group. He juggled juried performance with weekly ensemble dates, and recording the performances of others in Durgin Hall. "It was awesome," he says. "Complete immersion."

He interned around Seattle and one day, called UMass Lowell's Moylan. He was working 18-hour days without benefits, frustrated, thinking about coming home. "He was the one who got me here," says McGurk. "He called the owner, Steve Lawson, and I was hired. It was 1991, an amazing time."

Around since 1973 under the name Kaye-Smith recording, Bad Animals has been the wellspring of many hits, from Bachman Turner Overdrive's "Taking Care of Business" to Steve Miller's "Fly Like an Eagle." Decades later, Neil Young, REM and Johnny Cash would record there.

But when McGurk and partners bought it, they focused hard on buying state-of-the-art digital equipment and drawing post-production work for the film, TV and gaming industries.

It paid off. McGurk has long since worked with benefits, and even earned the approval of his father, who studied mechanical engineering at Rensselaer Polytech.

"I don't know what you do," McGurk's father has told him. "But I love it." —DP

UMass Lowell Yearbooks Now Available Online!

UMass Lowell Libraries and the Center for Lowell History, along with the Boston Library Consortium, have digitized the University's yearbook collection. To access, go to <http://archive.org>, and in the search box near the top, type "Lowell," the name of the yearbook (Pickout, Marm, Knoll or Sojourn) and the year.

► CLOSE-UP CLASS OF 1994



Steve DiNoto: From Small Town to Silicon Valley

His career is a mix of “Crime and Punishment,” “CSI” and “Criminal Minds”—high-tech rip-offs, violent crime, forensics, criminal psychology. And he has seen it from a range of angles: from East Coast to West, from a small-city police department to the offices of two of the largest IT companies on earth.



Until earlier this year, Steven DiNoto '94, '97 was manager of Apple's Global Security Operations Center—before he was hired away by Amazon to serve as that company's senior manager in charge of global business continuity. Prior to that, for 11 years, he was the chief administrative officer of the San Jose, Calif., Police Department. The longer he's spent in law enforcement, he says—and earlier jobs included top-level administrative posts with the Malden, Lawrence and Middlesex County Police Departments—the clearer it has been to him that, when it comes to solving crime, or running departments, the big picture is nearly always the key.

“Initially, I was fascinated by the specialized roles that technology and forensic psychology could play in supporting investigations,” he says. “But [over time], I came to realize how much more important it is to have a holistic framework for things.”

His first job, before he was even out of graduate school, was with the Lowell

Police Department, where he played a role in the development of the city's crime analysis unit—a task that would serve him well in his next position, as Middlesex County deputy sheriff. From the time he left there, in 1999—only two years out of grad school—there would be nothing but top-level posts.

Much of the credit for this rise, says DiNoto, belongs with his UMass Lowell education—a legacy of teaching he continued himself for three years, in the late '90s, as an adjunct instructor in the Criminal Justice Department.

“UMass Lowell was an amazing experience for me,” he says from his home in California, where he lives today with his wife, son and daughter. “The professors were great at instructing relevant content, as well as relating real-world experience. In addition to being the best CJ professors in the nation, they were also very accessible to students.”

Especially inspirational to him, DiNoto says, were Profs. Eve Buzawa—today's criminal justice chair—and Larry Siegel, whom he calls “the most prolific CJ textbook author in the world.” Both these professors, as well as others, he says, have served since as models of service that goes well beyond the classroom:

“They really reinforced the inherent value of helping as many people as you can. Throughout my career, I've tried to adhere to this basic but important principle.” —GD

1998

Donald Demers has been retired since 2009.

1999

Kristin Costa left the UMass Lowell Police Department and joined the UMass Dartmouth department nearly six years ago. She became the accreditation/training officer and, within 10 months, succeeded in having the department certified by the Massachusetts Police Accreditation Commission. She says she hopes that within the next several months, she will receive word that they will be an accredited police department.

2000

Jason Barbieri is regional director of sales at OncoMed, the Oncology Pharmacy. (A complete class note on Jason



appeared in the Spring 2012 magazine but a photo was not available at that time.)

2001

John O'Brien, who completed his M.B.A. from the University of Miami in 2008, is also halfway through his work on a doctoral degree in business from Walden University. John received his associate's degree in electrical engineering at UMass Lowell.

2002

Annette Parsons retired from the Air Force on May 1 after 26 years of service.

Ronald Wagogo was elected to the position of Region 1 Alumni Extension Chair in the National Society of Black Engineers and officially took office on May 1. Ron serves as the visionary leader of the region, which includes the states of Maine, Massachusetts, Vermont, New Hampshire, Connecticut, New York, Rhode Island, and New Jersey,

as well as the international chapters in eastern Canada and West Africa. A technical marketing engineer at Cisco Systems, Ron is also a member of the Institute of Electrical & Electronics Engineers (IEEE). He has been a dedicated member of NSBE since joining as an undergraduate and has held a number of leadership positions in the organization on the local, regional and national level.

2003

Carolyn Delehanty raises funds in memory of her son for underprivileged children living in Lowell.

Mohamed Omar, a work environment graduate and former environmental management engineer at Harvard University, has joined the King Abdullah University of Science and Technology in Saudi Arabia as a manager of environmental protection. Located on a beautiful campus on the Red Sea, the university has one of the largest certified green/LEED platinum projects in the world.

2004

William Schofield has been promoted to vice president in the Global Credit Products division at Bank of America. He has been with the bank since 2010 and has more than 12 years of related banking experience.

2006

For the last six years, **Michael Jarvis** has been teaching students with special needs—five years at Lowell High School and this past year at the Lowell High School Freshman Academy. He was attracted to the field when he worked as a substitute teacher for special education students at LHS to help pay for his last year at UMass Lowell. “I have a high level of patience working with kids,” he says, “especially the ones needing more help.”



► CLOSE-UP CLASS OF 1996

Dana Bryson: 'Hockey Mom'

Dana Bryson is usually buried in hockey equipment. Whether he's sharpening skates, shuttling pads and helmets to buses, providing players extra sticks or making sure their laundry is done, Bryson tends to feel more like a mother than an assistant equipment manager for the Los Angeles Kings.

But with Bryson behind the scenes this season, the Kings reached the pinnacle of the sport, winning the 2012 Stanley Cup. As a student at UMass Lowell in the early '90s, Bryson never dreamed he'd have the chance to hoist hockey's hallowed prize.

During his freshman year as a River Hawk, Bryson was dorm-mates with Jon Mahoney and David Mayes, both of whom were hockey players. The team needed a student equipment manager, and Bryson gladly volunteered.

"Those years I was at UMass Lowell were pretty memorable," Bryson says.

"We made it to the NCAA's twice and I was there when [Tampa Bay Lightning goalie] Dwayne Roloson played. So, it was a great hockey atmosphere."

After receiving his degree in criminal justice in 1996, the Medford native worked in equipment manager roles at Northeastern University, Providence College and for the Manchester Monarchs. In 2005, he took the job with the Kings.

"When I was doing it at school, I never had any aspirations to do it for the pros, but when I got to Providence, that's when I decided that's what I wanted to do for the rest of my life," Bryson says. "This past year was kind of crazy because it was the first year I traveled with the team full-time."

With a wife and three young children at home in Redondo Beach, Calif., Bryson says the travel wasn't easy. It helps, he says, that his wife, Jesse, works in community relations

for the Anaheim Ducks, and thus understands how hectic hockey life can be.

"My wife told me to just worry about hockey and everything at home would be fine," he says. "She was actually eight months pregnant in the playoffs and we had our third kid right before the first game of the Western Conference finals."

Bryson hopes the team will have a similar season this year.

"I've watched a lot of these guys come up through the system and really grow up in front of me and that's pretty special," he says. "But at the end of the day, we are basically babysitters. I have three kids at home and 25 at the rink. I don't know how I got here, but I love it and wouldn't change it for the world."—RM

“KEVIN JAMES, without a doubt. His characters have been funny and sensitive and sarcastic. Pretty much my kind of guy.”

— Kevin Plante '91, to *LP Magazine*, on who would best portray him in a movie. A would-be “Mall Cop,” Plante is manager of U.S. retail loss prevention operations for Staples, where he oversees all loss-prevention operations for more than 1,600 stores nationwide.

2005

Caitlin Jondro began a new job in May as a digital marketing program manager at Staples.

Djwan Scott, a second-year master's nursing student, was selected by Brigham & Women's Department of Nursing and Patient Care Services as a 2012 Ujima Award Recipient. Ujima is one of the seven principles of Kwanzaa, which celebrates family, community and culture. At BWH, the annual Ujima Award and celebration recognizes the contributions of multicultural members of the Nursing and Patient Care Services community. Djwan also is the coordinator of diversity support services for UMass Lowell's Bring Diversity to Nursing grant.



2006

Carrie (Kidder) Bentley and her husband, Marvin Bentley II, celebrated their first wedding anniversary on July 9. They say they are doing well and are excited to be celebrating one year of marriage and four years of being together.

2007

Sue Cabot, the communications assistant at the Indian Hill School in Littleton, is also a jazz singer who has performed at the Acton Jazz Café and at other venues in Worcester and Marlboro. Sue, who earned her degree in music business, says she enjoys jazz because it's full of life. “When I sing jazz, I sing it with my whole body, from the bottom of my feet up,” she says.

Colleen Ranshaw-Fiorello was certified as senior center director by the Massachusetts Association of Councils on Aging and Senior Center Directors in 2010.

Grace Sembajwe, a work environment graduate, recently joined the City University of New York School of Public Health at Hunter College as associate professor in the Environmental and Occupational Health Sciences Program. She is co-principal investigator on a Robert Wood Johnson Foundation grant for biomarkers of pain and cardiovascular disease. She is also principal investigator for a project examining employee biological monitoring for exposures to antineoplastic drugs, funded by the Massachusetts General Hospital Council for Technology Adoption and Innovative Process.

► CLOSE-UP CLASS OF 2005



Kathi Bailey Takes Her Work Halfway Around the World

In August, Kathi Bailey flew to China on her own dime and spent three weeks in Shanghai, Hangzhou, Qingdao, Xi'an and Beijing visiting community centers, nursing homes and senior housing sites.

The objective, she says, was to “understand China's solution to the needs of its rural aging population.” She wanted to learn how China was caring for its elderly and how that relates to the Social Security system in the United States. Her interest in this subject comes from her position as director of the Senior Center/Council on Aging in Clinton.

“The trip came about because of my interest in comparing aging demographics and policy in two countries,” she says. This comparative method was a “direct result,” Bailey says, of her training in the Regional Economic and Social Development program where she earned a master's degree in 2005. (She also has a B.A. in business from Worcester State.)

The idea of comparing U.S. policies with those of China stemmed from a meeting of the Gerontological Society Association held in Boston in 2011. It was there that Bailey met Prof. Mi

Hong of Zhejiang University. Hong, who directs the university's research on the rural aging population and social security, was in Boston to explain his team's research to the association's members.

Bailey says it struck her that even though there's a lot of controversy in the United States about financing Social Security, our system is viewed in China as a model program. It seemed obvious then that if she were to put her comparative method training into practice, she had to get on a plane.

The Clinton Council on Aging provided her with time off the job and Zhejiang University agreed to pay all her expenses in China.

“The Massachusetts Executive Office of Elder Affairs (EOEA) is aware of my trip and is very interested in the knowledge I gain from the experience,” she says. I hope to form a partnership for future learning with the Lowell, Boston and Worcester campuses of UMass, along with EOEA and AARP with a link to the World Health Organization.”

—JMCD

2008

Michael Harvey, a classroom teacher since the mid 1990s and principal of Belmont High School since 2006, has been named superintendent of the Hamilton-Wenham school district. A graduate of Amherst College, Mike earned a doctorate in school leadership at UMass Lowell.

Shannon Spinosa returned to her alma mater, Shawsheen Valley Technical High School, this fall as the school's newest medical assistant teacher. After earning a bachelor's degree at UMass Lowell, Shannon became an LPN before turning to education.

Peter Udstuen is Shawsheen Valley Technical High School's newest history teacher. Recently married, the Chelmsford resident is a native of Bellingham, where he played soccer and basketball in high school before playing rugby at UMass Lowell.

2009

Grace Basile, who has been interim assistant principal of the Shaughnessy Elementary School in Lowell since 2010, has been named principal of the Roosevelt School in Melrose. A graduate of Northeastern University, Grace has a master's in education degree from UMass Lowell.

Donna Fagen, who earned a doctorate in electrical engineering at UMass Lowell, is co-founder and chief technology officer at Equilateral Technologies Inc. of Lexington. The company deals in digital wireless technologies for voice and data. Donna was featured this spring in an issue of Mass High Tech: The Journal of New England Technology.

Tommy Powers, a former UMass Lowell hockey player, has been named the strength and conditioning coordinator for the NHL's Phoenix Coyotes. Joining the River Hawks in 2006-07, Tommy played in 15 career games while maintaining an outstanding academic record. The defenseman was a three-time selection to the Hockey East All-Academic Team. A stay-at-home defender, he carried a career rating of plus-1 with six penalty minutes and helped lead the River Hawks to the Florida College Classic Championship in 2007-08. Tommy graduated with a bachelor's degree in exercise physiology and a minor in nutrition.

2010

Brian Bahia launched a web design business in Lowell in May. The new company offers discounted rates for local businesses.

Carolanne Brennan and **Bruce Burkhardt Jr.** were married on July 14. Carolanne earned a master's degree in educational administration at UMass Lowell and is now teaching sixth grade.

Brian Dempsey is the new school resource officer at Somerset-Berkley Regional High School. He was previously a full-time police officer for seven years, three years in Florida and four years in Somerset. Brian has been

working the overnight shift as a patrolman for the Somerset police department. He earned a master's degree in criminal justice from UMass Lowell.

Shawn Hansen has worked for the Community Newspaper Co. as a freelance journalist since 2009, and has had his own television show, "Shawn Hansen's Comedy Corner," since 2010.

Amy Stanley, who received her master's degree in 2010, has been working at Lowell General Hospital, first in Community Health and Wellness and now in Human Resources. She also has been working on the side with Erin Caples '02, '04, another UMass Lowell alum, on a business Employee Assistance Program (EAP) and social media/grant consulting. Amy and Michael Tobin married in October.

2011

Joshua Northrup has joined Aerodyne Research, Inc., in Billerica as an assistant engineer in the company's Center for Atmospheric and Environmental Chemistry.

2012

Anna Struna says she bought a new car, got a condo right on the beach on Cape Cod, was able to find and hold a good job and joined in partnership with a fellow local artist in opening and running an art gallery—all within two months of graduation.

► CLOSE-UP CLASS OF 2011



Building the Future on the Site of His Past

The irony of his work isn't lost on Rafael Rodriguez Jr. Neither is its value.

The 2011 civil engineering grad has, since January 2012, worked as a field engineer for Turner Construction, the firm that has raised the Emerging Technologies and Innovation Center from rubble and dust to an \$80 million, state-of-the-art showpiece housing research and development facilities.

Rodriguez, 22, of Lawrence, calls it his "dream job," a place where his past and the University's future intersect along VFW Highway and University Avenue.

The 2005 Lawrence High School graduate says he lived his sophomore and junior years in Smith Hall, the red-brick UMass Lowell dorm that was torn down to make way for ETIC. "I used to live right there," he says, pointing to a patch of deep-green grass where until recently construction trailers stood. "Used to play catch right out in front."

He recalls driving past the site during Smith's demolition in 2010. "It was kind of upsetting in a way but at the same time, change was needed and things had to move forward. As I see it, that was inevitable. It was the start of this great building," he adds, sweeping his hand toward the 84,000-square-foot structure behind him. "It's a place where every inch is state-of-the-art. Nanotechnology, clean rooms, labs of every kind. It's all top-notch. The best."—DP

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► CLOSE-UP CLASS OF 2012

From Campus to the Campaign Trail

Jon Zlotnik’s political aspirations may have taken root when he was in high school, but his first campaign got off the ground in his UMass Lowell dorm room.

Zlotnik, who graduated in May with a bachelor’s degree in history, ran for a seat in the Massachusetts House of Representatives. The Central Massachusetts district includes his hometown of Gardner as well as Ashburnham, Winchendon and part of Westminster.

Driven by a desire to promote economic development in an area he says is struggling to

rebound from years of disinvestment, Zlotnik decided to run for the seat while he was still a college senior, deferring plans for law school. His suite at Sheehy Hall served as unofficial headquarters for the nascent campaign and his roommates were his first campaign volunteers.

“We had everyone working together on an assembly line in the common rooms at Sheehy, putting together mailings,” he says.

One of his roommates, Brad Heglin, who earned his bachelor’s degree in English in May, is Zlotnik’s campaign manager. The two have

known each other since sixth grade and graduated from Gardner High School together.

“I’ve never done anything like this before,” says Heglin, who is working on his master’s degree at the Graduate School of Education with a goal of becoming a high school English teacher. “It’s been a lot of fun.”

On Nov. 6, Zlotnik, a Democrat, won the seat previously held by first-term incumbent Rep. Richard Bastien, a Republican from Gardner, in what was widely called an upset. —JG





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► CLOSE-UP CLASS OF 2012

It Took a Quarter of a Century, but Rui Pereira Finally Got His Degree

For Rui Pereira, it was never just about the degree.

He wanted it, to be sure. To pursue anything for 26 years, you pretty much have to want it. But he clearly didn't need it—at least not for the last 20 years. And it was never really the point. The point was simpler than that:

"I had a goal—to earn my degree," says Pereira, who graduated this past spring, 26 years after he started, with a degree in civil engineering.

In 1986, when he first enrolled at UMass Lowell (still ULowell at the time), he was a 21 year-old transfer student from UMass Amherst, an émigré from the Cape Verde Islands who had come to Massachusetts six years earlier, with his parents and sisters, to rejoin others in the family. By the time he finished, earlier this year, he was a 47 year-old husband and father of three, a veteran of 13 years in the National Guard, a major-project construction manager responsible for more than \$90 million of under-contract work.

There was never any question, he says, what he wanted to do with his life: "I love construction, I always have. I love being a part of constructing things that will be used by people, things that will last."

And so he has. Over the course of the past 20-plus years—as field engineer, project engineer and finally project manager, in at least three states and for several different compa-

nies—he has worked on roadways, bridges, tunnels (including the Ted Williams Tunnel), fuel systems, airport projects and waste treatment plants, sometimes with as many as 180 employees reporting to him.

Throughout it all, he remained in pursuit of his UMass Lowell degree: taking night courses, online courses, out-of-state courses for transfer, sometimes taking whole semesters off. Somehow along the way, he managed to honor a 13-year commitment to the National Guard. But for most of these years, he was working full-time.

"I wouldn't hear from him for a while, then one day out of the blue he'd write, wanting to know what requirements he still had, what he had to do to graduate," says Engineering Prof. Donald Leitch, who served as a mentor to Pereira throughout his UMass Lowell career. "So I'd come up with a plan and let him know, and he'd always follow through. He had incredible perseverance, a lot of personal pride. He never lost sight of what he wanted."

Today he is in Florida, where he has lived and worked the last eight years—and from where, through a creative mix of email, online courses and transfer credits from a local community college—he earned the final pieces of his UMass Lowell degree. With him are his wife, Elizabete, whom he met as a fellow-student back in his UMass Amherst days



Rui Pereira celebrates his graduation with his mentor Prof. Donald Leitch.

(where two of his three children are students today) and the youngest of the couple's three children.

Prof. Leitch, Pereira will tell you, deserves a big piece of the credit for steering him through the academic waters: "He sold me on the path to begin with, then was always there, always available, his door was always open. He was a great mentor to me."

But the professor will have none of it.

"I just kept the records. The credit belongs to him. I mean, think about it. There he was, married, working full-time, raising three kids—he might take a break from time to time, but he always came back, he never lost sight of his goal. You tell me: How many other people are going to do that?"—GD

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Learning with Purpose

Gary Mucica '71, Leaves a Lasting Legacy on Campus

Gary Mucica enrolled at Lowell Tech in 1967 partly because the school had a golf team.

Thirty-two years later, after successful careers with Johnson & Johnson and the Clorox Co., he came back, on a whim, to teach one graduate course.

The one course became two and the two led to a full-time appointment and before long he became director of Graduate Management Programs. And then, at the request of the athletic director, he re-established the University golf team that had ceased to exist in 1997.

"I'm having a Type A retirement," he said two years ago. "UMass Lowell is on a roll and it's fun to be part of making it happen."

Gary, who did, indeed, play an important part in "making it happen," died unexpectedly on July 3 after a brief battle with cancer. He was 62. He leaves his wife, Sally, and his brother Bill, an assistant coach with the golf program.

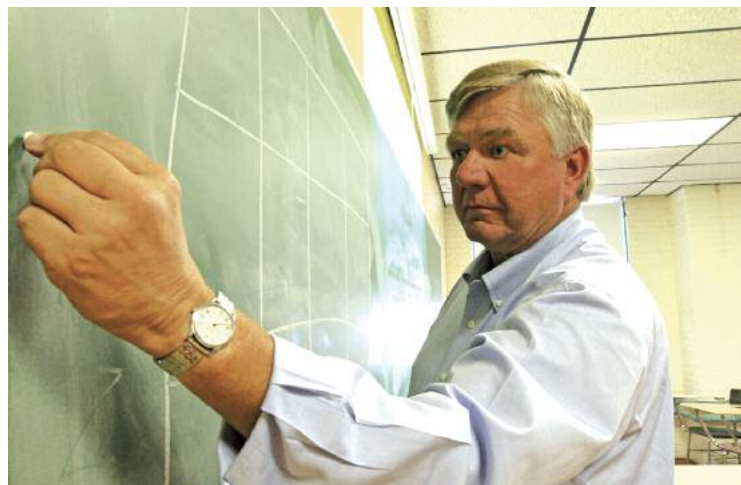
Chancellor Marty Meehan said, "Gary's passing is a great loss to the University. He made so many contributions to the growth of the campus that will forever be his legacy."

Director of Athletics Dana Skinner, the one who urged Mucica to revive the golf program, said, "We are deeply saddened at the death of our dear friend Gary. He was one of those rare individuals who had a talent for spreading optimism in every corner of the campus."

Gary led the golf team to its most successful season last year when it placed third among 34 Division I, II and III teams in the New England Intercollegiate Golf Association Tournament and earned its fourth bid in five years to the NCAA East-Atlantic Regional Tournament.

In addition to serving as director of Graduate Management Programs in the Manning School of Business, he also was co-chair of the campus Branding and Marketing Committee and chaired the Manning School of Business Advisory Board.

Aside from his coaching duties, Gary also supported athletic programs each year and established an endowment to increase scholarships. During the 50th anniversary celebration of the College of Management,



he pledged \$100,000 toward the construction of a new business school building.

He received the Francis Cabot Lowell Alumnus of the Year Award for Management in 2003.

Born in upstate New York, Gary came to Massachusetts with his family when his father, director of purchasing for Salada Tea, was transferred to Woburn. He captained the Reading High School golf team before enrolling at Lowell Tech.

In addition to his Lowell degree, he earned an M.B.A. from Suffolk University's Sawyer School of Management.

He was sales and marketing manager for both Johnson & Johnson and the Clorox Co. until his retirement in the spring of 1999. He played so much golf that summer, he said, that "I almost couldn't stand it."

So he was ready to get to work again when he happened to meet Dean Kathy Carter at an alumni event and agreed to teach "one course for one semester."—JMcD

Deceased

CLASS YR NAME

1931 Yun-Cheng Wang
1938 Mary E. (Kelley) Corkery
1938 Margaret L. (Noonan) Marsden
1939 John A. Goodwin
1941 Barbara L. Coffey
1941 Sidney W. Factor
1941 Margaret H. (Robinson) Keene
1942 Margaret D. (Jensen) Cullinane
1942 Eunice M. (Hodgson) Pickup
1945 Sidney B. Berkowitz
1947 Martha M. (Lenox) Doleva
1948 Yuan-Loong Yang
1949 John B. Weiser
1952 Elizabeth A. (Gleason) Gionet
1952 Diane B. (Barsorian) Maloomian
1952 Bernard Musmand
1953 Walter F. Polak
1954 Margaret R. Brady
1954 Frederick T. Gleason
1954 Ann M. (Robishaw) Welsh

CLASS YR NAME

1956 David E. Hanlon
1956 Carol A. (Mitchell) Preston
1956 John R. Walker
1958 Dolores L. (Depetrillo) Smith
1959 Gungor Solmaz
1963 Gerard H. MacDonald
1963 Christos Pappadopoulos
1964 Gilbert A. Dupre
1965 John R. Biro
1968 Douglas W. Anderson
1968 Stuart J. Marcus
1969 Joseph E. McKenney
1969 John C. Soldega Jr.
1970 Paul Gasamis
1970 Richard A. Mungo
1971 Gary M. Mucica
1971 William G. Perkins
1971 Frederick W. Spring
1972 Anthony G. Ziagos Sr.
1973 James A. Fairhurst

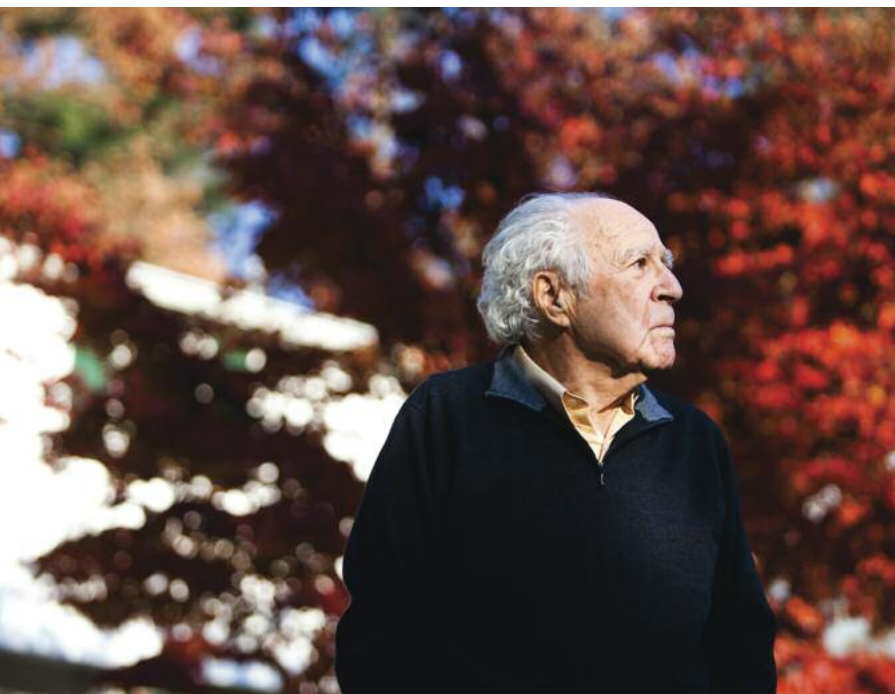
CLASS YR NAME

1974 Francis P. Barker
1974 Gerald C. Goldman
1975 William P. Malavich Jr.
1976 William H. Alderman Jr.
1976 Pamela A. (Kozub) Parker
1976 Michael B. Sullivan
1977 Stephen E. Austin
1977 Gregory A. Dana
1979 Gregory D. Sanders
1980 John A. Saboliauskas
1983 Maureen B. Amigo
1984 Robert K. Fawcett
1985 Holly E. Mawhinney
1986 John J. Kavanagh
1986 Linda R. (Schmauss) Siwak
1988 David W. Brazil
1988 Sally B. Costello
1988 Leo J. Coutu
1988 Edmund F. Wright Jr.
2000 James J. Caulfield

CLASS YR NAME

2002 Claire M. Babcock
2002 George A. Hammond
2003 Ryan S. Delaney
2003 Bryan Larosa
2007 Edward T. Dillon
2009 Christopher A. Bennett

Faculty Patrick Krolak
Faculty John A. Goodwin
Faculty Gary M. Mucica
Faculty Joseph A. Zaitchik
Staff Roger A. Grady
Staff Gregory Keefe



Prof. Joseph Zaitchik Taught English for Nearly Half a Century

Longtime English professor Joseph Zaitchik died at age 87 on July 18.

Joseph—who had been at the University for 46 years, and was planning to teach “The Bible as Literature” this fall—immigrated from Russia when he was 4 with his parents and four of his eight older siblings. He joined the faculty of UMass Lowell after earning a doctorate from Boston University.

Beloved by students and colleagues, he taught a wide range of courses from American Literature to History of the English Language, English as a Second Language and Human Values in Western Culture, an interdisciplinary curriculum he developed and trained colleagues to teach, and for which he wrote a textbook used at a number of universities.

He also wrote other textbooks, plays, short stories and poetry. In 2004 his play “Be Our Joys” won the Stanley Drama Award, an honor that included a New York production. In 2011, his first novel, “The Fitting,” was published.

In December, Joseph was joined by students, professors, friends and family in celebrating the release of the book, which the professor said he started before he came to the University. It’s about a Russian immigrant tailor untangling and re-tangling a murder mystery near a college campus based on UMass Lowell.

Joseph saw the University through different names and administrations and highs and lows. As the chairman of the student affairs committee in the ’60s and ’70s, he helped guide the campus through tumultuous times such as the Kent State shootings and clashes between students and administrations. But always, the school and Joseph kept moving forward.

“Early on, it was a small school that I came in to, but it’s been growing and growing and getting better and better,” said Joseph, at the December reception. “I’ve always enjoyed the students here.”

And they will certainly miss him.

In addition to his wife, Holly, Joseph leaves six children, eight grandchildren, former wife Jeanette Zaitchik and brother Rabbi Samuel Zaitchik.

Charles Saulters II '10: Artist Gone Too Soon

Charles Saulters II '10 loved life and sharing its best moments with the world. The talented artist and businessman succeeded, capturing stunning photos and videos in his 27 years. Sadly, that gifted life was cut short when he unexpectedly died in January.

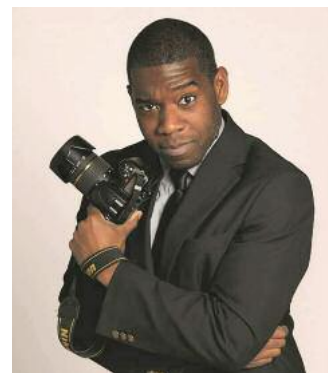
His art, however, will live on, spreading the beauty Charles so appreciated.

While studying music business, performance and fine arts at the University, Charles made an impact both with his desire to help others and his captivating personality.

“Charles always had a positive outlook and it spread deeply through his work relationships,” says classmate Gillian Murphy '10. “He worked for every moment that he had. The time we were fortunate to have with him and the warmth that he brought to the UMass Lowell and arts communities is something that we can spread and nurture in our own lives.”

While still in school, Charles began working as a photographer, videographer and graphic designer. After a post-graduation job interview didn’t pan out, he took things into his own hands.

“I told myself that I was going to go out on my own and get to a level where the company wishes they had understood my potential,” Charles told Pulse Magazine when he was featured as one of “12 to Watch in 2012.”



He founded Charles Saulters Media and quickly became sought-after throughout New England for his skills in everything from motion graphics to social media. He designed websites, shot live concerts and captured cherished moments for a growing list of satisfied clients.

“I love people,” Charles told Pulse reporter Tine Roycroft. “I enjoy making them smile, helping them connect their ideas with exciting solutions and making them feel as though there is someone else who is as passionate about their project as they are.”

Charles leaves his family and partner Sarah Sparrow. For more examples of his work, visit <http://charlessaulters.carbonmade.com>.

Charles was a proud member of Step Up To Excellence, a mentoring program at Fitchburg High School. Donations in his honor may be submitted to Piecework Partners, Step Up To Excellence, P.O. Box 309, Lincoln, MA 01773.



Photo by
Charles Saulters II

Prof. Patrick Krolak: His Innovative Spirit Will Live on



Emeritus Prof. Patrick D. Krolak, a teacher who mentored, encouraged and inspired countless numbers of students during his three decades of service to the University's Computer Science Department, is dead at the age of 72.

Pat, his wife, Rita, 70, and their son, Patrick M. Krolak, 42, were killed in an auto accident in the Adirondack region of upstate New York on Aug. 25. The convertible in which they were riding was struck head-on by an SUV that had crossed into oncoming traffic. All three members of the Krolak family were pronounced dead at the scene.

A memorial service was held Aug. 31 in Dover, where Pat and his wife lived.

Tom Costello, now a retired professor, was head of the fledgling Computer Science Department when he hired Krolak in 1982.

"He pushed his students to think big, to create things, to overcome barriers," Costello says. "He wasn't afraid to break the old mold and try something new. He liked challenging existing models. Every semester he changed things to keep up with the times."

Pat was the first department member hired from outside the University. At the time, he was on leave from Georgia Tech on a faculty research appointment and had responded to a UMass Lowell ad seeking qualified faculty for the Computer Science department.

A native of the Chicago area, he had previously been on the Vanderbilt University faculty where he chaired the computer science department. He had earned a doctorate in applied mathematics and computers from Washington University in St. Louis in 1968.

It soon became evident that Costello made an excellent choice in hiring him.

Two years after joining the C.S. faculty, Pat helped establish the Center for Productivity Enhancement. This was a program that brought together computer science, engineering, science and management students, and members of private industry. Common today, the concept was a revolutionary idea in 1984.

A prime example of the program's success was Avid Technology, then in Tewksbury and now headquartered in Burlington. The Center's students worked with Avid and helped turn that company—which specializes in video and audio production technology—into a huge success.

Among the students working in that program was Rich Miner, now a partner in Google Ventures, the venture capital division of the Internet search giant.

Miner credits much of his success to the professors who "prepared me with the skills to be an entrepreneur by providing a strong technical and commercial foundation. They also provided me with a pragmatic education."

Chief among those faculty members was Prof. Krolak.

Calling him "my dear friend and mentor," Miner last year established The Professor Patrick D. Krolak Innovation Scholarship. It is to be awarded annually in perpetuity to Computer Science students who exhibit "entrepreneurial spirit."

But beyond his teaching and mentoring skills, Pat was recognized as being a thoughtful human being.

"Too often staffs provide support to more senior members of an organization but don't hear any expression of appreciation," Costello says. "Pat never forgot to say 'Thank you.' Just last week he thanked the Computer Science system administrator for his help in laying out his plans for the fall."

Pat had retired in 2002 but continued to teach and was planning to resume his classes this fall. —JMcD

"Our father relished his time at UMass Lowell. He was tremendously proud of the students he mentored and the Center for Productivity Enhancement. Thank you to everyone on the faculty and in the administration who created an environment where his ideas could thrive. In the midst of this incomprehensible tragedy, we are comforted to know that his innovative spirit will continue to echo on through his students and colleagues."

**— Karen Krolak,
daughter of Pat and Rita**



Ashley Dias '09 Embraced Life

Ashley K. Dias, 26, died June 14 at the Cleveland Clinic in Cleveland, Ohio, with her family by her side. Ashley, whom we profiled in the last issue of this magazine, battled Cystic Fibrosis for all of her life.

She had two lung replacements and a kidney replacement. And through it all, she embraced life: competing in gymnastics, relentlessly supporting Boston sports teams and spending time with her friends, family and beloved dogs. She was also a loyal sister of Kappa Delta Phi sorority, as well as a member of the UMass Lowell cheerleading squad.

Born in Lowell, Ashley graduated from Andover High School and received a bachelor's degree from UMass Lowell in 2009.

Ashley is survived by her mother, father, two sisters, paternal grandparents, and many aunts, uncles and cousins.

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Nearly \$700,000 was raised for student scholarships through the generous support of our Commencement Eve Celebration sponsors. Since 2008, \$2.2 million has been raised through this annual event.

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— Marty Meehan, Chancellor



For future information about this event, please visit <http://alumni.uml.edu/commencementeve>

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