Modernized Perry Hall Opens New Era of Research, Learning

$50M Renovation Paves Way for Industry Partnerships

When Barry Perry ’68, ’15 (H) was a plastics engineering student, buildings on North Campus still housed machinery used to train students for careers in the textile industry. Perry recently was back on campus to celebrate the grand reopening of Perry Hall, the building that will prepare future generations of engineers and researchers for careers in biomanufacturing, clean energy and other emerging fields.

The building had been closed for over 18 months to undergo a $50 million renovation. Perry, a longtime supporter of research, academics and scholarships at UML, helped set the work in motion with a $1.25 million gift in 2012.

“It’s a great honor for our family to give this type of opportunity to students,” said Perry, who began his career at General Electric before becoming chairman and CEO of New Jersey-based Engelhard Corp.

More than 200 guests, including UMass President Marty Meehan ’78 and UMass Board of Trustees Chairman Robert Manning ’84, ’11 (H), packed the building’s redesigned main entrance for the sun-splashed ceremony, which drew a host of industry partners, alumni and local officials.

Originally known as the Engineering Building when it opened in 1952, Perry Hall has long been a hub of innovation and industry. The building had become dated, however, and a fire in 2012 forced the closure of the fourth floor.

The renovation work—conducted in partnership with the UMass Building Authority, project manager STV, architect Perkins+Will and Suffolk Construction—included a total reconstruction of the interior of the building.

The new space features labs for teaching and research in biomedical, chemical and environmental engineering, biomanufacturing and clean energy, as well as room to support expanding industry partnerships. Various lab space in the building is supported by generous alumni and partners, including Larry Acquarulo ’81, Mark Dyment ’87 and Rick Pierro ’83.

A $5 million grant from the Massachusetts Life Sciences Center (MLSC) supports work on the third floor, which is home to the Massachusetts BioManufacturing Center and the BioMedical Engineering Research Lab.

“With this investment, the center and UMass Lowell embrace a critical global role in educating a workforce with the skills, research capabilities and industry experiences to bring the next generation of therapies and medical technologies to market,” said MLSC President and CEO Travis McCready.

Joseph Hartman, dean of the Francis College of Engineering, said the modernized facility will greatly enhance the school’s recently launched programs in biomedical and environmental engineering. The fourth-floor Alternative Energy Research Lab will allow faculty and students to work on clean-energy initiatives like solar, wind, biofuels and energy storage.
A new study co-authored by Prof. Katherine Tucker found that the more eggs an individual consumes, the greater the risk for heart disease, stroke and overall mortality.

Research Links Egg-heavy Diet with Health Trouble

Study Finds Increased Egg Consumption May Contribute to Heart Disease

Eggs are an inexpensive source of protein and other beneficial nutrients, but consuming too many may be bad for your health, according to new research co-authored by Prof. Katherine Tucker of the Department of Biomedical and Nutritional Sciences in the Zuckerberger College of Health Sciences.

“Eggs may be good and bad for you, depending on how many you consume,” Tucker says. “Eggs include a lot of healthy nutrients, like zeaxanthin that protects your eyes and vitamin D that protects your bones, but if you eat too many, then you may be at higher risk of heart disease.”

Tucker was a co-author, with researchers at Northwestern University Feinberg School of Medicine, on a study published in the March issue of the medical journal JAMA that found that the more eggs an individual consumes, the greater the risk for heart disease, stroke and overall mortality.

The study analyzed data from six study groups across the U.S., which included nearly 30,000 adults. Based on their analysis, the researchers estimate that each additional 300 milligrams of dietary cholesterol consumed per day was associated with a 17 percent higher risk of cardiovascular disease and an 18 percent higher risk of early death.

One large egg contains nearly 200 milligrams of cholesterol, which is roughly the same amount as an 8-ounce sirloin steak.

“Eating several eggs a week is reasonable, but I recommend that people avoid eating three-egg omelets every day,” says Tucker. “Nutrition is all about moderation and balance.”

Study Examines Why So Few Rape Cases End in Arrests

Research Funded with $1.19M Federal Grant

For every 100 rapes and sexual assaults of teenage girls and women reported to police, only 18 lead to an arrest, according to a study conducted by three professors in the School of Criminology and Justice Studies under a $1.19 million grant from the National Institute of Justice.

Forty-two out of 100 languish as “inactive” cases, while 30 more are closed by “exceptional clearance”—a designation that is supposed to mean that police have enough evidence to arrest a suspect but can’t do so for reasons outside their control, such as the death of the suspect or his arrest in another jurisdiction.

“Arrest is the least likely outcome, apart from the small number of reports that are determined to be unfounded,” says Prof. April Pattavina. “The fact that so few cases end in arrest is troubling, especially since we know that most victims are reluctant to go to police in the first place.”

The researchers—principal investigator and Assoc. Prof. Melissa Morabito, Pattavina and Prof. Emerita Linda Williams, who is also a senior research scientist at the Wellesley Centers for Women—wanted to understand why so few rape and sexual assault reports result in arrest and what leads to further attrition as those cases make their way through the system.

What they found was disheartening for victims, they say. Even when suspects were arrested, prosecutors sometimes declined to file charges, foreclosing further investigation, while other cases fell apart because investigations took too long.

In the researchers’ analysis, fewer than 7 percent of the rape and sexual assault cases reported to police resulted in convictions.

Preferred Partners Program Celebrates Industry Support

Businesses Recognized for Commitment to University Success

UMass Lowell honored its key collaborators in the business community at its first-ever Celebration of Industry Partners.

More than 150 people gathered at the university’s Innovation Hub in downtown Lowell to celebrate UML’s partnerships with businesses. The university honored Raytheon and Kronos as its top two industry partners and recognized 23 additional companies that have deep collaborations with the university on a variety of fronts.

Chancellor Jacqueline Moloney emphasized the importance of the university’s partnerships with businesses for students, faculty, the community and industry. Each year, UML works with these partners on hundreds of initiatives, including research, job training and workforce development.

“Partnering with industry and preparing our students for careers with leaders like Raytheon and Kronos is part of our institutional DNA and is the spirit that has guided our university since it was founded nearly 125 years ago,” Moloney said. “We want to be your go-to university for everything. We know how to help you to get bigger, to get better and become more competitive.”

Kronos CEO Aron Ain said his company’s collaboration with UML has been instrumental in its growth.

“UMass Lowell is really important to us in so many dimensions,” said Ain, whose $1.4 billion company has hired between 200 and 300 UML graduates, has endowed scholarships and maintains internships and co-op programs with UML students.

Raytheon, which employs approximately 700 UMass Lowell alumni, also offers students professional opportunities through internships and co-ops and has endowed scholarships. It also collaborates with the university on the Raytheon-UMass Lowell Research Institute (RURI).
Days of Giving: 3,300 Donors Help UML Surpass Goal

Fundraising Drive Sets New Record

The UMass Lowell community is known for rising well above expectations. But during the third annual Days of Giving, donors didn’t just exceed expectations, they soared past them.

On April 9-10, 3,302 members of the UML community—including students, faculty, staff, alumni, family members and friends—made contributions online and at regional events, raising a record $420,500 for their favorite programs, colleges, clubs and sports teams.

Support was particularly strong for student scholarships, including both general fund and individual endowed scholarships. Athletics also scored a big win with its challenge to attract 425 donations—one for each of the university’s 425 Division I athletes. When the buzzer sounded, more than 1,000 donors had given to different sports teams and to the Costello Campaign, earning an additional $25,000 in challenge funds.

“I’m no longer surprised by the generosity of UML faculty and staff, whose giving rate is three times the national average, but we continue to be deeply touched by the level of their support. And we are frankly amazed at how many of our students—many of whom face real financial challenges—found a way to give back,” says Deidra Miles, the university’s director of annual giving.

For more information about Days of Giving, visit www.uml.edu/umlgives.

New Project Documents History of Immigration

Website Will Provide Easy Access to Historical Documents, Photos

For four years, History Prof. Robert Forrant and Asst. Prof. Ingrid Hess of Art & Design have quietly charted the broad history of immigration in Lowell.

With the help of a team of UML students, they have gathered and curated hundreds of photographs, videos and essays, building a unique website that is designed to help teachers, students and academics put together the pieces of a historically significant part of Lowell’s DNA—the arrivals of waves of immigrants calling the city their new home.

The professors’ efforts recently got a boost with a $12,500 grant from Mass Humanities, an independent programming and funding organization.

The website, which will be called the Library of New England Immigration (LNEI), will be officially unveiled in the coming months and will be part of UMass Lowell Library’s online resources. Initially, it will focus on Lowell immigration, especially over the past 50 years, but it will broaden to include New England over time, says Forrant.

Several UML students have helped, working as paid researchers, writers, image hunters, graphic artists and web designers.

Forrant says the website will make the information easily available to researchers, historians, teachers and students and citizens.

“As a historian, I can research and assemble information for years, but with a click, you can have all this at your fingertips,” he says. “I can write a book, but this is going to reach a whole lot more people, and faster.”

UML Celebrates Energy Savings, Sustainability on Earth Day

University Completes $23M Accelerated Energy Program

Some of the energy-saving measures, like the 600-panel solar array atop the South Campus parking garage, are impossible to miss. Others, like occupancy sensors to control lighting in O’Leary and Lydon libraries, are more discreet.

But big and small, they’re all part of the university’s recently completed $23.1 million Accelerated Energy Program (AEP), an ambitious, three-year state-sponsored initiative designed to make the campus more energy-efficient while reducing its carbon footprint.

Officials from UML and the state’s Division of Capital Asset Management and Maintenance (DCAMM) marked its completion at an Earth Day celebration at University Crossing.

As the state’s largest AEP site to date, the university implemented more than 100 energy-saving measures in 30 buildings across campus over the last three years. As a result, the university expects to see $1.2 million in annual energy savings. The upgrades will save 1.7 million gallons of water and reduce carbon dioxide emissions by 9 million pounds each year. The AEP also eliminates $10 million in deferred maintenance across campus.

The AEP was launched in 2012 as a collaborative effort between DCAMM, the Department of Energy Resources and Massachusetts utility companies to develop and implement energy- and water-savings projects at 700 locations statewide.

The university has also moved closer to Platinum status from the Sustainability Tracking, Assessment and Rating System (STARS) for its campuswide sustainability efforts. With its latest STARS Gold score, UML is now the highest-rated campus in Massachusetts and among the top 10 of the 900-plus higher education institutions that use the reporting tool nationwide.

As part of campus sustainability efforts, a rooftop garden has been planted at University Crossing.
It’s been almost 50 years since Neil Armstrong took the historic first steps on the moon as more than half a billion people around the world watched the live television broadcast. That mission confirmed the United States as the undisputed global leader in technology and innovation and opened the doors to new frontiers in space exploration.

To commemorate the 50th anniversary of the first moon landing and to honor the legacy of Apollo 11, UMass Lowell and the John F. Kennedy Library Foundation recently brought together scientists, educators and students for a symposium that explored the mission’s impact on science, research, engineering and space exploration.

The Moonshot Symposium, held at University Crossing, featured a panel of space experts, including NASA Chief Scientist James Green, Rahul Narayan, a member of the lunar transportation company OrbitBeyond Inc., Susanna Finn, a UML research scientist, and Prof. Robert J. Twiggs of Morehead State University. Megan Donahue, president of the American Astronomical Society, served as moderator.

Green described NASA’s latest initiatives, including the upcoming Commercial Lunar Payload Services (CLPS) mission, which is a partnership with the U.S. commercial space industry to deliver robotic landers and rovers to the lunar surface; the Lunar Orbital Platform-Gateway, a miniature space station orbiting the moon that will receive lunar samples and serve as a steppingstone for human missions to Mars and beyond; and the Europa Clipper, whose goal is to explore Jupiter’s geologically active moon Europa and search for signs of life.

Finn described the experiments that the LoCSST team had designed and constructed on campus, including LITES, which is currently studying Earth’s upper atmosphere from its vantage point aboard the International Space Station (ISS), and PICTURE-C, which will be launched to the edge of the atmosphere this spring, using a high-altitude helium balloon. The instrument will look for Jupiter-size planets orbiting nearby stars.

Other speakers included Chancellor Jacquie Moloney, Vice Chancellor for Research and Innovation Julie Chen, and Steven Rothstein, the executive director of the JFK Library Foundation, who showed a video clip of President John F. Kennedy’s historic “Moon Speech” at Rice University in Houston in 1962 that rallied support for the budding Apollo program. The Apollo 11 mission fulfilled Kennedy’s ambitious goal of “landing a man on the moon and returning him safely to earth” before the end of 1969.