UMass Lowell has celebrated a milestone in the construction of its new, $95 million student-engagement center with the raising in June of a 34-foot-long steel beam bearing the electronic signatures of 1,500 students, faculty and staff.

The 143,600-square-foot building, under construction as part of the University Crossing complex, is scheduled to open for the fall 2014 semester and will be home to a variety of student services and other amenities open to both the campus and the public, including the University’s flagship bookstore, a food court and café, an event space accommodating up to 500 people and meeting rooms.

“Today, we are marking an important step in the path to completion of University Crossing,” said Chancellor Marty Meehan at the “topping off” ceremony. “When the University acquired this site in 2011, we envisioned it as a vibrant hub uniting our three campuses and the community. I look forward to being back here next year to celebrate the opening of what will be a place for student and community engagement.”

Located at a central point between UMass Lowell’s North, South and East campuses and walking distance from the downtown business district, University Crossing is already the site of an 86,600-square-foot building adjacent to the new center. That structure has undergone extensive renovations and, by this fall, will be home to departments including University Police, student financial services, financial aid, parking, transportation, environmental management and the registrar’s office.

“The student center is designed to serve as the ‘living room’ of the UMass Lowell community,” said Associate Vice Chancellor of Student Affairs Larry Siegel, adding that students have worked with the University to give input on the new building. “As the new home to our student clubs and organizations, it will be a place designed to foster student engagement, entrepreneurship and social activism, and to encourage service to others.”
Students Awarded $90K to Develop Safer Cleaning Agents

**Environmental Protection Agency Sees Promise in Student Research**

Millions of everyday products such as household laundry detergents, cosmetics and industrial cleaners could be made less toxic and more biodegradable due to the work of some UMass Lowell students. Their work is so promising that the team won a prestigious $90,000 grant from the U.S. Environmental Protection Agency (EPA).

Called “P3”—People, Prosperity and the Planet—the award recognizes research that will help improve quality of life, promote economic development and protect the environment. The funding allows the team to further develop their designs and ideally bring them into the marketplace.

The students won the funding for creating safer, effective, non-toxic and biodegradable surfactants from abundant, renewable resources—namely, fruit-peel waste and sea algae. Surfactants are cleaning agents found in millions of everyday cleaning and personal care products. They help remove dirt, oil, grease, food and other organic compounds from clothes and dishes by making the dirt and oil dissolve more readily in water during washing.

“This award helps inspire a new generation of scientists and engineers to create solutions to complex environmental problems,” says Curt Spalding, regional administrator for the EPA’s New England office. “UMass Lowell students are playing a leadership role, applying their ideas to real-world situations and playing a part in protecting the environment in a more sustainable way.”

Nurses Gain Edge With R.N. to B.S. Program

**Hospitals Demanding Higher Degree**

Though she’s been a registered nurse for 27 years, Kim Pierce was finding it difficult to participate in her hospital’s improvement initiatives. She knew she had the ability, but also knew that she lacked some of the necessary skills.

She enrolled in UMass Lowell’s R.N. to B.S. degree-completion program 18 months ago and graduated in May armed with the knowledge necessary to best meet the needs of her patients.

“The program markedly improved my writing, communication, negotiation and problem-solving skills,” says Pierce, who works per diem in the critical care unit of the cardiac rehabilitation center at Lawrence General Hospital. “I now have the ability to perform evidence-based practice critique, concept analysis and literature reviews to better help my patients.”

Fox Hall Falcons Successfully Hatch Two Chicks

**Two Babies, Mom Are Doing Fine**

Since 2007, a pair of peregrine falcons has called East Campus home. This spring, they successfully hatched two chicks inside a gravel-filled wooden nest box mounted on the roof of 18-story Fox Hall.

Peregrine falcons are the world’s fastest birds, capable of diving from great heights at speeds of up to 200 miles per hour. These majestic raptors tend to nest on rocky cliffs as well as on tall buildings and structures in urbanized areas.

On June 6, a team from the Massachusetts Division of Fisheries & Wildlife (DFW) checked on the condition of the 4-week-old chicks and placed metal identification bands around their legs.

“The chicks are nice and healthy,” says Thomas French, assistant director of DFW’s Natural Heritage & Endangered Species Program, who led the tagging team.

“The parent falcons usually stay in Lowell year-round,” says French. “Their offspring can normally be found within Eastern Massachusetts. In previous years, some of them have been sighted in beaches and marshes as far north as Plum Island and as far south as Plymouth and Chatham.”

To date, the Fox Hall falcons have successfully raised a total of 15 chicks—12 on campus and, prior to that, three in a abandoned mill building in downtown Lowell.

To watch a video of this year’s tagging, go to UMass Lowell’s YouTube page.
**Students Embark on Summer Internships Around the Globe**

Biology major Rachel Paquette ’14 is spending six weeks this summer interning at the South Australian Aquatic Sciences Center in Adelaide. She is developing lab culture techniques for several species of algae and testing the impact of environmental conditions.

“I get to go to Australia, do hands-on work in my field and get credit,” said Paquette just before she left on her adventure.

Paquette is among a growing number of students who are taking advantage of international internship opportunities, gaining professional experience while getting exposure to global learning.

“International internships are a great opportunity for students to gain valuable career experience and earn academic credit,” says Fern MacKinnon, manager of the Office of Study Abroad and International Experiences.

Krystal Quezada, who earned her degree in English in May, spent her final undergraduate semester in Valencia, Spain, as a public relations and social media intern with the Villarreal soccer club. Participating in a faculty-led study abroad to Prague, Czech Republic, during the summer of 2012 whetted her appetite for a longer overseas experience.

“Now I feel ready to work. I am quite excited to start a new chapter.”

Students doing international internships for credit have assignments to complete, usually a series of papers or presentations. Similar to a study-abroad program, the students live in apartments or with host families. The Study Abroad office offers help with the application process and other arrangements.

**UMass Lowell Scientist Calls Alternative ‘Promising’**

UMass Lowell researchers have developed an epoxy resin that holds promise as a safe substitute for resins that contain bisphenol A—better known as BPA—a compound commonly found in the lining of food and beverage cans that poses potential health risks.

Used since the 1960s in consumer products ranging from baby bottles to eyeglass lenses, BPA mimics the hormone estrogen in the body, giving rise to concerns that it could harm human reproduction and development. Its potential risks are now being studied by the National Institutes of Health and the federal Food and Drug Administration.

Led by Daniel Schmidt, an associate professor of plastics engineering, the UMass Lowell team has identified a compound that could become an alternative to BPA in epoxy resins that are used in many adhesives and a host of other products. The substance is known as bis(epoxide) of 2,2,4,4-tetramethyl-1,3-cyclobutanediol (CBD O).

“All things being equal, we believe it is fair to say that replacing BPA with the monomer we’ve chosen will produce an economical, high-performance epoxy resin that generates less concern,” Schmidt says. “The results have been very promising so this has been pretty exciting.”

In contrast to BPA, the structure of CBD O “bears no resemblance to estrogen or any other human hormone,” Schmidt says, and published tests show the substance does not mimic the behavior of common classes of male or female hormones.

**Students Win National NASA Competition**

‘Rover Hawk’ Bests Other Universities’ Robots

UMass Lowell students have won a national NASA competition that challenged them to build a Mars rover-style robot and operate it via remote control, testing its durability and precision on varied terrain that mimicked the surface of another planet.

The UMass Lowell Rover Hawks—a nod to the University’s River Hawks—won the RASC-AL Exploration Robo-Ops Competition in June, beating out seven other university teams from across the country. NASA and the National Institute of Aerospace awarded the team $10,000 to build its rover based on plans submitted last December and a $6,000 cash prize for the championship.

To capture the win, the team’s rover successfully negotiated hills and wide expanses and picked up objects for one hour on a simulated planetary surface at NASA’s Houston training headquarters. The rover was controlled remotely by team members at the New England Robotics Validation and Experimentation Center at UMass Lowell, the country’s most advanced robotics-testing facility. Also contributing to the team’s final score was its success in producing an educational campaign about the contest that engaged the University community and the public through social media.
It’s Been a Banner Year at UMass Lowell

University Rankings, Accolades Soar

UMass Lowell is experiencing a period of unprecedented growth, and the world has taken notice. From hometown Lowell Sun, to industry-minded Boston Business Journal, to international publication Times Higher Education in London, UMass Lowell is receiving national and worldwide recognition.

In another historic milestone this year, the University’s athletic teams stepped up to Division I on July 1, joining America East, a conference featuring many of UMass Lowell’s peer institutions. America East Commissioner Amy Huchthausen noted that the conference looks for members with “strong academics, competitive athletics programs and outstanding facilities,” adding that “UMass Lowell has those assets and will strengthen America East in all facets.”

A recent report by Business Insider calls UMass Lowell the most underrated university in the nation. The finding is based on a comparison of PayScale.com’s mid-career salary data and the annual U.S. News & World Report rankings of colleges and universities across the country.

“Future income isn’t the only factor that should determine college choice, but it may be the most important one,” Business Insider states in the recent article, “The 25 Most Underrated Colleges in America.”

With an average mid-career salary of $92,400, UMass Lowell is No. 82 on PayScale’s list of more than 1,000 public and private colleges and universities nationally and is 16th among all New England institutions. Among public institutions in New England, UMass Lowell ranks second in average mid-career salary and is the only one that is a doctoral-granting university with a full range of academic programs from engineering to humanities.

UMass Lowell is ranked No. 170 by U.S. News & World Report, putting it in the top 100 public institutions and top 200 national universities in the U.S. of approximately 3,000 four-year colleges and universities. UMass Lowell’s ranking has climbed steadily in recent years, including jumping six spots from 2012 to 2013.

UMass Lowell Students are Work Ready, Life Ready, World Ready