Sale of UMass Lowell-Developed Technology Brings in $3.8M

When global pharmaceutical company Allergan recently acquired a startup named Anterios, it also acquired intellectual property developed at UMass Lowell. The deal will bring millions of dollars to the campus and UMass system for research and technology transfer.

Anterios is a clinical-stage biopharmaceutical company developing a next-generation delivery system and botulinum toxin-based prescription products. With the purchase of Anterios, Allergan also acquired global rights to NDS™, a proprietary technology that enables local, targeted delivery of neurotoxins through the skin without the need for an injection.

It was developed by a research team led by Prof. Stephen McCarthy and Prof. Emeritus Robert Nicolosi at UMass Lowell, where McCarthy is co-director of the Massachusetts Medical Device Development Center (M2D2), which has helped more than 100 entrepreneurs seeking to get their products to market. Nicolosi taught nutritional sciences and conducted research at UMass Lowell for more than 20 years.

“The key to this delivery system is that a product can be encapsulated in water-absorbent spheres that are small enough to enter the pores of the skin,” says McCarthy, a professor of plastics engineering who holds eight patents for inventions in areas including biodegradable plastics.

The acquisition of Anterios by Allergan translates into a $3.8 million equity payout for UMass Lowell and the UMass system. It’s the largest intellectual property deal to date for UMass Lowell, according to Rajnish Kaushik, assistant director of UMass Lowell’s Office of Technology Commercialization.

“This successful exit of a startup based on UMass Lowell’s intellectual property speaks to the creativity of our faculty and the opportunity for their research to have an impact both on people’s lives and on economic development,” Kaushik says.

Collaborating in the research were Tom Shea, professor of biological sciences, Tom Wilson, associate professor of clinical laboratory and nutritional sciences, and Carl Lawton, associate professor of chemical engineering. Balint Koroskenyi contributed to the group’s work as a UMass Lowell post-doctoral researcher and Jean-Bosco Tagne, Fongshu Kuo and Srikanth Kakumanu participated while they were doctoral students at the university.

The revenue generated for UMass Lowell from this license will be invested to advance the commercialization of other technologies and other research conducted at the university, according to the Office of Technology Commercialization.
Student Team Wins Second Prize in National Wind Competition

Contest is Organized by the U.S. Department of Energy

A team of 16 undergraduate students from the Francis College of Engineering and the Manning School of Business scored second place in this year’s national Collegiate Wind Competition sponsored by the U.S. Department of Energy.

The contest challenges students to design, build and test small-scale wind turbines that generate electricity off the grid and develop business plans to market their wind-power systems.

The UMass Lowell team took on the U.S. Army’s real-world challenge of providing innovative, sustainable electricity production to meet the operational needs of combat soldiers stationed in remote, hostile regions like Afghanistan. The idea for this project stemmed from the students engaging with researchers at the university’s HEROES lab and the U.S. Army Natick Soldier Research, Development and Engineering Center.

The student-designed wind turbine, called “WindHawk,” would provide Army camps with a network of ground turbines that have a combined output of 4 kilowatts of electricity per day. For forward-operating bases, an inflatable kite with dual turbines was designed to produce 6 kilowatts per day. The kite, which spans 13 feet and is tethered to the ground using a 1,640-foot-long cable, can be deployed or stowed in less than half an hour.

Twelve teams from across the country faced off in the competition, which was held in New Orleans. Pennsylvania State University took home the top honors.

Sustainability Is Second Nature

University Is Among 13 National Finalists for the 2016 Climate Leadership Award

UMass Lowell is among 13 national finalists for the 2016 Climate Leadership Award, presented annually by the nonprofit organization Second Nature to recognize innovation and leadership in sustainability, climate mitigation and resilience.

UMass Lowell is a nominee in the 4-Year Institutions category, a field that also includes Arizona State University, Duke University, the University of California, Los Angeles and the University of New Hampshire.

The winner will be announced in September and recognized in October in Los Angeles as part of the Greenbuild Leadership Awards Program.

“To be a finalist for this award along with such an esteemed group of universities is a great honor for UMass Lowell,” says Associate Director of Sustainability Ruairi O’Mahony.

This spring, UMass Lowell was one of 84 colleges and universities across the United States to become a charter signatory to Second Nature’s new Climate Commitment, which requires the university to set climate targets, report on progress publicly and collaborate with the surrounding community, all while integrating sustainability across the curriculum.

In 2007, UMass Lowell became a signatory to Second Nature’s Carbon Commitment, which laid the groundwork for the university’s Climate Action Plan and its goal of achieving carbon neutrality by 2050.

Attendees ‘Lean In’ at First Leadership Conference for Women

Designer Taniya Nayak ‘97 Calls On Women to Support Each Other

The university’s first annual Women’s Leadership Conference was a resounding success, with a sellout crowd, inspiring and high-powered speakers, practical advice—and lots of laughter.

The conference opened with a conversation between designer and TV personality Taniya Nayak ‘97 and Jacquie Moloney, the first woman chancellor of UMass Lowell, about Nayak’s sometimes bumpy road to success.

She now owns her own design firm, appears regularly on HGTV and the Food Network and represents Ellen Degeneres’ home décor line on QVC.

Nayak, who was born in Nagpur, India, and came to the U.S. as an infant, has encountered both racism and sexism working with clients and construction crews, said she counters it by preparing thoroughly and speaking with confidence.

Three themes played out over the course of the day—supporting other women, confronting bias with expertise and finding your voice—in workshops that dealt with everything from mental and financial health, to moving women into leadership roles, to closing the gender wage gap.

The closing keynote was delivered by Gina Barreca, professor of English and women’s studies at the University of Connecticut and author of “If You Lean In, Will Men Just Look Down Your Blouse?”

Barreca said women are always trying to squeeze themselves into clothes that don’t fit—just like they’re always trying to squeeze themselves into someone else’s idea of the good woman, the good mother or the good administrator.

UMass Lowell’s Free Wheelers Bike Share program—which provides free loaner bicycles for students, faculty and staff—is one of the many initiatives that has earned the campus finalist status for the 2016 Climate Leadership Award.
**President Meehan Donates $1 Million for Student Scholarships**

**Former Congressman Transfers Campaign Funds to Educational Foundation**

Marty Meehan ’78, president of the University of Massachusetts, has donated $1 million for student scholarships at UMass Lowell, where he served as chancellor from 2007 to 2015.

“Marty is determined to make a lasting difference and he knows that investing in a UMass Lowell education is the best way to do so.”

Meehan’s gift comes the same year that UMass Lowell launched a four-year, $125 million comprehensive fundraising and engagement campaign. *Our Legacy, Our Place* has already raised more than $84.5 million for student scholarships and support for faculty research, campus improvements and the university’s Division I athletics program.

“This gift moves me enormously, but it doesn’t surprise me,” says Chancellor Jacquie Moloney ’78, ’92. “Marty is determined to do so.”

**Honors Students Help Preserve Thoreau Legacy**

**Students Work on Statewide Reading for Thoreau Bicentennial**

Henry David Thoreau, the American philosopher and naturalist, dreamed of a library deep in the forest.

The Walden Woods Project built it, and now a group of Honors College students are volunteering at the Thoreau Institute’s library. The students are creating a toolkit for a statewide reading of Thoreau’s works in 2017, the bicentennial of his birth. They’re also studying Thoreau’s writings with a leading Thoreau scholar, curator Jeffrey S. Cramer.

“Reading Thoreau was like meeting a new friend,” says Erin Monahan, a liberal arts major. She is now organizing the library’s photographs and other images into a digital archive for the institute’s website, gaining experience for a future career as a curator and archivist.

Kale Connerty, a junior, says reading Thoreau led her to change her major from climate science to English, with a minor in climate change and sustainability. She is thinking about working as an environmental journalist.

Adjunct Prof. Thomas Hersey, who teaches the honors seminar on Thoreau, says he values the field trips to the Thoreau Institute not only for access to Cramer’s expertise, but because students cross both a physical and intellectual threshold when they walk through the woods from Walden Pond to the library.

“It’s that idea of a library in the woods, of having distance and then coming back to the classroom,” says he.

**Three Projects Win Creative Economy Grants**

**Faculty Take on History, Animation and Southeast Asian Folktales**

Faculty and research centers in the College of Fine Arts, Humanities and Social Sciences have won three Creative Economy grants from the office of UMass President Marty Meehan.

History Prof. Chad Montrie won $22,182 for “Urban Waters Revolution,” which will provide school lesson plans and educational signs for a new park in Lawrence at the confluence of the Spicket and Merrimack rivers. He will work with Groundwork Lawrence, Lawrence Heritage State Park and the Essex Art Center.

Ferrous Park was once the site of a laboratory where Ellen Swallow Richards helped plan early experiments in municipal water and sewage treatment. The grant also will fund the first annual Ellen Swallow Richards Lecture on Sept. 15.

Asst. Prof. of Digital Media Pouya Afshar won an $18,899 Creative Economy grant to help run animation workshops for middle and high school students in Lowell.

Afshar will work with faculty in the Graduate School of Education to train and supervise three art and design undergraduates as student instructors. The students will work with a few dozen middle and high school students to create animated films. University music students will write original soundtracks, while the Lowell High students will edit the soundtracks and sound effects into the film.

Faculty in the Center for Asian American Studies won a $23,750 grant to collect, illustrate and publish folktales from Cambodia, Laos, Vietnam and Myanmar (Burma) for use in the Lowell public schools.

The project began when two faculty members in the Graduate School of Education, Asst. Prof. Phitsamay Uy and Assoc. Prof. Min Jeong Kim, each had a child of her own and had difficulty finding children’s books about the cultures their families came from or the experiences of Asian American immigrants, especially Southeast Asians.

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**Phitsamay Uy, an assistant professor of education, with her son. She hopes to remedy a lack of children’s books about Southeast Asians.**
Acre Alley Reborn with Art, Poetry

University Helps Neighbors with Decatur WAY

For decades, an overgrown alley that runs between Salem and Merrimack streets in Lowell was a neighborhood blight that attracted nighttime criminal activity.

No longer. Welcome to Decatur WAY (Water, Art and You), an urban oasis transformed through colorful art, poetry and community vision and sweat.

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

Hundreds of people packed a short stretch of Salem Street, in the shadow of University Crossing, to celebrate the opening of Decatur WAY at a June 2 event.

“The university taking over that building was a godsend,” said Ouellette, pointing toward University Crossing at the dedication ceremony. Ouellette is on the board of the Coalition for a Better Acre.

The university purchased the former St. Joseph’s Hospital five years ago and University Crossing rose in the underutilized hospital’s place.

Approached by Ouellette, the university offered an easement that allowed public access to Decatur WAY from the end near University Crossing.

“We have 17,000 students whose safety we’re responsible for,” says Chancellor Jacquie Moloney. “We think a lot about that. … And we’re not going to build a fence around the campus to protect students. That’s not what UMass Lowell is about.”

Instead, the university has increasingly woven itself into the Acre and the city’s other neighborhoods, including the downtown.

Decatur WAY features murals from dozens of community groups, including one with a poem by Paul Marion, recently retired UMass Lowell Community Relations director, and a piece painted by Steve Mishol of the university’s Art & Design Department, with his daughter, Sophie.

The University Relations design team also painted a panel.

“A Mill City Grows work quotes Ralph Waldo Emerson, writ large: “The Earth laughs in flowers.”

For Ouellette, reclaiming the alley was more than a beautification project. It was proof of what happens when a community rallies together.

“We’ve forged a terrific relationship with the university along the way,” he said.

“And something else,” Ouellette continued. “The children in the neighborhood might hear about the importance of going to college, but it hasn’t always been something that seemed possible. Now, they see students all the time around here. UMass Lowell is right here, all the time, which tells them it’s possible.”

Chancellor Jacquie Moloney, City Councilor Corey Belanger, Acre neighborhood activist Dave Ouellette and state Rep. Rady Mom lead the opening of the new Decatur WAY.