Developed in Response to Growing Shortage of Workers

Responding to the growing demand for public health professionals, UMass Lowell’s College of Health Sciences is introducing new bachelor’s and master’s public health degree programs. Prospective students may apply now to enroll this fall.

The new public health programs were developed in response to the growing shortage of workers in the region and nationally. A greater public interest in health promotion and disease prevention, an aging population and an increase in the number of people retiring from jobs in the public health field are all fueling the need.

More than 250,000 additional public health workers will be needed in the U.S. than will be available by 2020. In Massachusetts, employment in public health occupations is expected to grow by 25 percent by 2050.

“Our goal is to produce graduates who can have a positive impact on health by decreasing the incidence of preventable diseases while reducing health care costs,” says Dean Shortie McKinney of the College of Health Sciences. “Our programs will emphasize prevention rather than treatment and prepare graduates to promote and evaluate initiatives in public health that range from building neighborhoods that encourage physical activity among people of all ages to policies that build a sustainable future for at-risk populations and help people make more informed choices related to health.”

Students enrolled in the bachelor of science in public health degree program will choose between three options—community health and health promotion, environmental and occupational health, and health sciences.

One of the options in the master of public health degree (M.P.H.) program is global environmental sustainability and health. Additional options for the M.P.H. program are in the planning stages.

Careers for those with degrees in public health include environmental scientists, community health workers, health educators, toxicologists, risk analysts, research project coordinators and worksite wellness managers.
NIH Funds Study of Injuries from Radiation Exposure

Detecting Injury Early Could Save Lives

A team of researchers from UMass Lowell and the Medical College of Wisconsin has been awarded two grants by the U.S. National Institutes of Health totaling nearly $930,000 over a period of five years to develop ways to predict and mitigate injuries resulting from radiation exposure.

For one project, Biology Prof. Susan Braunhut and Physics Assoc. Prof. Mark Tries will collaborate with Assoc. Prof. Meetha Medhora in Wisconsin to test innovative "biomarkers" that can potentially detect radiation injuries to the lungs, weeks before symptoms become apparent. This will help doctors in reducing lung injury in victims of a radiological terrorist attack, a nuclear reactor accident or in patients receiving radiation therapy for lung and breast cancers.

The other project will study the use of the anti-hypertension drug lisinopril to mitigate radiation injuries to multiple organs, such as lungs and kidneys, before symptoms develop.

Healthy Homes Program Receives $750K Grant for Asthma Research

Project Will Help Senior Citizens in Public Housing Breathe Easier

UMass Lowell has been awarded a $750,000 grant from the U.S. Department of Housing and Urban Development to reduce episodes of asthma among senior citizens living in Lowell public housing.

Studies show that asthma is under-diagnosed among senior citizens and that asthma-related morbidity and mortality among the elderly is increasing.

"The City of Lowell is an ideal area for our study since the prevalence of asthma among adults is 10.4 percent, higher than the state average of 8.1 percent," says David Turcotte, director of the Lowell Healthy Homes program, which is operated through UMass Lowell’s Center for Community Research and Engagement. “Seniors in particular spend 90 percent of their time in their homes, breathing in dust mites, mold and toxic cleaning solutions that can trigger asthma attacks."

The study will measure the effectiveness of providing the elderly in Lowell public housing with interventions such as educational materials, mattress and pillow covers, green cleaning supplies, HEPA vacuum cleaners and pest control items to improve health and reduce medical costs.

UMass Lowell researchers are partnering with the Lowell Housing Authority and the Lowell Community Health Center.

Teens and Adults Agree: Education Helps Youths Avoid Sexting Dangers

Research Provides Recommendations for Decreasing Risky Digital Behaviors

The problem with teenage sexting—sharing suggestive photos or messages by phone—isn’t so much the technology as poorly developed social skills, according to research by Assoc. Prof. Andrew Harris and Assoc. Prof. Judith Davidson.

Their report gathers data from a mixed-method, 18-month study in which youths, parents and educators discussed their perceptions of teen sexting.

"People think youths’ use of technology to communicate is a social problem, but that is a lack of understanding of kids’ social world. Digital communication complements social interactions for teens, but it’s not a substitute," says Harris. "This digital courtship isn’t inherently bad. Unfortunately it sometimes happens without a grounding in respect."

Harris of the Criminal Justice Department and Davidson of the Graduate School of Education worked with co-investigators from Johns Hopkins University, Miami University, Ohio and the University of Hartford.

"We found that the issue isn’t about phones or technology,” says Harris. “Its root is social and emotional development, and it can be reduced by teaching respect and acceptable relationship boundaries very early on in kids’ education."

Recommendations for educators include having transparent, realistic conversations with teens about intimate relationships and technology, providing peer-driven guidance and helping youths with underlying social and developmental needs. Teens need to be taught self-awareness, self-management, social awareness, relationship skills and responsible decision-making.
Plastics Engineering Prof. Awarded NSF CAREER Grant

Meg Sobkowicz-Kline to Receive $400,000 over Five Years

The National Science Foundation (NSF) recently recognized Asst. Prof. Meg Sobkowicz-Kline in the Plastics Engineering Department with a prestigious early career development award, called the “CAREER” award. This highly competitive annual program honors the nation’s best young university faculty-scholars.

Sobkowicz-Kline, who joined UMass Lowell in 2011, is interested mainly in the convergence of materials and engineering for environmental sustainability.

“My students and I are interested in the creative role that polymer materials can play in solving critical problems facing our society and planet today,” she says. “Our research goals include improving the properties and expanding the applications of bio-based plastics.”

Sobkowicz-Kline will use the NSF award, worth $400,000 over five years, to support her study of processing behavior and life cycle of renewable plastics made from the bioprocessing of agricultural sugars and byproducts. “These have the potential to reduce the use of conventional plastics derived from fossil fuels,” she says.

“I also plan to use my research as a catalyst for broadening participation of women in engineering by bringing student-run demonstrations of career options to local vocational and traditional high-school programs,” she says.

Sobkowicz-Kline earned bachelor’s and doctoral degrees in chemical engineering from Columbia University and the Colorado School of Mines, respectively.

Students Try New Sport: ‘Recyclemania’

Contest among Colleges and Universities Promotes Recycling

UMass Lowell has joined colleges and universities from across the United States and Canada in a contest called “Recyclemania,” which aims to encourage recycling efforts and reduce the amount of solid waste generated on campus. During the eight-week program, participants will benchmark themselves against other schools in different categories, such as paper, food service and electronics recycling. This is the first time UMass Lowell has entered the competition.

“Our participation in this program is another example of the University’s deep commitment to sustainability,” says Richard Lemoine, director of environmental and emergency management.

During the Recyclemania challenge, which runs from Feb. 2 to March 29, UMass Lowell will benchmark its food service wastes and electronics recycling against other schools. In March, electronics recycling events are planned during which students, faculty and staff can drop off old computers, televisions, fax machines and other items.

South African Judge is 2014 Greeley Scholar for Peace

Albie Sachs Worked with Nelson Mandela, Advanced Human Rights

Anti-apartheid champion Albie Sachs—an architect of South African democracy and a contemporary of Nelson Mandela—has been named UMass Lowell’s 2014 Greeley Scholar for Peace Studies.

An influential member of the African National Congress, Sachs is a judge, author and teacher. The honor will bring him to UMass Lowell this semester for a series of events, including the annual Day without Violence on April 8.

Born in Johannesburg, Sachs has spent his life working to abolish South Africa’s segregationist policies and creating a free and just society. In 1994, then-President Mandela named him as a judge to the country’s first Constitutional Court, capping his work in the ANC to help establish South Africa as a democracy and draft its constitution. During nearly 15 years on the bench, Sachs advanced South Africa’s recognition of human rights, legalizing same-sex marriage, striking down the death penalty and overturning laws that criminalized homosexuality, among other precedents.

“I am very excited to be this year’s Greeley Scholar for Peace,” says Sachs. “At UMass Lowell, I will speak about working over the years with Nelson Mandela, about why we built the new top court in the heart of a prison where both Gandhi and Mandela had been locked up and about restorative rather than punitive justice, including my meeting with the soldier who planned the bombing of my car that nearly took my life.”
New Semester, Fresh Start

Updates and Renovations Reshape Campus

Renovated classroom space, a new state-of-the-art anatomy and physiology lab, a Writing Center and the arrival of one the world’s most popular coffee shops are some of the changes on campus this semester.

The projects, which are spread out across campus, are expanding opportunities for hands-on, active learning and continue the transformation of the University’s landscape.

“These improvements are part of the ongoing implementation of our campus master plan to provide world-class facilities and in-demand amenities for our students and faculty,” says Vice Chancellor for Finance and Operations Joanne Yestramski.

The updates come at a time of unprecedented growth on campus. To meet the rising demand for everything from classroom space to dorm rooms, the University has opened six new buildings in the past 18 months. And work is proceeding on the 230,000-square-foot University Crossing student engagement center that is rising up over the Merrimack River. The building will offer one-stop student services, a flagship campus bookstore, food court, space for student clubs and organizations, administrative offices and more.

At Weed Hall on South Campus, a new 1,445-square-foot instructional lab for anatomy and physiology classes—which has been outfitted with new benches, sinks, tables, storage cabinets and an audio-visual system—will help accommodate the growing health sciences enrollment.

On the third floor of O’Leary Library, a new Writing Center offers space for tutoring and meetings. Adjacent to the Writing Center is 1,500 square feet of new Learning Commons space where students can collaborate on group projects, study independently and conduct research. The area is replete with new furniture and computer terminals and upgraded wireless access.

A full-service Starbucks has opened in renovated space at Lydon Library. Located next to the DifferenceMaker Central office, the sleek, new eatery offers an expansive menu of sandwiches, pastries and drinks. With plenty of seating, customers can grab a coffee or bite to eat and warm up next to the gas fireplace. Outside, the renovated plaza offers exterior seating with heating during cool weather and year-round views across the Merrimack River.

The new anatomy and physiology instructional lab in Weed Hall helps accommodate the growing health sciences enrollment.