

# UML Shuttle

A PUBLICATION OF THE UNIVERSITY OF MASSACHUSETTS LOWELL

## Study Takes Long View of Immigration, Globalization in Lowell

A three-year, \$100,000 grant from the Lowell National Historic Park has set into motion an ambitious, historic study.

Using archival materials, hundreds of hours of oral histories, extensive interviews and participant observation, a team of researchers intends to illuminate Lowell's global history and its contemporary cultural geography.

The Lowell National Park was founded more than 30 years ago, building on the ethnic experience of immigrant groups at that time. The exhibits and archives don't reflect the newest waves of immigration from Southeast Asia, parts of Africa and Brazil, so an ethnographic study was proposed.

"It's great that the researchers (who won the grant) are local folks who already know where Merrimack meets Central," says Mehmed Ali, park historian, who will advise and review the project along with Park Superintendent Michael Creasey.

"Although one outcome of the study will be updated park exhibits, the larger goal is to inform the park on how better to interact with the community."

Tracking and describing current patterns of immigrant populations in Lowell is just one part of the picture the study will portray. The history of the place dates to Native Americans and the research will place Lowell's history within the context of globalization—with the understanding that globalization is nothing new.

"We tend to have a short-sighted view of globalization," says Asst. Prof. Christoph Strobel of the History Department, a co-principal investigator on the project. "Global forces in the past have had an impact on trade, immigration, colonization and the movement of disease. It's a 'current-centric' view of the world to think globalization is only happening now."

"Lowell is a great microcosm of these forces. Immigration has always shaped the city and tensions have erupted between 'natives' and 'new-comers.' Even the very early manufacturing history around the falls reflects global influences—German glassmakers worked there, the British bought beads from Venice and sold them to Native Americans—and understanding this enriches our cultural perspective on the present, adds to our own sense of place."

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▲ Strobel caption

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## Governor-elect Deval Patrick to Headline Meehan Town Meeting

Governor-elect Deval Patrick will join a panel of UMass Lowell experts on Saturday, Dec. 16, for U.S. Rep. Marty Meehan's Town Meeting, "Climate Change: Local Solutions to a Global Crisis." The event, a presentation followed by discussion, will be held from 10 a.m. to 12:30 p.m. in O'Leary 222.

UMass Lowell is active in the areas to be discussed, being home to the School of Health and Environment, the Toxics Use Reduction Institute and the Lowell Center for Sustainable Production,



▲ Governor-elect Deval Patrick

as well as programs in energy engineering, asthma research and intervention, green chemistry and bio-based polymers. The University has become an internationally recognized leader in sustainable development and ecological health.

Meehan says, "I believe Massachusetts' public universities hold the key to developing long-term solutions to global warming that improve public health and the economy. ...A scientific consensus exists that human activity is the leading cause of greenhouse gas accumulation and that climate change is adversely affecting human health. We cannot let environmental catastrophe be our legacy to future generations."

Panelists from UMass Lowell will be Dr. Kenneth Geiser, director of the Lowell Center for Sustainable Production, and Dr. Amy Cannon of the Center for Green Chemistry. Joining them will be Dr. Paul Epstein, associate director of the Center for Health and the Global Environment at Harvard Medical School; and Lee Ketelsen, New England director of Clean Water Action, a national citizens' organization.

—SS

## UML Collaborates With Lawrence on New High Schools

High school students in Lawrence will soon be part of an educational experience that is unique in New England.

The City of Lawrence has built six separate high schools on a new 25-acre campus in South Lawrence to replace the existing high school across town. The new schools emphasize six different areas of study and have been developed with the assistance of UML's Center for Field Services and Studies (CFSS) and the support of the Graduate School of Education.

The six schools are scheduled to open in September of 2007. They include: Lawrence High School for Fine and Performing Arts, Lawrence International High School, Lawrence High School for Health and Human Services, Lawrence High School for Humanities and Leadership Development, Lawrence High School

for Math, Science and Technology and Lawrence High School for Business Management and Finance.

The schools will operate independently with six different principals, each with its own staff and budget. Although each school is a freestanding building with its own classrooms, some features will be shared, such as a common cafeteria, a 12,000-square-foot media center and the athletics program.

According to Dr. Hector N. Torres, University liaison for the Lawrence Public Schools, the new model will promote a more personalized learning environment. "Students who graduate will be very well prepared for post secondary education," says Torres.

Existing high school students will get to choose which school they would like to attend based on their individual interests. Presentations from each

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## SRT Program Installs New 'High End' Audio Console

*System Keeps UML in Forefront of Audio Education Nationally*

The Music Department's Sound Recording Technology program has installed a new analog mixing console—which looks like it belongs in the Starship Enterprise—that will offer seniors and graduate students what Prof. Will Moylan calls "cutting edge" education.

Made by API (Automated Processes, Inc.) of Jessup, Md., this new piece of equipment with its myriad of colored lights, switches and dials is more than seven feet long. The cost, including installation and options, was slightly more than \$300,000.

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## IN OTHER NEWS

**Critical Issues Sessions** — Vice Chancellor Diana Prideaux-Brune says Critical Issues sessions have been "very useful."

**Student Group Receives National Excellence Award**—The Collegiate Chapter of MENC received the MENC National Collegiate Chapter of Excellence Award

**Online Auction**—Bidding has been fast and furious during the online auction to benefit the Costello Gym renovations.

To see these and other stories, go to UMass Lowell's new online eNews Web site at [www.uml.edu/enews](http://www.uml.edu/enews)

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## SRT Program Installs New 'High End' Audio Console

"We've chosen to stay with analog technology because of its sound quality and its applications for teaching and research," Moylan explains. "There's more flexibility in this kind of high-end analog console—which is high-end to a factor of three or four compared with where the technology had been in previous iterations. It allows us to explore things in graduate courses and some undergraduate courses that we couldn't on a digital-audio computer platform."

The new unit, which has been installed in a refurbished room on the second floor of Durgin Hall, replaces one that was bought in 1989 and which, Moylan says, "was showing its very advanced age."

Named "Vision" by its manufacturer, the new console has some old technology that is used in very progressive ways. It also can be interfaced with digital technologies.

"So we have the best of both worlds in a way that is very sophisticated in terms of sound quality—and understanding various qualities of sound recording and reproduction is very essential to our program," he says.

"It's also the only analog device that's been designed for mixing surround sound. That's very significant. Surround sound has become a very important part of the film industry and multimedia experiences. So it's very important for

our students to have advanced skills in that area."

API began the installation at the end of May and the work has progressed since then with significant contributions from Bill Carman, associate director of SRT Facilities, and a number of students.

Alacronics Corp. of Wellesley redesigned the control room, Durgin 213, to accommodate the new equipment and to make the space compatible for surround sound.

Although the refurbishing work was not completely finished, students were able to take classes there beginning in November.

This new console and surround sound capability "is one more way that the SRT program is staying at the forefront nationally in audio education—and one more way that we're positioning ourselves to assist industry in the further development of technology and recording techniques," says Moylan.

—JMcD



▲ The new "Vision" sound mixing console enables the SRT program to remain at the forefront of audio education.

## Pushing the Material Limits at Tripathy Symposium

The late Prof. Sukant Tripathy, founder of the Center for Advanced Materials, inspired friends, colleagues and students to be bold in their research and generous in collaboration. Each year, the Center honors his memory with a competitive summer fellowship for doctoral candidates, the Tripathy endowed lecture in the fall and the Tripathy Memorial Symposium in early December.

Speakers at the recent symposium shared their latest, often unpublished, research into designed new

materials that are "made to order" for their properties and applications—such things as flexible photovoltaics, therapeutic polymers, bio-engineered silk materials, color-changing thread and fire-safe polymers. Pictured above are, from left, Dr. Pradeep Dhal from Genzyme; Dr. Russell Gaudiana from Konarka Technologies (a company based on technology developed by Tripathy); Dr. Zakya Kafafi of the Naval Research Laboratory; and Physics Prof. Jayant Kumar, director of the Center for Advanced Materials.

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## UML Collaborates With Lawrence on New High Schools

school will be made to all eighth grade students in Lawrence allowing them to select a school for next year.

Approximately 30 to 40 UML faculty and staff members have been working with administrators and teachers in Lawrence for over a year, assisting with the development of the schools. Six separate committees have been formed with each one supporting one of the different schools.

"The faculty here has been working with Lawrence to help on a number of levels. Some areas we are working on include curriculum development and ensuring that students from Lawrence who go on to college have a smooth transition," says Torres.

Each school will carry core curriculum requirements, but lessons will be shaped by the individual school's focus. For example, the Business Management and Finance school will operate like a business, with students serving as consumers and assisting in



▲ Construction is nearly complete on the six new Lawrence High Schools.

the day-to-day operation of the school. In the International school, there will be an emphasis on bilingualism and multilingualism, as well as an English immersion program for all non-English speaking students who are new arrivals to this country.

"An educational vision and a real partnership with the University will make this dream a reality for the students of Lawrence—it is a win-win proposition," says Torres.

—JH

## Wegman Chairs International Group to Evaluate Swedish Health Research

Prof. David Wegman, dean of the UMass Lowell School of Health and Environment, this year chaired an international committee of health experts charged with the evaluation of occupational health research in Sweden.

The committee, made up of professionals from the U.S. and four European nations, presented its findings in Stockholm in November.

The level of research in Sweden affecting occupational health, the committee concluded, is very high; areas of concern include the adequacy of funding—whether it can continue at present levels—and the development of better tools for collecting surveil-

lance information, to enable the targeting of high-priority needs.

"Swedish research is very high-quality, very high-impact," says Wegman, who has enjoyed a collaboration with the Swedish Institute of Public Health for nearly 30 years. "The group we evaluated is probably the most productive research group [in its field] in the world."

The Swedish Council for Working Life and Social Research (FAS), for which Wegman's committee prepared its research, will be presenting its report, including the committee's findings, to the Swedish parliament in January.

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# Transformation Project Moves Forward

## Faculty Survey Results Released

Faculty and staff involved with the UML Transformation Project continue to develop new campus strategies in an effort to better the experience of students, faculty and staff. The project's goal is to enhance the physical, economic and social aspects of UML through varied efforts, such as developing interdisciplinary teaching and research activities, deepening connections with community programs and maintaining a clean and safe working environment for the University community.

A faculty survey covering the 10 implementation teams' topics was created to gather data for the Transformation Project. Each team submitted questions, and Universal Survey of New York City conducted the survey last summer and through the early fall. All current faculty were eligible to participate in the phone version of the survey. All faculty who were not reached by phone were able to complete a web-based version of the survey at the beginning of the semester. A total of 212 full-time faculty members were surveyed, including 169 via telephone and 43 through the web.

Institutional Research did preliminary analysis; some highlights from the survey results include an overall positive depiction of working relationships on campus. Most respondents described the quality of working relationships in their departments, as well as outside of their departments, as one of the strong points of working at UML. Beyond this, job satisfaction is

high and few faculty expressed a desire to seek new employment in the near future. This data specifically relates to the concerns and efforts of the Workplace Quality team. Other team-related results include a high percentage of faculty who stated they lack sufficient time for research and 70 percent who said they seek outside sources for research funds. Eighty-five percent of respondents said they wish to increase their interdisciplinary efforts. It is hoped that these results will help the Research Team and the Interdisciplinarity Team focus their efforts during the middle and latter stages of the Transformation Project.

Other points of interest within the results indicate that community outreach activities are a regular part of many faculty's experience, with 74 percent indicating they are very, or somewhat, engaged in community service activities. Faculty generally believe they are supported in these kinds of efforts, with 73 percent of those surveyed stating they believe that UML values such outreach and service. Another promising result: 93 percent of faculty surveyed felt that the UML education was excellent or good.

While the survey results communicate many positives about the UML experience, there are also clearly some areas that need attention and more focus. The implementation teams will take this information and shape recommendations for enhancing learning, discovery and community engagement. More detailed results will be available on <http://intranet.uml.edu/transformation>.

## UML Campus Transformation Project

To read more go to [www.Uml.edu/enews](http://www.Uml.edu/enews) for the next installment in a series on the Transformation teams' efforts.

# Professors Take a Stand

## Actions Aimed at EPA, Congress

If a Ph.D. carries weight, then some professors have taken to throwing theirs around in hopes of influencing U.S. policies.

This fall, Prof. Joel Tickner of Community Health and Sustainability and seven faculty economists have engaged in such political action.

Tickner and two other members of an Environmental Protection Agency (EPA) advisory committee resigned to call attention to what they see as the panel's ineffectiveness in addressing pervasive problems with the agency's

treatment of toxic chemicals. In an Oct. 2 resignation letter, the three wrote that the National Pollution Prevention and Toxics Committee "has been unable or unwilling to consider systemic, structural problems," with EPA's treatment of chemicals under the Toxic Substances Control Act. They also note that the advisory committee's makeup is weighted towards industry.

Also this fall, UML economists signed a petition recommending that Congress raise the federal minimum wage, which has stood at \$5.15 an hour since 1997. The professors ñ Michael Carter and Monica Galizzi of

Economics; William Lazonick, Philip Moss, Jean Pyle (emeritus) and Chris Tilly of Regional Economic and Social Development (RESO); and Charles Levenstein, emeritus, of Work Environment ñ are seven of 664 economists participating in the advocacy effort, which was organized by the Economic Policy Institute.

Moss said the minimum wage is well below its historic standard, its purchasing power having eroded over the years. He said he signed the petition for two reasons. "As a matter of pure equity, people who work hard shouldn't work full time and fall below the poverty level. The second reason is, the more costly workers are to employers, the more they have to do to make them valuable. And that makes jobs better."

## Rep. Golden Attends TEAMS Academy Pilot Program



◀ Rep. Thomas Golden recently attended a session of the TEAMS Academy pilot program, which enabled 270 area high school sophomores to attend advanced math and science workshops at UML. The pilot served as a test model for a daily, part-time program for local high school juniors and seniors next fall.

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## Study Takes Long View of Immigration, Globalization in Lowell

Prof. Robert Farrant of the Regional Economic and Social Development (RESO) Department is principal investigator of the study, which will fund two graduate students for two years. RESO Prof. Linda Silka is a co-PI and collaborators are drawn from the departments of Political Science and Art, the Mogan Cultural History Center, Middlesex Community College, the "One Lowell" cultural association, the Registry of Deeds and Lowell High School.

Farrant is particularly excited about working with UMass Lowell students who share an immigrant story. He will teach an undergraduate and graduate seminar in the spring on globalization and immigration.

"We are fortunate in having a rich diversity on campus," says Farrant. "Brazilian, Portuguese, Cambodian students have contemporary stories to tell; it will be very interesting for the students to compare their experiences with the histories and recollected stories we have dating from the late 1800s."

With so much material to work with, the team will pick four long

streets in Lowell to study. Archival records, census data, material from the Registry of Deeds, the National Folklife Center and the Center for Lowell History will help in creating a series of overlay maps to show the changing populations over the long sweep of history.

Involving current students in the research is also interesting to Dr. Susan Thomson of Middlesex Community College, cultural anthropologist for the study.

"I'm personally excited because a lot of my students are from these newer immigrant groups," says Thomson. "We also are looking to the community to be involved in an integral way with the research, to participate in discovering what is meaningful."

Neighborhood history-writing projects and engagement of high school classes will help to round out the project over the three years. But, the hope is that National Park programs and outreach will be changed and enriched for years to come.

—SS



▲ Prof. Chris Tilly of Regional, Economic and Social Development is one of seven UMass Lowell professors who signed a petition calling on Congress to raise the minimum wage.



▲ UMass Lowell was represented on the U.S.-Japan nanotechnology exchange by Asst. Prof. Daniel Schmidt, left, of Plastics Engineering; Chemistry Prof. Marina Ruths, third from left; and Prof. Julie Chen of Mechanical Engineering, U.S. director of the 2006 program for NSF, on a visit to Osaka University.

## What's 'Nano' in Japanese?

### Young Investigators Make International Connections

Nanotechnology is a hot area of research in several parts of the world. With that in mind, the National Science Foundation (NSF) has joined with the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan to sponsor the Japan-US Young Researchers Exchange Program on Nanotechnology.

Asst. Prof. Daniel Schmidt of the Plastics Engineering Department and Prof. Marina Ruths of Chemistry were selected as part of the 2006 U.S. contingent. Each country hosts a dozen top young researchers to visit nanotechnology-related research facilities and build personal networks during a two-week exchange.

NSF leaders asked Prof. Julie Chen of the Mechanical Engineering Department, and a former NSF program officer, to organize this year's exchange. In March, UMass Lowell hosted the general symposium for the visiting Japanese; the group toured facilities at MIT, Harvard, Northwestern, Cornell, UC Santa Barbara, Stanford and UCLA. Last month, the U.S. group toured Japan, guided by Chen's counterpart, Dr. S. Okamura of the National Institute of Materials Science.

Chen says, "It's a great door-opening opportunity in many ways—meeting people, understanding the structural set-up of the research, having a contact for future reference. An additional benefit is that the U.S. researchers get to know each other and this also opens doors to collaboration."

About their time in Japan, Ruths says, "It was helpful to see people in the workplace, rather than at a conference. It added to my understanding of their interactions and expectations."

All were impressed with the quantity and quality of instrumentation in Japan. Says Schmidt, "We saw one of the most powerful nuclear magnetic resonance spectrometers in existence; the same for a transmission electron microscope. We also used an extremely high resolution atomic force microscope, with which you could see individual atoms and move them around."

Although Schmidt set up a material exchange with a researcher at NEC Tsukuba (where carbon nanotubes were first reported), he also emphasized the growing relationships with fellow U.S. researchers, as well as their diversity.

"A lot of us felt it was nice to be in a group representing such a broad range of research being done," he says. "These are people you wouldn't necessarily meet at a conference, and it's especially valuable to get together across disciplines."

## Seven Community Projects Tackle Toxic Chemical Use

### 15-year old Boy Scout Takes On Leadership Role

You've probably heard the phrase "Get the Lead Out" as it pertains to gasoline and paint. But did you know that lead sinkers used in recreational fishing are poisoning wildlife such as loons and eagles while safer alternatives exist? This is just one example of how this year's TURI Community Grant Projects will raise awareness to encourage people to make safer choices when it comes to toxic chemical use.

The Toxics Use Reduction Institute (TURI) has funded \$57,409 for seven community grant projects designed to reduce toxic chemical use across the Commonwealth.

"The diversity of these projects highlights how all of us can reduce toxic chemical use at the source to make our lives healthier and safer," says TURI's Rachel Massey.

The newly funded grants are:

- \$500 Youth Grant for the Lead Fishing Weight Exchange Project. Project Manager: Michael Browne of Milton Boy Scout Troop 5, Great Blue Hill District of the Boston Minuteman Council.
- \$500 for Healthy Lawns for Healthy Families Project (third year). Project Manager: Jessica Cajigas, Town of Westford Water Department.
- \$5,000 for Auto Shop Alternatives Project. Project Manager: Megan Baldwin, Sanitarian, Town of Watertown Health Department.
- \$11,809 for Safe Shops Project. Project Manager: Tiffany Skogstrom, Safe Shops project manager, Boston Public Health Commission.
- \$11,600 for Union Toxics Use Reduction Capacity Building. Project Managers: Tolle Graham and Marcy Goldstein-Gelb, MassCOSH, Dorchester.
- \$11,500 for Integrated Pesticide Management (IPM) Educator Training in Public Housing Project

(second year). Project Manager: Patricia Hynes, Center for Healthy Homes and Neighborhoods at Boston University's School of Public Health.

- \$12,000 for Healthy Floor Finishing Project. Project Manager: Hiep Chu, executive director, Vietnamese-American Institute for Development (Viet-AID), Dorchester.

For more information on each project, go to [www.uml.edu/eNews](http://www.uml.edu/eNews) and click on "Research."

The TURI Community Grant Program was established in 1994 to support community organizations and municipalities in their efforts to raise awareness of ways to reduce toxic chemical use at the source. TURI issues requests for proposals in June and applications are due by the end of August. For more information, visit [www.turi.org](http://www.turi.org).



▲ Fifteen-year-old Michael Browne of Milton received a \$500 grant from TURI to remove 40 to 60 pounds of lead from the use of recreational fishing. The project will help him earn his Eagle Scout rank, a recognition that only five percent of all Boy Scouts achieve.



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