University Readies for June 1 Commencement

Mass Lowell will hold its annual Commencement Ceremony on Sunday, June 1 at the Tsongas Arena in downtown Lowell. In addition to the 1,500 bachelor’s, master’s and doctoral degrees awarded, the Commencement Ceremony will recognize students for academic excellence and University service. This year’s valedictorian will be named, along with recipients of the Chancellors’ Medal for Distinguished Academic Achievement. Each college will hold individual receptions on the arena grounds following the graduation. This year’s honorary degree recipients are Margaret R. Becklake, professor emeritus at McGill University in Montreal; distinguished novelist and playwright James Carroll, who will serve as commencement speaker, William T. O’Shea, vice president of marketing for Lucent Technologies and president of Bell Labs; and the late John Ogonowski, American Airlines Flight 11 pilot, who was nominated by U.S. Rep. Marty Meehan.

Margaret Becklake has dedicated her life to treating lung disease. She studied medicine at the University of Witwatersrand in Johannesburg, South Africa, and joined the staff of her alma mater in 1951 as physiologist to the Miners’ Medical Bureau. By 1967, she’d established the lung function laboratory at the Royal Victoria Hospital in Montreal to study the health of local miners. During her career, Becklake has received numerous accolades, including the

At Lowell High School, a Project of Caring that Touches Lives

There are nine students, five full-time and four part-time, in the Intensive Special Needs classroom at Lowell High School. Most of them are unable to speak and have little or no control over their bodies or their lives. The high point of their day, if it could be called that, is the 40 minutes they spend each morning moving beads back and forth on a U-shaped plastic bar and watching a disco ball twirl.

Early last fall, around the start of the LHS 2002-03 school year, Deborah Webster, a physical therapist in the Lowell school system, wrote a letter to Alan Rux of the UMass Lowell Electrical and Computer Engineering Department. The high school’s Intensive Special Needs program, she explained, had been developed four years before, to assist high school-age students with “profound physical and cognitive disabilities.” Such students, the letter went on, have been shown to benefit from “a classroom that provides an interactive, multi-sensory surrounding,” one that would engage them not only through sight and hearing but also through movement, touch and smell. Webster had heard of the work of the UMass Lowell Assistive Technology Program, and was hoping, she wrote, that the people there might find a way to help.

In response to the letter, Rux visited the school, along with Assistive Technology Director Dorn Clark. What the two saw apparently convinced them: the need was there, and UMass Lowell could be of aid.

It wasn’t until early this spring, though, that the wheels really began to turn. That’s when Walter McGuire, an adjunct assistant professor emeritus of computer science, took control.

GEAR UP Goes to High School

Kids have a lot to think about when they reach high school: how to get around in a new, large place. How to meet people and make friends. What clothes to wear to be cool and fit in.

And, just maybe, what courses to take to prepare for college.

GearUp (Gaining Early Awareness and Readiness for Undergraduate Programs) is a program funded by the U.S. Department of Education to encourage minority and disadvantaged students to set their sights on a college education.

UMass Lowell’s Center for Family, Work and Community (CFWC), in partnership with Middlesex Community College (MCC), is managing a five-year program to make a significant difference in the lives of Lowell’s school children. The cohort of 800 students that the GearUp program began helping in the sixth grade has now reached Lowell High School, one of the largest high schools in the state. Bowa George Tucker, director of GearUp, says the high school offers new challenges to the program.

“We are trying to understand how the high school functions, the

Bell’s Research Shows Benefits of Vodou

Carolyn Cossé Bell believes vodou has received a bad rap.

The history professor says the ancient African religion, commonly associated with dolls and stickpins, actually fostered spirituality and enlightenment that enabled oppressed people to feel empowered. She hopes her ongoing research will prove that vodou was a catalyst for good, rather than evil and sorcery and has been misrepresented in popular fiction and Hollywood movies.

“What vodou promoted and the spiritualism provided was a multicultural, universalist society in which everyone was equal,” Bell says. “It’s a wonderful message, this vision of women and men, black and white, the notion that we’re all part of the same spirit world. It’s life-affirming.”

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8 Student-Faculty Research Featured at Symposium
Study Examines Treatment of Immigrant Children with Disabilities

Prof. Doreen Arcus, psychology, recently presented a paper with students Jennifer Deschenes and Cynthia Zacharias as part of a symposium at the Society for Research in Child Development Conference in Tampa, Fla. Their paper examined the degree to which children with disabilities may be overlooked when they are also immigrant children with limited English proficiency.

Clarinet Society Plays Host to Noted Congress

The Thirteenth Annual Clarinet Congress was held this April in the Fisher Recital Hall. The congress featured a master class and recital with Aline Benoit, clarinetist with the Boston Pops Esplanade Orchestra. A finale concert was performed by UMass Lowell students and a Festival Clarinet Choir. The University’s Clarinet Society, advised by music Prof. David Martins, sponsored the day-long event.

Immigration Seminar Will Feature Figures from UMass, City

A retrospective on the resettlement of Southeast Asian refugees and immigrants in Massachusetts, funded in part by the Council on Diversity and Pluralism, will take place Thursday, May 29 in Alumni Hall. The speakers and panelists at the seminar will include UMass Lowell Professors Nick Minton, political science, and Anne Mulvey, psychology, as well as Professor Emeritus of Political Science Hai Pho, and Lan Pho, director emeritus of the Center for Diversity and Pluralism. Also present will be Chuck Sart, president of the board of directors of the Cambodian Mutual Assistance Association of Greater Lowell Inc., Dorcas Grigg-Saito, executive director of the Lowell Community Health Center, and several other members of the Lowell immigrant and educational community.

To reserve a place at the seminar, send an e-mail message to lan_pho@uml.edu.

Faculty to Present Environmentally Friendly Solutions at Sustainable Technologies Symposium May 29

Researchers from UMass Lowell will present recommendations on more environmentally friendly technologies at the annual University Research in Sustainable Technologies Symposium to be held on Thursday, May 29 from 9 a.m. to noon in the Wannalancit Mill Conference Room. This year’s funded researchers are Daniel Sandman, Chemistry Department; Stephen McCarthy, Plastics Engineering Department; Joey Mead, Plastics Engineering Department, and Changmo Sung, Chemical Engineering Department; Paul Wormser, Konarka Technologies; and John Duffy, Mechanical Engineering Department.

A joint project of the Toxics Use Reduction Institute (TURI) and the Center for Environmentally Appropriate Materials (CEAM) with support from the Commonwealth’s Strategic Envirotechnology Partnership (STEP) program, the University Research in Sustainable Technologies Symposium taps the research capabilities of the UMass System to advance the investigation, development and evaluation of sustainable technologies that are environmentally, occupationally and economically sound.

Space is limited; please register for this free event by calling Anne Basanese, TURI, at ext. 3144.

GSE Readies for May 12 Move to O’Leary

A s of May 12, the Graduate School of Education will have a new home—temporarily. Offices for the GSE administration, faculty and the Center for Field Services and Studies will be relocated to the fifth floor of O’Leary Library, UML South. With the consolidation and more efficient use of space that have been part of the library improvements, O’Leary will be able to accommodate the GSE’s temporary move from UML West. The Demonstration School will remain on West until the permanent move to the Lawrence Mills complex anticipated in 2005.

The fifth floor will have office space, two seminar rooms and a computer lab. Classes will primarily be held in Coburn Hall, the location of the GSE’s predecessor, the Normal School. The class schedule will not put a tremendous burden on other classes because they are held at 4 p.m., between day and evening classes.

The Demonstration School will continue to run on UML West, but, in the interim, additional modular units have been leased to accommodate the third- and fourth-graders currently housed in Gould Hall. There will still be a GSE presence on West in the way of student teachers and research assistants interacting with the elementary students.

To welcome faculty, staff and students to the new space, a summer reception will be held June 17 from 3 to 5 p.m. in O’Leary Library, fifth floor.

Health Seminar Explores Looking Beyond the Individual for Health Promotion Strategies

▲ Dr. John McKinlay, center, recently spoke at the New Directions in Health Promotion Seminar. McKinlay, co-founder and director of the New England Research Institute in Waltham, discussed the importance of looking at health promotion strategies at the level of social determinants and regional and national policy instead of individual biomedical and bio-behavioral risk factors. Joining McKinlay before his talk were, from left, Allison Grenell, a researcher at the New England Research Institute; Darcie Boyer, graduate student in Regional, Economic and Social Development; Co-directors for the Center for Public Health Research and Health Promotion, Barbara Mason and Craig Stanis. The Seminar Series is sponsored by the Center for Public Health Research and Health Promotion and the Center for Family, Work and Community.

Dinh Discusses Asian Immigrants in America at the Salon

▲ Prof. Khanh Dinh, psychology, can pinpoint the turning point in her life—immigrating to America from Vietnam with her family in 1975. It was a most significant experience of her life and has been the foundation for her research into the psychology of immigrants. Dinh, right, discussed her personal immigration experiences and her research on Asian immigrants at the recent Salon organized by English Prof. Tony Szczesniak.

Superintendents Discuss History Frameworks at CFSS Forum

▲ Local educators gathered on UML West to discuss “Teaching What Matters in History and Social Studies” as part of the Superintendents’ Forum, hosted monthly by the Center for Field Services and Studies (CFSS). Guest speaker Kathy Ennis, second from left, executive director of Primary Source, shared her work to shape the curriculum frameworks in this subject area.

Participating in the discussion were, from left, Irene Crane, supervisor of humanities, Lawrence Public Schools; Ennis; Prof. Judith Boccia, director, CFSS; and David Troughton, superintendent, North Reading Public Schools, and convener of the forum.
Center Leadership Changes Hands Temporarily

Psychology Prof. Meg A. Bond, director of the Center for Women and Work (CWW), will be on sabbatical during the next academic year, writing about her long-term collaboration on workplace diversity issues in a regional firm. During Bond’s absence, two colleagues will be stepping in to manage the Center’s activities: Prof. Paula Rayman of Regional Economic and Social Development and Prof. Laura Punnett of Work Environment. Rayman and Punnett have been serving as senior associates for the Center.

The Center supports research, education and social action geared to improving the conditions of work and promoting economic opportunities for women. As acting co-directors, Rayman and Punnett will seek to enhance the intellectual community of CWW and to foster new collaborations.

At Lowell High School, a Project of Caring that Touches Lives

professor in the Engineering Department and a project engineer at Analog Devices in Wilmington, at the suggestion of Rux and Clark, went to pay his own visit to Lowell High. What he found there, in the Intensive Special Needs classroom being run by LHS staffer Tracy Ruth, was something, he says today, he’s not likely to soon forget.

“What Tracy Ruth was doing in there, with the little she had, was pretty incredible. You’ve got to picture a white room with bare walls, two or three toys, including the disco-ball, the device with the beads, and not much else. And these kids are seriously disabled—nonverbal, most of them in wheelchairs. But she was doing the best she could. It was like watching a car mechanic working on a car with a bent screwdriver and a rusty pair of pliers.”

From that day on, the project moved forward. Nineteen of Walt McGuire’s electrical engineering students, under his direction, took on the LHS Intensive Special Needs classroom as their targeted, senior-year Capstone Project. UMass Lowell Vice Chancellor Fred Speroulias approved a $1,500 grant for raw materials: toys, mirrors, switches, transistors, electronic parts. At Analog Devices, 11 company engineers, as part of the “Analog in Action” community assistance tradition, went on standby as volunteer mentors to McGuire’s students.

By late April, roughly half of the 19 were putting the final touches on their prototypes. Modeled roughly on a Dutch concept known as Snoezelen, the projects, each in its own way, sought to create a multi-sensory environment, addressing the senses of vision, hearing, smell and touch. The experience for the students, in the words of Alan Rux’s grant proposal: “...can be stimulating or relaxing. [These] with severe sensory impairment, autism or multiple disabilities...will experience learning, play and relaxation in this hi-tech, custom-designed classroom.”

There is, for example, the “Catherine Wheel,” a creation that relies on a panel of light-emitting diodes which, when the right buttons are pushed, will create patterns of light and music. And engineering senior’s Paula Sachette’s creation, scheduled for its demo in early May: a switch-activated light display controlled by a microprocessor which, depending on the toggles released, will emit sequences of light in diamond, circular, oval, rectangular or almost any other pattern.

“The by the time we’re done with this,” says Walt McGuire, “we’re going to be delivering 15 to 17 pieces of hardware to that classroom that will be beyond anything they’ve ever seen before. They’ll stimulate those students’ senses—touch, sound, sight, the whole range—but most of all, they’ll stimulate their minds.”

For the 19 UMass Lowell students, and the University as a whole, the rewards—as Alan Rux’s grant proposal defines them—are perhaps subtler, but no less real: “the skills they gain from working as a team with persons of [different] professions...the satisfaction of improving the life of a special-needs person...of providing something special that money cannot buy.”

SIFE Members Lead Course at Lowell Middle School

members of Students in Free Enterprise (SIFE) conducted eight workshops over two days this March for more than 200 seventh-graders at Lowell’s Sullivan Middle School. The workshops addressed two major areas: the importance of a college education, especially in business, and an introduction to the concept of green or environmentally friendly business practices.

The University students created their own 70-minute workshop for the project, during which, the SIFE teams engaged the students in discussions on various “what if” scenarios on the topics. Then, they had their groups create collages on the theme of green marketing and its impact on the world.

Szczesniul Pens Examination of Great American Author

Robert Penn Warren, America’s first poet laureate and one of the most prolific American poets of the 20th century, wrote more about race relations in America than perhaps any other white literary figure of his generation.

Yet, according to Prof. Tony Szczesniul, English, there was a gap in scholarly research on this facet of Penn Warren’s writing.

“This was a moment in Penn Warren’s career,” says Szczesniul, “that no one had come to terms with.”

This is one of the reasons why Szczesniul authored a new book published in December, Racial Politics and Robert Penn Warren’s Poetry. This book, he says, provides a bridge for those wanting to learn more about the crossover of Penn Warren’s aesthetics and his politics.

Penn Warren went through a 10-year period, roughly 1943-1953, when he couldn’t finish a poem. This period of writer’s block was almost contemporaneous with a phase when the author began a serious re-examination of his views of race. Szczesniul says that when Penn Warren emerged from his literary drought, the tone of his writing had changed to reflect this social transformation.

According to Szczesniul, “Brother to Dragons” is a good example of Penn Warren’s writing from this era. It is a book-length poem based on the true story of when two of Thomas Jefferson’s nephews murdered a slave.

Szczesniul’s book, which relies heavily on unpublished archival materials, is the first to thoroughly trace the influences Penn Warren’s changing thoughts on race and his poetic writings had on one another.
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University Readies for June 1 Commencement

Career Investigator Award of the Medical Research Council of Canada, from 1968 to 1993, and the World Lunar Society Award in 1992. She is currently professor emeritus at Montreal’s McGill University and Director of the McGill Summer Programme in Epidemiology and Bioethics.

Renowned author James Carroll has written nine novels, including four New York Times bestsellers. His memoir An American Requiem: God, My Father, and the War That Came Between Us received the 1996 National Book Award. Carroll actually began his career in the priesthood, serving as Catholic chaplain at Boston University from 1969 to 1974. He eventually left the priesthood to become a writer, joining the Berkshire Theater Festival in Stockbridge in 1974 as Playwright-In-Residence. In 1976, he published his first novel, Madonna Red, which was translated into seven languages. Presently, Carroll is an associate of the Belfour Center for Science and International Affairs at Harvard University, where he is working on a history of the Pentagon. His essays and articles have appeared in The New Yorker and his syndicated column has run weekly in the Boston Globe since 1992.

William T. O’Shea is executive vice president of Corporate Strategy and Marketing for Lucent Technologies. O’Shea joined Lucent Technologies in 1985 and has held various executive positions since then, including President of Lucent Technologies Network Systems, President of Lucent Technologies Europe, and President of Lucent Technologies Europe, Middle East, and Africa. He has also held senior executive positions at AT&T and its predecessor companies.

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GEAR UP Goes to High School

cultural issues, and how best to assist the students,” he says.

The GearUp program continues its many components, now transplanted into a high school setting: in-school tutoring, after-school enrichment, professional development for teachers, mentoring, college awareness presentations and parent education.

During the school day, 10 to 20 college students and retired engineers provide tutoring. Before- and after-school tutoring sessions are run by teachers, providing help in math, science, English and social studies. Similar services are being set up at the Greater Lowell Technical High School.

Many of the students referred for tutoring are at risk of dropping out. They have been identified through a dropout prevention program developed by MCC with the school department. GearUp counselors encourage the students not to give up, to set goals and keep striving.

During April vacation, the program offered field trips to colleges, to build student awareness of college and career opportunities. An entrepreneur program will help students develop business proposals. And a project with the Revolving Museum in Lowell will involve mentoring and coaching.

“After the schools gain more awareness of what we offer,” says Tucker, “they learn how to develop initiatives that are funded through GearUp.”

At the Robinson Middle School, for example, where GearUp includes all the students in the school, a host of after-school programs have been started, including a music program using steel drums.

Parent education has been a strong component of GearUp. At the high school, workshops are offered in computer skills training and English for non-English speakers. A Parent Expo was held April 15, with the citywide Parent Council, to inform parents about the high school environment and discuss how parents can advocate for their children.

Although the full success of GearUp cannot be calculated until today’s high school freshmen start applying to college, teachers report that their students have responded positively to the program offerings, gaining in skills and interest in school.

—KL

From Looms to Computers, CWW Gathering at the Well Forum Explores Technology in Women’s Lives

Today, we might think of technology as a computer or a mobile phone, but technology can be anything from a vacuum cleaner to a weaving loom, anything that design is supposed to improve a process or task. The discussion at the fifth annual Gathering at the Well Forum, “Technology in Women’s Lives: Labor Saving or Enslaving?”, looked at all types of technology impacting women’s lives from the mill girls of the 1800s to present-day nurses and clerical workers. More than 60 members of the community and University participated in the forum sponsored by the Center for Women and Work (CWW).

Keynote speaker Roslyn Feldberg, associate director of labor relations, Massachusetts Nurses Association, has spent her career interviewing women about their work. She reiterated a point throughout her talk, “Technology doesn’t make things easier when it’s used without talking to the people who do the work.”

She relayed stories about data entry jobs being required to improve efficiency scores and secretaries being pooled—both designed to improve the bottom line. In the case of the data clerks, the women began adding extra spaces to improve their scores. “If management makes up the system, people get very creative.”

The same is true in nursing, where Feldberg described technology such as blood sugar monitors creating more tedious work instead of simplifying the job. The monitor gives the nurse the result immediately, but nurses were required to file an order with the lab to receive a printout for the patient’s chart – two extra steps. When a supervisor thought that the levels were simply not being checked, he was made aware of the difficulties of the new technology and a more streamlined system was devised.

From mill girls of the 1800s to present-day nurses, the Gathering at the Well Forum covered a broad spectrum of technology and women’s work. Forum organizers and speakers were from left, Suzanne Harter, conference coordinator, Center for Women and Work (CWW); Maria Papesh, Lowell National Historical Park; Prof. Meg Bond, director, CWW; Keynote Speaker Roslyn Feldberg, associate director of labor relations, Massachusetts Nurses Association; and Sivan Daniel, graduate student, CWW.

Well Forum, “Technology in Women’s Lives: Labor Saving or Enslaving?”, were Dr. Susan Goodwin, vice chancellor of Diversity and Pluralism, Massachusetts Institute of Technology, and Maureen Ridge, public services director, SEIU Local 285. The event began with earlier examples of technology in women’s work. “Women have always worked and they have always used the tools and technology of their time,” said Feldberg.

Fieldberg said that the mobile phone, but technology doesn’t solve the problem. Talking with the end-user solves the problem,” said Feldberg.

Technology doesn’t solve the problem. Talking with the end-user solves the problem,” said Feldberg.

The Council on Diversity and Pluralism, the Council of Federal Centers and Institutes and the Bookstore fund the Gathering at the Well.
**Haiku Event Kicks Off A Poetry Year for Lowell**

Among the notable happenings during National Poetry Month (April) this year, the *New York Times* offered an editorial appreciation of a posthumous collection of haiku by Jack Kerouac. The *Times* wrote: “Jack Kerouac, the poet of inordinate prose, was also a master of haiku.... Most of us tend to think of Kerouac as the scroll-making, self-scripting author of *The Dharma Bums*, *The Subterraneans*, *The Ox-Bow Incident*, and *Venus in Fur*; *The Last Waltz* is out of which those effusions are made.” A local tie-in to this publishing news happens on Saturday, May 17, when Lowell’s Flowering City Committee sponsors a Haiku Walk in the Lowell-Dracut-Tyngsboro State Forest as a prelude to a Haiku contest sponsored by the same organization.

*History Prof. Caryn Cossé Bell has written a* wrote: “Jack Kerouac, the poet of inordinate prose, was also a master of haiku.... Most of us tend to think of Kerouac as the scroll-making, self-scripting author of *On the Road*, a writer who is the soul of effusion. But his haiku are the molecules out of which those effusions are made.” A local tie-in to this publishing news happens on Saturday, May 17, when Lowell’s Flowering City Committee sponsors a Haiku Walk in the Lowell-Dracut-Tyngsboro State Forest as a prelude to a Haiku contest sponsored by the same organization.

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**A day of quiet gladness— Mount Fuji is veiled in misty rain.**

*Basho*

Haiku was invented and developed as a poetic form hundreds of years ago in Japan. Most of us know it as a three-line poem with 17 syllables (5-7-5). Kerouac redefined it as a short poem, usually in three lines, that may or may not rhyme. He wrote: “I propose that the ‘Western Haiku’ simply say a lot in three short lines.... Above all, a Haiku must be very simple and free of all poetic trickery and make a little picture and yet be as airy and graceful as a Vivaldi Pastorella.” Kerouac held up this haiku by Basho (1644-1694) as a model: “A day of quiet gladness— Mount Fuji is veiled in misty rain.”

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**Economist Decrees Child Labor in Mexico**

*Economist Luis Felipe Lopez-Ceval from the Universidad de las Americansas in Puebla, Mexico and the Colegio de Mexico in Mexico City, right, is welcomed to campus by Prof. Chris Tilly and graduate student Patricia Jimenez, both of Regional Economic and Social Development. Lopez-Ceval led a seminar about his research on child labor in Mexico.*

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**Building Strong Minds and Bodies — Summer Students Qualify For Recreation Center Membership**

Students taking courses this summer can build their minds and their bodies. New this semester, students enrolled in summer courses qualify for a reduced summer fitness membership for $75 at the Campus Recreation Center. Summer memberships will run May 19 through August 30.

New courses being offered this summer include Introduction to Audio for Multimedia and the Web, C Sharp Programming, Wireless Communications and The American West.

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**Bell’s Research Shows Benefits of Vodou**

Bell discovered information about vodou (often spelled “voodoo”) as part of her research into the religious culture of 18th- and 19th-century New Orleans, the city she called home most of her life before moving north seven years ago. In her book, *Revolution, Romanticism, and the Afro-Creole Protest Tradition in Louisiana, 1718-1868*, Bell examines Spiritualism, a radical religious sect that emphasized personal empowerment and repudiated orthodox religion. She said that in Louisiana, vodou emerged among enslaved West Africans who fused their ancient religious rites with elements of Roman Catholicism and Native American spiritual beliefs.

Vodou is based on the worship of one god, who is helped by various spirits, and the practice of rituals that native Africans discovered were similar to Roman Catholicism with its saints and sacraments. (“Vodun” actually means God, creator or Great Spirit.) Vodou encourages its participants to better understand the natural processes of life and their own spiritual futures. For example, Bell said the vodou dolls are created from items found in nature such as Spanish moss, twigs, cloth and string, crafted in the image of a person with an article from him or her, such as a piece of hair.

In particular, the enormous influx of Haitian immigrants in 1809— which nearly doubled the size of New Orleans and increased the city’s black majority to 63 percent— contributed to the ascendency of vodou across all levels of the city’s society. Bell said that in 1874, about 12,000 spectators, both black and white, swarmed to the shores of Lake Pontchartrain to catch a glimpse of the famed “Voodoo Queen” Marie Laveau as she performed her legendary rites.

Bell says that vodou helped produce leaders, as it served as a “weapon of the weak.”

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May 7, 2003
Robots Rule the Day at UMass Lowell

They clicked. They whirred. They lit up. They moved.

All over the gymnasium of the new Campus Recreation Center on a recent Saturday, knots of enthusiasts admired the robotics creations of fellow inventors or cheered as their favorite bots scored points in head-to-head competition.

Two simultaneous events—the second annual New England Botfest and the 2003 Massachusetts Regional Botball Tournament—gave the full range of opportunity to creative folks of all ages.

Just what is Botfest? Fred Martin, assistant professor of computer science, explains what and why.

“Low-cost robotics kits have led to an explosion of interest in robotics,” says Martin. “Students from grade school through graduate school can construct robots that do useful things or are just whimsical. So Botfest is an open-ended exhibition that allows lots of room for creative expression.”

Creative expression was evident in the projects displayed by middle schools from Wellesley and from Newport, R.I., and by fourth grades from Woburn, Haverhill and Smithfield, R.I., as well as a high school group from South Kingstown, R.I. UMass Lowell graduate students rounded out the demonstrations.

If prizes were given for group enthusiasm, one would have to go to the fourth-graders from the Anna McCabe Elementary School in Smithfield, who arrived with an eye-popping display and showed off their project at every turn. With consulting help from Martin and direction from teacher Mary Lurgo, the students had created interactive computational jewelry. They programmed Cricket logo boards with answers to four questions, so that when two students met, their jewelry would light up according to the degree of commonality they shared.

Meanwhile, 13 high school and middle school teams competed in Botball, a series of double elimination matches, complemented by points for design, engineering and Web site construction.

Botball is a creation of the KISS Institute for Practical Robotics, a national program encouraging students to learn about science and technology with hands-on experience. The institute sends each participating team a set of parts—a treasure trove of Lego parts, processing boards, motors, and lots of sensors: light sensors, a light probe, a sonar sensor and bump sensors—and allows them six weeks to design and build one or more robots.

“The real challenge of Botball is that the competition is played by the robots alone, without remote guidance,” says Holly Yanco, assistant professor of computer science and lead organizer of the event. “That means the students have to program all the action into the robot, then stand back and watch the action.”

The double elimination tournament is played on a 4-by-8-foot board. Two teams face off in an attempt to collect black or white balls into their own end zones.

Extra points are gained by tipping over tubes of balls, placing balls in special side target areas or into a tube, basketball-style.

The set-up provides ample opportunity for complex feats of design and programming, but sometimes “keep it simple, stupid” is the best strategy for winning. The girls’ team from Martha’s Vineyard Public Charter School, working with their older student mentors (male, but dubbed honorary girls), programmed their robot to simply knock down tubes, for a reliable nine points. This strategy worked all the way to the final match, where they faced the boys’ team from the same school—and won.

Waltham and Ashland teams came in third and fourth in the head-to-head. Waltham High School’s team placed second overall on points, and Northbridge High School in Whitinsville placed third.

Brooks Automation Selects CSCDE to Help Make the Switch to C++

Brooks Automation, Inc., which delivers manufacturing automation solutions for semiconductor, precision electronics and other industries, has awarded a training contract to the Division of Continuing Studies, Corporate and Distance Education (CSCDE).

Currently, the company uses C programming, a procedural language, in developing their embedded software and would like to shift to C++ programming, an object-oriented language. In collaboration with CSCDE, Prof. Bill Moloney, computer science, is teaching a group of 15 software engineers in the embedded systems group C++ and providing student support services on-site in Chelmsford.

“The personalized student support services provided to Brooks employees by our corporate on-site training team is just another example of how we work with each company to fit the program to their needs,” says Dean Jacqueline Moloney, CSCDE.

Switching to C++ will reduce Brooks’ software development cycle times, increase code re-use and software quality. And by retraining experienced software engineers, Brooks may save money over the long-term.

“Brooks has already invested in developing people in their domain. These are talented engineers who understand the context. It’s a much better decision to retain people who have context and experience,” says Moloney. The non-credit courses are more specifically geared towards the company’s application than the credit course offered by the department, enabling the students to use relevant examples.

“It has long been said that it is more economical to invest in current employees than to hire new employees,” says Catherine Kendrick, director of corporate and distance marketing, CSCDE. “By working with the University, companies ensure that they are receiving the best education in cutting-edge technologies tailored to fit their needs. The relationship we have established with Brooks epitomizes this idea.”
Human Factors in the Segway

Thirty-six different versions of the handlebars.

Engineers designing the Segway were determined to get the human factors right, to make it very simple to use just by shifting body weight and operating one control on the handlebars. So, many versions were needed to work out the details.

Human factors design is also a strong interest of students and faculty in the Computer Science Department. The department offers a graduate certificate program in human computer interaction and hosts LowellCHI—the first student chapter in the United States and second in the world to be affiliated with the international professional organization ACM SIGCHI.

Assoc. Prof. Marian Williams is executive vice chair of the professional organization and faculty advisor to LowellCHI. The chapter, which is open to graduate students and undergraduates, invited John Morrell, dynamics and software development manager at Segway, to speak at their monthly meeting.

“John rode off the elevator and asked directions,” says Williams. “Then he rode the entire time he gave his presentation,” before giving rides to anyone interested.

Morrell reviewed the design goals and principles the designers considered, such as “depth.” Depth means an object is easy to use from the beginning, yet rewarding to use as one develops more expertise. Morrell said he expects competitors to develop, as users test their agility and ability to do tricks with Segways. He also said the machine was designed to be plain, so attention would be on the person riding, not on the device.

More than 60 people attended.

Window Replacement Project in North Quad Begins in June

A total of 115 windows in the Falmouth and Pasteur buildings on North will be replaced beginning in early June, according to Project Manager Marie Gaine. The work will be completed by the end of August.

This is the first phase of a more extensive project in which all windows in the quad—Falmouth, Pasteur, Kitson and Southwick—will be replaced eventually.

The work in Phase 1 will be done on the VFW Highway side of the two buildings.

“We will be in contact with the different departments with a more detailed schedule in the next few weeks,” says Gaine, “but it is not premature to start preparing offices, labs and classrooms in anticipation of this work. It’s especially important that areas near the windows be clear to give the contractor room to remove the existing windows and install the new ones.”

The objective of the project is to reduce energy costs. The new thermal-pane windows will be more efficient in retaining heat in the winter months and cooling during hot weather, Gaine says.

Mayor Cites Importance of Medical Labs Training at UMass Lowell

Proclaiming the week of April 20 - 26 Medical Laboratory Week in the City of Lowell, Mayor Rita Mercier used her bully pulpit to call attention to the national shortage in medical laboratory technicians and to the academic program at UMass Lowell that educates this workforce.

“The need is for students to get special training at UMass Lowell,” she said.

Vice Mayor Armand Mercier added that the need for technicians is critical.

“Let’s face it,” he said, “if programs graduating these technicians do not remain successful, then we are in deep trouble.”

Prof. Kathleen Doyle, coordinator of the Medical Technology and Clinical Lab Sciences programs, said that UMass Lowell’s program recently received a 100 percent quality rating from the field’s national accrediting body.

“We can achieve this because of the quality of our faculty and staff, the university administration and our clinical affiliates,” she said.

Representatives of three of those affiliates—Saints Memorial Medical Center, Lowell General Hospital and the Lahey Clinic—added their call for recruiting more medical technicians.
Student-Faculty Research Featured at Symposium

Digging deeper into a topic through research brings classroom learning to life. Research projects help prepare students for future careers and UMass Lowell faculty encourage their students to engage in research and to make presentations about their work.

More than 120 graduate and undergraduate students took the challenge and participated in the sixth annual Student Research Symposium, displaying and explaining their posters to interested faculty and fellow students.

The symposium is sponsored by the Faculty-Student Collaborative Research Task Force of the Council on Teaching, Learning and Research as Scholarship. Prof. Arthur Mittler, physics, and Asst. Prof. Doreen Arcus, psychology, are co-chairs. The task force encourages faculty-student research projects, including interdisciplinary research.

Faculty Teaching Center Hosts Annual Conversation Dinner

Faculty Mentoring Project Seeks New Participants

The mentoring project for new faculty, which worked very well during its first year of operation, is seeking more faculty and staff mentors for the 2003-04 academic year.

Prof. Barbara Cocanour of physical therapy, coordinator of the project, says its mission is to help new faculty members become oriented to the campus. Experienced colleagues, both faculty and staff, help the new members by answering questions about University policies and procedures, directing them to appropriate resources, and by offering encouragement.

“There were about 18 mentors in the program this year, and they say participation wasn’t time-consuming,” Cocanour says. “Very often the contacts entail only phone calls, or possibly an occasional lunch.”

According to feedback from a questionnaire distributed recently, she says, “Those who used the mentoring project found it very helpful. The feedback was very positive.”

Mary Beaudry, director of the Faculty Teaching Center, says the project grew out of a discussion last spring at the 10th anniversary dinner of the Council on Teaching, Learning, and Research as Scholarship.

“Several people said that, in view of the many new faculty members coming in (there were 49), we needed mentors for them,” Beaudry says. A faculty handbook, published in December, also grew out of that dinner discussion.

Anyone interested in becoming a mentor, should contact Cocanour at Barbara_Cocanour@uml.edu.
Two members of the Toxics Use Reduction Center (TUR) presented papers at the National Pollution Prevention Roundtable’s annual spring conference last month in Louisville, Ky.

Pam Civie provided information about the Massachusetts Model for Industry EMS Peer Mentoring, while Eileen Gunn discussed effective pollution prevention education and outreach, and the Toxics Use Reduction Networking Community Grant Program.

Asst. Prof. Alkim Akyurtlu of the Electrical and Computer Engineering Department has received a NASA Faculty Fellowship Award and will be conducting research at the NASA Langley Electromagnetics Research Branch for 10 weeks this summer. She was selected for the competitive award from among 730 faculty applications.

“My acceptance was based on my qualifications and the fact that my research area was of great interest to the branch’s research initiative,” Akyurtlu says. She will be conducting research in the area of electromagnetic wave interactions with meta-materials.

“These novel media have unique electromagnetic properties, not found in nature, that lead to very interesting results, including the reversal of Snell’s Law and the Doppler effect,” she says.

Akyurtlu joined UMass Lowell faculty this past fall after working with the Systems and Analysis Group at MIT Lincoln Laboratory. She obtained her Ph.D. and M.S. degrees in electrical engineering from Penn State and a B.S. degree from Virginia Tech.

Faculty and staff from the Center for Field Services and Studies (CFSS) in the Graduate School of Education presented research findings and introduced new technology tools at the international conference of the Society for Information Technology and Teacher Education (SITE) held recently in Albuquerque.

The presentations were based on work done in the $1 million, multi-year “Ready to Teach” project, supported by a grant from the Preparing Tomorrow’s Teachers to Use Technology project of the U.S. Department of Education. The project is a partnership of UMass Lowell, the public school districts of Lowell, Methuen and Chelmsford, and the Mass Networks Educational Partnership, Inc.

The SITE presenters were Judith Boccia, director of CFSS; Patricia Fontaine, lecturer and project design team facilitator; Mike Lucas, CFSS distance learning coordinator and project technical expert; John Wren, project Webmaster; and Marjorie Dennis, project coordinator.

The On-Campus Discovery of an Underwater World

One day 17 years ago, Computer Science Prof. Jesse Heines, as he often did and still does, was helping a student with his homework. The young man’s name was David Morton. His hobby was scuba diving; it was a sport Heines had never tried.

“We just got to talking—I was fascinated. The next thing I knew, he was giving me my first lesson. Right here in the [UMass Lowell] pool.”

That first lesson led to another, and over time the fascination deepened. Then, as Heines’s diving skills sharpened and his experience taught him more of the beauties of marine life, he began to feel the urge to record it on film. “I’d been involved in photography for a long time already—since college, actually. So it was sort of a natural progression. I bought the equipment and began taking pictures. Once I started, it just grew.”

And the better he got. Several years ago, at the New England Aquarium Dive Club’s annual photography contest, his underwater photos were awarded both first and second prize.

Meanwhile, his one-time student/teacher, David Morton, is today president of the Boston Sea Rovers, among the oldest Scuba club in the United States. And Heines, who has been teaching computer science at UMass since 1985, is now also the department’s resident photographer.

His photos can be accessed at http://teaching.cs.uml.edu/pictures. Then click on “Scuba.”

Brown Tours Yucca Mountain, the Future Site for Spent Nuclear Fuel

Engineering Prof. Gil Brown returned not long ago from a trip to Yucca Mountain, Nev., where, together with six other nuclear engineering professionals, he toured the site now being developed as the nation’s repository for spent nuclear fuel.

The site, which is accessed by a five-mile tunnel through the mountain, was approved last summer by Congress and the president for licensing by the Department of Energy. It is located roughly 100 miles north of Las Vegas.

“It was very impressive, remote and arid,” says Brown, who traveled by foot and rail into part of the tunnel, which is 25 feet in diameter. “And, based on 20 years of study, it’s been determined to be a safe and stable place [for the spent fuel and waste].” The storage area, he says, is midway between the water table and the surface, 1,000 feet from each.

The week prior to his trip to Yucca Mountain, Brown attended the 2003 American Nuclear Society Student Conference, which took place at the University of California Berkeley the first week of April. Roughly 300 students from 16 universities attended the conference, including seven from UMass Lowell, which has sent students to the conference nearly every year since 1975.
Wednesday, May 7
Concert, Faculty Performance Series, Concert Band, Daniel Lutz, director, 7:30 p.m., Durgin Concert Hall. For information, call (978) 934-3850.

Thursday, May 8
Concert, Faculty Performance Series, Studio Orchestra, Walter Platt, director, 7:30 p.m., Durgin Concert Hall. For information, call (978) 934-3850.

Thursday–Friday, May 8–9
Performance, STARTS program, “Tiki Tiki Tembo,” a musical production for school field trips, grades K-3, 9:30 and 11 a.m., Durgin Hall. Tickets $5. For information and reservations, call the STARTS hotline (978) 934-4452.

Friday, May 9
Graduating Students’ Breakfast, For information, call Patricia Yates (978) 934-2355.

Concert, Faculty Performance Series, Choral Collage, featuring Dr. Christopher McGahan, director, 7:30 p.m., Durgin Concert Hall. For information, call (978) 934-3850.

Concert, Student Performance Series, Jean Pulsifer, piano, 7 p.m. Fisher Recital Hall. For information, call (978) 934-3850.

Saturday, May 10
Concert, All-City Youth Wind Ensemble, Deb Huber, director, 7:30 p.m., Durgin Concert Hall. For information, call (978) 934-3883.

Concert, Faculty Performance Series, Choral Collage, featuring Dr. Christopher McGahan, director, 7 p.m., Durgin Concert Hall. For information, call (978) 934-3850.

Monday, May 12
Concert, Faculty Performance Series, Brass Ensemble, Joseph Foley, director, 7:30 p.m., Durgin Concert Hall. For information, call (978) 934-3850.

Concert, Faculty Performance Series, Classical Guitar Ensemble, Prof. Richard Schilling, director, 7:30 p.m., Fisher Recital Hall. For information, call (978) 934-3850.

Tuesday, May 13
Open House, Registration for Summer Session classes, late registration begins May 15 for Session I, July 2 for Session II, 5 to 7:30 p.m., Southwick Hall. For information, call (978) 934-2480.

Thursday, May 15
Concert, Student Performance Series, Jean Pulsifer, piano, 7 p.m. Fisher Recital Hall. For information, call (978) 934-3850.

Sunday, May 18
Concert, UML String Project, Student Recital, featuring Prof. Susan Turcotte-Gavriel, master teacher and Dr. Kay George Roberts, director, 3 p.m., Durgin Concert Hall. For information, call (978) 934-3850.

Monday, May 19
Summer Session I, Classes begin. For information, call (978) 934-2480.

Tuesday, May 22
Summer Residency, Graduate School of Education has a new location, 3 to 5 p.m., O’Leary Library, 5th floor. For information, call (978) 934-4600.

Thursday, May 29

UML Summer Campsite
Looking for ways to keep the kids busy this summer? How about giving them something to do that’s educational, or athletic, or something that’s just plain fun?

UMass Lowell offers a variety of summer camps for each child’s individual interests. There’s everything from hockey School to National Park Adventures to learning how to make liquid-propelled rockets at Designcamp.

Check out www.uml.edu/summervamps for all the details.

Cox Reads From Latest Work

Did you know...

Kerouac Writer-in-Residence Betsy Cox, right, read from her latest work and took questions from an audience of nearly 100 in Coburn Hall recently. Prof. Bill Roberts, chair of English, left, hosted the event. Cox is the author of three novels, including The Ragged Way People Fall Out of Love, as well as the short story collection Bargains in the Real World. She has been teaching a writers’ workshop for the Department of English this semester.

for Extra Credit...

How did Blanche Cheney, Josephine Chute, Frances Clark and Sarah Lovell earn their nickname?

According to former students, it was actually a term of endearment, as the women “ruled with an iron rod” but were “gentle and warm-hearted.”