Search Panel Names Three Finalists for Chancellor

The UMass Lowell Chancellor Search Committee recommended three finalists for the position to University of Massachusetts President Jack Wilson: a chancellor, a chief academic officer and a congresswoman. About 100 had applied.

Those selected were: David C. Chang, chancellor of the Polytechnic University; Nabil A. Ibrahim, vice chancellor for academic affairs and chief academic officer at Purdue University, Calumet; and Martin T. Meehan, who represents the 5th congressional district of Massachusetts in the U.S. House of Representatives.

Wilson will recommend a new chancellor to the UMass 22-member Board of Trustees, which could make a decision at their March 14 meeting.

In a UMass President’s office press release announcing the finalists, William T. O’Shea, chairman of the 21-member search committee, said, “We are very pleased to be advancing the names of these three candidates, any one of whom could be a distinguished and dynamic new leader for the UMass Lowell.”

According to the press release, the committee sought candidates “possessing a passion for higher education, an understanding of the public research university, and the experience and ability to lead the campus and community.”

President Wilson lauded the committee for its “diligence” and “unslefish service to the University.” He lauded O’Shea, a UMass Lowell alumus, in particular, for his “distinguished service as chairman.”

The candidates were expected to visit campus the first week in March.

About The Finalists

David C. Chang is chancellor of the Polytechnic University, located in Brooklyn, NY, and has also served as president of that institution. Additionally, Dr. Chang has served as dean of the College of Engineering and Applied Science at Arizona State University and held several academic positions at the University of Colorado. He holds a bachelor’s degree from the National Cheng-Kung University in Taiwan, as well as a master’s and a Ph.D. from Harvard University.

Nabil A. Ibrahim is vice chancellor for academic affairs and chief academic officer at Purdue University, Calumet. He previously served as chief research officer and dean at San Jose State University, and also held academic positions at Bradley University and the University of Manitoba. Dr. Ibrahim holds a bachelor’s degree from the University of Cairo and a master’s and Ph.D. from McMaster University.

Martin T. Meehan represents the 5th congressional district of Massachusetts in the U.S. House of Representatives, an office he has held since 1993. He has also served as First Assistant District Attorney in Middlesex County and as the Commonwealth’s Deputy Secretary of State for Securities and Corporations. Rep. Meehan has taught at UMass Lowell and at Harvard University Law School. He holds a bachelor’s degree from UMass Lowell and MPA and JD degrees from Suffolk University.

Walk Before You Run, Talk Before You Read: Oral Literacy Project Helps Preschoolers

Most reading difficulties are at root, deficiencies of oral language,” says Allyssa McCabe, professor of psychology. “In preschool, we can predict fairly accurately which children will have academic difficulties in fourth and seventh grades.”

McCabe is leading a research project that aims to reverse that prediction for preschool children at risk; the research is part of the UMass Lowell—Bartlett School Community Partnership. Volunteer college students are trained to engage children in the most basic and powerful pre-requisite of literacy: one-on-one conversations in English.

“They tell a story to get a story,” explains doctoral candidate and research assistant Mari Beth Bennett, “sharing personal experiences and prompting similar accounts from the children that are recorded and read back.” The volunteers help extend the children’s vocabulary, and draw attention to letters and sounds.

More than 30 preschool children, aged two to five, are participating in the intervention group, with a similar number from the McAvinue School as a control group. Pre-tests and post-tests measure a variety of oral language skills, with additional testing planned for fourth grade.

Meanwhile, the student researchers are gratified to see a tremendous growth in language and social skills among their young charges. Tiffany Keyes, a junior psychology major, says, “It is so interesting to see them learn, everything from letters to interacting with other children. It puts it all into perspective—the language that someone uses towards little kids really affects them.”

Village Empowerment Program Named Finalist for Carter Award

Volunteering to bring power and water to remote villages in Peru has been life changing for the students—and life saving for the villagers.

Now the project is gaining well-deserved attention and has been named as a finalist for the state’s 2007 Jimmy and Rosalynn Carter Partnership Award for Campus-Community Collaboration.

The Village Empowerment Partnership, headed by Prof. John Duffy of the Mechanical Engineering Department, is a collaboration of UMass Lowell and the Peruvian Ministry of Health.

Started nine years ago with an exploratory visit, the project is responsible for grass-roots development in 33 remote villages of the Peruvian Andes, where student volunteers and local Inca residents have installed solar-powered radio communications and vaccine refrigerators, sustainable power sources for lights and laptops in schools, and easily maintained water supply and purification systems.

As Duffy, director of UMass Lowell’s energy engineering program, wrote, “The results of the project have been truly life altering for the community partners and for the students. The communication system alone for the clinics has saved many lives, according to health care professionals in Peru. Entire villages now have running water where before people had to walk up to a half mile with buckets from the nearest irrigation canal, shared with cattle and pesticides. Some student participants have changed their career plans and now do this type of work.”

The volunteers travel every six months to the same villages to ensure sustainability and learn from the people.
State Backs Medical Device Development Center

$150,000 Grant Funds Pilot to Foster Industry Growth

Mass Lowell’s ability to address industry’s need for the latest technology goes back a century to the days of the Lowell Textile Institute. That tradition continues—and continues to receive state backing—with a $150,000 grant from the John Adams Innovation Institute to the Mass Medical Device Development Center (M2D2).

With the funds, M2D2 will help inventors turn new medical product ideas into prototypes likely to secure federal and private funding.

“We are excited about assisting potential new medical device companies,” said Prof. Stephen McCarthy, co-director of M2D2, at a recent announcement of the award. “This is a pilot program. We really expect to grow it.”

Joseph D. Downing, chief operating officer for the Innovation Institute, presented a “check” to McCarthy and Chancellor David MacKenzie. “Everyone likes technology, but you’re really investing in new medical procedures,” he said. “The involvement of business and industry leaders in this project convinced us of the ‘reputation effect’—that smart dollars will follow the reputation.”

McCarthy’s M2D2 team includes Hoosk Johnston, a Smith and Nephew retiree, as chair of its steering committee, and Mark Trusheim, a biotech industry consultant and former interim president for the Mass Biotech Council. Steering committee members represent venture capital firms, large and small medical device companies, UMass and economic development agencies.

Thomas Chmura, UMass vice president for Economic Development, noted that the state’s economic stimulus legislation has provided the funding so that the Innovation Institute can make such awards. He thanked Sen. Steven Panagiotakos and state Rep. Thomas Golden, on hand for the announcement, for their support.

Panagiotakos noted that the technology sector has been hard hit by global competition. “The state needs to be proactive in economic development and help seed innovation and technology,” he said.

Golden said he would like to see M2D2 expand. “It’s my hope that one, the technology stays and, two, jobs are to follow,” he said. The M2D2 concept received seed funding in 2005 from the UMass President’s Science and Technology Fund. The center is a collaboration between UMass Lowell and UMass Worcester, combining Lowell’s expertise in plastics engineering with the Medical School’s clinical trial capabilities. Sheila Noone, director of the Office of Clinical Research at Worcester, co-directs M2D2 with McCarthy. Rounding out the M2D2 team are Renae Lias Claffey, director of government relations; Ken Geiser, assistant to the Provost for research; and Edward March, executive in residence at UML, as well as the UMass Donahue Institute’s Rebecca Loveland and Kate Modzelewski.

The announcement came at a meeting of more than 150 business executives at the Merrimack Valley Venture Forum, held at Wannalancit. M2D2 steering committee chair Johnston told the audience that while employment in the industry has grown in other states, it has fallen here in the last two years, due to a change in the investment climate. “The little guys aren’t getting funding,” he said. “Our hope on M2D2 is to fill the early-stage void.”

Walk Before You Run, Talk Before You Read: Oral Literacy Project Helps Preschoolers

Eighteen undergraduate and graduate students comprise the volunteers, using the project to complete practicum and community service requirements in a variety of disciplines, from engineering to English. The volunteers themselves are like a “little UN” says Bennett, hailing from Southeast Asia, Africa and the Caribbean.

McCabe sees student researchers as an effective means of providing rich oral language stimulation to young children. The project goal is to collect pilot data as the basis for a significant federal grant, allowing expansion of the program to other schools in Lowell and the region.

Research funding has included a seed grant from the Committee of Federated Centers and Institutes (CFCI), the umbrella organization of interdisciplinary research centers on campus, and the Theodore Edson Parker Foundation. Others associated with the research include Dr. Judith Boccia, director of the Center for Field Services and Studies and co-principal investigator on the project; Kelly King, doctoral student, and Filar Fabery, both teachers at the Bartlett School; Dr. Grace Wai, principal of Bartlett; Kelly Clough, principal of McAvinnie; and Marion DeLaubenthal, graduate student in community psychology and trainer, along with Bennett, of the student researchers.

Dr. Judith Boccia, director of the Center for Field Services and Studies; Mari Beth Bennett, doctoral candidate in education; and Prof. Allyssa McCabe of the Psychology Department are working on research to improve the oral language skills of at-risk preschool children.

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Village Empowerment Program Named Finalist for Carter Award

UMass Lowell will join the other finalists, Harvard and Northeastern, at the April 9 award ceremony and dinner, which will include video presentations to highlight the work being done. The Carter Partnership Award was created to recognize and encourage efforts to build safe, healthy and caring communities across the United States and throughout the world, in honor of the Carters’ commitment to collaboration and cultural change.

From left, Rep. Thomas Golden and Sen. Steven Panagiotakos recently joined UMass Vice President for Economic Development Thomas Chmura for a grant presentation on campus. Next to Chmura is John Adams Innovation Institute’s CDO, Joseph Downing, who presented a “check” to Plastics Engineering Prof. Stephen McCarthy, co-director of M2D2. With them is Chancellor David MacKenzie.

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**UML Outreach Program Audit Underway**

**Student Fellows Supported by Grant from Mass. Campus Compact**

The University has received a $4,500 grant from the Massachusetts Campus Compact (Compact) to support an audit of on-campus outreach and recruitment programs for prospective undergraduates. The Compact is a nonprofit coalition of 66 college and university presidents committed to developing the civic skills of students, building partnerships with the community and integrating civic engagement with teaching and research. The group supports a range of professional development, information sharing and policy activities designed to strengthen the role of higher education institutions as civic partners.

“There are many programs on campus designed to improve student access to the University,” said Michael Belcher, acting director of recruitment and outreach. “We don’t know if these programs, taken as a whole, are reaching all the right audiences. There could be overlap among programs or there could be gaps. That’s what this project will tell us.”

Belcher, project supervisor, will oversee two interns, Sergio Sanchez, a plastics engineering major, and Castro Yves-Arboite, a recent graduate of the graphic design program, in surveying every University department and mapping the activities, target audiences and reach of each outreach program.

Belcher expects to have a completed inventory in mid-May. The team will present findings to the UML community and to residents of Lowell and Lawrence. The community meetings will be facilitated by community partners and the UML Community-University Advisory Board. The final step of the project will be to formulate a one-year plan to maximize student outreach.

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**Chowdhury Named Vice Provost for Research**

**Chowdhury Named Vice Provost for Research**

Physics Prof. Partha Chowdhury has been appointed Vice Provost for Research. He will serve on an interim basis and maintain his faculty position, pending resumption of a national search that was suspended until a new Chancellor is named.

Chowdhury will be the first to hold this newly established position, intended to provide oversight and coordination of research matters on campus. He will work closely with the deans, the Research Council and other faculty research groups, as well as the Office of Research Administration. He will support the development of grant proposals and allocation of matching funds, develop policies for teaching and research assistantships, and oversee graduate student policies and collective bargaining.

“With UMass Lowell conducting close to $30 million in research annually, it’s critical to continue to build capacity and champion new initiatives,” says Chowdhury.

Chowdhury is an internationally recognized researcher in the field of heavy-ion spectroscopy and nuclear structure. His experiments are conducted at national heavy-ion accelerator facilities, and he was on the design team for Gammasphere—the world’s most powerful gamma-ray spectrometer—located at Argonne National Laboratory. He chaired the prestigious Gordon Conference in Nuclear Chemistry in 2005 (an elected honor).

In addition to sustained federal funding from the Department of Energy, his research has led to collaborative ventures and stable R&D partnerships with Massachusetts-based industry to develop materials and devices with applications in medical imaging and astronomy. Chowdhury joined the faculty in 1995 after teaching at Wellesley College and Yale University.

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**CLASS To Host New England Peer Tutoring Conference**

**Event Includes Staff and Tutors From Area Colleges**

Three UMass Lowell tutors will be making presentations on Saturday, March 31, at the 13th annual conference of the New England Peer Tutoring Association (NEPTA).

The conference, the theme of which will be “Lights, Camera, Tutor! Directing Students to Academic Stardom,” will feature staff/tutors from several community colleges and four-year institutions in New England. The event will be hosted by the University’s Centers for Learning and Academic Support Services (CLASS) Tutoring Program.

Two Faculty Win MTTC Technology Investigation Awards

Two faculty researchers have been awarded the maximum $40,000 Investigation Awards in the latest round of funding by the Massachusetts Technology Transfer Center. These awards are intended to support the commercialization of innovative technology.

Professor Emeritus Arthur Watterson of the Chemistry Department is developing flame retardant materials using new chemistry, based on enzyme synthesis, that are stable, produced rapidly, are non-toxic when combusted and degrade without environmental harm. These would replace fire retardants containing halogens and phosphorus, already banned in Europe.

Professor Sam Mil shein of the Electrical and Computer Engineering Department is working to improve transistor technology by shaping the electrical field profile along the channel of a transistor. As a result, operational frequency and power are both higher, the breakdown voltage increases, gain (amplification) is almost constant and linearity is improved.

Kazmer Elected Fellow of ASME

Plastics Engineering Prof. David Kazmer has been named a Fellow of the American Society of Mechanical Engineers (ASME), the first professor at UMass Lowell to be so honored.

Election to Fellow of ASME recognizes exceptional engineering achievements and contributions to the engineering profession. Newly elected Fellows will be honored in the November issue of Mechanical Engineering Magazine.

Kazmer is well known in two areas: design for manufacturing and plastics manufacturing. He is the author of several book chapters, including the article on injection molding in the “Encyclopedia of Chemical Processing,” and of more than 50 reviewed journal articles and 100 conference papers; he holds 18 patents. He invented a molding process named Dynamic Feed, which has been used to produce hundreds of millions of dollars worth of plastics products economically, and has received many awards for outstanding teaching, research and service.
Penny Wars: Attack of the Engineers
UML celebrates National Engineering Week

If you’ve been wondering what two cents are worth, you didn’t step into the College of Engineering during the National Engineering Week. An inter-department competition involving the largest penny collection brought out both unity and an aggressive streak across departments.

The Penny Wars was a competition to collect the maximum number of copper pennies for charity. But, if someone dropped a silver coin into a department’s collection, that coin’s worth would be subtracted from the penny total. So, for example, for every quarter in the box, 25 pennies would be null and void. Students and faculty collected copper pennies for their own departments, and went around dropping silver coins in the boxes of the other departments. Professors were rumored to have changed large amounts of paper money into cash for strategic placement. A $20 bill that would have negated 2,000 pennies was disqualified, and added to the total contribution.

The Department of Electrical and Computer Engineering won the Penny Wars with the highest total contribution, followed by the Department of Chemical Engineering. The cumulative collection of $925.98 will go to a charity that the winning department elects.

“It was amazing that despite being just pennies, we managed to collect such a huge sum,” says Pamela Jahngen-Provencal, executive director of Administration and Development in Engineering. ARAMARK is donating 50 pizzas to the winning department.

L-R: Betti Fortin, coordinator of Academic & Student Programs; Students: Tom Lancaster, Joseph Dinino & Noel Lacaladé; Ruth Dubey; Grad student Peter Gamache; Pamela Jahngen-Provencal, Executive Director of Administration & Development; and John Ting, Dean, College of Engineering.

‘The Old College Try’
UML’s Community Commitment Showcased in Upcoming Conference

What does a university owe to its surrounding communities? How involved should a college be in the things that matter to its neighbors? Throughout UMass Lowell’s storied 111-year history, the school’s partnerships with local people, groups, and issues have been consistent and significant.

In April, UMass Lowell will again showcase its century-long commitment to community by hosting the Committee on Industrial Theory and Assessment’s (CITA) annual conference, a gathering of academics and professionals from around the world who will share highlights and components of successful university/community partnerships.

“The phrase ‘the engaged institution’ is increasingly being used to describe universities that purposefully seek out interdisciplinary research and more integrated forms of knowledge generation,” says Prof. Linda Silka, director of UMass Lowell’s Center for Family, Work and Community and co-chair of CITA.

Silka and her co-chair, Assoc. Prof. Robert Forrant of RESD, report that CITA has attracted 200 university and professional practitioners from around the world, including some from as far away as South Africa, India and Mexico. Registrants will visit UMass Lowell to deliver 60 presentations over 20 sessions.

“It’s enlightened self-interest, really” says Silka. “UMass Lowell has very deep roots in this area, and we’ve always been an integral regional engine—from training and graduating excellent job-ready students, to partnering with cultural groups in the city, to actively supporting local school systems.”

According to Silka, UMass Lowell enjoys direct benefits from these relationships, from a better, brighter and more diverse student pool, to enhanced cultural exposure, to better recruitment of faculty, staff and students.

“When you want to attract the most special students—like bright Lowell students who are the first in their family to attend college and the most highly sought after faculty, the relationship between a university and its community can be a very appealing selling point.”

Conference goals include highlighting successes and identifying barriers to community/university partnerships; understanding the needs and challenges of local, national and international partnerships; identifying strategies for evaluating partnerships, and promoting the integration of partnerships into research, teaching and outreach.

For more information on the CITA conference, visit www.uml.edu/com/CITA.

L-R: Linda Duong, Toni-Maria Henry and Vicki Watson, from left, members of the 2006 CITA Summer Research Team, represent one of sixty groups presenting their work at the CITA International Conference. Their presentation, “What’s Art Got to Do With It?” takes place on April 26.