

In brief

Economic Development



UMASS SETS RECORDS FOR COMMERCIALIZING TECHNOLOGY

To friends and supporters of the University of Massachusetts:

In addition to its core purpose of education, a public research university's mission includes the generation of new knowledge and the sharing of that knowledge with society. One important way of doing this is through the commercialization of technology developed by university faculty.

I am pleased to report that the performance of the University of Massachusetts in this regard for fiscal year 1999 reached historic highs on all counts.

Until a few short years ago, UMass did not participate actively in technology commercialization. Then, in 1996, the University adopted new policies governing its intellectual property, made a series of strategic investments, and strengthened its new office of Commercial Ventures and Intellectual Property (CVIP).

As a result, in the last fiscal year, the University generated 112 invention disclosures, secured 32 patents, completed 19 licenses, and generated \$4.1 million in licensing income along with an additional \$5.4 million in industry-

sponsored research associated with technology commercialization.

These accomplishments are primarily the result of an outstanding and inventive faculty. Their work — in fields ranging from cloning and surgical devices to educational software and plastic forming — has led to new products at world-class companies, such as Smith & Nephew Endoscopy in Andover, and promising start-up companies, such as Advanced Cell Technologies in Worcester.

Technology developed at the University is now helping surgeons do new kinds of minimally invasive surgery and enabling high school students to learn calculus more easily through the use of new educational software.

The University's involvement in these important ventures is fully consistent with its public purpose.

William M. Bulger
President
University of Massachusetts

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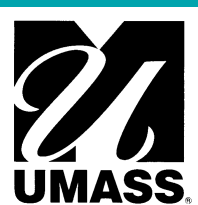
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Distance Learning Expands at UMass Lowell

UMass Lowell's various programs in distance learning continue to grow and are now serving more than 3,000 students annually. These include the CyberEd program run by the Continuing Studies Division, the Instructional Network run by the Center for Field Studies, and the graduate school's off-site programs. Of these, the fastest growing is CyberEd, the largest on-line program in New England, with especially strong student interest in its offerings in the field of information systems. This program has been profiled on Microsoft's Higher Ed Web site and has been used by companies such as Analog Devices for corporate education.

Contact: Dean Jacqueline Moloney,
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UMass Lowell Partners with Lucent Technologies on Training Initiative

Employees at Lucent Technologies' Andover facility recently began a series of training modules in engineering technology. The UMass Lowell College of Engineering and Division of Continuing Studies and Corporate Education designed the modules. Lucent officials were impressed by UML's responsiveness and willingness to provide on-site training. The \$250,000 workforce training contract has the option to continue for a second round.

Contact: Cathy Kendrick, UMass Lowell
(978) 934-2495

Greater Boston Manufacturing Partnership at UMass Boston Wins Industry Training Grants

The Greater Boston Manufacturing Partnership, one of three business development centers housed at the College of Management, recently received two state workforce training grants. They are funded under the new Workforce Training Fund and administered by Mass DET. One grant will be used to assist a collaborative of ten medical products manufacturers in quality, good manufacturing practices, and FDA compliance training. The other will help enhance productivity for a collaborative of eleven manufacturers, with a variety of products, through training in lean manufacturing/ just-in-time production systems.

Contact: Jerry Rubin, UMass Boston
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UMass Boston and Telecom Council "Graduate" 30 Telecom Campers

With support from about two dozen of the state's leading telecommunications firms working through the Massachusetts Telecommunications Council, UMass Boston recently completed a highly successful summer technology camp for 30 tenth and eleventh graders and selected high school teachers from Greater Boston. The intensive three-week program culminated in a celebratory luncheon at the Newton Marriott, where students proudly displayed their projects to a group of industrial and academic leaders.

Given the outstanding success of this first-year pilot program, plans are being developed to expand the program next year.

Contact: John Ciccarelli, UMass Boston
(617) 287-7893

UMass Amherst Enhances Off-Campus Professional MBA

The Isenberg School of Management at UMass Amherst has successfully delivered an off-campus Professional MBA program to over 250 students annually since 1992 in Holyoke and since 1995 in Pittsfield. The school is further strengthening this program by increasing its flexibility, providing classrooms with state-of-the-art corporate facilities, offering a broader array of electives, and linking the program with distance learning options. Future plans include more distance learning, Internet course offerings, and a certificate in Internet commerce, along with other joint degree options. The Professional MBA is a highly competitive, fully accredited program, designed for the working professional.

Contact: Heather Miller, UMass Amherst,
(413) 545-4195, or hmiller@som.umass.edu

UMass Center for Professional Education Opens in Westborough

Following up on President Bulger's May 7 announcement, the University has opened its new Center for Professional Education to respond to the training and professional development needs in the I495 high technology corridor. The center is based on the cam-

pus of the Massachusetts Technology Collaborative in Westborough. It is a collaborative effort of the University's five-campus system. An array of introductory courses in information technology is being offered this fall, and a Professional MBA program, modeled on the UMass Amherst program above, will be launched in January 2000.

For more information, call
(877) 274-4495 or visit our Web site
at www.umass.edu/umass495

I-495 Center Hires First Director

President Bulger recently announced the hiring of Dr. Barbara Macaulay as director of the I495 Center for Professional Education. Dr. Macaulay is an expert in adult and continuing education, having earned her Ed.D. in adult education from Columbia University. She has served on the graduate school faculty at Columbia University and Clark University. Prior to coming to UMass, she served as associate dean for continuing education at Quinsigamond Community College in Worcester, where she developed close ties with a number of companies in the I495 region.

Contact: Barbara Macaulay, Center for
Professional Education (508) 616-7909,
or macaulay@donahue.umassp.edu

"The new
UMass Center
for Professional
Education
provides a
very significant
boost to the
competitiveness
of the I495
Technology
Corridor."

JOSEPH D. ALVIANI
President and CEO,
Massachusetts
Technology
Collaborative

UMass Amherst Library to Provide Business Data Services

The UMass Amherst Library and Five Colleges, Inc., have been awarded a contract by the Massachusetts Board of Library commissioners to provide business and economic development services statewide. This contract will fund a digital library of business and economic development resources, including Web resources, state-provided databases, and access to librarians' expertise. The digital library will be made available through MLIN, the Massachusetts Library and Information Network, www/mlin.lib.ma.us. Project staff will develop a continuing education program for librarians and a Speakers' Bureau to advance the library's image as a critical provider of business information and referrals. Partnering with the UMass Amherst Library is the Center for Intelligent Information Retrieval (CIIR), also on the Amherst campus.

Contact: Rachel Lewellen, UMass Amherst (413) 545-3343, rlwellen@library.umass.edu

UMass Dartmouth Plans for New Advanced Technology Manufacturing Center in Fall River

A groundbreaking for the new UMass Dartmouth Advanced Technology Manufacturing Center (ATMC) facility is expected to be held within a year and the facility completed 18 months from the start of construction. The new ATMC will be located at the former Kerr Mill site in Fall River. MassDevelopment, a state agency, is overseeing the project. ATMC assists businesses through educational programs, research

and development, and other services. In addition to offering technology and manufacturing assistance, the center will provide incubator space for new and growing companies. A day-long conference with state officials and area industry representatives was recently held to plan the facility.

Contact: Christine Fox, UMass Dartmouth (508) 999-9121

UMass Dartmouth Partners with Natick Soldier Systems on Computer Integrated Clothing

One of the first strategic partnerships in support of the new facilities of the Advanced Technology Manufacturing Center (ATMC) at UMass Dartmouth is a research and development agreement with Natick Soldier Systems Center (a part of the US Army's Natick Labs). A developer of protective clothing for the military and civilian emergency rescue personnel, Natick Soldier Systems plans to integrate computer chips and nanosensors into their clothing products. The ATMC at Dartmouth is assisting with this technology through a cooperative research and development agreement.

Contact: Christine Fox, UMass Dartmouth (508) 999-9121

UMass Amherst Family Business Center Garners National Recognition

The UMass Family Business Center has been voted the most innovative program of its type in the country by the International Family Business Program Association. Its Web site is described as "the most comprehensive, by far" by Yahoo! *Internet Life* magazine. The center's offerings include a series of eight dinner forums annually that cover topics on technical issues, as well as "soft" issues such as power, money, and death. The FBC is funded through member dues and the support of several corporate partners. It is based in the UMass Division of Continuing Education, and has ties to the Isenberg School of Management.

Contact: Ira Bryck, UMass Family Business Center (413) 545-1537 or bryck@admin.umass.edu or www.umass.edu/fambiz

Commercializing University Technology

UMass Lowell Acquires Intellectual Property Rights from Valyi Foundation

UMass Lowell has recently executed an agreement with the estate of Dr. Emery Valyi, one of the nation's most prolific inventors in the field of plastics. Dr. Valyi's estate has granted Lowell the exclusive use of more than 40 patents and three potentially significant license agreements, with the understanding that the University will work to commercialize the intellectual property and share proceeds with both the Lowell campus and the Valyi estate. This transaction is believed to represent one of the most significant gifts ever of intellectual property to any American university. Revenues generated at Lowell by commercial development and sub-licensing of this intellectual property will be used to establish the Valyi Institute for Plastic Forming at UMass Lowell.

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(978) 934-2577

UMass Worcester and Smith & Nephew Honored by MassMEDIC

The third annual MassMEDIC Leadership Award was recently awarded to Dr. William Meyers of the UMass Medical School and Ron Sparks and Hooks Johnston, Jr., of Smith & Nephew Endoscopy. MassMEDIC recognized the partnership for its leadership and success in developing innovative surgical devices and procedures that greatly benefit the quality of medical care. UMass and Smith & Nephew, a surgical-devices manufacturer, launched its first new product last year. The partnership,

which was formed more than two years ago, has been touted as one of the most productive of its type in the country.

Contact: Dr. William C. Meyers,
UMass Worcester (508) 856-4528

Mass Ventures Hires New CEO

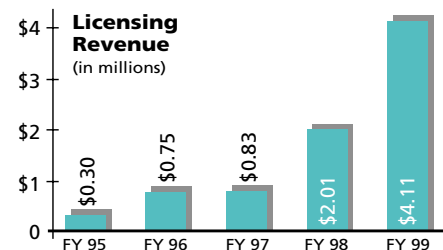
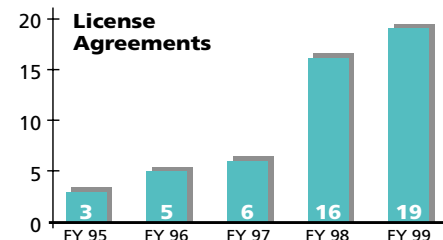
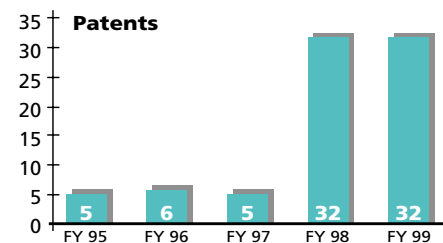
Mass Ventures, the venture development company affiliated with UMass Amherst, has named Jerome J. Schaufeld as its new president and chief executive officer. Schaufeld is experienced in technology transfer, research, management and entrepreneurship. He has been a founder and CEO of technology businesses, and also a founder of the MIT Enterprise Forum. He will work with UMass Amherst to acquaint faculty and students with the resources available for commercializing technology. He will also work with the UMass office of economic development on a new program for student ventures in the College of Engineering.

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Another Record-Breaking Year for Commercializing University Technology

FY 1999 was another record-breaking year for commercialization of University technology, as UMass reached historic highs for patents issued, license agreements completed, and licensing revenue generated. The University's efforts in this area are coordinated by its Office of Commercial Ventures and Intellectual Property (CVIP) under the leadership of CVIP Executive Director Joe McGuirl.

Contact: Joe McGuirl, CVIP (508) 856-1626



Benchmarking the State of the Economy

Pharmaceutical Study Examines Industry's Impact on the State

The pharmaceutical industry has a significant presence in Massachusetts, with the potential to grow substantially in the next century. That was the principal conclusion of a new pharmaceutical study titled *Economic Impact of the Pharmaceutical Industry in Massachusetts*. The study was sponsored by the Pharmaceutical Researchers and Manufacturers of America and conducted by Professor Anurag Sharma of the Isenberg School of Management at UMass Amherst with support from the UMass Donahue Institute. The report details the pharmaceutical industry's role in the state economy and outlines the potential for future industry-related development.

Contact: Steven Landau, UMass Donahue Institute (617) 287-7040

Environmental Industry Review Undertaken by UMass Boston

Professors Betty Diener and David Terkla, both of UMass Boston, are conducting a study of the state's environmental industry. Although one of the largest industries in the state—and at one time, one of the fastest growing—little information is currently available on industry sales or numbers of employees and firms. Professors Diener and Terkla are developing data that can be compared to the region, other states and other industries. A final report is expected to be published this fall. The study is being funded by the UMass Economic Project and conducted with the assistance of the Environmental Business Council.

Contact: Steven Landau, UMass Donahue Institute (617) 287-7040

UMass Amherst E-Commerce Center to Study Impact of E-Commerce on Massachusetts Firms

What is the impact of e-commerce and e-business on companies doing business in Massachusetts? Which industry sectors will do well and which will not? Those are the questions being posed by Professors George Milne and Les Ball of the Isenberg School of Management in a new study by the UMass Amherst Interdisciplinary Center for Electronic Enterprise (ICEE). Electronic commerce is growing rapidly and impacting the nation's economy. Little is known, however, about the impact on individual states or industry sectors. The results of their research will be published in the September issue of *Massachusetts Benchmarks*. The study is being funded by the UMass Economic Project.

Contact: Professor George R. Milne, UMass Amherst (413) 545-5669 or milne@mktg.umass.edu

Hispanic and Asian Population Trends Forecast by UMass Boston

Boston's neighborhoods will be more ethnically diverse by 2005, according to a study released by the Center for Community Economic Development (CCED) at UMass Boston. Fifty percent more Hispanics and 35 percent more Asians are expected to be living in the city in 2005 than in 1995. The study, titled *Neighborhood Population Changes in Boston, 1995–2005*, also predicts that there will be a 10 percent increase in the Black pop-

ulation and a 15 percent decrease in the White population. The projected influx of Hispanics mirrors population trends nationwide. The study was conducted by the CCED in cooperation with the Massachusetts Institute for Social and Economic Research (MISER) at UMass Amherst.

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Summer Issue of Benchmarks Journal Released, Fall Issue Due September 30

In the summer issue of *Massachusetts Benchmarks*, Alan Clayton-Matthews writes about the state's economic health, and the Commonwealth's fishing industry is evaluated by Daniel Georgianna of UMass Dartmouth. Victor Gautam of Cape Cod Community College profiles the Cape and Islands economy and the challenges of creating sustainable growth while preserving the region's uniqueness. The *Benchmarks* staff also reports on a study of the Boston area's salary competitiveness in the computer industry. The fall issue will feature an analysis of Massachusetts companies' Internet presence and a look at the changing economy of the Pioneer Valley. (A complete list of the journal's regional analysts appears in Key Contacts, opposite page.)

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ECONOMIC DEVELOPMENT

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Upcoming Events

Sep 22
Nov 3
Dec 9

5 to 7 P.M., Mass I495 Center, Westborough, MA

Information Session: UMass I-495 Center for Professional Education

The new UMass I495 Center for Professional Education will be holding information sessions throughout the fall for individuals and organizations interested in new programs in information technology and the Professional MBA. These programs are designed for working professionals and will be offered at the campus of the Massachusetts Technology Collaborative in Westborough. For more information, call (877) 274-4495, or e-mail 495info@umassp.edu.

Oct 20

3 to 6 P.M., Newton Marriott, Newton, MA

The Engineering in Massachusetts Collaborative: Building Mutual Learning Networks

The fourth statewide meeting of the Engineering in Massachusetts Collaborative will bring together business, government and education leaders to focus on the Commonwealth's need for a skilled workforce in science, engineering and technology. Organized by Krishna Vedula, dean of engineering at UMass Lowell, the event will focus on the sharing of "best practices" for encouraging K-12 students to pursue studies and careers in science and engineering. For more information, contact Pamela Provencal, UMass Lowell (978) 934-2572.

Oct 28

8 A.M. to 3 P.M., Sheraton Needham, Needham, MA

New England Economic Project (NEEP) New England.Com: How Will E-Commerce Transform Our Economy?

This conference, cosponsored by UMass, will focus on the implications of the rapidly increasing wave of e-commerce activity on the economy of Massachusetts and other New England states. UMass professors Alan Clayton-Matthews of Boston and Leslie Ball of Amherst will join other industry and academic experts in examining these issues. For more information, contact Carol Hazerjian, NEEP (508) 660-1968.