# Impact on Tomorrow



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FEB 8 1974

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The University of Massachusetts at Amherst



# The University

Many things to many people, the modern university remains a mirror on the larger world, bringing into focus the facts and factors and fragments of our perceptions, and reflecting new light into the distance and darkness. It holds forth knowledge and experience as tools in the search for truth. The university is people, it is programs, it is places. It is a means toward self-betterment, and a framework which encourages personal growth and societal progress. Reflecting man's abilities and aspirations, it is no more powerful and no more idealistic than man himself. It enables him both to prove and to disprove himself and his creations, both to succeed and to fail in a partly controlled environment, and to amplify his perceptions, his powers, and his potential. It is an extension of society's values.











# The University of Massachusetts

The campus at Amherst is only a part of a state-wide system of public higher education geared to the needs of all the citizens of the Commonwealth. Established in 1863 under the Morrill Land Grant Act as Massachusetts Agricultural College, the new institution's first students were welcomed to four wooden buildings by four teachers in 1867. Growing slowly through its first half-century, "Mass Aggie" became Massachusetts State College in 1931, and the University of Massachusetts in 1946. The original Amherst campus was joined by the University of Massachusetts at Boston in 1965, and the University of Massachusetts Medical School at Worcester enrolled its first class in 1970. A separate President's Office was established in 1970 in downtown Boston. Two years later the Trustees approved plans for halting physical growth at Amherst at 25,000 or fewer students, while expanding the Boston campuses at Columbia Point and elsewhere to serve an equivalent number. Optimum Medical School enrollment has been targeted at 400, plus students of some allied health services and professions. Activities at the three major campuses are supplemented by academic, research and service programs at the University's Marine Station at Gloucester, Agricultural Experiment Stations at Waltham and East Wareham, urban education programs in several of the state's metropolitan centers, and continuing education programs on and off campus. University activities have broken traditions of time also, moving into summers, evenings and weekends. The very nature of education has broadened, to satisfy the growing needs of greater numbers of Massachusetts citizens.

Surrounding the State House, opposite, are views of (clockwise from upper left) the Amherst campus, Boston campus at Columbia Point, Marine Station at Gloucester, and Worcester campus, site of the new Medical School, opened in 1970.



















# The University of Massachusetts at Amherst

The Amherst campus of the University of Massachusetts occupies the center of an unspoiled valley rich in cultural and educational opportunities. Surrounding colleges, which with the University make up the Five College Cooperation program, are Amherst, Hampshire, Mount Holyoke, and Smith, all within a few minutes of each other. Students at any one of these institutions may arrange courses at any of the others. Predominantly an agricultural area, the Amherst environs still boast important tobacco and vegetable crops as well as sites of historic interest, such as Noah Webster's farm, the Emily Dickinson House, and former residences of Eugene Field and Robert Frost. The principal industry is education, while recreational attractions include golf, tennis, skiing, fishing, mountain-climbing and hiking.

The University's astronomical observatory (center, opposite page) is encircled by views of academic neighbors and environs. Clockwise from upper left are Amherst's town common, Amherst College, Emily Dickinson House, Mount Holyoke College, nearby tobacco fields, Smith College, the town's Jones Library, and Hampshire College, which first opened in 1970.

### Students

Sheer mass is perhaps the most striking aspect of student life on the University's Amherst campus, with diversity running a close second. There are more than 21,000 students in the rough square mile enclosing all the classrooms, labs, and residence halls; more than half of them live on campus. Almost two-thirds are from the eastern half of the state; one in 20 is from outside Massachusetts. Hundreds are seeking two-year associate degrees; several thousand pursue advanced degrees in 40 doctoral areas and 60 master's programs; the vast middle majority are four-year undergraduates, working toward bachelor's degrees. They are liberal and conservative, apathetic and enthusiastic, black and white, secure and timid, rich and poor. They are all the source of the University's impact on tomorrow.











# Faculty



Since 1958, when the University boasted more than 400 faculty members for a total enrollment of fewer than 6,000 students, a student-to-faculty ratio of 15 to 1 has been adhered to. The full-time faculty now number more than 1,400, serving upward of 21,000 students on the Amherst campus, recently increasing by 150 new teachers annually. Of these, an average of 50 have been replacements. The institutional growth rate is now slowing, and faculty expansion is tapering off also. Emphasis now centers on teaching quality, efficiency, and incentives. Salaries have achieved the top quarter among comparable institutions nationwide on the American Association of University Professors scale. Several teachers deemed outstanding each year are honored with privately funded awards of \$1,000 each. A small number of faculty growth grants are awarded to advance specific summer research projects, and sabbatical leaves are frequently available to those eligible. Recent legislation now allows the hiring of up to one percent of the faculty above the standard salary scale, to enable recruitment of internationally respected educators for special chairs. "Faculty" also includes a large number of part-time persons, including instructors, lecturers, and holders of fellowships and assistantships. The fulltime faculty, the most recent survey shows, spend an average of 56 hours at work each week, including about 21 hours in preparation and grading, 12 in actual contact with students, 12 in research, eight in administration, and three in other duties including public service. A third of the student contact hours are with individuals, during regularly-scheduled office hours.







The faculty and its varied activities are typified in these views of Associate Professor of Psychology Alice H. Eagly.









# On-Campus Academics

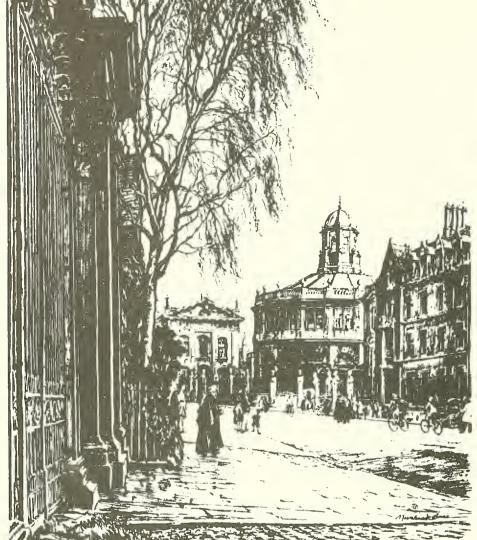


Areas of undergraduate study include Accounting/Afro-American Studies/Agricultural & Food Economics/Anthropology/ Applied Music/Arabic/Armenian/Art History/Asian Studies/ Astronomy/Athletics/Biochemistry/Botany/Chemical Engineering/Chemistry/Civil Engineering/Classics/Communication Disorders/Community Health/Comparative Literature/ Computer & Information Science/Creative Art/Danish/Dutch/ Economics/Education/Electrical Engineering/English/Entomology/Environmental Design/Environmental Health/Environmental Sciences/Exercise Science/Finance/Fisheries Biology/Food & Agricultural Engineering/Food Science & Technology/Forestry/French/General Business/Geography/Geology/German/Greek/Hebrew/History/Home Economics Education/Hotel, Restaurant & Travel Administration/Human Development / Industrial Engineering / Italian / Judaic Studies / Landscape Architecture/Latin/Latin American Studies/Leisure Studies/Linguistics/Management/Management & Family Economics/Marine Sciences/Marketing/Mass Communications/ Mathematics/Mechanical Engineering/Medical Technology/ Military & Air Science/Music Education, Theory, History & Appreciation/Natural Resources/Near Eastern Studies/Nursing/Nutrition & Food/Philosophy/Physical Education/Physics/Plant Pathology/Plant & Soil Sciences/Polish/Political Science / Portuguese / Psychology / Rhetoric / Russian / Sociology/Soviet Studies/Spanish/Speech/Statistics/Swedish/Textiles, Clothing & Environmental Arts/Theatre/Veterinary & Animal Sciences / Wildlife / Wood Technology / Zoology





Areas of graduate study include Agricultural and Food Economics/Animal Science/Anthropology/Art History/Astronomy/Biochemistry/Botany/Business Administration/Chemical Engineering/Chemistry/Civil Engineering/Comparative Literature/Computer and Information Science/Dramatic Arts/ Economics/Education/Electrical Engineering/English/Entomology/Environmental Engineering/Fine Arts/Fisheries Biology/Food and Agricultural Engineering/Food Science and Technology/Forestry/French/Geology/Germanic Languages and Literatures/Hispanic Languages and Literatures/History/ Home Economics/Human Development/Industrial Engineering and Operations Research/Labor Studies/Landscape Architecture/Linguistics/Management Science/Marine Sciences/ Mathematics/Mechanical Engineering/Microbiology/Music/ Nursing/Nutrition and Food/Ocean Engineering/Philosophy/ Physical Education/Physics/Plant Science/Plant Pathology/ Political Science/Polymer Science and Engineering/Psychology/Public Administration/Public Health/Regional Planning/ Slavic Languages and Literatures/Soil Science/Sociology/ Speech/Statistics/Wildlife Biology/Wood Technology/Zoology. A Cooperative Ph.D. Program involving Amherst, Hampshire, Mount Holyoke and Smith Colleges and the University is available in a dozen departments in the sciences and humanities. An increasing number of interdisciplinary programs are available on all levels. Special undergraduate opportunities include the Honors Program, Bachelor's Degree in Individual Concentration, the University Without Walls, and Project 10.



# Off-Campus Academics

Left: Oxford campus; below: student nurse at work; right: two beneficiaries of the University Year for Action program

Throughout the school year, varied academic programs are provided off campus, under auspices of the Amherst administration. These range from more than 100 continuing education courses in many Massachusetts communities to field experiences in professional settings across the nation. Students are exchanged with other U.S. universities and colleges; academic years are offered in Germany, England, and British Columbia. Other off-campus programs are operating in Italy, Spain, France, England, Ireland, Germany, and the West Indies. Several local programs combine academics and community service; some are designed to assist specific groups, such as inner-city residents, retired persons, airmen at Westover Air Force Base, paraprofessionals, and women. Accessibility is the basic goal.





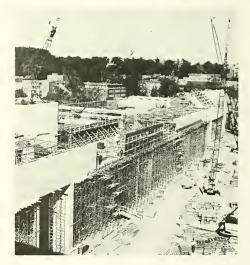
## **Facilities**

Below: Tobin Hall; right: Lincoln Campus Center; lower right: Fine Arts Building under construction; opposite page: campus and valley seen from Holyoke Range





The sometimes awesome size of a major university is a very real factor in its ability to mount and maintain quality programs in those areas demanding expensive and specialized facilities and equipment, such as computers, telescopes, electron microscopes, and creative space for the fine and performing arts. The smaller colleges may have special strengths; the state expects its university to do all things well. In this effort, a ratio of 200 square feet of floor space per student is being maintained. Recent additions to the Amherst campus include a 28-story University Library; a 215,000-square-foot Fine Arts Center, to be completed in 1974; the first phase of a Graduate Research Center; Tobin Hall, a major classroom building, and the Lincoln Campus Center, with its attached parking garage.







With more than 380 Recognized Student Organizations from which to choose, students have no difficulty in finding extracurricular activities to suit their preferences and schedules. In addition to the wide opportunity in intermural sports, there are more than 900 intramural teams, 16 academic honor societies including Phi Beta Kappa, Phi Kappa Phi and Sigma Xi, and two dozen fraternities and sororities. Other groups and societies stress University and public service, music, publications and other media, hobbies, languages, religion, politics, ecology, and special events. There are more than 50 professional interest groups and societies; others implement student government and the fine arts program. New groups are born and die each year as interests change. All are provided University help if desired.

## Extracurriculars

A trip by raft on the Connecticut River publicizes concerns of the Ecology Club.









## Residences

More than 11,000 students live in the 47 residence halls on campus, amid all the assets and liabilities of any small city. Integration of the living and learning environments has become more than a pretty phrase as academic and social programs of many kinds have moved into the residence halls themselves. To combat the impersonal effect of large size, and allow more individuality, the campus provides traditional "dorms," residential colleges including several halls each, suite-style residences like apartments, and fraternities and sororities. All these provide staff support, counseling, and opportunity to share in house government; most now include coeducational units. Room rents vary between the basic types of residence, the older facilities in most instances costing less than the newer.







## Food Services





An everyday act such as getting a meal becomes a massive exercise in logistics, dietetics, and human relations when performed on the university scale. On the Amherst campus, a six-million-dollar budget, none of it from state appropriation, takes care of well over three million meals annually. More than 10,000 students buy meal tickets for five days a week, half of them for three meals and half for two. More than 300 persons work full time in the vast operation, plus another 500 part-timers. There are five large dining commons and several snack bars, plus four food areas in the Campus Center complex. Student advice in operation is solicited and frequently results in improvements. The commons are open for business a total of thirteen hours each day, one hundred and sixty days every year.











# Counseling



Staff of Room to Move, campus drug counseling center, poses in a friendly tree.

There's no shortage of places and people to turn to for help on the University scene, whether the problem is academic, emotional, physical, vocational, or imagined. Counseling in its many forms involves hundreds of professionals and volunteers daily, in addition to academic advising by the entire faculty. Efforts are directed toward career planning, job placement, training of residence hall staff and police, community development and human relations. Health services run the gamut from physical to psychological to environmental to educational in such areas as drugs and sex. At the core of the program is the Health Center, which functions as hospital and out-patient clinic. In areas which most closely affect their lives, trained students successfully counsel their own peers within the residences.



## Financial Aid



A university career is expensive, even with low tuition for instate residents, and about one-third of students need and get some form of financial assistance, whether as a gift, wages or loan. More than a million dollars in scholarships is shared by about 4,500 students, augmented by almost a third of a million dollars in federal grants. Almost 1,000 students secure workstudy jobs on campus each year through the Financial Aid Office; many more get part-time jobs in the Amherst area on their own or with University assistance. More than 1,000 National Defense Education Act loans total close to a half-million dollars annually; the University makes many short-term loans also. Two to five percent of all graduate students receive some help, usually in the form of fellowships or assistantships.













### Research



Research occurs each time a faculty member or student probes beyond the superficial in any area. Much of it is unpaid effort, and does not show up in annual reports or scientific journals. The University of Massachusetts at Amherst in 1971 joined the top 100 university and college research centers nationally on a dollar scale of federal support received. Total outside support from all sources for all varieties of research on and off campus is now in excess of ten million dollars. Sponsorship comes from the University, private enterprise, and government. The popular image of research is being broadened by successful work toward bigger cash crops in Massachusetts products such as cranberries, lobsters, and oysters, and investigating new energy and food sources for the Commonwealth and the whole world.



Above left, graduate students in mechanical engineering develop a low pollution motor vehicle. At right, ongoing research unlocks the oceans' secrets.

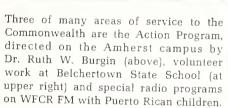
### Service



Building on a solid history of public service in agriculture, the University of Massachusetts at Amherst has expanded its public service sharply in recent years, at home and abroad. Some such programs share in federal funds, such as Cooperative Extension and University Year for Action; others are energized by totally volunteered effort, such as those at the Northampton State Hospital and Belchertown State School. Some outreach programs pay small hourly stipends, others nothing; some involve academic credit, most do not. Students and faculty analyze river water, tutor Puerto Rican children, and test throat cultures for strep germs. Faculty and staff serve on state committees and local boards; the campus is made available to several thousand outside groups for conferences every year.









## Growth

After almost a century of slow growth, internal development and retrenchment, the University of Massachusetts at Amherst during the past two decades has shot upward sharply in size and reputation. Some of the best educators in the world in several fields have been drawn to the faculty; basic programs have received gratifying recognition on the undergraduate and graduate levels. Student enrollment has doubled in the past seven years, leading the Trustees to set a limit of 25,000 for the campus. Half of the campus' 110 major buildings were erected in the past dozen years. More than \$150 million from state and self-liquidating sources has been spent on buildings since 1960. Half the usable square footage of campus buildings has appeared on the Connecticut Valley skyline in the past decade.











#### The Future

"Today's University needs a greater sense of identity and purpose to respond effectively to demands for reform and innovation. The long-standing elitist pattern of higher education is crumbling. We are seeking out the best minds among minority youth, the poor, the older, the handicapped, women, the retrainable. With wider access to education, we must also accommodate education to more diversified needs. Public service may be the arena in which a more productive relationship between the University and society may evolve. Our goal is a more responsive and meaningful intellectual community. There is no simple or easy way. The challenge commands our best efforts day by day; the future will judge our collective impact."

Randolph W. Bromery, Chancellor







