

Research, Scholarship, and the Creative and Performing Arts

Vision

The University will enhance its position as a world center for creation, refinement, and dissemination of knowledge, advancement in science and technology, leadership in addressing critical societal issues, and innovative scholarship and production in the creative and performing arts. This will be accomplished through the leadership of outstanding faculty throughout the institution, the participation of excellent students and staff, the development of a supportive and agile infrastructure, and the collaboration with governmental, business, and societal organizations throughout our region and the world.

Goals

1. The university will establish a culture where every academic unit and research center is expected to engage in research, scholarship, and other creative works at the level of the best in its discipline. As a result of this emphasis,
 - a. The number of university research programs ranked nationally in the top ten in appropriate surveys will exceed 50 by 2018.
 - b. Every major program will formulate a plan for its advancement by 2010 with a target of becoming ranked within the top 50 by 2018. The continuation of major programs that do not reach that target will require approvals and special justification.
 - c. Institutional research awards from all sources will be at least \$500M by 2013 (currently \$407M), and \$600M by 2018.
 - d. Colleges, departments and centers will benchmark research grant dollars per faculty member against the average of their disciplinary peers. Those units operating 20% or more below this benchmark will reduce the differential by at least half by 2013 and exceed the benchmark by 2018.
 - e. The number of \$1 million or more annual grants for research support will increase by at least 50% by 2013 and will at least double by 2018.
 - f. The number of members of the National Academies (Science, Engineering and Medicine) will increase by at least 50% by 2018.
2. The University will be widely known and respected internationally for its suite of outstanding interdisciplinary research efforts related to major societal issues.
3. Taking advantage of its special location, the University will strengthen its research programs by further expanding collaborations with national and international partners for mutual benefit. The sharing of expertise and personnel and the joint use of advanced facilities has been, and will continue to be, a source of great strength to the research, scholarly, and artistic activities of the institution.

Strategies

For Goal 1:

- A. Deans of Colleges and Schools, in concert with the Offices of the Provost and Vice President for Research, will develop expectations for the research programs of all departments and centers at the level of the best in the discipline. Output measures (such as papers published in

high quality venues, citation counts, editorships, professional awards and recognitions, as appropriate to each discipline, as well as sponsored research awards and formal and informal rankings) will be used to benchmark each unit's standing. Each unit's performance and productivity will be measured and monitored. Institutional resource allocations will support the productive units and encourage higher scholarly and creative achievements, research productivity, and national/international recognition.

- B. Every academic unit will maintain the highest standards for creativity, leadership, and accomplishment in research, teaching, scholarly, or artistic creativity in all core faculty positions. Adherence to these standards underpins recruitment, contract renewal, promotion, and post-tenure review.
- C. The University will assertively pursue the appointment of faculty who have the demonstrated the capability for creating research programs or other scholarly or creative work of significant importance and great impact.
- D. The University will develop a coordinated approach to pursuing grants from major foundations, such as the National Endowment for the Humanities, the National Endowment for the Arts, and the Mellen and Pew Foundations.
- E. Emphasis will be placed on the recruitment of Ph.D. students who show great promise. Units will provide these students with the financial support, intellectual environment, opportunities, and mentorship to facilitate their success.
- F. Every academic unit will aggressively pursue and report contract and grant raising efforts for research, scholarship, performance, and other needs as appropriate to the discipline.
- G. Every academic unit will actively cultivate partners, both internal and external to the campus, to advance its research, scholarly, and/or creative agenda.

For Goal 2:

- A. The University will develop or expand several significant multi-disciplinary research efforts that build on existing strengths and address significant societal issues with the goal of becoming among the few best in the world in these areas. Criteria for choosing areas to develop will include:
 - a. The leadership of a senior faculty champion and the presence of a sufficient corps of faculty and staff committed to the highest achievement.
 - b. Competitive positioning and the likelihood of world-class distinction.
 - c. Responsiveness to an important societal problem.
 - d. Connection to the academic mission of the University.
 - e. Potential for governmental, business, or foundation funding.

A few areas that meet the above criteria and multi-disciplinary research efforts include: Global Climate Change; Language, Culture, and Cognition; Energy; Nano-bio Science and Technology; Health; and Information Sciences. These are important areas where the University already has significant strengths. Specific areas to be supported will be developed through a process based on faculty organized initiatives, largely based on matching institutional strengths with national needs and the strong promise of significant external support. Areas and programs will be supported in new and emerging areas where faculty leadership, expertise, and commitment are found.

- a. By 2018 the research office will have successfully established at a minimum 6 institution-wide major initiatives based on identified themes, most tied to national priorities, and all supported by external funding in excess of \$50 million.

- B. The University will strongly encourage the development and expansion of these efforts by providing support in initiating these efforts, including seed funding to conduct the necessary preliminary work, and allocating a special pool of funds to pursue the appointment of outstanding faculty members whose expertise and leadership are required for the success of these initiatives.
- C. The University will foster and maintain close relationships with the leadership of government agencies, private corporations and foundations. This will position it to respond quickly to new opportunities, will improve the likelihood for funding new initiatives, and will facilitate collaboration once a new project is under way.
- D. The University's Public Information office will work with colleges and research centers to ensure that the successes of major research projects become widely known and appreciated.

For Goal 3:

- A. Develop specialized agreements for partnerships with select companies, which will provide core funding for cutting edge scientific and technical areas and to encourage student and faculty participation.
- B. Significantly improve technology transfer and commercialization activities and revenue, and aggressively support entrepreneurial activities and new venture formation. Ease access and facilitate mutually advantageous agreements for companies interested in research with potential commercial value and for faculty and students engaged in entrepreneurial activities. Work aggressively to bring the fruits of the institution's research to patents, product development, processes, devices or other purposes.
- C. Maintain and expand close collaborations with Federal, State and private agencies and laboratories in the area. Encourage joint training of graduate students and the sharing of facilities where this leads to closer partnerships between University and laboratory researchers. Encourage joint appointments for university and laboratory personnel to facilitate these partnerships. Continue to encourage the location of facilities to M Square and elsewhere in the vicinity by recognizing the potential synergies of related work and the opportunities for cross fertilization through the exchange of personnel and expertise.
- D. Maintain and expand close collaborations with museums, galleries, libraries, and performing arts organizations. Seek expanded opportunities for partnership on major foundation grants in the collecting and archiving of digital objects, the creation of new, especially multi-media works of art, and the mounting of innovative museum exhibitions. Develop institutional mechanisms to facilitate the sharing of professional expertise in joint research and creative projects, and in the training of students at both the graduate and undergraduate levels. Maintain and expand relationships with other governmental agencies, through service on their advisory boards, policy forums, taskforces, training programs, and other means.