

# Research and Graduate Studies Subcommittee of the Chancellor's Strategic Planning Task Force

Interim Report, January 19, 2007

## **Introduction**

The Research and Graduate Studies (RGS) Subcommittee has met six times. In each case, either one or both of the task force co-chairpersons, Kristine Alster and Peter Langer, have attended and contributed to the RGS's deliberations. The RGS's efforts to date are presented below in the following sections: charge; vision; priorities, goals, and recommendations; and plan for completion.

## **Charge statement adopted by the RGS**

*Recognizing the potential to build upon the innovative scholarly pursuits of faculty and students, this group will develop a comprehensive plan to increase significantly the research and development enterprise at UMass Boston, and outline a roadmap for enhancing graduate studies. Specifically, the RGS will (1) develop a research strategic plan, (2) recommend resources and infrastructure needed to achieve the goals of the research strategic plan, and (3) provide recommendations as appropriate for the development and use of university infrastructure necessary to achieve the goals of the research strategic plan.*

## **Vision that underlies the RGS's work**

The RGS has developed the following vision statement for describing the university's desired future position with reference to research and graduate studies.

*The University of Massachusetts Boston (UMass Boston) will be nationally recognized as a prominent, public research university, and, as a result, one of Greater Boston's finest research institutions. Our research reputation and our commitment to the issues of urban communities will attract superior faculty members whose research is at the forefront of their fields. The identification of research clusters and the investment of significant resources in research infrastructure will permit teams of faculty members and students to be engaged in world-class interdisciplinary, multi-departmental, and multi-institutional projects of national and international significance. Research scientists, post-doctoral fellows, and graduate students of the highest ability from diverse backgrounds will seek out opportunities at UMass Boston to study, advance their professional careers, and contribute to the discovery and application of knowledge. Legislators, government officials, and community leaders will seek out UMass Boston faculty members for their opinions, their wisdom, and their creative solutions to critical problems. The rigorous and innovative basic and applied research of our colleges, institutes, and centers will be admired for its contributions to public policy and the advancement of our understanding of multicultural, urban, social, environmental, educational, and technological issues. Business and industry leaders will view UMass Boston as a definitive source for new knowledge and discoveries, as well as a key source of highly trained personnel essential for growing the technology-driven global economy of the 21st century.*

## **Priorities, goals, and recommendations**

### **Benchmarking**

The RGS determined that benchmarking would be useful for monitoring university performance in achieving goals related to increasing significantly the research enterprise.

The RGS identified two sets of peer institutions (see Appendix A). One group is known as operational (or organizational) peers and consists of institutions that have similar constraints and performance levels on most of the critical characteristics relevant to the benchmarking activity. The second group represents aspirational peers—institutions that have some background characteristics similar to our own (e.g., second largest public research university in the state, located within a large city), but higher levels of accomplishment (e.g., total federal research expenditures) or specific characteristics (e.g., existence of a national center in a particular research area) that represent a research enterprise goal for the university. Comparisons with aspirational peers provide insights not so much about our university's relative performance, but about how our university might realistically replicate elements of other institutions' paths to success.

An RGS benchmarking subcommittee developed a set of data to be collected from both lists of peer institutions (see Appendix B). The RGS proposed that the professional staff of the Office of Institutional Research and Policy Studies, supplemented by RGS resource persons and staff, would initiate the data collection and analysis processes. Based upon the availability of the data, the RGS may recommend the deletion of one or more of the institutions and/or data variables. The final step will be the analysis of the data to determine what the RGS can learn from these quantitative data and about how to improve UMass Boston's research enterprise and to develop reference points for benchmarking our progress toward achieving the yet to be determined research goals.

### **Plan for completion**

#### **Goals, strategies, and tactics**

The RGS's remaining work will be (a) the development of measurable outcomes related to research and graduate studies toward which efforts should be directed, (b) the careful design of plans for deploying university resources to attain these desired outcomes, and (c) the specification of the steps that are needed to implement these plans.

RGS members have determined that its work will be aided significantly by the work of a consulting firm, Battelle Memorial Institute's Technology Partnership Practice, engaged by the vice provost for research to undertake a comprehensive assessment of the opportunities for enhancing UMass Boston's research enterprise.

The Battelle consultants participated in the December 1, 2006, RGS meeting to outline the steps the engagement would entail. The RGS will receive, review, and discuss information presented by the consultants according to the following schedule.

- January 2007: Interim report on UMass Boston core competencies, talent generation capacity, and competitive position
- February 2007: Interim report on areas of industry specialization not well served currently by local universities
- March 2007: Interim report on recommended research cluster areas, investment strategies and tactics
- April 2007: Final report and complete set of deliverables including five to six recommended areas and a detailed strategic investment plan to enhance the university's research enterprise. These recommendations will also address curricular enhancements, new degree programs, research infrastructure investments, and specific connecting activities to bring key industry and university personnel together.

To clarify, Battelle products are not RGS products. Battelle products are the data the RGS will use to develop a final report addressing the RGS's remaining work, as outlined in the first paragraph of this section. For example, Battelle will provide a recommendation(s) on a research cluster opportunity. Then, the RGS, after careful analysis and discussion, might (or might not) offer the same recommendation along with a plan for deploying university resources to support such a cluster.

Respectfully submitted on January 19, 2007

RGS members

Richard Antonak, Vice Provost for Research and RGS Co-chair

Daniel Simovici, Professor of Computer Science, College of Science and Mathematics,  
and RGS Co-chair

Kenneth Campbell, Associate Dean and Professor of Biology,  
College of Science and Mathematics

Mary Ellen Colten, Director, Center for Survey Research

Greer Glazer, Dean and Professor, College of Nursing and Health Sciences

Jeffrey Keisler, Assistant Professor of Management Sciences and Information Systems,  
College of Management

Peter Kiang, Professor of Curriculum and Instruction, Graduate College of Education

William Kiernan, Research Professor and Director, Institute for Community Inclusion

Anna Madison, Associate Dean and Professor, College of Public and Community Service

Jan Mutchler, Professor and Associate Director, Gerontology Institute,  
McCormack Graduate School of Policy Studies

Paul Nestor, Professor of Psychology, College of Liberal Arts

Bala Sundaram, Professor and Chairperson, Department of Physics,  
College of Science and Mathematics

David Terkla, Professor of Economics, College of Liberal Arts

RGS resource persons

William Brah, Director, Venture Development Center

John Ciccarelli, Assistant to the Chancellor for Economic Development

Valera Francis, Director, Office of Research and Sponsored Programs (ORSP)

RGS staff

Jim Mortenson, Communications and Training Coordinator, ORSP

## Appendix A: Benchmarking

### OPERATIONAL PEERS

Cleveland State University  
CUNY Brooklyn  
CUNY City College  
CUNY Queens  
Old Dominion University  
Portland State University  
Rutgers University Newark  
San Francisco State University  
University of Memphis  
University of Missouri St. Louis  
University of North Carolina at Charlotte  
Wichita State University

### ASPIRATIONAL PEERS

George Mason University  
Georgia State University  
SUNY Albany  
University of Alabama at Birmingham  
University of Illinois at Chicago  
University of Louisville  
University of Maryland Baltimore County  
University of Rhode Island  
University of Wisconsin Milwaukee

## Appendix B

Data Request from Operational and Aspirational Peers for Research and Graduate Studies Committee of the Chancellor's Strategic Planning Task Force

### TIME POINTS FOR ALL DATA:

Most recent fiscal year

5 years ago

#### 1. Proposals:

Total number of Proposals submitted

Number of Proposals to Federal Gov't, State and Local Gov't, Foundations/NGOs, Other

#### 2. Awards:

\$ Amount of Awards: total and by sponsor, type, and discipline

# of Awards: total and by sponsor, type, and discipline

Award Sponsor:

Federal Gov't-TOTAL

NSF, NIH, DOE, NASA, ED, NEH, NEA, DOD, STATE

State and Local Gov't

Foundations/NGOs

Other

Project Type:

Individual PI, Group Grant/Center, Educational, Outreach, Other

Discipline:

Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy, Interdisciplinary, Other

#### 3. Expenditures:

TOTAL \$\$ and \$\$ by sponsor, type, and discipline

Award Sponsor:

Federal Gov't-TOTAL  
NSF, NIH, DOE, NASA, ED, NEH, NEA, DOD, STATE  
State and Local Gov't  
Foundations/NGOs  
Other

Project Type: Individual PI, Group Grant/Center, Educational, Outreach, Other

Discipline: Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy  
Interdisciplinary, Other

**4. Number of types of Federal Awards:**

RO1, CAREER, Research Centers, GOALI, IGERT, SREP/STEM, SBIR, LSAMP

**5. Research Office FTE total and by role**

preaward, postaward, compliance, communications , combination , other

**6. Number of Doctorates granted total and by discipline:**

Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy,  
Interdisciplinary, Other

**7. Masters students total number; Doctoral students total number and by discipline:**

Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy,  
Interdisciplinary, Other

**8. Postdoctoral appointees total and by discipline:**

Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy,  
Interdisciplinary, Other

**9. Research Faculty (not staff) total and by discipline:**

Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy,  
Interdisciplinary, Other

**10. Endowed Chairs total and by discipline:**

Social Science, Natural Science, Humanities, Education, Medical/Public Health/Nursing, Public Policy,  
Interdisciplinary, Other

**11. Number of Faculty**

FTEs—# full time; # part time  
Percent of courses taught by part-time staff

**12. Teaching Load**

Stipulated course load  
Effective average teaching load in contact hour units

**13. Total square footage of lab space**

**14. Number of graduate assistantships**

**15. Average graduate assistantship stipend**

Are tuition and fees included in stipend?

**16. Does the University have an incubator or venture unit?**