

UNIVERSITY OF MASSACHUSETTS

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MINUTES OF THE MEETING OF THE  
COMMITTEE ON SCIENCE, TECHNOLOGY AND RESEARCH (STR)

Wednesday, September 3, 2008; 8:00 a.m.  
Amherst Room  
225 Franklin Street – 33rd Floor  
Boston, Massachusetts

**Committee Members Present:** Chair Pearl; Trustees Gerson, Lawton, O’Shea (via conference call) and Thomas; Chairman Manning

**Committee Member Absent:** Vice Chair Johnston; Trustees King-Shaw, Osterhaus-Houle and Tocco

**University Administration:** President Wilson; General Counsel Bench; Senior Vice President Williams, Vice Presidents Chmura and Lenhardt; Chancellors Holub, Motley, MacCormack, Meehan and Senior Vice President for Health Sciences and Interim Chancellor Collins; Executive Deputy Chancellor Flotte; Vice Chancellor Ockene; Provosts Langley, Garro and Abdelal; Vice Provosts for Research Kostecki and Antonak; Assistant Vice Chancellor for Research Development Petrovic; Vice Provost for Research Sullivan; Dean Glazer, UMass Boston; Assistant Chancellor Vigeant, UMass Dartmouth; Professor Brauhn, UMass Lowell; Ms. MacDonald, Budget Analyst

**Faculty Representatives:** Professors O’Connor and May, UMass Amherst; Professors Tirrell, UMass Boston; Ms. Gibbs, UMass Dartmouth

Chair Pearl convened the meeting at \_\_\_\_\_ a.m. and asked for a motion to **Consider the Minutes of the Previous Meeting.**

It was moved, seconded and

**VOTED:** To approve the minutes of the May 20, 2008 meeting of the Committee.

Under the **Chair’s Report**, Chair Pearl welcomed Kristen Gerson, the new student Trustee from the Worcester campus, to the Committee. Trustee Gerson offered brief remarks expressing her enthusiasm for joining the Committee.

Chair Pearl expressed her satisfaction with the progress being made on the life sciences and clean energy fronts – two strategic areas that the STR Committee has been promoting over the last two years.

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Chair Pearl noted that today's agenda includes a comprehensive report from President Wilson on progress since the last meeting on the life sciences, clean energy and the higher education bond bills. There will be a special presentation by Chancellor Collins and a panel representing the system-wide Life Sciences Task Force that has been working to develop a plan for the University's role in the life sciences. Vice President Lenhardt will also provide an update on sustainability initiatives at the University.

The next item was the **President's Report**. President Wilson first thanked Chair Pearl and the members of the Committee for their continued work in supporting the University's research mission and efforts to promote science and technology-based economic development in Massachusetts.

Over the past year, the University has been working with the Governor and Legislature in three critical areas – the life sciences, clean energy and higher education capital legislation. President Wilson was able to report historic progress on all three fronts.

In the life sciences, the Legislature passed and the Governor signed a \$1 billion dollar Life Sciences Bill. UMass is right in the center of this initiative, poised to play a variety of critically important roles. The bill provides \$500 million dollars in capital funds, \$250 million dollars in operating funds for various grant programs, and \$250 million dollars in tax incentives over 10 years.

Nearly half of the capital funds are targeted at infrastructure on UMass campuses or for regional initiatives of which UMass is a partner. The legislation funds several cutting-edge new facilities across our campuses, including a new building to be constructed at the UMass Medical School to be named the Albert "Albie" Sherman Center in honor of its long-time Vice Chancellor.

UMass is also explicitly written into the governance of the Initiative. The President is a member of the Life Sciences Center Board of Directors, and the University's five Chancellors are now members of a state-wide Advisory Board.

The Life Sciences Center will award \$25 million dollars annually for programs in R&D, tech transfer and commercialization, regional innovation centers, and education and workforce development. The University is well positioned to compete for these funds. Indeed, the University was pleased that UMass campuses were recently awarded five "faculty start-up" and "new investigator" grants by the Life Sciences Center – two each to UMass Amherst and UMass Lowell and one to UMass Boston.

In addition to its efforts in the life sciences, the Legislature enacted and the Governor signed several new pieces of innovative legislation to promote the use of clean energy and the development of a clean energy industry here in Massachusetts.

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One bill encourages state entities to adopt new approaches to sustainability and the use of clean and renewable energy. Vice President Steve Lenhardt will report on the University's sustainability efforts later in this meeting.

There is also the "Green Jobs Act" that establishes a Clean Energy Technology Center and provides \$68 million dollars in funds to support clean energy research, new venture creation, and workforce development. As with the Life Sciences Initiative, the University is once again well positioned to play a leadership role.

The President of the University is an ex-officio member of the Board of Directors of the Clean Energy Technology Center. Thanks to the partnership developed with the Executive Office of Energy and Environmental Affairs and the work of the system-wide Clean Energy Working Group, chaired by UMass Amherst Vice Provost Paul Kostecki, the University is a strong contender for the funds and involvement in this area.

Lastly, the President reported that the Legislature passed and the Governor signed the Higher Education Bond Bill. It provides \$1 billion in capital to the University over the next 10 years. The President noted that a significant portion of these funds will support new science, technology and research facilities at UMass campuses. This will enable the University to carry out its academic and research mission and enhance our ability to support the Commonwealth's Innovation Economy.

In his conclusion, President Wilson indicated that the progress made in these three areas is historic. The capital bill is the largest state investment in the University's infrastructure in our history, and the opportunities for UMass in the life sciences and clean energy bills represent an unprecedented demonstration of support from state leaders for UMass's role as the state's public research university.

The President focused on the three key reasons for the University's historic success: (1) continued commitment to academic excellence, (2) a willingness and proven ability to partner with the state and business leaders, particularly in areas of strategic importance to the Commonwealth, and (3) an ability to work collaboratively as a system – the President's Office and the campuses, Trustees, alumni, and all the University's supporters.

President Wilson thanked the Trustees, Chancellors, Vice Presidents and everyone that has worked together to make this possible, noting that these efforts represent a demonstration of UMass at its best.

Chair Pearl introduced the first item for action, the **Life Sciences Task Force Report**. Over the past two years, this Committee has strongly encouraged the University to position itself as a leader in the life sciences and explore ways to increase inter-campus collaboration.

Under the leadership of Chancellor Collins, a system-wide Task Force has been working for the past several months. Their job has been to develop a plan to strengthen

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the University in the life sciences, promote inter-campus collaboration, and position the University for the \$1 billion Mass Life Sciences Initiative.

Today's proposed resolution recommends that the Board of Trustees accept the report of the Task Force, commend their work, and urge the President and Chancellors to follow through on their recommendations.

Chancellor Collins indicated that this is the final report from the Task Force. He reminded the Trustees that there is no entity in the Commonwealth better positioned than the University to promote the life sciences agenda. The Task Force has worked over the past several months in a collaborative fashion to develop an "aspirant plan" for the University in the life sciences.

The key points about the Task Force report were that UMass is well-positioned for leadership in the life sciences ... our success depends on collaboration and engagement ... we have the potential to be world-class ... new centralized structures will be essential ... and the time to act is now.

Chancellor Collins then introduced a panel of campus representatives who served on the Task Force to brief the Trustees -- Greer Glazer, Dean of Nursing and Health Sciences, UMass Boston; Paul Vigeant, Assistant Chancellor for Economic Development, UMass Dartmouth; John Sullivan, Vice Provost for Research, UMass Worcester; Executive Deputy Chancellor and Provost and Dean of the School of Medicine Terence Flotte; Susan Braunhut, University Professor of Biological Sciences, UMass Lowell; and Paul KostECKI, Vice Provost for Research, UMass Amherst.

Dean Glazer of Boston then reported on Attracting, Retaining and Graduating Students for the Life Sciences in STEM programs. She explained the critical importance of workforce to the life sciences endeavor and identified a range of efforts the University should undertake in this area – ranging for support for K-12 initiatives and student retention strategies to improving curriculum and developing more co-ops and internships. She also highlighted the upcoming release of the Life Sciences Talent Initiative, a study undertaken by the UMass Donahue Institute.

Assistant Chancellor Vigeant from Dartmouth reported on Developing a Network of University-led Regional Technology Innovation Centers. He highlighted UMass's unique position for developing such centers and suggested that they could be vehicles for linking the University's research and teaching capabilities with the needs of industry around the state. All campuses already have some centers in place or in development for which they have received some state support.

Vice Provost Sullivan from Worcester reported on establishing a UMass Center for Clinical and Translational Science. This center will provide innovative structure for researchers from all UMass campuses to work collaboratively to take research "from the bench to the bedside". The Medical School is leading a major system-wide proposal to the NIH to support the creation and development of this center.

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Executive Deputy Chancellor Flotte of Worcester reported on Establishing Life-Sciences Specific Seed Funding. This will be a \$1 million fund called the “Life Sciences Moment Fund” that will be funded by the Medical School and overseen by the Vice President for Health Sciences. It is being modeled after the President’s highly successful Science & Technology Fund and will support collaborative projects across UMass campuses.

Professor Braunhut from Lowell reported on Establishing the UMass Core Facilities Steering Committee. The concept here is to develop new models for sharing of core facilities across the campuses. The University is well-equipped but not all facilities are well-known or broadly shared. Certain capabilities such as high performance computing do not exist and will need to be developed. She proposed a Steering Committee to facilitate the establishment of ways of sharing infrastructure and identifying future system-wide needs and priorities.

Finally, Vice Provost Kostecki from Amherst reported on Developing Incentives and Removing Barriers to Inter-Campus Collaboration and Entrepreneurial Efforts. He highlighted the need to develop structured opportunities for UMass faculty to engage with each other (e.g., seminars, seed funding) and to remove various administrative barriers that impede collaboration (e.g., access and charging policies, articulation agreements).

In conclusion, Chancellor Collins identified the steps needed to maintain the Task Force’s momentum in the coming year. The University needs to deliver well on initial state-supported initiatives (e.g., stem cell bank, M2D20). The Task Force Report should be shared broadly throughout the University community. A smaller Steering Committee should be organized to promote follow-up on Task Force recommendations. And, vehicles such as the President’s Council, Provosts Council and Research Council should be used to promote collaboration in this area.

Chairman Manning expressed the view that this was the most inspiring presentation he has seen since joining the Board and wished all Board members could have seen it. Chair Pearl and Trustee Lawton agreed and indicated that it was an impressive document and process.

A wide-ranging discussion followed, with a special emphasis on the importance of follow-up with the K-12 system. Chairman Manning noted that Secretary Reville is joining the Board and should be a conduit to other levels of the education system.

Following the discussion and expressions of strong support for the work of the Task Force, it was moved, seconded and

**VOTED:** To recommend that the Board take the following action:

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To accept the following report “A University wide Plan to Strengthen the life Sciences and Promote Inter-campus Collaboration over the Next Five Years” – as prepared by the University of Massachusetts Life Sciences Task Force with the support of the Trustee Committee on Science, Technology and Research;

And further,

To affirm the importance of the life sciences to the University’s research and education enterprise, in that its disciplines account for nearly 60% of the University’s research expenditures and engage thousands of students in classroom- and laboratory-based programs;

To recognize this unique “life sciences moment,” where the University plays a critical role in an emerging Commonwealth strategy to secure far into the future Massachusetts’ position as a global leader in both fundamental research in the life sciences and its application to create new technologies and therapies to advance human health and address other societal challenges;

To endorse the effort of the Task Force to craft a university-wide aspirant vision in the life sciences and develop strategies for encouraging multi-disciplinary collaborations, links with industry and other research institutions, and inter-campus partnerships that will enable our faculty to enhance the excellence of their research programs, benefit our students through the education they obtain and by enabling them to assume positions of leadership in industry and research, and support the growth of the Commonwealth’s industry base;

To commend the members of the Task Force, which included nearly 40 members of the faculty and administrative staff from the five campuses and the President’s Office, for their thoughtful, collaborative and far-sighted report:

Nancy Cohen, John Cunningham, Steven Goodwin, Paul Kostecki, George Langford, Michael Malone and T.J. Mountziaris from UMass Amherst; Richard Antonak, Joan Becker, Stephen Crosby, Paul Fonteyn, Greer Glazer, Andrew Grosovsky and Winston Langley from UMass Boston; Anthony Garro, William Hogan, Robert Peck, Louis Petrovic and Paul Vigeant from UMass Dartmouth;

Ahmed Abdelal, Susan Braunhut, Partha Chowdhury, Carl Lawton, Jacqueline Moloney, Stephen McCarthy, and David Wegman from UMass Lowell; Anthony Carruthers, Brendan Chisholm, Terence Flotte, Paulette Seymour Route, John Sullivan, James McNamara and Judith Ockene from UMass Worcester; and Abigail Barrow, Jeffrey Brancato, Thomas

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Chmura, Michael Goodman and Marcellette Williams from the UMass President's Office; and Michael Collins, Chair; and

To urge the President and Chancellors, in consultation and partnership with all relevant governance bodies on the campuses, to take necessary actions to follow through as may be appropriate on the recommendations identified in the report and to use the report to advance the interests of the University with the Governor, Legislature and other relevant parties. (Doc. T08-077)

Chair Pearl thanked the members of the Task Force, and encouraged the President and Chancellors to follow through on actions as appropriate and in consultation with relevant governance bodies on the campuses.

The final item for **Discussion** was an **Overview of Sustainability Initiatives at UMass Campuses**. In addition to the life sciences, the Chair noted that this Committee has placed a high priority on the University's role in clean energy. It has monitored the work of a system-wide clean energy working group and endorsed a partnership between the University and the Executive Office of Energy and Environmental Affairs that encourages collaboration in clean energy and broader issues of sustainability.

Most of the Committee's focus to date has been on the role of the University in research, education and economic development. In response to the interest of a number of Trustees, this presentation focused on the roles that the University itself is taking in promoting sustainability and "going green".

Efforts to date reflect the University's commitment to complying with Governor Patrick's executive order on this topic as well as the American College & University Presidents' Climate Commitment that was signed by President Wilson.

Vice President Lenhardt, assisted by Alison MacDonald, reported that facilities, staff and others have contributed to sustainability efforts on every campus. Committee members were provided with a comprehensive report highlighting the University's role in such areas as construction, energy consumption, renewable energy, transportation, recycling and waste management, facilities maintenance, information technology and student involvement.

During the discussion that followed, Vice President Lenhardt highlighted issues concerning the difficulties of universities achieving "climate neutrality", the complex processes and substantial costs involved in securing LEED (Leading in Energy and Environmental Design) Certification, and the ongoing debate about the long-term "payback" from renewable energy and green construction projects.

Chancellor Meehan indicated that the Chancellors are committed to some level of LEED certification; but, additional costs in higher levels of certification may make it

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prohibitive. Chancellor MacCormack noted that some data shows that investment does pay back but campuses must find funding for initial building costs.

The meeting adjourned at 9:53 a.m.

Barbara F. DeVico  
Secretary to the Board of Trustees