

UNIVERSITY OF MASSACHUSETTS

AMHERST•BOSTON•DARTMOUTH•LOWELL•WORCESTER

MINUTES OF THE MEETING OF THE
COMMITTEE ON SCIENCE, TECHNOLOGY AND RESEARCH

Monday, February 25, 2008; 8:00 a.m.
Amherst Room
225 Franklin Street – 33rd Floor
Boston, Massachusetts

Committee Members Present: Chair Pearl; Vice Chair Johnston; Trustees Beatrice, Nath, Osterhaus-Houle, O’Shea (via conference call) and Thomas

Committee Member Absent: Chairman Manning; Trustees Lawton and Tocco

University Administration: President Wilson; General Counsel Bench; Senior Vice President Williams, Vice Presidents Chmura, Lenhardt and Smith; Chancellors Motley, and Meehan and Senior Vice President for Health Sciences and Interim Chancellor Collins; Associate Chancellor Moloney; Vice Provosts for Research Kostecki, Antonak and Chowdhury; Assistant Vice Chancellor for Research Development Petrovic; Vice Provost for Research Sullivan; Executive Deputy Chancellor Flotte; Jack Cline, Assistant Vice President for Federal Relations

Faculty Representatives: Professors O’Connor and May, UMass Amherst; Ms. Gibbs, UMass Dartmouth; Professor Carter, UMass Lowell

Guests: Ian Bowles, Secretary, Executive Office of Energy and Environmental Affairs (EOEEA); Greg Watson, Senior Advisor for Clean Energy; Dr. Phil Mjwara, Director General, Department of Science and Technology, South Africa

Chair Pearl convened the meeting at 8:04 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 November 20, 2007 meeting of the Committee.

Under the **Chair’s Report**, Chair Pearl welcomed the special guests and expressed her satisfaction with the progress being made in clean energy and the life sciences – two strategic areas that the STR Committee has been promoting over the past year.

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Then she outlined the agenda: a brief report from President Wilson on the progress since the last meeting ... an action item to approve a resolution accepting the work of the Clean Energy Working Group ... a presentation by our special guests and partners in clean energy – EOEEA Secretary Ian Bowles and Senior Advisor for Clean Energy Greg Watson ... a signing of a joint Memorandum of Understanding between the Commonwealth and the University of Massachusetts on clean energy ... an update on the life sciences by Chancellors Michael Collins and Martin Meehan ... a report on our federal relations strategy by Director of Federal Relations Jack Cline ... and a briefing on the University Policy on Conflicts of Interest by Vice President Thomas Chmura.

Under the **President's Report**, President Wilson thanked Chair Pearl and complimented the Committee for helping to stimulate important system-wide activity in strategic areas such as the life sciences and clean energy and highlighting important issues about strengthening our research enterprise.

President Wilson acknowledged EOEEA Secretary Ian Bowles and his Senior Advisor Greg Watson. He also welcomed a 12-member delegation of scientific and government leaders from South Africa, led by Dr. Phil Mjwara, Director General of the National Department of Science and Technology. The University is particularly honored to host this group, given the University's strong history of academic partnerships in South Africa.

Dr. Phil Mjwara then addressed the Committee. He explained that the National Department is working to revive U.S./South Africa relationships which developed under former President Clinton. It has identified a number of development areas (e.g., clean energy) and policy issues (e.g., human capital) in which it is looking to collaborate.

President Wilson then highlighted progress with two important pieces of legislation. The House has put forward a \$1 billion Life Sciences bill. Like the Governor's Initiative, the House bill proposes several elements that are important to UMass, including more than \$200 million in capital funding for UMass life sciences facilities.

The Higher Education Committee of the House has released the higher education bond bill that includes \$1B in funding for UMass. Both of these pieces of legislation reflect the University's five-year capital plan which the Board passed last Fall to guide investment in 21st century facilities across all five of our campuses.

There still are several hurdles to cross before either of this legislation becomes law; the President thanked the Chancellors, Trustees, Vice Presidents and campus officials and Alumni who have been active in supporting the passage of the legislation.

The President then saluted the work of the UMass system-wide Clean Energy Working Group, led by UMass Amherst Vice Provost Paul Kostecki. He noted that Clean Energy is a key area of UMass R&D, with an estimated \$18 million in activity in FY2006.

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He explained that Secretary Bowles and Greg Watson are here today because they recognize our considerable strengths as well. EOEEA and the University have already partnered on important initiatives such as winning a U.S. DoE-supported wind energy testing facility for Massachusetts. The President and Mr. Watson joined the Governor on his recent trade mission to China which focused on clean energy and life sciences.

Today's meeting includes the signing of a system-wide memorandum of understanding (MOU) with EOEEA to formalize, expand, and further strengthen what is already an exciting partnership with state government.

In closing his report, the President again thanked the Chancellors and their teams for their campus science, technology and research accomplishments. He also thanked the Trustees on the Committee for their service and support.

Chair Pearl then introduced the Action Item, the Clean Energy Report.

It was moved, seconded and

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

To accept the following report – “Clean Energy for the Commonwealth: Powered by the University of Massachusetts” – as prepared by the UMass Clean Energy Working Group at the request of the Trustee Committee on Science, Technology and Research.

And further,

To affirm that clean energy is an important field of science, technology and research with great potential to benefit the Commonwealth, the nation and the world;

To assert that the University of Massachusetts, as the Commonwealth's public research university, has a crucial role to play in this field and a responsibility to support the state's goal of global leadership in clean energy;

To endorse the memorandum of understanding with the State Executive Office of Energy and Environmental Affairs and efforts to partner with industry through engagement with such groups as the New England Clean Energy Council;

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To commend the members of the Clean Energy Working Group – Dr. Paul Kostecki of Amherst (chair), Dr. Richard Antonak (Boston), Dr. Craig Armiento (Lowell), Tom Chmura (President’s Office), Dr. Steve Goodwin (Amherst), Dr. George Langford (Amherst), Dr. David Levy (Boston), Dr. Michael Malone (Amherst), John Miller (Dartmouth), Dr. Robert Peck (Dartmouth), Dr. John Ting (Lowell), and Dr. Marcellette Williams (President’s Office) and staff – Loren Walker of Amherst (project leader), Jeff Brancato (President’s Office) and Marla Michel (Amherst); and

To urge the President and Chancellors to take all necessary and appropriate actions to position the University as a leader in clean energy with the Governor, Legislature, industry and other relevant parties. (Doc. T08-032)

Vice Provost Kostecki indicated that he was proud of the effort and collaboration put forth by everyone involved across the system. He indicated that the working group intended to continue its work and would be seeking support from the President’s S&T Fund to support its continuing efforts.

Chair Pearl indicated that an overriding purpose of the working group has been to position UMass as a strategic resource in helping the State achieve its goal of making Massachusetts a global hub for clean energy research and jobs. She then introduced Secretary Bowles and Mr. Watson to discuss the first discussion item: **Clean Energy Partnership with the Executive Office of Energy and Environmental Affairs.**

Secretary Bowles provided an overview of the state’s energy strategy under Governor Patrick, the status of clean energy legislation making its way through the Legislature, and a description of the growing clean energy sector in the state. He noted that the Administration sees a focus on clean energy as both an environmental imperative and an economic opportunity for the Commonwealth.

He gave high praise to the UMass “white paper” on clean energy and the R&D initiatives in clean energy. He suggested that UMass has a special role in positioning Massachusetts to be a global leader in clean energy. He highlighted current and potential collaborations in areas ranging from climate change and energy efficiency to biofuels and wind energy. He also appreciated UMass’s support for recruiting clean energy companies to Massachusetts (e.g., Vestas) and encouraged UMass to “lead by example” in terms of the use of clean energy in UMass facilities.

President Wilson and Secretary Ian Bowles then signed a Memorandum of Understanding declaring a shared goal of meeting the clean energy needs of the citizens of the Commonwealth through research, education, public service and establishing an effective inter-organizational approach to developing clean energy programs. The MOU will establish a joint executive coordinating committee between the two institutions that

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will oversee the planning and development of joint activities in such areas as public policy, R&D, workforce development and economic development.

President Wilson thanked Governor Patrick and Secretary Bowles for placing such high priority on a partnership with the University. Speaking on behalf of the campuses, Chancellor Meehan expressed strong support for the MOU, endorsed the signing of the agreement, and echoed President Wilson's praise for Governor Patrick's and Secretary Bowles' ambitious clean energy agenda.

The next item was **Update on Life Sciences Initiative at UMass**. Chancellor Collins provided an update of the most recent developments on the Governor's Life Sciences Initiative and UMass's emerging and aspirant roles in the life sciences.

Since the last meeting of the Trustees, the Legislature has begun active consideration of the Governor's Initiative. A number of public hearings have taken place in Amherst, Boston and Worcester. President Wilson, the Chancellors and others from UMass have testified at these hearings. The University's message has been that there is no single entity that is better positioned than UMass to realize the potential created by continued investment in the life sciences and the economy of our state.

The Governor's original proposal included: \$500M in capital funding over 10 years; \$250M for the Massachusetts Life Sciences Investment Fund over 10 years; reconstitution of the membership and an increase of the size of the Life Sciences Center Board from 5 to 7; and \$250M in tax incentives.

The House proposal uses a similar framework to the Governor's proposal, but differs in that it defines specific investments. The House also expands the Mass Life Sciences Center Board from 5 to 7 with a permanent seat for the UMass President; creates two new advisory Boards to the center; and creates five regional technology and innovation centers to bolster the life sciences industry in regions around the state.

Under the House proposal \$95M would be allocated for the UMass Amherst Life Sciences Center; \$90M for the UMass Medical School Advanced Therapeutics Cluster; \$11.4M for the UMass Dartmouth purchase of the Advanced Technology and Manufacturing Center (ATMC); \$5.7M for the Stem Cell Bank and Registry. In addition, UMass campuses would be able to compete for various R&D and workforce grants.

Even prior to the passage of the \$1B legislation, the Mass Life Sciences Center has awarded three out of its four initial initiatives to UMass -- the Massachusetts Stem Cell Bank and Registry at the UMass Medical School; the Massachusetts Medical Device Development Center (M2D2); and the Life Sciences Talent Initiative at the Donahue Institute. In addition, there is a \$12M Life Sciences Center Matching Grant Program for which UMass campuses can compete.

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The Chancellor reviewed the status of the UMass initiatives. In response to concerns about the demand for talent in the life sciences sector, the UMass Donahue Institute has been studying to the needs of the life sciences industry and will be recommending strategies to ensure those needs are met. It held a Life Sciences Talent Summit at UMass Boston that attracted over 300 people, including Governor Patrick.

The UMass Medical School is far along in the development of the stem cell registry. They have hired staff; developed a website prototype; determined the information elements to be contained and updated on the website; and are in a continuing process to obtain the most current information on all Harvard and NIH approved stem cell lines.

The Medical School is also working aggressively to develop the stem cell bank. They have found space on the Shrewsbury campus of the Medical School; awarded contracts for renovation of the space to accommodate the bank; ordered equipment; begun the process of developing protocols, procedures and guidelines; begun hiring technical staff; and have a search underway for the head of the bank.

Lastly, Dr. Collins reported on the work of the system-wide UMass Life Science Task Force. The Task Force goals are: (1) to develop a University-wide Action Plan and (2) to create inter-campus collaboration in the life sciences. The Task Force is divided into six working groups which are working to develop position papers in key topic areas (e.g., shared infrastructure, nanotechnology), which will feed into a comprehensive “aspirant plan”. The final report and plan will be presented to the Board in June.

Chancellor Meehan then provided an update on the **Massachusetts Medical Device Development Center Initiative (M2D2)**. M2D2 is a joint initiative of UMass Lowell and Worcester. It was developed to support medical device inventors and entrepreneurs in converting medical device ideas into products for the commercial market. Lowell provides engineering expertise (e.g., design, prototyping) and Worcester provides clinical expertise (e.g., testing, clinical trials) to assist in this process. It is estimated that M2D2 can initially support 3-4 new products per year.

The project was initially developed with a seed grant from the President’s S&T Fund. It has since received in-kind contributions from the two campuses and over \$2M of financial support from the State’s John Adams Innovation Institute, industry and the federal government. In mid-February, just prior to the House announcement on the Life Sciences Bill, Governor Patrick announced a \$4M grant to develop a facility (the former IPI building) to house M2D2 on the Lowell campus. Lowell is committed to generating an additional \$2-3M to support the project.

This initiative is important not only in its own right but as a model of the kind of life sciences regional innovation centers envisioned in the Life Sciences Initiative. It directly addresses the criteria the Commonwealth is looking for: being responsive to industry needs; strong university-industry linkages; focus on translational research and commercial applications; shared-use facilities and resources; strong support from local

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government and regional organizations; strong support from the life science community; leveraging of federal, private and university resources; and strong potential for economic impacts and healthcare improvements.

The next item was the **Federal Relations Strategy for R&D**. At its last Committee meeting, the Committee heard from a panel of campus chief research officers who indicated that over 60% of our research funding comes from federal funds. Thus, Chair Pearl emphasized the importance of understanding what the University's Office of Federal Relations is doing to enhance our federal relations.

Jack Cline, Assistant Vice President for Federal Relations, provided an overview of this new office and how it functions in Washington, DC. He explained that the office represents the University in working with federal agencies, the Congressional delegation, other universities (through efforts such as the Science Coalition), and other key stakeholders.

He highlighted key budget issues in Washington (e.g., NIH, NSF) as well as other issues affecting higher education such as proposed regulations on endowment spending and patent reform. An overriding goal of his efforts is to position UMass with Congress, the federal agencies, etc. as the Commonwealth's public research university. He also works to coordinate the efforts of the five campuses in Washington and provides weekly reports to University officials on relevant federal issues.

Mr. Cline noted that the University has offices on Capitol Hill. He invited Trustees, faculty, administrators or students to make use of the office when in Washington. Following Mr. Cline's remarks, Greg Watson indicated that the EEOA looks forward to collaborating with the University's Federal Relations Office on a number of clean energy R&D initiatives important to the Commonwealth and across the nation (e.g., marine renewable energy, biofuels).

Chair Pearl inquired about a newsletter or report that was sent out from Mr. Cline's office; Mr. Cline noted that there is and offered to add any Trustee or interested person to the distribution list.

The last item was the **University Policy on Conflicts of Interest**. Chair Pearl explained that the Board has adopted a number of policies over the years that affect the conduct of research on the campuses. It is appropriate that from time to time that we review the implementation and status of those policies. One such policy is a policy covering conflicts of interest related to commercial ventures and intellectual property.

Vice President Chmura provided a brief update on this policy. As a research University, the University of Massachusetts needs to have in place policies and procedures that protect the integrity of its research, the educational experiences of our students, and our intellectual property.

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In 1996, the Trustees approved a Policy on Conflicts of Interest (COI) relating to intellectual property and commercial ventures for the University and all its campuses. In accordance with that policy, the University has established a system-wide COI Committee. The Committee is charged with reviewing conflicts situations on a case-by-case basis and has broad discretion to approve, deny or approve with conditions proposed relationships between University faculty and staff with private companies as they relate to intellectual property and commercial ventures. The Committee has handled over 130 cases since its establishment in 1996.

Following a brief discussion with members of the Committee, the meeting adjourned at 10:01 a.m.

Zunilka Barrett
Assistant Secretary to the Board