

UNIVERSITY OF MASSACHUSETTS

AMHERST•BOSTON•DARTMOUTH•LOWELL•WORCESTER

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

**Wednesday, September 15, 2010; 8:00 a.m.
Amherst Room
225 Franklin Street – 33rd Floor
Boston, Massachusetts**

Committee Members Present: Chair Johnston, Trustees Dinan, Fox, Lawton, Osterhaus-Houle, Thomas and Santos; Ms. Saeynum Lee representing Trustee Reville

Committee Member Absent: Trustees King-Shaw, Reville and Tocco

University Administration: President Wilson; General Counsel Heatwole; Senior Vice President Williams; Vice President Chmura; Associate Vice President Brancato; Chancellors Holub, MacCormack, Meehan and Collins; Executive Deputy Chancellor/Provost Flotte; Provosts Langley and Garro; Vice Chancellor for Research and Engagement Malone, UMass Amherst; Vice Provost for Research Xia, UMass Boston; Vice Chancellor Petrovic, UMass Dartmouth; Vice Chancellor for Research Sullivan, UMass Worcester; Lynn Griesemer, Associate Vice President for Economic Development and Executive Director of Donahue Institute; Dr. Hayman, Associate Dean of Research, College of Nursing, UMass Boston; Dr. Kiefe, Chair of Quantitative Health Sciences, UMass Worcester

Faculty Representatives: Professor Adrion, UMass Amherst; Professor Tirrell, UMass Boston; Ms. Gibbs, UMass Dartmouth

Chair Johnston convened the meeting at 8:04 a.m. and welcomed the new students to the Committee Christopher Dinan from UMass Dartmouth, Michael Fox from UMass Amherst and Evelyn Santos from UMass Worcester; Ms. Saeynum Lee is representing Trustee Reville; Provost Langley is representing Chancellor Motley.

Chair Johnston then asked for a motion to approve the **Minutes of the Previous Meeting**.

It was moved, seconded and

VOTED: To approve the minutes of the May 26, 2010 meeting of the Committee.

Chair Johnston reported that at the last Committee meeting President Wilson provided a terrific overview of the research work at the University of Massachusetts. Most of us are familiar with the capital projects underway across campuses and many of these were highlighted in a terrific *Sunday Boston Globe* article on July 25th about our impressive construction activity.

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Among the factors identified as key to our growth were strategic program and capital facilities investments and the increasing collaboration among the campuses within the University. Today President Wilson will provide an update on the progress of capital investments and an update on the Massachusetts Green High Performance Computing Center (MGHPCC) initiative being developed in Holyoke in partnership with four other universities, two leading high tech companies and the state. This represents the most significant state/industry/academic partnership in the history of the Commonwealth.

Under the **President's Report**, President Wilson first provided an **Overview on the Status of UMass S&T Projects**. The University is currently undergoing unprecedented expansion of physical infrastructure which will support rapid future growth of research enterprise across all five campuses; over \$500M has been invested in the past 5 years; over \$1B is planned for the next 5 years.

At UMass Amherst: The new Laboratory Science Building is a 144,000 ft.² state-of-the-art science facility for interdisciplinary research clusters; capital cost is \$156M; has adaptable space; Silver LEED certification; is part of a science cluster with ISB and planned Life Science Building; in Phase I (50% complete fit-out, 50% shell/core) and scheduled for completion in Summer 2012.

At UMass Boston: the Edward M. Kennedy Institute for the United States Senate will support scholarly research; facility – program space includes exhibit areas, classrooms and a reproduction of the U.S. Senate chamber; technology-intensive programs to be designed for K-12 and university students, teachers, government officials and public; significant emphasis placed on digital archiving and web access.

The Integrated Science Complex is the first part of the Master Plan; is estimated at \$152M capital cost; is the new first major academic facility since the Boston campus opening in 1974; will provide approximately 200,000 ft.² space for faculty laboratories, research centers and core facilities; targeted completion in 2013.

At UMass Dartmouth: the Bio-processing Facility, a 22,000 ft.² facility provides unique resource for biomanufacturing research at production scale; supports robust industry partnerships, education and training programs and expansion of campus research enterprise; estimated capital construction cost is \$22M-\$25M; site selection underway.

At UMass Lowell: the Emerging Technologies and Innovation Center, an 84,000 ft.² facility at campus gateway; programming to focus on key technology areas and cutting-edge fields, including nano-technology, plastics engineering, biomedicine and electro-optics; Groundbreaking was held in June 2010; expected occupancy is 2012.

At UMass Worcester: the Ambulatory Care Center (formerly the Advanced Center for Clinical Education and Science); home of new Quantitative Health Sciences department and Conquering Disease Clinical Research Center (key elements of UMass Center for Clinical and

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Translational Science); unique design integrates patient care centers with related clinical and translational science research programs; capital construction cost of a \$120M – 258,000 ft.²; move-in currently underway.

The Albert Sherman Center is a 480,000 ft.² facility; will house key strategic research initiatives, including Advanced Therapeutics Cluster, RNA Therapeutics Center, Center for Stem Cell Biology and Gene Therapy Center; \$400M total investment (includes related infrastructure improvements); design will foster interdisciplinary interaction and collaboration; Groundbreaking held in September 2009; completion in late 2012.

President Wilson continued by providing information on two new initiatives: the UMass Innovation Institute and UMass Seed Fund. The UMass Innovation Institute is a potential new UMass system entity to support campus research growth by better enabling industry partnerships and other technology-driven collaborations; designed to create new revenue streams; modeled on similar entities at other major research universities, including University of Michigan and Purdue; planning effort led by Amherst with support from Raytheon; Presidential review anticipated in coming months. The UMass Seed Fund concept design is underway and is supported by alumni and friends, to help accelerate growth of UMass start-ups; strong interest from campuses and key alumni; vetting taking place internally and with leadership of UMass Foundation and other key partners; Presidential review is also anticipated in coming months.

Following his research facilities update, President Wilson then provided an **Overview of the Massachusetts Green High Performance Computing Center in Holyoke**. The Massachusetts Green High Performance Computing Center (MGHPCC) is a unique collaborative effort involving MIT, UMass, BU, Northeastern and Harvard, with state government and private industry (Cisco and EMC). It is designed to be the first truly world-class high performance computing center in the Northeast and will serve as a key piece of infrastructure to meet the growing needs of our faculty in furthering their research in fields such as life sciences, clean energy and climate change. With a projected budget of over \$150M for construction and equipment, it represents the largest and most significant state/industry/academic partnership in the history of the Commonwealth.

To date, a not-for-profit corporation has been formed to develop/manage facility; site location selected, technical requirements identified, planning and design underway; (a former Vice President of Cisco has been selected to serve as Interim Executive Director, with a search for a permanent Executive Director underway; and \$600,000 education proposal is pending at NSF.

Key next steps include execution of a \$25M grant agreement with the state; finalize acquisition of property from HG&E; “Launch” project with Governor, University Presidents, industry execs at October event in Holyoke; activate University Consortium to pursue collaborative R&D and education opportunities; link with Cisco’s “Smart & Connected Communities Initiative” in Holyoke.

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Chair Johnston asked how the MGHPCC relates to the undergraduate and graduate student experience. President Wilson indicated that it presents tremendous student opportunities, is designed around student educational experiences and will serve as a scholarly resource. The design of the facility and databases will support educational programs.

Trustee Fox asked what practical research and academic experiences will be available through the Edward M. Kennedy Institute. President Wilson indicated that the institute will provide educational programs, work study, student guides as well as mock debates.

Trustee Thomas asked if the MGHPCC will have a connection with Springfield, the largest area in that region. Lynn Griesemer, Associate Vice President for Economic Development and Executive Director of Donahue Institute commented that the Mass Technology Collaborative and regional task force are leading an effort to develop a broadly-focused regional economic development strategy which will leverage the MGHPCC as one of a number of critical local assets.

Chair Johnston introduced the next item for **Discussion, UMass Center for Clinical and Translational Science**. This past July, the UMass Medical School was formally notified that it had been selected by the NIH as the recipient of a \$20M Clinical and Translational Science Award (CTSA) grant to support the UMass Center for Clinical and Translational Science. While there have been numerous successful multi-campus R&D proposals in the past, CTSA is the largest and most significant R&D collaboration in the University's history. Chancellor Collins then provided background information on the CTSA initiative. Vice Provost Sullivan led the effort on the campus.

Provost Flotte, Vice Provost Sullivan, Dr. Laura Hayman, Associate Dean of Research, College of Nursing from the Boston campus; and Dr. Catarina Kiefe, Chair of Quantitative Health Sciences from the Medical School described the development of the new Center for Clinical and Translational Research.

The CTSA program creates academic homes for clinical and translational science at research institutions across the country. A major goal of the program is to develop teams of investigators from various fields of research who can transform scientific discoveries in the laboratory into treatments and strategies for patients in the clinic. By encouraging collaboration across disciplines, CTSA support innovative approaches to tackle research challenges and train clinical and translational researchers.

This effort is designed to bring research discoveries into the practice of medicine more quickly – improving the process from “bench to bedside”. Through the CTSA grant, the University is joining an elite consortium of 55 nationally prominent research institutions who are all working to strengthen their clinical and translational research efforts.

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One of the unique aspects of the Medical School's successful proposal to the NIH is the depth of collaboration with UMass Memorial Health Care, the other campuses of the UMass system, the Massachusetts Biologics Lab, the Donahue Institute and other parties outside of UMass, including WPI, Abbott Bioresearch Center and Charles River Laboratories.

Important groundwork for this proposal was laid by an investment in 2006 by President Wilson through the President's Science and Technology Initiative and Chancellor Collins' subsequent leadership in organizing the "Life Sciences Moment Fund" to encourage cross-campus collaboration.

The meeting adjourned at 9:52 a.m.

Zunilka Barrett
Assistant Secretary to the Board