

**UNIVERSITY OF MASSACHUSETTS
AMHERST•BOSTON•DARTMOUTH•LOWELL•WORCESTER**

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

**Wednesday, September 4, 2013; 8:00 a.m.
Amherst Room
225 Franklin Street – 33rd Floor
Boston, Massachusetts**

Committee Members Present: Chair Johnston; Vice Chair Osterhaus-Houle; Trustees Campbell, Lowe, Murphy, O'Brien and Xifaras; Chairman Thomas

Committee Members Absent: Trustees Gomez and Malone

University Administration: President Caret; General Counsel Heatwole; Senior Vice President Williams; Vice President Chmura; Chancellors Subbaswamy, Motley, Grossman, Meehan and Collins

Faculty Representatives: Professor Kurose, UMass Amherst; Professor Tirrell, UMass Boston

Documents Used: -Update on FY 2012 R&D Expenditures, Doc. T13-074
-Special Presentation of New Research on Down Syndrome, Doc. T13-075
-HEROES (Harnessing Emerging Research Opportunities to Empower Soldiers), Doc. T13-076

Chair Johnston convened the meeting at 8:15 a.m. and welcomed the new Trustees to the Committee: Zoila Gomez; Patrick Lowe, UMass Worcester; Colin Murphy, UMass Dartmouth; and Nolan O'Brien, UMass Boston. He then stated that the Committee had been provided with draft minutes for the June 5, 2013 meeting and asked for any corrections. With no corrections, the minutes were approved.

Reports:

Chair's Report

Chair Johnston reviewed the meeting's agenda.

President's Report

President Caret reported on new and ongoing Science, Technology and Research topics including: the ongoing impacts of sequestration on the campuses; the \$95 million Life Sciences funding at the Amherst campus; the coordination between the Clean Energy Center's leadership and the campuses; the Advanced Manufacturing Regional Partnership Academy in development by UMass Dartmouth and the UMass Donahue Institute; the growing strength of UMass' technology commercialization; and the award of the President's Science and Technology

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Initiative and Creative Economy grants. Trustee Xifaras noted the importance of briefing gubernatorial candidates on UMass.

Discussion Items:

Vice President Chmura provided an **Update on FY2012 R&D Expenditures**. He reviewed the University's R&D expenditures performance over the last decade, noting UMass' growth rate and its ranking just behind MIT and Harvard. He reviewed the data in Massachusetts, New England and the nation and highlighted the strengths of the various campuses. President Caret noted the diversification of funding sources and new work with private industry on the campuses. There was a discussion about sequestration and campuses ability to find additional, alternative funding sources. Vice Chancellor Malone commented on private industry collaboration and UMass Amherst's economic and industry engagement. Chair Johnston asked about the Massachusetts Congressional Delegation's support for R&D. Deputy Chancellor/Provost Flotte noted that the Worcester campus had met recently with Congressman McGovern. President Caret added that he meets regularly with the delegation and is currently scheduling a day in Washington in November. Chancellor Grossman reported on Senator Warren's recent visit to the Dartmouth campus.

Deputy Chancellor/Provost Flotte introduced Dr. Jeanne Lawrence, Professor of Cell and Developmental Biology, from the Medical Center to report on her **New Research on Down Syndrome**. Dr. Lawrence described her work investigating the silencing of the extra chromosome found in Trisomy 21 and its potential to lead to the development of chromosomal therapy in this area. Deputy Chancellor/Provost Flotte noted Dr. Lawrence's courage in pursuing this risky research area. Vice Chair Osterhaus-Houle thanked Dr. Lawrence for the amazing potential of her research. Chancellor Motley also thanked Dr. Lawrence for the presentation and applauded the contributions made by UMass as an institution. There was a discussion about the societal and legal implications that have appeared through international discussions of her research.

Chancellor Meehan introduced the panel discussion, **HEROES ("Harnessing Emerging Research Opportunities to Empower Soldiers")** and described the collaboration between UMass Lowell and Natick Labs. Vice Provost for Research Julie Chen introduced the panel: Lynn Samuelson, U.S. Army Natick Soldier Research Development and Engineering Center (NSRDEC) Director of HEROES (and UMass Lowell alumna), and Anant Singh, Vice President of Triton Systems, a key industry partner with UMass Lowell on several research projects and SBIR grants.

Dr. Samuelson described the collaboration, which works closely with Lowell students and faculty on research that supports service personnel from clothing and equipment to shelters and combat feeding. Chair Johnston asked about the intellectual property produced and the ownership. There was further discussion about the economic impact of the defense industry on Massachusetts. Mr. Singh discussed the role his company plays in the collaboration and the

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importance of high-risk, early stage R&D. He noted that all of the players had come together: the user, research expertise and industry. Vice Provost Chen reiterated the importance of retaining the state's highly educated workforce and the importance of programs like NSRDEC in Massachusetts. There was a discussion about Department of Defense funding. Deputy Chancellor/Provost Flotte noted a recent sizable grant with MassBiologics. Acting Vice Provost Meressi noted Dartmouth's work with Natick Labs. Chancellor Meehan stated that the Department of Defense research is very important and has many civilian applications. He added that given the potential for another BRAC, it is important to show the critical role that Massachusetts plays with the Department of Defense. Ms. Rodriguez added that the system is investing in the legal infrastructure necessary on the compliance side. Vice President Chmura reiterated the importance of that growing capacity.

There being no other business, the meeting adjourned at 10:09 a.m.

Kate Wilkinson
Staff Assistant