
THE MASSACHUSETTS LIFE SCIENCES CENTER

**Board of Directors Meeting
Tuesday, February 26, 2008
Governor's Council Chambers
2:00 pm**

MINUTES

A meeting of the Massachusetts Life Sciences Center Board was held on Tuesday, February 26, 2008 at the Massachusetts State House in the Governor's Council Chambers, Boston, Massachusetts, pursuant to notice duly given.

Board Members present were:

Vice-Chairman Jack M. Wilson, Ph.D., President of the University of Massachusetts
Secretary Jay Gonzalez, Undersecretary for Administration and Finance
Marc Beer, Chief Executive Officer of ViaCell, Inc.
Micheline M. Mathews-Roth, M.D.

Melissa A. Walsh, Chief of Staff to the Massachusetts Life Sciences Center

Others in Attendance:

Tom Chmura, University of Massachusetts President's Office
James Heffernan, Massachusetts Biotechnology Council
Beth Nicklas, Massachusetts Technology Collaborative, John Adams Innovation Institute
William Mc Dermott, McDermott, Quilty and Miller
Beth Nicklas, Massachusetts Technology Collaborative, John Adams Innovation Institute
Catherine Williams, State House News Service
Tim Coleman, PriceWaterhouseCoopers
Tim Daley, Office of Senator Harriette Chandler
Jennifer James, Undersecretary of Workforce Development
John Monahan, Worcester Telegram and Gazette
Mark Trusheim, Co-Bio Consulting

I. Call to Order

Melissa Walsh called to order the meeting of the Massachusetts Life Sciences Center (hereinafter "the Center" or "the Life Sciences Center" or "MLSC") Board of Directors with three board members present at 2:10 p.m. Ms. Walsh notified the Board that Secretary O'Connell was still testifying at a legislative hearing and likely would not join the meeting.

II. Approval of the minutes of the January 24, 2008 Board Meeting

On the motion of President Wilson, which was duly seconded by Dr. Roth, the Board voted unanimously to approve the minutes of the January 24, 2008 Board Meeting.

III. Chief of Staff Update

Ms. Walsh gave an update of the life sciences legislation, reporting that the House had passed its version of the bill. The bill will now move to the Senate for that chamber's consideration and action.

Ms. Walsh reported on the success of both the February 1st Research Matching Grant launch event at Massachusetts General Hospital ("MGH") and the February 11th Life Sciences Talent Summit at UMASS Boston. The Governor, Senate President, Speaker of the House and Congressman Capuano joined the launch event at MGH, an incredible sign of broad support for the work that the MLSC is doing. It was a truly proud moment for the MLSC to announce this important program in front of the press and more than 160 attendees.

Ms. Walsh noted that Tom Chmura will report in more detail about the Summit and the next steps following that unprecedented event and that Beth Nicklas from the John Adams Innovation Initiative will discuss the movement of the matching grant programs.

She announced that Senators Jack Hart and Harriette Chandler were just appointed to the Life Sciences Talent Initiative Advisory Committee by the Senate President and recognized Tim Daley, from Senator Chandler's office.

IV. Introduction of New Outside Counsel

Ms. Walsh reported that the outside counsel search had concluded and that the MLSC had engaged Foley & Lardner as outside counsel. Ms. Walsh introduced Larry Vernaglia, partner at the law firm and explained that this new relationship would enable the Center to move forward with the contracting pieces for the matching grant program, stem cell bank, and the stem cell registry. She thanked Larry for his and his team's work so far and for being so readily available days, nights and weekends to assist with the ongoing work of the Center.

Attorney Vernaglia introduced some colleagues that he brought along with him, as they are part of the team that the firm has assembled to assist in the work of the MLSC. Attorneys Carl Rosenberg, Dave Bannard, Abdullah Malik and Alpana Kumar were introduced. Attorney Vernaglia said what a pleasure it has been to work with Ms. Walsh and the Center thus far and what an honor it is to play a role in this exciting new venture that holds such promise for the life sciences and for the Commonwealth.

V. Super Cluster II Report Proposal

Ms. Walsh explained that Tim Coleman, from PriceWaterhouseCoopers ("PwC") had asked to be moved up on the agenda to discuss his proposal to the MLSC because his

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sister had just given birth to twins and was in the hospital. Ms. Walsh introduced Mr. Coleman from the Healthcare Advisory group at PwC and invited him to speak to the Board and explain PwC's proposal.

Mr. Coleman discussed the success of the Super Cluster report last year, which was sponsored by PwC, the Massachusetts Technology Collaborative ("MTC") and the New England Healthcare Institute ("NEHI") last year. He explained that he came to Ms. Walsh to ask for MLSC's collaboration and sponsorship this year on the "Super Cluster II" report which will have a theme relative to creating a Massachusetts pathway to the global market. He said that of 10,000 copies of last year's report, PwC had only 500 copies left. MTC has been able to use it for its messaging, the Governor used it as an aid for his trade mission to China. PwC envisions doing a second report, not as a sequel to last year's report, but as the next focus on how Massachusetts can commercialize technology globally. PwC has requested \$20,000 in support and sponsorship of a second report, to help finance the development of the report. He thinks that the report will fit well with the MLSC mission.

Marc Beer stated that he loved last year's report and thinks that this theme is an important one, but will be an ambitious framework. He asked who commissioned the report. Ms. Walsh and Mr. Coleman explained that it was not commissioned by an outside source but, rather, PwC, MTC and NEHI had hoped to create another report that had the value and impact of the last report and had anticipated that MLSC joining as a sponsor would lead to that outcome. Mr. Coleman explained that by including an array of diverse perspectives within the report, as an example, he hopes to pull together a strong report that we can share at the BIO San Diego conference in June this summer.

Undersecretary Jay Gonzalez joined the meeting.

President Wilson agreed that last year's report was super and that it had great value.

Jay Gonzalez explained that he would assume that the report would include mention of the MLSC, whether the Center sponsors the report or not, as the Center will play a major role in the life sciences here and the message that it seems the report will be getting out. He asked what specifically sponsorship would get the MLSC. Tim Coleman explained that this will be a good way to introduce the MLSC – and possibly its new Executive Director - and what Massachusetts is trying to do. From this perspective, it would be a good opportunity to lay out who the Center is to the Commonwealth and to the life sciences community.

President Wilson cautioned that this report may not have as significant an impact as it did last year given that the BIO conference was held in Massachusetts and provided a great platform as a galvanizing event to announce the report there. He stated, though, that he thinks it is a reasonable investment.

Undersecretary Gonzalez stated that he would assume that sponsorship would also mean being engaged in the operation of creating the report. He stated that the MLSC would

want to have something like this regardless and if other resources could be leveraged with a \$20,000 commitment to help produce a very high quality product, that makes sense. Ms. Walsh explained that she had had conversations with PwC and MTC already about this and that sponsorship would include our lending the labor of staff and being engaged with development of the report on a day-to-day basis. She stated that she is committed to playing a strong role as part of the working group for the report, if that is the charge of the Board, so that the MLSC could truly help shape the final report. She further stated that this would be a good opportunity of the new ED, if the timing worked out, to be introduced.

Marc Beer asked that the working group, through Ms. Walsh, communicate regularly on the progress of the report and the key concepts develop.

Jay Gonzalez asked for periodic progress reports as to how the report is shaping up at subsequent Board meetings. He stated that he believes that the working group for the report should use the Board meeting to the extent that the Board can be a useful sounding board.

On the motion of Jay Gonzalez, which was duly seconded by Marc Beer, the Board members Dr. Roth, President Wilson, Marc Beer and Jay Gonzalez voted to approve the motion to sponsor the Super Cluster II report as printed in the Board binders.

VI. Research Matching Grant Program Update

Ms. Walsh said that she would like to ask Beth Nicklas from the John Adams Innovation Institute at the MA Technology Collaborative to update the Board on the MLSC's Research Matching Grant Program. Ms. Walsh first noted that the MLSC had a phenomenal event on February 11th, with a tour and launch over at the Massachusetts General Hospital (MGH) to announce the official launch of the program.

Ms. Nicklas noted that the Governor, Senate President, Speaker of the House and Congressman DiMasi all attended the launch event. She said that she thinks we have Melissa to thank that we were fortunate enough to have Dr. Peter Slavin of MGH host the event. It was a phenomenal tour of some of the laboratories regenerative medicine and creating organs from cells. It was terrific for non-scientists to see some of the amazing therapies that are possible in the foreseeable future. Ms. Walsh let the Board know that NECN took the tour with us and there is a good clip on the www.masslifesciences.com website that was shown a couple of times on television that highlights the day and some of the work that the group saw. Ms. Nicklas said that it was clear how very passionate the MGH researchers are about what they are doing. The press conference was standing room only with more than 150 people in attendance. Prior to that, on January 30, the MLSC held a briefing with Secretary O'Connell to discuss the program. About 40 research leaders attended. They had excellent questions and good input that has been integrated into the solicitations, where appropriate. It was a very valuable briefing for us. There will be a Bidder's conference this Friday for the New Investigator solicitation. Proposals for that grant are due April 11th, so things are progressing very nicely. Ms.

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Nicklas reported that she continues to get dozens of clarifying and technical questions from a diverse range of institutions. She stated further that the MLSC and John Adams Innovation Institute has been working on the peer review process in contemplation of grant applications coming in. Ms. Nicklas noted that Dr. Harvey Lodish had been in to meet with the Board to share his thoughts on the importance for a Scientific Advisory Board. It is critical to have scientists and researchers from academia and from industry who can be the oversight group that makes recommendations to the MLSC. This would work well within the research matching grant process. An initial review panel will be put together based on the specific discipline of the applications to look at the applications based on their specific scientific expertise in that particular area. They would then rank those proposals and send recommendations to the Scientific Advisory Board for a more holistic review. Dr. Lodish is excited and interested in helping the MLSC in thinking about the need for a Scientific Advisory Board. Ms. Nicklas stated that we have been looking to assemble a list of people to help us in the work that we are doing.

Ms. Walsh thanked Ms. Nicklas for her update and noted that the Board has been discussing the creation of a Scientific Advisory Board, generally, for a couple of months and Drs. Lodish and Greenhouse attended the December Board meeting to share their vision for a SAB. There is a motion in the Board binders to codify and make official the creation of a Scientific Advisory Board as an advisory entity to inform all of the work of the MLSC and especially the work around the research matching grant program.

Marc Beer asked when the process would begin to begin scoring the grants. Ms. Nicklas answered that applications for the first grant are due on April 11th. Prior to that, letters of intent are due so that a sense can be formed as to the areas of science that we need to focus on in assembling our initial review panels. The hope is to have recommendations to the Board by the end of June. Ms. Nicklas reminded the Board that this model is similar to the NIH approach and that another meeting is scheduled with Dr. Greenhouse and Lodish to discuss the best practices for getting this process together. Marc Beer said that he is familiar with the process but would like to know how many months would go by before we test the process to be sure that it is working, it will be a very special day when we approve the first grant and understand the caliber of the applications that come in. Ms. Nicklas offered that we could report back at the April Board meeting on what types of applications have come in and, with Dr. Lodish, how the process is shaping up. Ms. Walsh stated that the vision is to have prospective SAB candidates come in at the April meeting to share their respective experiences so that the Board could vote on approval of SAB members as they are identified. April would be a good check in for the process and this agenda item would remain on subsequent Board meeting agendas, as the process is ongoing.

President Wilson stated that we need to keep in mind the issue of fairness with respect to academia and industry, regional diversity, etc.. and that this will be important from a credibility and quality perspective.

Ms. Walsh asked the Board members to ponder their own respective networks to help identify people that they think should be considered for the SAB and get that information to her so that it can be shared with MTC.

Jay Gonzalez asked if it would make sense to try and have the Board in place in time for the April applications. Ms. Walsh suggested that an option for the Board would be to table the motion before them and take it up at the March meeting when more progress has been made on identifying potential SAB candidates. She agreed to work with the JAIL team to develop a one-page description of the SAB criterion and reiterated that diversity and quality will be critical values as we look to assemble this body. The Board collectively agreed on this plan. Ms. Nicklas reminded that the deadline for letters of intent is March 14th, making it possible to report, somewhat, on what types of applications are coming in when the Board meets again in March. Ms. Walsh asked for Board recommendations for the SAB be given by March 3rd.

Marc Beer suggested that we consider Dr. Lodish as an appropriate person to Chair the SAB, once assembled, as he would be a perfect leader for that role.

VII. Stem Cell Bank and Registry / M2D2 Updates

Bank: President Wilson reported that, though some of the technicalities are still being negotiated, the Stem Cell Bank has been moving forward at an aggressive pace. UMASS has identified space in the Worcester Medical School space and plans are being made for renovation of the space. Process of putting together processes for developing protocols and procedures and begun hiring technical staff. A search is underway for the head of the Registry. We expect the Bank to open and start operations this Summer and begin delivering cell lines by early 2009.

Registry: President Wilson reported that the Stem Cell Registry is even further along, as staff has been hired, the website prototype is nearly complete and they are continuing to obtain the most current information on all NIH approved stem cell lines. UMASS Medical School is prepared to “go live” within a week or two. UMASS looks forward to working with Melissa and others, including the Governor’s office on an appropriate launch for the Registry.

M2D2: President Wilson explained that the M2D2 project in Lowell, as described at the December MLSC Board meeting, has had some great developments recently. M2D2 is a joint effort between UMASS Lowell and industry that is designed to combine the engineering expertise in Lowell with the clinical expertise of the Medical School to help inventors and entrepreneurs bring their medical devices from the idea stage to the clinical stage. President Wilson thanked the MLSC for their support and Undersecretary Gonzalez for helping to identify an appropriate way to get M2D2 funded. The result of this funding was a fantastic event with the Governor in Lowell where the Governor was very well received by the community there. President Wilson believes that M2D2 can be a model of a regional innovation center in the Commonwealth.

VIII. Life Sciences Talent Initiative Update

Ms. Walsh stated that the Life Sciences Talent Summit on February 1st was an unprecedented coming together of leaders from academia, public sector and industry. During the Economic Development Committee press conference last week, the Summit and the work of the LSTI was referenced as a resource in putting together pieces of the bill. She introduced Tom Chmura, Vice President of Economic Development at UMASS to give an update on the Initiative.

Mr. Chmura said that, thanks to the leadership of the MLSC Board, this was the first time that an event like this was ever held in the state. The event had terrific co-sponsorship from all of the industry groups: MassMEDIC, the Massachusetts Technology Collaborative, MLSC and UMASS. The event had over 300 people, far exceeding expectations. Secretaries Bump and O'Connell stayed all day, Genzyme occupying an entire table, Rep. Rodrigues stayed all day with Reps. Sanchez, Murphy and other legislators attending as well, Chris Gabrieli ran a workshop – it was a very high quality group, we were very fortunate to have Josh Boeger give the key note and the Governor address the crowd at lunch. The Donahue Institute was able to share its research and get feedback. As a nice example of the sort of thing you would like to see happen as a result of this, Genzyme used the event as an opportunity to announce that it was sponsoring a new scholarship internship at UMASS for the life sciences. The Board of Education might match this scholarship. This is a good example of public/private partnering.

Key findings: This is a very dynamic industry, growing much faster than any other sector in the economy. 80 – 90% of firms surveyed projected future growth in the next year or two. The industry is highly dependent on college graduates 4-year degree or higher, this is more true in the biopharma side of things, maybe less so in the medical device industry. The industry is also very dependent on foreign workers, which is a problem for the industry. Certain positions have high vacancy rates, such as medical scientists. The research shows a concern with the quality of undergraduate education. Industry appears to be more interested in more of an integrated science approach: not just teaching narrow biology, but linking biology with IT, for example. This is the type of experiential learning that Genzyme, for example, is more interested in. A half dozen companies have followed suit in coming to UMASS with ideas like this, following the Genzyme announcement. Donahue Institute will be examining more ways to be more integrated and systemic in linking where the programs are and where they are needed. Mr. Chmura again thanked the Center for helping to raise these issues. The Donahue Institute will complete a technical report and findings of Summit by March. They will meet with Advisory Committee in April and hope to finish final report and recommendations in May.

Ms. Walsh then asked if attendees would introduce themselves. [List is reflected above]

Ms. Walsh asked if there were any other issues that people wanted to raise. None were raised.

The meeting adjourned at 3:00 pm, upon motion of President Wilson.

Secretary