

**Empire State Stem Cell Board**  
**Full Board Meeting Minutes**  
**June 27, 2008**

The Empire State Stem Cell Board held a meeting on June 27, 2008, at the Department of Health offices, 90 Church Street, New York, New York. Commissioner Richard F. Daines, M.D., presided as Chairperson.

**Board Members Present:**

Dr. Richard F. Daines, Chairperson  
Mr. Kenneth Adams  
Fr. Thomas Vincent Berg  
Dr. Bradford Berk  
Mr. Robin Elliott  
Ms. Brooke Ellison  
Dr. Samuel Gorovitz  
Dr. Hilda Hutcherson  
Dr. Robert Klitzman  
Dr. Vivian Lee  
Rev. H. Hugh Maynard-Reid  
Msgr. William Smith  
Dr. Michael Stocker  
Dr. Daniel Sulmasy  
Mr. Robert Swidler  
Ms. Madelyn Wils

**Department of Health Staff Present:**

Dr. David Anders  
Ms. Bonnie Brautigam  
Ms. Judy Doeschate  
Mr. Michael Heeran  
Ms. Sharon Johnson  
Ms. Marti McHugh  
Ms. Amy Nickson  
Dr. Tia Powell  
Ms. Beth Roxland  
Dr. Lawrence Sturman  
Ms. Mary Szesnat  
Ms. Linda Tripoli

**Special Guest Present:**

Dr. Samuel Silverstein

**Observers Present:**

Dr. Michelle Cissell  
Mr. Ed Ellison  
Ms. Jean Ellison  
Ms. Barbara Meara  
Dr. Glenn Monastersky  
Ms. Kelly Ryan

**Introductions**

Chairman Daines called the meeting of the full Board to order and asked Board members and staff to briefly introduce themselves.

**Approval of Minutes for the May 13, 2008 Full Board Meeting**

Dr. Daines directed Board members to the draft minutes for the meeting of the full Empire State Stem Cell Board held on May 13, 2008, that were included in their agenda books under tab 5. Dr. Daines then asked for a motion to approve the minutes for the May 13, 2008 meeting of the full Board. Mr. Swidler so moved. Fr. Berg seconded the motion. The motion passed unanimously.

**Program Updates**

Dr. Daines advised members that all meetings of both Committees and the full Board would be including time for program updates. He noted this was being done in response to requests from some Board members who expressed an interested in being kept informed about the progress made with Requests for Applications (RFA) and program staff activities. He then turned the floor over to Dr. Sturman to provide the update.

Dr. Sturman advised members that the contracts for all twenty-five institutional development grant awards had been executed and that the first vouchers for those grants are due by July 31, 2008. He noted that program staff will be sending instructions and reminders to awardees this week.

Dr. Sturman advised the Board that NYSTEM staff had received letters of intent to submit applications for the four pending RFAs from investigators across the State in the following numbers: 26 for planning grants; 23 for shared equipment and facilities; 508 for innovative investigator-initiated research; and 79 for targeted research. He noted that the RFAs for curriculum development and summer internships at the undergraduate level have been held for possible issuance with another educational concept under development.

Dr. Sturman noted that the contract with the peer-review contractor, American Institute for Biological Sciences (AIBS), had been executed and that staff was working with the contractor to prepare for the review of the applications received in response to the current RFAs. Dr. Sturman expressed his appreciation for Dr. Varmus's efforts in reaching out to

potential reviewers to help ensure that highly qualified individuals are engaged in reviewing the applications. He advised members that if the current schedule holds, the Funding Committee should be voting on most of the RFAs in November and December.

Dr. Sturman also provided brief updates on plans being made for a scientific meeting in 2009, and for an RFP to contract for the development of scientific symposia for 2010-2014.

**Presentation: Secondary School Initiatives by Samuel Silverstein, M. D.**

Dr. Daines noted that members of both the Ethics and Funding Committees have expressed an interest in exploring ways that the Board might support educational programs involving stem cell research at the secondary school level. He advised members that Dr. Klitzman had suggested that Dr. Samuel Silverstein be brought in to discuss the work he and others have been doing at Columbia University to educate high school teachers as a means of increasing the success and interest of high school students in the sciences. He noted that Dr. Silverstein's work in pre-college science education earned him the 2003 New York City Mayor's Award for Public Understanding of Science and Technology and the 2005 American Society for Cell Biology's Bruce Alberts Award for Excellence in Science Education. He then turned the floor over to Dr. Silverstein.

Dr. Silverstein provided Board members with information about the importance of science education, the public's support of science education, and data reflecting substantial deficits in the public's knowledge about science. He noted that his colleague, John Miller, issued a paper in 2004 that concluded the best long-term strategy for increasing civic scientific literacy is to improve pre-collegiate education. He suggested that one of the most valuable things the Board could do is establish science work experience programs for intermediate and high school teachers at universities and medical schools in New York State similar to the program at Columbia University. Dr. Silverstein then provided information about Columbia's program.

Dr. Silverstein stated the program at Columbia University has brought in ten teachers a summer and pays them a stipend of \$6,000. Teachers are also given \$1,000 to take back to their schools to pay for supplies. The teachers work in laboratories side by side with research scientists and come for two summers, with the returning teachers helping orient the newer teachers. Dr. Silverstein advised members that the teachers brought into their program are teachers whose students are not doing as well on science exams as their colleagues. The pass rate for the students of teachers in the program have increased from 45% to 53% in the first year, and then 65% in subsequent years. He noted that since each teacher teaches about 100 students each year, a program with ten teachers each year has the potential to impact 1,000 students in the first year, 2,000 by the second year, and then, 8,000 by the third year with the new cohort of teachers. He advised members that the current cost of Columbia's program is about \$290,000 per year. He suggested this type of program provides a much more sustainable benefit than providing a course limited to one or two weeks. He advised members that the research shows that it takes between 80 and 120 hours of professional development to have a reproducible effect on student achievement.

Dr. Silverstein noted that he has encouraged the Board of Regents to include stem cells in the New York biology Regents curriculum and in advanced placement courses to help ensure students learn something about this topic with little additional cost. He also suggested informal learning environments, such as science museums, zoos and aquariums are good places to expand education about stem cells. His colleague, John Miller, has shown that this type of informal learning is actually more effective than four years of college for some people.

Ms. Wils asked Dr. Silverstein how the Board would identify the best use of its limited funds for pre-collegiate education. She expressed support for the idea of having a Regents component because it forces the situation. Dr. Silverstein acknowledged there were a lot of choices, and noted he thought the information provided in John Miller's papers provided direction. The two items he thought would impact the greatest number of people were science museums and websites, especially scientific films on websites.

Ms. Ellison inquired whether Dr. Silverstein had any data on the efficacy of third parties coming into the classroom and providing information to students on a more intermittent basis. Dr. Silverstein stated that the information he had was only anecdotal. When a faculty member helped set up a DNA laboratory in a very poor high school, the assistant principal called him up to let him know that every student in the school was going into the DNA laboratory and wanting to have their DNA tested to see how different they were. He said the assistant principal said it was very unusual to have their students talking about science at all, but everyone seemed to be excited by it.

Dr. Daines thanked Dr. Silverstein for his presentation and indicated staff would be coming back with a range of proposals informed by his presentation.

### **Strategic Plan: Discussion of Public Comments and Possible Adoption**

Dr. Daines directed the Board's attention to the draft Strategic Plan included in their agenda books under tab 7. He reminded members that at its last meeting the Board had agreed to post the draft Strategic Plan on the NYSTEM website and invite public comments. He advised members that the draft Strategic Plan had been posted on the NYSTEM website on May 15<sup>th</sup> along with an electronic comment form for the public to submit comments. The website also advised the public that they could submit comments in writing to Ms. Doesschate and provided her address. The Department of Health issued a press release announcing that the draft plan was available for public comment and an email-alert was sent to the over 200 individuals who had signed up to be advised of developments in the NYSTEM program. He noted that a June 13<sup>th</sup> deadline was established initially, but that this was extended to June 20<sup>th</sup> to provide greater opportunity for public comment before the June meeting.

He advised members that staff has reviewed all of the comments received. He stated that Fr. Berg had also recommended additional edits to the Strategic Plan, which were reviewed by the Ethics Strategic Plan Workgroup in a conference call on Monday and then by the Strategic Plan Coordinating Committee in a conference call on Tuesday. These discussions led to the development of the specific additional recommended edits that were

sent to Board members on Tuesday. Dr. Daines then turned the floor over to Dr. Sturman to provide more details on the comments received.

Dr. Sturman noted that in addition to the public being made aware of the plan's posting through email-alerts and the press release, several interest groups notified their constituencies of the plan's posting and provided a link to the electronic form on the website. He stated that approximately 1100 comments were received through the NYSTEM electronic form mechanism or emailed to the NYSTEM webmaster between the morning of May 16 and midnight of June 20th. In addition, approximately 125 letters were received by Ms. Doesschate as the designated contact for written comments. Dr. Sturman reported that comments were also submitted on behalf of the following organizations: New Yorkers for the Advancement of Medical Research; the National Council of Jewish Women/Hadassah; The Associated Medical Schools of New York; Concerned Women for America; the New York State Catholic Conference; the Pro-Choice Alliance for Responsible Research; The Association of Politically Active Christians; New Yorkers for Constitutional Freedom, and The New York State Right to Life Committee. Dr. Sturman mentioned that the letters from all of these organizations and the elected officials who had submitted comments were sent to Board members earlier in the week.

Dr. Sturman advised members that the comments contained in the correspondence sent to Board members reflected the types and substance of the comments submitted by individuals, although most comments from individuals were much shorter in length – sometimes a single sentence. He stated that the vast majority of comments did not reference provisions of the strategic plan itself, but addressed broad public policy issues. He noted that only a few submissions recommended specific changes to the draft Strategic Plan and that those expressed the need for changes as general concepts, rather than specific textual edits.

Dr. Sturman stated that the comments mostly focused on human embryonic stem cell research, with individuals expressing strong opinions for and against such research. He advised members that the majority of individuals submitting comments broadly expressed opposition to human embryonic stem cell research, cloning and human/animal hybrids, or to state funding of such research, and that a majority of submissions also expressed support for adult stem cell research. Some comments expressed support for the Strategic Plan as written and for all types of stem cell research. Many commenters expressed concerns about funding stem cell research in light of the State's fiscal status. Many also expressed appreciation for the opportunity to provide comments and encouraged continued public dialogue. A small number of the comments received expressed concerns specifically about women donating oocytes.

Dr. Sturman advised members that many of the comments were like those submitted by organizations and elected officials in that they expressed concern about the Funding Committee's failure to adopt the Ethics Committee's "unanimous recommendation of a six month, or brief, moratorium on funding embryonic stem cell research." He observed that it was not clear how this type of comment should be interpreted or categorized since the Ethics Committee's initial set of recommendations would have permitted funding of some forms of human embryonic stem cell research, the initial recommendations would have only applied to the first round of grants, and six months had already passed since the Ethics Committee made its recommendation.

Dr. Daines then opened the floor up to Board members. Mr. Elliott suggested that any responses sent to the individuals or organizations who submitted comments should respond to inaccuracies and provide clarifications. Fr. Berg stated he would be extremely uncomfortable voting on the Strategic Plan without having a better sense of the 1100 plus comments submitted and having an opportunity to peruse those comments. He suggested the public would expect that at least some of the Board members would have read their comments. Fr. Berg then moved to postpone adoption of the Strategic Plan until the next meeting of the full Board.

Dr. Gorovitz stated that he was not inclined to postpone adoption of the plan. Dr. Gorovitz stated that he had read all of the materials sent to Board members earlier in the week and asked whether there was any position, point of view, or argument contained in the submitted comments that is different than what the Board had already seen or heard about. He stated that if every point of view and argument submitted were contained in comments passed on to Board members, then he would rather rely on the judgment of staff and proceed to assess what was provided to the Board.

Dr. Klitzman agreed with Dr. Gorovitz and observed that the comments sent to Board members had certain themes that were not surprising. He noted that Board members are well-aware of the important national debate and that the arguments on both sides are not new to the Board. He noted the Strategic Plan was written with the understanding that the Board is working in that context.

Dr. Daines stated that staff had been provided with the direction to provide Board members with the full breadth of the comments and some weighting of the comments while keeping in mind it was not set up as a poll. Ms. Doesschate advised members that the only substantive comment submitted by an individual that is not reflected in the comments from organizations and elected officials that were provided to Board members is the suggestion that the first round of grants be nullified and pulled back. She noted that many of the comments received from individuals reflected the individual's personal perspectives, experiences, hopes, concerns, moral views and that she did not want to minimize the significance of those individual comments and views. However, the majority of the comments tended to use language that was repetitive and that the nature and substance of all of the comments received on the Strategic Plan were reflected in the materials provided to Board members. She noted that some of the correspondence sent to Board members provided good examples of individuals expressing their personal views and gave the Board a sense of the strength of many of the comments submitted by individuals. Dr. Daines advised members that he had spent considerable time with staff going over the process and how to categorize the content of comments and that he is confident the Board had received a good representation of the richness of the comments received

Fr. Berg acknowledged that Board members knew what the arguments were going to be and the tenor of the themes in the emails and correspondence. However, he felt that the way an individual worded his or her comments might affect the words used in the Strategic Plan.

Dr. Hutcherson commented that she was struck by the anger expressed in some of the comments, including those that suggested that the Board had acted in a disingenuous or dishonest manner, and questioned whether the Board would be able to satisfy everyone, even if it worked on the document for another year.

Ms. Wils agreed with Drs. Gorovitz, Klitzman, and Hutcherson and commented that this was similar to her experience with a lot of other public processes. She stated the Board has spent a lot of time discussing and working on the document and that the Board needs to begin work on implementing the plan. Ms. Wils suggested the Board needed to vote on Fr. Berg's motion.

Dr. Daines asked Fr. Berg to clarify his motion to delay adoption. Fr. Berg stated his motion would be to delay final consideration until the next full meeting of the Board. Dr. Daines asked for a second on the motion and none was forthcoming.

In response to a Board member inquiry, Dr. Daines asked Ms. Doesschate to review the proposed amendments to the draft Strategic Plan so that everyone would be clear about them. Ms. Doesschate ensured all members had a copy of the recommended revisions and then reviewed those amendments to the executive summary, the introduction, chapter 5, and the glossary. The edits clarified that the Board is committed to an open and transparent forum for debating the moral and ethic issues related to stem cell research; reiterated the statutory prohibition against human reproductive cloning; added the abbreviation "ELSIE" wherever "Education, Legal, Social Issues and Education" appeared; eliminated a reference to blastocyst when referring to ANT; added a phrase in Chapter 5 stating "[t]he Board recognizes that there are strongly held, divergent views;" modified the next sentence to eliminate the inference that only some believe that human embryos are living organisms; reordered two sentences on page 12; added a definition for "clone" in the glossary; and modified the definition for somatic cell nuclear transfer

Members suggested additional edits to: 1) insert (ELSIE) next to the appropriate heading on page 6; 2) change "more than that" to "more than those" on page 12; 3) insert "do not accept that premise and" on page 12, between "others" and "would argue;" 4) change "genomes" to "cells" or "genetic sequence" on page 13; 5) insert "and professional" between "public" and "understanding" in the last bullet on page 11; and 6) insert "but are not limited to" after "include:" prior to the listing of issues. After discussion of Fr. Berg's request that the diagram on page 10 be clarified to indicate that it shows a stage of an embryo, it was also agreed that the diagram would be labeled "Derivation of Stem Cells from Embryos."

Ms. Wils then moved to approve the Strategic Plan with all of the amendments discussed. Dr. Gorovitz seconded the motion. Dr. Sulmasy stated he would be voting against the plan because he thinks the plan forecloses debate on one of the substantive ethical issues - the sources of stem cells; the plan does not address the ethics of regenerative medicine; and the plan highlights embryonic stem cells as a source of stem cells in a way he does not think is balanced and credible. Dr. Klitzman noted that the document states that these are topics of ongoing discussion, and therefore, does not foreclose debate.

Dr. Daines then called the question. The motion passed with Mr. Adams, Dr. Berk, Mr. Elliott, Ms. Ellison, Dr. Gorovitz, Dr. Hutcherson, Dr. Klitzman, Dr. Lee, Rev. Maynard-

Reid, Dr. Stocker, Mr. Swidler, Ms. Wils, and Dr. Daines voting in favor. Fr. Berg, Msgr. Smith, and Dr. Sulmasy voted against the motion. There were no abstentions.

Dr. Daines thanked Dr. Stocker and Dr. Cissell for all their work on the document. He noted that while the vote was not unanimous, the document reflects a great deal of input from all parties and is a good initial plan.

### **Discussion of Annual Report and Possible Approval**

Dr. Daines reminded Board members that the statute creating the Empire State Stem Cell Board requires the Board to issue an annual report and that an outline of the annual report was discussed at the Board's last meeting. He directed members to the draft report found under tab 8 of their agenda books and solicited the Board's comments on the draft.

Fr. Berg suggested that the sentence in the Commissioner's introductory letter stating that the research "offers the promise of new treatments, therapies and even cures" should be toned down. Dr. Gorovitz concurred and recommended that the word "hope" be inserted in place of "promise." Dr. Daines agreed to make that change to his letter.

Mr. Swidler recommended that the paragraph on page 14 addressing the Ethics Committee's initial recommendations should be modified to clarify the Ethics Committee's intentions with regard to its initial recommendations. He stated he thought it was important to set the record straight in light of the distortion he saw in the comments submitted in opposition to the adoption of the draft Strategic Plan. He suggested that the sentence beginning "the most significant modification" should be modified to insert "was to exclude the use of first round funds" in place of "was the inclusion of a prohibition against using funds." He suggested that two sentences also be inserted following that sentence saying:

"The Ethics Committee recognized that its members held different views about the merits of supporting these categories of research, and that the committee had not yet had a substantive discussion about those merits. As a result, it thought it reasonable to hold off funding such research for the imminent first round, to allow for an initial discussion."

Dr. Klitzman agreed with this recommendation and suggested that "and the public" should be inserted after "members" in the first added sentence. Dr. Sulmasy voiced his agreement with Mr. Swidler's recommendation.

Mr. Elliott recommended several changes to the draft report. He noted that the issuance of the additional four RFAs were important and suggested that they should be described more fully in the annual report, including using the titles of the RFAs. Mr. Elliott also suggested that the report should mention that the Board had discussed providing support for secondary education initiatives, even though they had not been acted upon in the first year. He also suggested that Dr. Sturman's letter should mention the expeditious schedule for the four RFAs. He noted that while Dr. Sturman's letter highlighted the fast action on the first RFA and awards, the issuance of the subsequent RFAs was also impressive and should be mentioned, possibly including the number of months it took to issue those RFAs

Fr. Berg inquired whether the sentence on page 15 stating “the Committee reached a consensus that embryos, as defined in the Strategic Plan, are deserving of respect” accurately reflected the Ethics Committee’s conclusions at its last meeting. After some discussion, it was agreed that the report accurately reflected the consensus of the Ethics Committee.

Mr. Adams inquired about the exact time period the draft report covered. It was noted that annual reports tend to follow the State’s fiscal year, but since the Board only met for the first time at the end of October of 2007, it would have been difficult to produce and approve an annual report by April first. After further discussion, it was agreed that the time period for the first annual report should be flexible, but that in the future the Board should issue one for a twelve month period, perhaps ending on March 31<sup>st</sup> of each year.

Dr. Stocker then moved to approve the draft annual report as amended. Mr. Adams seconded the motion. The motion passed unanimously.

### **Update on the 2009 NYSTEM Grantees Conference**

Dr. Daines noted that the Board has had some very preliminary discussions regarding a potential conference for funded scientists in 2009 and referred members to a concept paper for a “grantees conference” in the spring of 2009 under tab 9 of their agenda books. He then turned the floor over to Dr. Sturman to provide Board members with an update on the plans being made.

Dr. Sturman advised members that since there was not enough time to arrange for an outside group to manage a conference this year, staff would be making arrangements for a grantee conference in 2009. He referred members to the concept paper and stated that staff has identified a location in Albany for a one day event. He stated that 100 to 150 individuals would be expected to attend, which would include several members from each institution that received awards, as well as from other institutions. Dr. Sturman advised members that a planning committee with representatives of several of the institutions would help decide which research abstracts should be turned into plenary talks, posters or workshop sessions. He reminded members that the initial awards stated that the travel costs associated with attending this conference could come from the grant itself. Dr. Sturman then asked members for their comments.

Dr. Gorovitz supported the basic outline, but expressed concern regarding the “intensive one-day” description of the event and encouraged staff to include unstructured time for real conversations and natural intellectual interactions between the researchers. Mr. Swidler concurred with Dr. Gorovitz that interaction should be a goal of the event and suggested that the event should also include individuals from other institutions that may be in different parts of the grant cycle. Dr. Sturman clarified that others would be able to attend, but that a preference would be given to those awarded funds between June, 2008 and the conference.

Dr. Berk suggested that the purpose needs to be well defined to ensure time is appropriately allocated and it meets its goals. Dr. Klitzman suggested granting scholarships to high school, college and graduate students to enable them to attend. Dr. Sturman noted that that is expected to occur in the future when there is more time to plan for the conference in 2010 and

thereafter which would include a bigger audience and a wider cross section of people, including people from outside New York and even the country.

Dr. Lee inquired if it was possible to expand the benefits of the initial conference by making the written materials available on the NYSTEM website and video recording the presentations to make them available on the web as well. Dr. Sturman stated there are potential budgetary considerations that need to be addressed, but that it probably could be done. Dr. Lee urged staff to make that available. She noted that the main attraction for this event is for the New York community of scientists and that could differentiate this stem cell meeting from others. She observed that since the program is encouraging integration and interaction across the New York State programs, there is significant motivation for people who are unable to attend to understand what transpired so they can identify potential collaborators.

### **Adjourn and Break**

Dr. Daines then asked for a motion to adjourn the meeting of the full Board. Dr. Gorovitz so moved and Dr. Stocker seconded the motion. The motion passed unanimously.

*Approved: June 11, 2009  
s/ Judy L. Doeschate, Esq.  
Executive Secretary to the  
Empire State Stem Cell Board*