

**Empire State Stem Cell Board**  
**Full Board Meeting Minutes**  
**December 11, 2009**

The Empire State Stem Cell Board held a meeting on Friday, December 11, 2009, at the Department of Health offices, 90 Church Street, New York, New York. Commissioner Richard F. Daines, M.D., presided as Chairperson.

**Funding Committee Members Present:**

Dr. Richard F. Daines, Chairperson  
Mr. Kenneth Adams  
Dr. Bradford Berk\*  
Mr. Robin Elliott  
Dr. Gerald Fischbach  
Dr. David Hohn,\*

\*via videoconference

Dr. Bruce Holm\*  
Dr. Hilda Hutcherson  
Dr. Allen Spiegel  
Dr. Michael Stocker  
Ms. Madelyn Wils

**Funding Committee Members Absent:**

Dr. Richard Dutton

**Ethics Committee Members Present:**

Fr. Thomas Berg  
Ms. Nancy Dubler  
Ms. Brooke Ellison  
Dr. Samuel Gorovitz\*

\*via videoconference

Dr. Robert Klitzman  
Dr. Vivian Lee  
Dr. Samuel Packer  
Mr. Robert Swidler

**Ethics Committee Members Absent**

Rev. H. Hugh Maynard-Reid

**Department of Health Staff Present:**

Ms. Bonnie Brautigam  
Dr. Kathy Chou  
Ms. Judy Doesschate  
Dr. Matthew Kohn

Ms. Beth Roxland  
Ms. Lakia Rucker  
Dr. Lawrence Sturman  
Ms. Kathy Zdeb

**Special Guest Present:**

Dr. Alan Friedman

**Observers Present:**

Ms. Lourdes Bahamonde  
Mr. Matthew Bahamonde  
Ms. Jean Ellison  
Mr. Ed Ellison  
Ms. Crystal Mainiero  
Mr. David McKeon

Ms. Caroline Marshall  
Ms. Katalin Polgar  
Ms. Kristin Smith  
Ms. Susan Solomon  
Ms. Kelly Ryan

## **Approval of Minutes for the June 11, 2009, Full Board Meeting**

Dr. Daines directed members to the draft minutes for the June 11, 2009, meeting of the full Board included in their agenda books and asked for a motion to approve the minutes. Dr. Packer so moved and Dr. Lee seconded the motion. Fr. Berg noted that he was abstaining due to his absence from that meeting. The motion passed.

## **Discussion of Draft Annual Report Outline**

Dr. Daines then turned the floor over to Dr. Sturman to facilitate discussion of the Board's next annual report. Dr. Sturman referred members to the draft outline enclosed in their agenda binders. He noted that the outline includes the items presented in the Board's 2008-2009 annual report, with a few additions. He advised members that the research abstracts would not be included in the annual report, but that the report would provide links to the abstracts on the NYSTEM website. He then asked members for their comments and suggestions.

Members expressed support for the report to be prepared in a manner similar to the prior year's report. Dr. Klitzman suggested that the report should include information about the recent shifts in federal policy and highlight how current federal policies exemplify the importance of New York's stem cell research program.

Dr. Sturman concluded the discussion by encouraging members to contact him or Ms. Doesschate with any further thoughts about the annual report.

## **Program Updates**

Dr. Sturman noted that a chart with the status of all Requests for Applications (RFAs) and awards was provided in the Committee's agenda binders. He also distributed charts that showed the expenditures proposed in the strategic plan versus the program's actual expenditures to date. He noted that infrastructure funding already exceeded the planned expenditures for the first five years, but that funding for research, scientific training and Ethical, Legal, and Social Issues Education had not yet met the five-year targets set forth in the plan. Dr. Sturman noted that some of the infrastructure commitments would provide funding beyond the initial five-year investment and that these types of projects needed to be funded earlier in the program to ensure that investigators have access to the equipment and facilities needed to conduct stem cell research.

In response to a question about how NYSTEM compared to the National Institutes of Health (NIH) funding for stem cell research at New York State institutions, Dr. Sturman advised members that NYSTEM is currently funding more stem cell research in New York State than NIH. He stated that he hopes that the State's investment will attract new investigators and retain existing investigators while advancing the science. Dr. Sturman also noted that NYSTEM's impact has been the biggest in the area of increasing interaction and collaboration among New York State researchers. When asked to compare NYSTEM's funding distributions to California's, Dr. Sturman reminded members that California's investment in infrastructure includes the construction of actual buildings, which causes a greater proportion of their funding to go to infrastructure than New York's, but that NYSTEM's distribution is otherwise similar to California's.

Dr. Sturman concluded his report by noting that the next annual scientific conference is scheduled for Wednesday, May 26, 2010, and Thursday, May 27, 2010, at the CUNY Graduate Center on Fifth Avenue and 34<sup>th</sup> Street and that the planning committee for the conference includes Ira Cohen, Ihor Leminschka, Steven Goldman, Lorenz Studer, Ruth Lehmann and Gordana Vunjak-Novakovic.

**Presentation: “Learning Science in Informal Environments” by Dr. Alan Friedman**

Dr. Daines introduced Dr. Alan Friedman and reminded members that Dr. Friedman had previously presented information to the Ethics Committee about developing educational and other programs to engage the public. Dr. Daines then turned the floor over to Dr. Friedman.

Dr. Friedman advised members that he was offering a roadmap for making choices in how to carry out the Board’s goal in its strategic plan of engaging:

“...diverse communities in order to enhance public understanding of critical ethical, legal, and social issues and provide opportunities for education on stem cell research and its impact on society.”

He stated that there are many ways the Board might fulfill this goal and suggested the Board should first answer the following questions to narrow their options: 1. Who do you want to reach? 2. What information do you want them to receive? 3. How much money do you want to spend? and 4. How fast do you want to reach the audience?

Dr. Friedman stated that informal learning is a good way to reach a large audience through channels such as television programs, books, magazines, the internet, libraries and exhibits. He advised members that a recent report issued by the National Research Council, the National Academy of Science and the National Science Foundation on learning science in informal environments confirmed that most people learn most of what they know about science outside of the classroom. He informed the Board that 61 percent of all U.S. adults visit science exhibitions of one form or another each year.

Dr. Friedman stated that radio programs, booklets and websites have become highly developed over the years and are a viable medium for presenting information on stem cell research. He advised members that a wide range of exhibit venues can reach large audiences, but that they take several months to years to develop. Dr. Friedman provided examples of exhibits in Maryland and Minnesota that were successful and suggested the Board could minimize costs by sponsoring an established exhibit to travel throughout New York State.

Dr. Friedman concluded his presentation by recommending that the Board develop a small workgroup of three or four people to address the key questions he raised and develop specific recommendations for the Board to consider.

**Discussion of Formal and Informal Education Proposals**

Dr. Daines then turned the floor over to Dr. Sturman to facilitate the Board’s discussion of possible formal and informal educational proposals.

Dr. Sturman began the discussion by asking Dr. Friedman about the importance of online materials in connection with an exhibit. Dr. Friedman stated that there isn't sufficient evidence to conclude that websites are a vital part of a museum program's effectiveness. He noted that very few people who visit museums visit the website, and that others who use the website usually do not visit the museum. Dr. Friedman suggested that websites may be used to keep exhibits up-to-date. He noted that exhibits usually have a life span of three to five years and that they should not be used for topics where the information changes dramatically and quickly.

Mr. Adams recommended that the voting public should be a primary target audience for any educational program because they can place pressure on elected officials to continue funding for the NYSTEM program. He suggested that the most effective way of doing that would be through a public relations media campaign. He recommended that the program seek professional expertise in this area by hiring a public relations firm. Mr. Elliott concurred with Mr. Adams' recommendation and suggested that the program should start by addressing what is newsworthy in the stem cell science field generally, as well as what emerges from the research supported by the NYSTEM program.

Dr. Klitzman noted that members of the Ethics Committee had expressed a preference for targeting teachers and journalists because those groups can impact many people over time. He asked Dr. Friedman for his thoughts on how to reach members of the public who may not visit a science museum or website.

Dr. Friedman suggested that there are many avenues that can be used to reach audiences, including those who do not go to a museum or use the internet. He noted that public surveys have shown that Al Gore's campaign using a PowerPoint presentation and a documentary to educate people on global warming has been very successful. He reminded members that the National Aeronautics and Space Administration's campaign was one of the earliest uses of the media to secure public support for a significant investment in that field. Dr. Friedman acknowledged that television is another major channel for reaching audiences that do not go to museums or websites, but getting it covered on television can be difficult because any programming needs to pass through "gatekeepers." He advised members that a way to address this is to write a piece in the outlet's preferred format and fit it to their particular timeframe.

Dr. Sturman advised members that he has visited universities throughout the State to gather information on ways to reach journalists and journalism students effectively. He stated that he received many good suggestions, which included developing undergraduate multimedia courses with a focus on stem cell research, providing a stipend to support graduate students on a science reporting track who are working on their thesis, establishing a fellowship for mid-career journalists to work on a substantial piece of reporting and developing continuing education programs for working journalists.

Dr. Sturman advised members a problem with getting stem cell research covered in the media is that freelancers are on the rise while science writers are on the decline and many newspapers no longer include a section devoted to science or health issues. He suggested that generalists also need to be provided with a grounding in science. Dr. Sturman mentioned that there are many organizations with an interest in supporting innovative approaches to news

delivery such as the Carnegie Foundation and the Knight Foundation, both of which support topic-specific websites.

Dr. Sturman stated that he will present more information to the Board after he meets with others with experience in the science communication and documentary film fields. Dr. Sturman also supported Dr. Friedman's recommendation that a workgroup be developed to wrestle with these issues and asked for volunteers.

Ms. Ellison suggested that any program developed by the Board should conclude with a series of actionable steps that the public can undertake to get involved, such as writing letters to editors or contacting members of the New York State Legislature or Congress.

Mr. Swidler supported the development of a documentary and suggested it should be a priority of the NYSTEM program. He emphasized that it is important to know what the Board wants to accomplish when it engages the public and suggested the Board's goals should be to inform the public about the stem cell research the Board is funding and encourage support for stem cell research. Dr. Klitzman asked if staff could provide the Board with information about existing documentary films relating to stem cell research. Dr. Friedman suggested that if the Board decides to make a documentary, the Board should also consider how it would make sure the documentary is seen once it is made.

Members discussed whether there are gender issues related to science learning that the Board could address and whether the goal should be to reach older audiences or younger audiences for longer term benefits. Members suggested that social networking mediums, such as Twitter and YouTube, should be considered to reach younger audiences. Dr. Spiegel suggested the Board should consider following the NIH's fellowship program for journalists that has them embedded with researchers for a period of time. Dr. Lee also suggested that NYSTEM staff contact the Tisch School for the Arts at New York University to learn about the ways they have attempted to reach younger audiences on a variety of issues.

Dr. Sturman advised members that staff is not looking at just one type of project or avenue and would be considering several possible avenues for outreach and education. He noted that he will be visiting the Maryland exhibit while in Washington and will offer feedback when the topic is discussed more thoroughly.

Dr. Sturman then asked members to provide feedback on the concept proposal included in their binders for summer research experience for secondary school science teachers. Dr. Hutcherson expressed support for the concept paper and suggested including teachers who teach younger students, such as fourth and fifth graders. She also recommended that the proposal include preference for public school teachers over private school teachers due to the lack of resources for teachers who work in disadvantaged neighborhoods. Dr. Hutcherson also suggested that there be an outside evaluation of the program so that the Board can take that into consideration before deciding whether it should continue to fund this type of project in the future. Ms. Wils questioned whether there would be a requirement to ensure that teachers would convey the information learned to students through classroom work, seminars or after school programs. Dr. Spiegel supported the proposal noting that most science teachers have no hands-on experience in science and that teachers who have had this type of experience have seen their students become more successful on the regent's exam.

Dr. Sturman advised members that he and staff will consider the Board's suggestions while it prepares a draft RFA that will be presented to the Funding Committee in the near future.

**Adjourn**

Dr. Daines then asked for a motion to adjourn the full Board meeting. Dr. Hutcherson so moved and Ms. Wils seconded the motion. The motion passed.

*s/ Judy L. Doesschate, Esq.  
Executive Secretary to the  
Empire State Stem Cell Board  
Approved: May 21, 2010*