

**Empire State Stem Cell Board**  
**Funding Committee Meeting Minutes**  
**May 22, 2012**

The Empire State Stem Cell Board held a meeting on Tuesday, May 22, 2012, at the offices of the Department of Health, 90 Church Street, New York, New York. Commissioner Nirav R. Shah, M.D., M.P.H., presided as Chair.

**Ethics Committee Members Present:**

Dr. Samuel Gorovitz

**Funding Committee Members Present:**

Dr. Nirav R. Shah, Chairperson

Mr. Robin Elliott

Dr. David Hohn, Vice Chair

Dr. Richard Gronostajski

Dr. Hilda Hutcherson

Dr. Mario Loomis

Dr. Allen Spiegel

Dr. Dr. Michael Stocker

Ms. Madelyn Wils

**Funding Committee Members Absent:**

Dr. Bradford Berk

**Department of Health Staff Present:**

Dr. David Anders

Ms. Bonnie Brautigam

Dr. Kathy Chou

Ms. Janet Cohn

Ms. Susie Han

Dr. Matthew Kohn

Ms. Valerie Koch

Ms. Beth Roxland

Ms. Lakia Rucker

Dr. Lawrence Sturman

**Observers Present:**

Mr. Lawrence Connolly

Mr. Robert Feldman

Ms. Julia Gelman

Mr. Ronald Goldman

Ms. Mary Greene

Mr. Ted Lawson

Mr. Scott Lipnick

Mr. Edward Reinfurt

Ms. Kristin Smith

Ms. Phoebe Stone

**Motion to Convene in Executive Session**

Dr. Shah advised members and the public that the Committee needed to go into executive session to discuss the evaluations of the applications submitted in response to the Request for Applications (RFAs) for Investigator-Initiated Research Projects (IIRP) and Innovative, Developmental or Exploratory Activities (IDEA) in Stem Cell Research; Short-Term Faculty Training, and Collaborative Opportunities; and Empire State Medical, Dental and Veterinary

Student Stem Cell Research Training Program. Dr. Stocker so moved and Dr. Gronostajski seconded the motion. The motion passed unanimously.

Dr. Shah then asked members of the public and non-essential staff to leave the room and advised them that the Committee was expected to reconvene in public session at approximately 2:30 p.m.

### **Executive Session**

Dr. Shah noted that a few members of the Committee would need to be recused for the discussion of specific applications, but that Dr. Sturman would first be providing members with information about the evaluation process and reviewing the applications for which there were no conflicts of interest. Ms. Brautigam then discussed the evaluation criteria included in the RFA and Dr. Sturman provided members with information about the peer review evaluation and scoring process.

Several Committee members expressed concern about established investigators receiving more than one award and felt that applications within the tie breaker range should be prioritized based on programmatic balance, early stage investigators, and invitation of new investigators to the field. Committee members expressed support for the criteria recommended by Dr. Sturman for selecting among the applications receiving the same overall scores and commented that the criteria were rational, appropriate and consistent with the desired emphasis.

The Committee was then provided with information relating to the individual applications while members who were identified as having a potential conflict of interest for certain applications left the room during consideration of those applications.

### **Motion to Adjourn Executive Session**

Dr. Shah then asked for a motion to adjourn the executive session and reconvene in public. Dr. Hohn so moved and Dr. Stocker seconded the motion. The motion passed.

### **Public Session - Opening Remarks and Introductions**

Dr. Shah called the meeting to order and welcomed Board members, staff and the public. He then asked members and staff to introduce themselves.

### **Recommendations for Approval of Awards**

Following the introductions, Dr. Shah advised the Committee that it would be first voting on its recommendations for awards to applicants who responded to the RFAs for funding of IIRP; IDEA; Short-Term Faculty Training and Collaborative Opportunities; and Empire State Medical, Dental, and Veterinary Student Stem Cell Research Training Program awards. He noted that the Committee would first consider applications received for the two training RFAs

because there were no conflicts of interests, and that any member with conflicts of interests needs to recuse themselves during the IDEA and IIRP voting.

Ms. Brautigam provided an overview of the evaluation criteria and process. Ms. Brautigam advised members that they would first act on the recommendation for the Institutional award for Short-Term Faculty Training and Collaborative Opportunities. Dr. Sturman then provided the Committee with the application number, sponsoring institution, the name of the principal investigator, and recommended funding amount for the following application:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11F-001	Nikitin, Alexander	Cornell University	Cornell Short Term Faculty Training and Collaborative Opportunities Program	\$31,500

Dr. Stocker moved to recommend approval of the award in the amount recommended by staff. Dr. Hohn seconded the motion. The motion passed.

Next the Committee considered the applications that were received in response to the RFA for the Empire State Medical, Dental and Veterinary Student Stem Cell Research Training Program. Dr. Sturman then provided the Committee with the application numbers, sponsoring institutions, the name of the principal investigators, proposal titles, and recommended funding amounts for the following application:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11M-001	Ghazizadeh, Soosan	SUNY at Stony Brook	Stony Brook Dental School Stem Cell Training Program	\$71,636
N11M-002	Fortier, Lisa A.	Cornell University	Stem cell training of Veterinary students to foster the development of cross-trained stem cell scientists in New York State.	\$76,617

Dr. Stocker moved to recommend approval of the award in the amount recommended by staff. Dr. Loomis seconded the motion. The motion passed.

Dr. Shah stated that the Committee would now be voting on applications received in response to the third round of IIRP and IDEA awards beginning with those that have no conflict of interests. Dr. Sturman provided members with the application numbers, sponsoring institutions, the name of the principal investigators, proposal titles, and recommended funding amounts for the following application:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11G-083	Lai, Eric C.	Sloan-Kettering Institute	Control of Neural Stem Cell Identity by the Zinc Finger Protein Ars2	\$1,058,640

N11G-091	Temple, Sally	Regenerative Research Foundation	Stem Cell Based Models of Retinal Disease	\$326,400
N11G-138	Goldman, Steven	University of Rochester	Human Induced Pluripotential Cell (iPSC)-Derived Oligodendrocyte Progenitor Cells for the Treatment of Myelin Disorders	\$1,077,552
N11G-180	Thomsen, Gerald H.	SUNY at Stony Brook	The Function of Stem Cells in Sea Anemone Regeneration	\$325,000
N11G-042	Evans, Todd	Weill Medical College of Cornell University	Discovery of Novel Retinoids for Stem Cell Biology	\$330,000
N11G-025	Ma, Yupo	SUNY at Stony Brook	Transformation of Stem Cell Based Transplantation Therapy	\$1,077,486
N11G-118	Wang, Jianlong	Mount Sinai School of Medicine	Connecting the Tet proteins to the pluripotency network	\$1,079,000
N11G-152	Ezhkova, Elena	Mount Sinai School of Medicine	Characterization of multipotent embryonic skin stem cells	\$330,000
N11G-160	Nikitin, Alexander Y.	Cornell University	Roles of Ovarian Surface Epithelium Stem Cells	\$1,042,227
N11G-211	Liu, Jun	Cornell University	Induced cellular reprogramming in C. elegans	\$320,966
N11G-229	Brivanlou, Ali H.	The Rockefeller University	Directed differentiation of human embryonic stem cells to defined neocortical subtypes	\$1,080,000
N11G-262	Ptashne, Mark	Sloan-Kettering Institute	Chromatin Structure and the role of Myc and Variants thereof in Pluripotency, Differentiation, and Cancer	\$1,044,317
N11G-035	Benoit, Danielle S.	University of Rochester	Promoting MSC-mediated musculoskeletal tissue regeneration using sustained, localized siRNA delivery	\$314,494

Dr. Spiegel moved to recommend approval of the award in the amount recommended by staff. Dr. Gronostajski seconded the motion. The motion passed.

Dr. Hutcherson recused herself and left the room during consideration of the following applications:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11G-057	Doetsch, Fiona K.	Columbia University	MicroRNA Regulation of Adult Neural Stem Cells	\$1,023,290
N11G-077	Vunjak-Novakovic, Gordana	Columbia University	Spatial-Temporal Studies of Stem Cells Using a Microbioreactor Platform	\$1,077,792
N11G-249	Sussel, Lori	Columbia University	Regulating the Directed Differentiation of CNS and Pancreatic Islet Cell Populations	\$325,778
N11G-002	Laufer, Edward M.	Columbia University	Canonical Wnt Signaling Regulation of Adrenocortical Stem Cells	\$330,000
N11G-056	Doetsch, Fiona K.	Columbia University	Three-Dimensional High Resolution Reconstruction of the In Vivo Adult Neural Stem Cell Niche	\$328,359
N11G-214	Christiano, Angela	Columbia University Medical	Skin regeneration in the setting of epidermal stem cell ablation	\$330,000

Dr. Spiegel moved to recommend approval of the award in the amount recommended by staff. Dr. Stocker seconded the motion. The motion passed.

Dr. Hutcherson returned to the room and Dr. Shah asked Dr. Hohn to chair the meeting while he recused himself and left the room during consideration of the following applications:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11G-071	Hubbard, E. Jane Albert	New York University School of Medicine	Aging Stem Cells	\$330,000
N11G-147	Reinberg, Danny F.	New York University School of Medicine	Understanding How Erk Signaling Promotes Lineage Competence Through Chromatin Regulation	\$329,946
N11G-202	Schneider, Robert	New York University School of Medicine	Translational Regulation for Treatment of the Breast Cancer Stem Cell	\$1,080,000

N11G-132	Smith, Susan	New York University School of Medicine	The Molecular Mechanism of Stem Cell Dysfunction in TIN2-Associated Dyskeratosis Congenita	\$360,000
N11G-255	Aifantis, Iannis	New York University School of Medicine	Regulation of Pluripotency and Stem Cell Differentiation by the Ubiquitin-Proteasome System	\$1,080,000
N11G-032	Fishman, Glenn I.	New York University School of Medicine	Directed Differentiation of Cardiac Purkinje Cells from ESCs	\$986,819
N11G-292	Bach, Erika A.	New York University School of Medicine	Genetic circuits that regulate self-renewal and niche competition in the testis	\$1,067,116

Dr. Spiegel moved to recommend approval of the awards in the amounts recommended by staff. Dr. Stocker seconded the motion. The motion passed.

Dr. Shah returned to the room and Dr. Spiegel recused himself and left the room during consideration of the following applications:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11G-207	Guo, Wenjun	Albert Einstein College of Medicine	Understanding the Role of Normal Mammary Stem Cell Program in Breast Cancer Stem Cells	\$330,000
N11G-273	Bouhassira, Eric E.	Albert Einstein College of Medicine	Clinical Grade iPS	\$330,000
N11G-041	Steidl, Ulrich	Albert Einstein College of Medicine	Regulation of Hematopoietic Stem Cell by the Chromatin-Remodeling Protein SATB1	\$1,080,000

Dr. Hohn moved to recommend approval of the awards in the amounts recommended by staff. Dr. Loomis seconded the motion. The motion passed.

Dr. Spiegel returned to the room; while Drs. Hohn and Gronostajski recused their selves and left the room during consideration of the following applications:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11G-188	Sim, Fraser James	SUNY at Buffalo	Directed Reprogramming of Human Fibroblasts to Oligodendrocyte Progenitors	\$329,984
N11G-252	Feng, Jian	SUNY at Buffalo	Redefining Idiopathic Parkinson's Disease through Induced Pluripotent Stem Cells	\$1,080,000

Dr. Spiegel moved to recommend approval of the awards in the amounts recommended by staff. Dr. Stocker seconded the motion. The motion passed.

Drs. Hohn and Gronostajski returned to the room and the Committee then took up additional applications which would be approved but not funded. They first voted on the following application for which there was no potential conflict of interest:

App #	PI	Sponsoring Institution	Proposal Title	Recommended Funding
N11G-259	Wang, Jianlong	Mount Sinai School of Medicine	Deciphering The Nanog Code for Stem Cell Pluripotency and Somatic Cell Reprogramming	\$933,902
N11G-291	Soloway, Paul D.	Cornell University	Tools for Single Molecule Analyses of Stem Cell Quality	\$945,241

Dr. Stocker moved to recommend approval of the awards in the amounts recommended by staff. Dr. Spiegel seconded the motion. The motion passed.

Dr. Shah then recused himself and left the room while the Committee considered the following applications:

App #	Sponsoring Institution	PI	Proposal Title	Recommended Funding
N11G-081	New York University School of Medicine	Aifantis, Iannis	The TET-family proteins in hematopoietic stem cell differentiation and transformation	\$1,002,979

Dr. Spiegel moved to recommend approval of the awards in the amounts recommended by staff. Dr. Stocker seconded the motion. The motion passed and Dr. Shah returned to the room.

### **Approval of Minutes for the November 14, 2011, Funding Committee Meeting**

Dr. Shah directed members to the draft minutes of the November 14, 2011, meeting of the Empire State Stem Cell Board and asked for a motion to approve them. Dr. Stocker so moved and Dr. Loomis seconded the motion. The motion passed unanimously.

## **Discussion and Possible Vote of Request for Applications for Investigator Initiated Research Projects (IIRP) and Innovative, Developmental or Exploratory Activities (IDEA) in Stem Cell Research**

Dr. Shah directed members to the fourth round RFA for Investigator Initiated Research Projects (IIRP) and Innovative, Developmental or Exploratory Activities (IDEA) in Stem Cell Research which was located within their meeting materials. He then turned the floor over to Ms. Brautigam.

Ms. Brautigam advised members that staff incorporated changes based on previous discussions with the Committee and the Institutional Review Board panel members which include who may apply, relative to the number of applications that an investigator may submit in any of the funding mechanisms IDEA or IIRP; an administrative review for essentially being debarred from doing business with the government; and explicit prohibition that program funds can't be used to supplant or duplicate other existing support for the same work. Additionally, she stated that there would be maximum salary cap of \$199,700, reduced compliance penalties, and implementing the National Institutes of Health (NIH)'s new scoring system between one and nine.

Dr. Shah inquired whether a frequently asked questions document could be drafted which contained scenarios of the types of research the Board is interested in supporting. Ms. Brautigam responded that staff could craft language in the purpose of the funds section of the RFA that would more carefully eliminate those that are not truly programmatically relevant to the mission of the Board.

Dr. Shah asked for a motion to approve the fourth round RFA for Investigator Initiated Research Projects (IIRP) and Innovative, Developmental or Exploratory Activities (IDEA) in Stem Cell Research. Dr. Hohn so moved and Dr. Stocker seconded the motion. The motion passed unanimously.

## **Discussion and Possible Approval of Revisions to Appendix A-2**

Ms. Brautigam advised members that the revisions made to Appendix A-2 occurred in sections A, B, C, D, and F with the intention of refining the legal citation and making the document clearer. She noted that grammatical clarifications were made to section E and that there were no changes to the intent of what the Board had put forth originally. Ms. Brautigam then stated the Ethics Committee had approved the changes in the morning during their meeting.

Dr. Shah asked for a motion to approve the revisions to Appendix A-2. Dr. Stocker so moved and Dr. Spiegel seconded the motion. The motion passed unanimously.

## **Adjourn**

Dr. Shah then asked for a motion to adjourn the meeting of the Funding Committee. A motion was made and seconded. The motion passed unanimously.

*s/ Janet Cohn  
Executive Secretary to the  
Empire State Stem Cell Board  
Approved: September 24, 2012*