

Adopted: July 16, 2013

CONNECTICUT STEM CELL RESEARCH ADVISORY COMMITTEE
Minutes – Special Meeting
Monday, June 10, 2013

A special meeting of the Connecticut Stem Cell Research Advisory Committee (“Advisory Committee”) was held on Monday, June 10, 2013, at the Sheraton Hartford South, 100 Capital Boulevard, Salon A & B, Rocky Hill, Connecticut.

Call to Order: The meeting was called to order at 8:43 a.m. Members present: Treena Livingston Arinzeh, Ph.D.; Richard H. Dees, Ph.D.; Sandra Engle, Ph.D.; Gerald Fishbone, M.D.; Myron Genel, M.D.; David Goldhamer, Ph.D.; Ronald Hart, Ph.D.; James Hughes, Ph.D.; Ann Kiessling, Ph.D.; Diane Krause, M.D., Ph.D.; Jewel Mullen, M.D., M.P.H., M.P.A.; Paul Pescatello, J.D., Ph.D.; and Milton B. Wallack, D.D.S.

Other Attendees: Cheryl Allevo (CI); Isolde Bates (UCONN); Terri Clark (CASE); (CI); Marianne Horn (DPH); Joseph Landry (CI); Marc Lalande (UCONN); Claire Leonardi (CI); Sangamesh Kumbar (UCHC); Kevin Lo (UCONN); Daisy Ramos (UCONN); Rick Strauss (CASE); Paula Wilson (Yale); Ren-He Xu (UCONN).

Opening Remarks:

Attorney Horn welcomed everyone and stated that funding for the 2013 grant round is contingent upon the receipt of funds from the State Bond Commission. She noted that only those members eligible to vote on a proposal should participate in the discussion and vote on the proposal. Attorney Horn noted that the meeting is a public meeting, and the discussions should be focused on the proposals being discussed. She asked the Advisory Committees to refrain from discussions about the proposals with the public or any of the other members during the breaks or lunch. Attorney Horn indicated that the reviews will begin with the Cores, Group, and Disease Specific Group proposals followed by the Established Investigator and Seed proposals. There are 53 proposals to be reviewed. In an effort to keep on track, Ms. Allevo reviewed the times proposed to be allotted to review and discuss each the proposals from the respective categories. Following initial review, each of the proposals will be put into one of three categories—1) Yes Fund, 2) Maybe Fund, or 3) Not Fund. If a member has an objection, Attorney Horn asked that he or she express their objection immediately, and the proposal will be placed in the Maybe Fund category for further discussion during the second phase of the review.

Attorney Horn summarized the process agreed upon by the Advisory Committee members at the May 1, 2013 meeting for selecting the proposals from each category that would be reviewed by the Advisory Committee members.

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Attorney Horn mentioned that following the selection of proposals to receive grant funding, additional proposals should be selected for a reserved list in the event one or more grants fail. She stated that if the Advisory Committee members need to discuss the information identified as proprietary, it may be necessary to go into executive session. Attorney Horn asked the members of the public not to address any questions that may be arise during the meeting and noted that there is a public comment period at the end of the meeting.

Dr. Mullen reminded the Advisory Committee members to be as objective as possible during the review and to stay within the guidelines agreed upon.

Review of Core Proposals:

Dr. Wallack and Dr. Pescatello discussed the following two Core grant proposals:

- 13-SCD-YALE-01, Dr. Lin, principal investigator, grant request of \$500,000
- 13-SCD-UCHC-01, Dr. Xu, principal investigator, grant request of \$500,000

The Advisory Committee members discussed the science, the proposed projects, the peer review scores and peer review recommendations. A question arose about the funding of core facilities and whether funding should continue for core facilities. Some of the issues discussed in previous meetings were again discussed (i.e. funding cores for new areas of science and/or continuing to scale back funding for cores). The Advisory Committee members discussed the importance of the core facilities and noted that requests have been made for cores to move in the direction of becoming self-funded through cost recovery, philanthropic funding, etc. Dr. Wallack and Dr. Pescatello, the Advisory Committee reviewers for the two proposals, indicated that proposal 13-SCD-YALE-01 lists the additional philanthropic funding that has been obtained. A suggestion was made to reiterate to the cores the need to become self-funded and continue to taper funding down each year.

There being an objection to putting grant proposal 13-SCD-YALE-01, Dr. Lin, principal investigator, in the Yes Fund category, the proposal was put into the Maybe Fund category.

Dr. Pescatello noted that grant proposal 13-SCD-UCHC-01 lists new aims but does not specify how it plans to become financially self-sufficient.

Maybe Fund Core Proposals:

- 13-SCD-YALE-01
- 13-SCD-UCHC-01

Review of Group Proposal:

The two Advisory Committee primary reviewers discussed the Group proposal for grant 13-SCC-WES-01, Dr. Naegele, principal investigator, grant request of \$1,488,229. The science, proposed project, peer review scores, and proposed funding level were discussed.

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MOTION: Upon a motion made by Dr. Goldhamer, seconded by Dr. Arinzeh, the eligible Committee members voted unanimously in favor of putting Group grant proposal 01-SCC-WES-01, Dr. Naegele, principal investigator, in the Preliminary Yes Fund category. **VOTE: 13-0-0** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Goldhamer; Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack) **MOTION PASSED**

Preliminary Yes Fund Group Proposal:

- 01-SCC-WES-01

Review of Disease-Directed Group Proposals:

The respective Advisory Committee primary reviewers discussed the following five Disease-Directed Group proposals:

- 13-SCDIS-JAX-01, Dr. Xian, principal investigator, grant request of \$2,000,000
- 13-SCDIS-UCHC-01, Dr. Torti, principal investigator, grant request of \$1,999,864
- 13-SCDIS-ISB-01, Dr. Xu, principal investigator, grant request of \$2,000,000
- 13-SCDIS-JAX-02, Dr. McKeon, principal investigator, grant request of \$2,000,000
- 13-SCDIS-UCHC-02, Dr. Rowe, principal investigator, grant request of \$2,000,000

The Advisory Committee members discussed the science, the proposed projects, the peer review scores and peer review recommendations. A discussion ensued on some of the positive aspects of the proposals. However, it was noted that some of the plans and directions are too preliminary for the category.

There not being unanimous consensus among those eligible to vote, Disease-Directed grant proposal 13-SCDIS-JAX-01, Dr. Xian, was put in the Maybe Fund category.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Engle, the eligible Committee members voted in favor of putting Disease-Directed grant proposal 13-SCDIS-UCHC-01, Dr. Torti, principal investigator, in the Maybe Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Arizeh, the eligible Committee members voted in favor of putting Disease-Directed grant proposal 13-SCDIS-ISB-01, Dr. Xu, principal investigator, in the Maybe Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Goldhamer, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Hart) **MOTION PASSED**

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MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Engle, the eligible Committee members voted in favor of putting Disease-Directed grant proposal 13-SCDIS-JAX-02, Dr. McKeon, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Kiessling, the eligible Committee members voted in favor of putting Disease-Directed grant proposal 13-SCDIS-UCHC-02, Dr. Rowe, principal investigator, in the Not Fnd category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

Preliminary Yes Fund Disease-Directed Proposal:

- None

Maybe Fund Disease-Directed Proposal:

- 13-SCDIS-JAX-01
- 13-SCDIS-UCHC-01
- 13-SCDIS-ISB-01

Not Fund Disease-Directed Proposal:

- 13-SCDIS-JAX-02
- 13-SCDIS-UCHC-02

Review of Established Investigator Proposals:

The two respective Advisory Committee primary reviewers discussed the following 17 Established Investigator grant proposals:

- 13-SCB-UCHC-06, Dr. Heinen, principal investigator, grant request of \$750,000
- 13-SCB-YALE-06, Dr. Kim, principal investigator, grant request of \$750,000
- 13-SCB-YALE-10, Dr. Qyang, principal investigator, grant request of \$750,000
- 13-SCB-YALE-12, Dr. Xiao, principal investigator, grant request of \$750,000
- 13-SCB-UCHC-05, Dr. Chhabra, principal investigator, grant request of \$600,000
- 13-SCB-UCHC-01, Dr. Kumbar, principal investigator, grant request of \$749,999
- 13-SCB-UCHC-15, Dr. Martins-Taylor, principal investigator, grant request of \$750,000
- 13-SCB-YALE-13, Dr. Ivanova, principal investigator, grant request of \$750,000
- 13-SCB-YALE-14, Dr. Ivanova, principal investigator, grant request of \$750,000
- 13-SCB-UCHC-17, Dr. Li, principal investigator, grant request of \$750,000
- 13-SCB-YALE-05, Dr. Sutton, principal investigator, grant request of \$750,000
- 13-SCB-YALE-01, Dr. Rizzolo, principal investigator, grant request of \$750,000

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- 13-SCB-YALE-02, Dr. Huang, principal investigator, grant request of \$750,000
- 13-SCB-YALE-04, Dr. Hirschi, principal investigator, grant request of \$750,000
- 13-SCB-UCHC-18, Dr. Ma, principal investigator, grant request of \$495,000
- 13-SCB-UCHC-08, Dr. Bayarsaihan, principal investigator, grant request of \$750,000
- 13-SCB-YALE-03, Dr. Zhong, principal investigator, grant request of \$750,000

A question arose on the travel expenses for grant proposal 13-SCB-YALE-12, Dr. Xiao. A discussion ensued on the difference in scoring between the Peer Reviewers and the reconciliation of the scores for grant proposals 13-SCB-YALE-13, Dr. Ivanova, principal investigator, and 13-SCB-YALE-01, Dr. Rizzolo, principal investigator.

After discussing each of the proposals, the following motions were made:

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Arinzeh, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-UCHC-06, Dr. Heinen, principal investigator, in the Preliminary Yes Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-06, Dr. Kim, principal investigator, in the Preliminary Yes Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

The two primary Advisory Committee reviewers recommended putting grant proposal 13-SCB-YALE-10, Dr. Qyang, principal investigator, in the Yes Fund category. However, there was not unanimous consensus among Advisory Committee members eligible to vote, and grant proposal 13-SCB-YALE-10 was put into the Maybe Fund category.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-12, Dr. Xiao, principal investigator, in the Maybe fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

The two primary Advisory Committee members recommended putting grant proposal 13-SCB-UCHC-05, Dr. Chhabra, principal investigator, in the Yes fund category. However, there was not unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCB-UCHC-05, was put into the Maybe category.

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MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Hart, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-UHC-01, Dr. Kumbar, principal investigator, in the Maybe Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

The two primary Advisory Committee members recommended putting grant proposal 13-SCB-UHC-15, Dr. Martins-Taylor, principal investigator, in the Yes Fund category. However, there was not unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCB-UHC-15, was put into the Maybe category.

MOTION: Upon a motion made by Dr. Goldhamer, seconded by Dr. Engle, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-13, Dr. Ivanova, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Arinzeh, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-14, Dr. Ivanova, principal investigator, in the Maybe Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Genel, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-UHC-17, Dr. Li, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-05, Dr. Sutton, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

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MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Wallack, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-01, Dr. Rizzolo, principal investigator, in the Maybe Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hart, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-02, Dr. Huang, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Goldhamer, seconded by Dr. Hughes, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-04, Dr. Hirschi, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Engle, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-UHC-18, Dr. Ma, principal investigator, in the Maybe Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-UHC-08, Dr. Bayarsaihan, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Kiessling, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-YALE-03, Dr. Zhong, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

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Preliminary Yes Fund Established Investigator Proposals:

- 13-SCB-UCHC-06
- 13-SCB-YALE-06

Maybe Fund Established Investigator Proposals:

- 13-SCB-YALE-10
- 13-SCB-YALE-12
- 13-SCB-UCHC-05
- 13-SCB-UCHC-01
- 13-SCB-UCHC-15
- 13-SCB-YALE-14
- 13-SCB-YALE-01
- 13-SCB-UCHC-18

Not Fund Established Investigator Proposals:

- 13-SCB-YALE-13
- 13-SCB-UCHC-17
- 13-SCB-YALE-05
- 13-SCB-YALE-02
- 13-SCB-YALE-04
- 13-SCB-UCHC-08
- 13-SCB-YALE-03

Second Review of Maybe Fund Established Investigator Proposals:

The Advisory Committee members reconsidered the Established Investigator proposals put in the Maybe Fund category, starting with grant proposal 13-SCB-UCHC-18, Dr. Ma, principal investigator. After further discussion on the proposal, the following motion was made:

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Hart, the eligible Committee members voted in favor of putting Established Investigator grant proposal 13-SCB-UCHC-18, Dr. Ma, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

Discussion ensued on Established Investigator proposal 13-SCB-YALE-01, Dr. Rizzolo, principal investigator. At least one Advisory Committee member was opposed to putting the proposal in the Not Fund category; and therefore, the proposal was kept in the Maybe Fund category. There was general consensus to review the Seed grant proposals before continuing with the second review of the Established Investigator proposals put into the Maybe Fund category.

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Review of Seed Proposals:

The Advisory Committee discussed the following 28 Seed grant proposals:

- 13-SCA-YALE-04, Dr. Thomas, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-11, Dr. Guzzo, principal investigator, grant request of \$200,000
- 13-SCA-YALE-38, Dr. Kumar, principal investigator, grant request of \$200,000
- 13-SCA-YALE-27, Dr. Ruddle, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-01, Dr. Lo, principal investigator, grant request of \$200,000
- 13-SCA-YALE-20, Dr. Rompolas, principal investigator, grant request of \$200,000
- 13-SCA-YALE-23, Dr. Waxman, principal investigator, grant request of \$200,000
- 13-SCA-YALE-32, Dr. Bartulos, principal investigator, grant request of \$200,000
- 13-SCA-YALE-36, Dr. Sundaram, principal investigator, grant request of \$200,000
- 13-SCA-YALE-12, Dr. Jonas, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-02, Dr. Maye, principal investigator, grant request of \$200,000
- 13-SCA-YALE-06, Dr. Shadel, principal investigator, grant request of \$200,000
- 13-SCA-YALE-05, Dr. Yun, principal investigator, grant request of \$200,000
- 13-SCA-YALE-15, Dr. Yao, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-04, Dr. Patterson, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-03, Dr. Bezsonova, principal investigator, grant request of \$200,000
- 13-SCA-YALE-08, Dr. Deng, principal investigator, grant request of \$200,000
- 13-SCA-YALE-19, Dr. Ghaedi, principal investigator, grant request of \$200,000
- 13-SCA-YALE-28, Dr. Liu, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-12, Dr. Nair, principal investigator, grant request of \$199,925
- 13-SCA-UCON-03, Dr. Gurevich, principal investigator, grant request of \$200,000
- 13-SCA-YALE-21, Dr. Blair, principal investigator, grant request of \$200,000
- 13-SCA-YALE-33, Dr. Chandra, principal investigator, grant request of \$200,000
- 13-SCA-YALE-34, Dr. Tanaka, principal investigator, grant request of \$200,000
- 13-SCA-YALE-39, Dr. Yang, principal investigator, grant request of \$200,000
- 13-SCA-YALE-16, Dr. Yan, principal investigator, grant request of \$200,000
- 13-SCA-YALE-17, Dr. Carroll, principal investigator, grant request of \$200,000
- 13-SCA-UCHC-18, Dr. Ma, principal investigator, grant request of \$199,925

A discussion ensued on the intent of funding for the Seed category and whether funding should be provided to continue an existing project, for early stage proposals or experienced principal investigators. A request was made to discuss this issue before the next funding round.

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The Advisory Committee members discussed the need in the future to ensure that applicants include a list of other pending proposals and any potential overlaps with other proposals.

After discussing the proposed projects, the science, the peer review scores and Advisory Committee reviewers' recommendations, the following motions were made:

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Pescatello, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-04, Dr. Thomas, principal investigator, in the Preliminary Yes Fund category.
VOTE: 11-0-2 (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Hughes, seconded by Dr. Krause, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UCHC-11, Dr. Guzzo, principal investigator, in the Preliminary Yes Fund category.
VOTE: 12-0-1 (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Pescatello, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-38, Dr. Kumar, principal investigator, in the Preliminary Yes Fund category.
VOTE: 11-0-2 (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

There wasn't unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCA-YALE-27, Dr. Ruddle, principal investigator, was put into the Maybe Fund category.

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UCHC-01, Dr. Lo, principal investigator, in the Preliminary Yes Fund category.
VOTE: 12-0-1 (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

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MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hughes, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-20, Dr. Rompolas, principal investigator, in the Preliminary Yes Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Hughes, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-23, Dr. Waxman, principal investigator, in the Preliminary Yes Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

The two primary Advisory Committee members recommended putting grant proposal 13-SCA-YALE-32, Dr. Bartulos, principal investigator, in the Yes Fund category. However, there was not unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCA-YALE-32, was put into the Maybe Fund category.

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hughes, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-36, Dr. Sundaram, principal investigator, in the Preliminary Yes Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Dees, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-12, Dr. Jonas, principal investigator, in the Maybe Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Krause, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UHC-02, Dr. Maye, principal investigator, in the Maybe Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Pescatello, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-06, Dr. Shadel, principal investigator, in the Preliminary Yes Fund category.

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VOTE: 11-0-2 (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-05, Dr. Yun, principal investigator, in the Maybe Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED.**

There wasn't unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCA-YALE-15, Dr. Yao, principal investigator, was put into the Maybe Fund category.

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UCHC-04, Dr. Patterson, principal investigator, in the Maybe Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UCHC-03, Dr. Bezsonova, principal investigator, in the Preliminary Yes Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

The two primary Advisory Committee members recommended putting grant proposal 13-SCA-YALE-08, Dr. Deng, principal investigator, in the Yes Fund category. However, there was not unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCA-YALE-08, was put into the Maybe Fund category.

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Engle, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-19, Dr. Ghaedi, principal investigator, in the Maybe Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

Adopted: July 16, 2013

The two primary Advisory Committee members recommended putting grant proposal 13-SCA-YALE-28, Dr. Liu, principal investigator, in the Preliminary Yes Fund category. However, there was not unanimous consensus among the Committee members eligible to vote, and grant proposal 13-SCA-YALE-28, was put into the Maybe Fund category.

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UHC-12, Dr. Nair, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Genel, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UCON-03, Dr. Gurevich, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Arinzeh, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-21, Dr. Blair, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Hughes, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-33, Dr. Chandra, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Pescatello, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-34, Dr. Tanaka, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Wallack, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-39, Dr. Yang, principal investigator, in the Not Fund category. **VOTE: 11-0-**

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2 (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause)
MOTION PASSED

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Kiessling, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-16, Dr. Yan, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Fishbone, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-YALE-17, Dr. Carroll, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Arinzeh, seconded by Dr. Genel, the eligible Committee members voted in favor of putting Seed grant proposal 13-SCA-UCHC-18, Dr. Ma, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

Preliminary Fund Seed Proposals:

- 13-SCA-YALE-04
- 13-SCA-UCHC-11
- 13-SCA-YALE-38
- 13-SCA-UCHC-01
- 13-SCA-YALE-20
- 13-SCA-YALE-23
- 13-SCA-YALE-36
- 13-SCA-YALE-06
- 13-SCA-UCHC-03

Maybe Fund Seed Proposals:

- 13-SCA-YALE-27
- 13-SCA-YALE-32
- 13-SCA-YALE-12
- 13-SCA-UCHC-02
- 13-SCA-YALE-05
- 13-SCA-YALE-15
- 13-SCA-UCHC-04

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- 13-SCA-YALE-08
- 13-SCA-YALE-19
- 13-SCA-YALE-28

Not Fund Seed Proposals:

- 13-SCA-UCHC-12
- 13-SCA-UCON-03
- 13-SCA-YALE-21
- 13-SCA-YALE-33
- 13-SCA-YALE-34
- 13-SCA-YALE-39
- 13-SCA-YALE-16
- 13-SCA-YALE-17
- 13-SCA-UCHC-18

The Advisory Committee members discussed the highly competitive nature of the program and how to proceed in order to most effective. A discussion ensued on potentially reducing funding for certain proposals and having the applicants come back for additional funding in another round. Some concern was expressed with arbitrarily reducing funds unless there is something specific in the proposed budget that should be reduced or not funded. It was noted that if the budget for a grant is reduced, the principal investigator would be required to provide a revised budget showing how the funds will be spent. There was general consensus to move to the second review of the Core proposals.

Second Review of the Maybe Core Proposals:

The Advisory Committee members discussed Core proposals 13-SCD-YALE-01 and 13-SCD-UCHC-01 for a second time. A suggestion was made to reduce the funding and require the cores to have clear plans in the future for weaning from the grant funding. There was some objection with arbitrarily reducing the funding. It was noted that many other grants depend on the core. There was general consensus to keep the funding at \$500,000 for this round but to reduce funding next year for Core proposals.

Final Vote on Funding for Core Grant Proposals:

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Goldhamer, the eligible Committee members voted in favor of providing funding for Core grant proposal 13-SCD-YALE-01, *“Continued Service and Technology Development at the Yale Stem Cell Center Cores,”* Dr. Lin, principal investigator, in the amount of \$500,000. **VOTE: 10-1-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Mullen, Pescatello and Wallack; Opposed: Kiessling; Abstained: Genel and Krause) **MOTION PASSED.**

Adopted: July 16, 2013

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hart, the eligible Committee members voted in favor of providing funding for Core grant proposal 13-SCD-UCHC-01, "*UCONN-Wesleyan Stem Cell Core*," Dr. Xu, principal investigator, in the amount of \$500,000. **VOTE: 11-1-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Krause, Mullen, Pescatello and Wallack; Opposed: Kiessling; Abstained: Goldhamer) **MOTION PASSED**

Final Vote on Funding for Group Proposals:

The Advisory Committee members discussed Group proposal 13-SCC-WES-01, Dr. Naegele, principal investigator, that was put into the Preliminary Yes Fund category. Some concern was expressed with funding a project for four years when the field and science is changing so rapidly. Opposition was expressed with arbitrarily reducing the time and funding for the principal investigator to achieve the goals in the proposal.

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Hart, the eligible Committee members voted unanimously in favor of providing funding for Group proposal 13-SCC-WES-01, "*HESC-Derived GABAergic Neurons for Epilepsy Therapy*," Dr. Naegele, principal investigator, in the amount of \$1,488,229. **VOTE: 13-0-0** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Goldhamer, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack) **MOTION PASSED**

Second Review and Vote on Disease Directed Group Proposals:

The Advisory Committee members reviewed the Disease Directed Proposals put into the Maybe Fund category. The two Advisory Committee reviewers highlighted grant proposal 13-SCDIS-ISB-01, Dr. Xu, principal investigator. The science and aims in the proposal were discussed. A suggestion was made to fund the proposal at a reduced amount.

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted in favor of providing funding for Disease Directed Group proposal 13-SCDIS-ISB-01, "*Developing a Potential Therapy for Multiple Sclerosis Using hESC-derived MSCs*," Dr. Xu, principal investigator, in the amount of \$1,000,000. **VOTE: 10-0-3** (In favor: Arinzeh, Dees, Engle, Fishbone, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel, Goldhamer, and Krause) **MOTION PASSED**

Adopted: July 16, 2013

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Kiessling, the eligible Committee members voted in favor of putting Disease Directed Group grant proposal 13-SCDIS-JAX-01, Dr. Xian, principal investigator, in the Not Fund category. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Goldhamer and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Engle, the eligible Committee members voted in favor of putting Disease Directed Group grant proposal 13-SCDIS-UHC-01, Dr. Torti, principal investigator, in the Not Fund category. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

Final Vote and Continuation of Maybe Fund Established Investigator Proposals:

The Advisory Committee members considered the Established Investigator grant proposals in the preliminary Yes fund category.

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Dees, the eligible Committee members voted in favor of providing funding for Established Investigator grant proposal 13-SCB-UHC-06, *“Using hESCs and iPSCs to test the Significance of Hereditary Cancer-Associated Variants,”* Dr. Heinen, principal investigator, in the amount of \$750,000. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Dees, the eligible Committee members voted in favor of providing funding for Established Investigator grant proposal 13-SCB-YALE-06, *“Pluripotency and Heterochromatin Topology,”* Dr. Kim, principal investigator, in the amount of \$750,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

The Advisory Committee members considered the remaining Established Investigator proposals in the Maybe Fund category. There was a discussion about whether to fund proposals from principal investigators that have received funding in the same or similar area in the past and how to better identify if there are overlaps.

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MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Engle, the eligible Committee members voted in favor of moving Established Investigator grant proposal 13-SCB-YALE-10, Dr. Qyang in the Not Fund category. **VOTE: 8-3-2** (In favor: Arinzeh, Dees, Engle, Hart, Hughes, Kiessling, Mullen, and Pescatello; Opposed: Fishbone, Goldhamer, and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

Some concerns were expressed with the lack of preliminary data for grant proposal 13-SCB-YALE-12, Dr. Xiao, principal investigator, and a suggestion was made to reduce funding and the length of grant to give the principal investigator time to show the preliminary data needed. It was also noted that there is a \$10,000 discrepancy in the budget.

MOTION: Upon a motion made by Dr. Goldhamer, seconded by Dr. Hart, the eligible Committee members voted in favor of providing funding for Established Investigator grant proposal 13-SCB-YALE-12, *“Improving the fidelity of human iPSC with epigenetic and chemical genetic approaches,”* Dr. Xiao, principal investigator, in the amount of \$532,500 for three years. **VOTE: 10-1-2** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Opposed: Engle; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Pescatello, the eligible Committee members voted in favor of providing funding for Established Investigator grant proposal 13-SCB-UCHC-05, *“Generation of Customized Anti-Tumor T Cells from Human Pluripotent Stem Cells (hPS) Derived Embryoid Bodies (EB) for Immunotherapy of Human Melanoma,”* Dr. Chhabra, principal investigator, in the amount of \$600,000. **VOTE: 11-1-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Opposed: Krause; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Hughes, the eligible Committee members voted in favor of moving Established Investigator grant proposal 13-SCB-UCHC-01, Dr. Kumbar in the Not Fund category. **VOTE: 11-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

There was a discussion about Established Investigator proposal 13-SCB-UCHC-15, Dr. Martins-Taylor, principal investigator. A motion was made and seconded to fund the proposal. However, before proceeding there was general consensus to table the vote on the proposal until after the second review of the seed proposals.

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Final Vote and Second Review of Seed Proposals:

The Committee members voted on the Seed proposals in the preliminary Yes Fund category.

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Pescatello, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-04, "*Vascular Growth Factor Signaling in Human Neural Stem Cells*," Dr. Thomas, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Hughes, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-UCHC-11, "*Establishing an epigenetic memory of tissue-specific induced pluripotent stem cells for superior chondrogenic differentiation capacity*," Dr. Guzzo, principal investigator, in the amount of \$200,000. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hart, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-38, "*Human ES-derived neuronal cell culture systems for investigating West Nile virus pathogenesis*," Dr. Kumar, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hughes, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-UCHC-01, "*Next Generation Bone Graft Substitute Through Osteogenic Differentiation of hMSC by a Small Molecular*," Dr. Lo, principal investigator, in the amount of \$200,000. **VOTE: 12-0-1** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Genel, seconded by Dr. Wallack, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-20, "*Elucidating the role of stem cells in the skin tumor Pilomatricoma by in vivo imaging*," Dr. Rompolas, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone,

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Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Wallack, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-23, "*Modeling chronic pain condition with iPS cells from patients with 'man on fire' syndrome for better pharmaco-genomic analysis and drug testing,*" Dr. Waxman, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Dees, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-36, "*Potential of human pluripotent stem cell derived mesenchymal cells for lung tissue engineering,*" Dr. Sundaram, principal investigator, in the amount of \$200,000. **VOTE: 10-1-2** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Opposed: Engle; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Goldhamer, seconded by Dr. Pescatello, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-06, "*Testing the Oxidative Stress Theory of Ataxia-Telangiectasia Pathology Using Induced Pluripotent Stem Cells,*" Dr. Shadel, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Krause, seconded by Dr. Wallack, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-UCHC-03, "*Specification of poised epigenomic marks in ES cells,*" Dr. Bezsonova, principal investigator, in the amount of \$200,000. **VOTE: 11-1-1** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Hughes, Kiessling, Krause, Mullen, Pescatello and Wallack; Opposed: Engle; Abstained: Goldhamer) **MOTION PASSED**

Final Vote—Seed Proposals in Maybe Category Moved to Fund Category:

MOTION: Upon a motion made by Dr. Hughes, seconded by Dr. Dees, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-27, "*The Role of Adipocyte Stem Cell in Lymphatic Vessel Differentiation,*" Dr. Ruddle, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer,

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Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Wallack, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-32, "*Cell Therapy With ISL1+ Cardiac Progenitor Cells for Cardiac Repair After Myocardial Infarction,*" Dr. Bartulos, principal investigator, in the amount of \$200,000. **VOTE: 10-1-2** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Opposed: Engle; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Dees, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-UCHC-02, "*Differentiating Human Embryonic Stem Cells Down the Axial Skeletal Lineage,*" Dr. Maye, principal investigator, in the amount of \$200,000. **VOTE: 10-2-1** (In favor: Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Opposed: Arinzeh and Krause; Abstained: Goldhamer) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Hart, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-15, "*Characterize nuclear lamina-associated chromatin in human ES cells,*" Dr. Yao, principal investigator, in the amount of \$200,000. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Pescatello, the eligible Committee members voted in favor of providing funding for Seed grant proposal 13-SCA-YALE-05, "*Hypoxia and Maintenance of Human Cancer Stem Cells,*" Dr. Yun, in the amount of \$200,000. **VOTE: 10-1-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Kiessling, Mullen, Pescatello and Wallack; Opposed: Hughes; Abstained: Genel and Krause) **MOTION PASSED**

Third Review of Established Investigator Proposals:

The Advisory Committee members discussed the following Established Investigator grant proposals remaining in the Maybe Fund category:

- 13-SCB-YALE-01, Dr. Rizzolo, principal investigator
- 13-SCB-UCHC-15, Dr. Martins-Taylor, principal investigator
- 13-SCB-YALE-14, Dr. Ivanova, principal investigator

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MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Dees, the eligible Committee members voted in favor of moving Established Investigator grant proposal 13-SCB-YALE-01, Dr. Rizzolo, principal investigator, in the Not Fund category. **VOTE: 9-2-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Hart, Hughes, Kiessling, Mullen, and Pescatello; Opposed: Goldhamer and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

A suggestion was made to reduce the funding to \$550,000 for Established Investigator grant 13-SCB-UHC-15, Martins-Taylor, principal investigator.

MOTION: A motion was made by Dr. Wallack and seconded by Dr. Genel to providing funding for Established Investigator grant proposal 13-SCB-UHC-15, "*Uncovering molecular pathways disrupted in Prader-Willi Syndrome*," Martins-Taylor, principal investigator, in the amount of \$550,000 rather than \$750,000. **VOTE: 5-7-1** (In favor: Fishbone, Hughes, Genel, Krause, Wallack; Opposed: Arinzeh, Dees, Engle, Hart, Kiessling, Mullen, Pescatello; Abstained: Goldhamer) **MOTION FAILED**

MOTION: Upon a motion was made by Dr. Dees, seconded by Dr. Hart, the eligible Committee members voted in favor of providing funding for Established Investigator grant proposal 13-SCB-UHC-15, "*Uncovering molecular pathways disrupted in Prader-Willi Syndrome*," Dr. Martins-Taylor, principal investigator, in the amount of \$750,000. **VOTE: 9-2-1** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mullen, Pescatello, and Wallack; Opposed: Engle and Krause; Abstained: Goldhamer; and Dr. Hughes was not present for the vote) **MOTION PASSED**

Reserve for Established Investigator Category:

The Advisory Committee members considered Established Investigator grant proposal 13-SCB-YALE-14, Dr. Ivanova, principal investigator, for a reserve in the event one or more of the funded proposals does not come to fruition or there are funds remaining.

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Engle, the eligible Committee members voted unanimously in favor of putting Established Investigator grant proposal 13-SCA-YALE-14, "*Molecular regulation of cell lineages in the human blastocyst*," Dr. Ivanova, principal investigator, in the amount of \$750,000, as the first ranked reserved Established Investigator grant proposal for future consideration if the opportunity arises. **VOTE: 10-1-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Opposed: Goldhamer; Abstained: Genel and Krause) **MOTION PASSED**

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Final Vote—Seed Proposals in Maybe Category Moved to Not Fund Category:

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Hart, the eligible Committee members voted in favor of moving Seed grant proposal 13-SCA-YALE-12, Dr. Jonas in the Not fund category. **VOTE: 8-2-2** (In favor: Arinzeh, Engle, Goldhamer, Hart, Hughes, Kiessling, Mullen, and Pescatello; Opposed: Dees and Fishbone; Abstained: Genel and Krause—Dr. Wallack was not present for the vote) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Engle, seconded by Dr. Dees, the eligible Committee members voted in favor of moving Seed grant proposal 13-SCA-YALE-19, Dr. Ghaedi, principal investigator in the Not fund category. **VOTE: 10-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Engle, the eligible Committee members voted in favor of moving Seed grant proposal 13-SCA-YALE-28, Dr. Liu, principal investigator in the Not fund category. **VOTE: 10-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

Vote on Reserve for Seed Category in Priority Order:

The Advisory Committee members considered reserves from the Seed category in the event one or more of the funded Seed proposals does not come to fruition or there are funds remaining.

The following proposals were put in the Reserve for the Seed category, in rank order:

- 13-SCA-UCHC-04, Dr. Patterson, principal investigator
- 13-SCA-YALE-08, Dr. Deng, principal investigator

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Hart, the eligible Committee members voted in favor of putting Seed proposal 13-SCA-UCHC-04, "*Induced Pluripotent Stem Cells as Preclinical Models for Human Chrondrodysplasias*," Dr. Patterson, principal investigator, in the amount of \$200,000, as the first ranked Seed reserve grant proposal for future consideration if the opportunity arises. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Genel, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Goldhamer and Krause) **MOTION PASSED**

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MOTION: Upon a motion made by Dr. Pescatello, seconded by Dr. Hart, the eligible Committee members voted in favor of putting Seed proposal 13-SCA-YALE-08, *“Using patient derived iPSC to discover treatments for coronary artery disease,”* Dr. Deng, principal investigator, in the amount of \$200,000, as the second ranked Seed reserve grant proposal for future consideration if the opportunity arises. **VOTE: 11-0-2** (In favor: Arinzeh, Dees, Engle, Fishbone, Goldhamer, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel and Krause) **MOTION PASSED**

Restoration of Funding for 13-SCDIS-ISB-01:

Following the review of all of the grant proposals, there was approximately \$129,271 of funding remaining, and there was general consensus to restore this amount to grant 13-SCIS-ISB-01 that had been reduced earlier in the meeting.

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Pescatello, the eligible Committee members voted in favor of providing an additional \$129,271 in funding to Disease Directed Group proposal 13-SCDIS-ISB-01, *Developing a Potential Therapy for Multiple Sclerosis Using hESC-derived MSCs,* Dr. Xu, principal investigator, for a total of \$1,129,271. **VOTE: 10-0-3** (In favor: Arinzeh, Dees, Engle, Fishbone, Hart, Hughes, Kiessling, Mullen, Pescatello and Wallack; Abstained: Genel, Goldhamer, and Krause) **MOTION PASSED**

Summary of 2013 Grants by Category:

Core:

- 13-SCD-YALE-01, *“Continued Service and Technology Development at the Yale Stem Cell Center Cores,”* Dr. Lin, principal investigator, in the amount of \$500,000
- 13-SCD-UCHC-01, *“UCONN-Wesleyan Stem Cell Core,”* Dr. Xu, principal investigator, in the amount of \$500,000

Group:

- 13-SCC-WES-01, *“HESC-Derived GABAergic Neurons for Epilepsy Therapy,”* Dr. Naegele, principal investigator, in the amount of \$1,488,229.

Disease Directed Group:

- 13-SCDIS-ISB-01, *“Developing a Potential Therapy for Multiple Sclerosis Using hESC-derived MSCs,”* Dr. Xu, principal investigator, in the amount of \$1,129,271.

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Established Investigator:

- 13-SCB-UCHC-06, *“Using hESCs and iPSCs to test the Significance of Hereditary Cancer-Associated Variants,”* Dr. Heinen, principal investigator, in the amount of \$750,000.
- 13-SCB-YALE-06, *“Pluripotency and Heterochromatin Topology,”* Dr. Kim, principal investigator, in the amount of \$750,000.
- 13-SCB-YALE-12, *“Improving the fidelity of human iPSC with epigenetic and chemical genetic approaches,”* Dr. Xiao, principal investigator, in the amount of \$532,500 for three years.
- 13-SCB-UCHC-05, *“Generation of Customized Anti-Tumor T Cells from Human Pluripotent Stem Cells (hPS) Derived Embryoid Bodies (EB) for Immunotherapy of Human Melanoma,”* Dr. Chhabra, principal investigator, in the amount of \$600,000.
- 13-SCB-UCHC-15, *“Uncovering molecular pathways disrupted in Prader-Willi Syndrome,”* Dr. Martins-Taylor, principal investigator, in the amount of \$750,000.

Seed:

- 13-SCA-YALE-04, *“Vascular Growth Factor Signaling in Human Neural Stem Cells,”* Dr. Thomas, principal investigator, in the amount of \$200,000.
- 13-SCA-UCHC-11, *“Establishing an epigenetic memory of tissue-specific induced pluripotent stem cells for superior chondrogenic differentiation capacity,”* Dr. Guzzo, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-38, *“Human ES-derived neuronal cell culture systems for investigating West Nile virus pathogenesis,”* Dr. Kumar, principal investigator, in the amount of \$200,000.
- 13-SCA-UCHC-01, *“Next Generation Bone Graft Substitute Through Osteogenic Differentiation of hMSC by a Small Molecular,”* Dr. Lo, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-20, *“Elucidating the role of stem cells in the skin tumor Pilomatricoma by in vivo imaging,”* Dr. Rompolas, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-23, *“Modeling chronic pain condition with iPS cells from patients with ‘man on fire’ syndrome for better pharmaco-genomic analysis and drug testing,”* Dr. Waxman, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-36, *“Potential of human pluripotent stem cell derived mesenchymal cells for lung tissue engineering,”* Dr. Sundaram, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-06, *“Testing the Oxidative Stress Theory of Ataxia-Telangiectasia Pathology Using Induced Pluripotent Stem Cells,”* Dr. Shadel, principal investigator, in the amount of \$200,000.
- 13-SCA-UCHC-03, *“Specification of poised epigenomic marks in ES cells,”* Dr. Bezsonova, principal investigator, in the amount of \$200,000.

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- 13-SCA-YALE-27, *“The Role of Adipocyte Stem Cell in Lymphatic Vessel Differentiation,”* Dr. Ruddle, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-32, *“Cell Therapy With ISL1+ Cardiac Progenitor Cells for Cardiac Repair After Myocardial Infarction,”* Dr. Bartulos, principal investigator, in the amount of \$200,000.
- 13-SCA-UCHC-02, *“Differentiating Human Embryonic Stem Cells Down the Axial Skeletal Lineage,”* Dr. Maye, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-15, *“Characterize nuclear lamina-associated chromatin in human ES cells,”* Dr. Yao, principal investigator, in the amount of \$200,000.
- 13-SCA-YALE-05, *“Hypoxia and Maintenance of Human Cancer Stem Cells,”* Dr. Yun, in the amount of \$200,000.

Public Comments:

Dr. Lalande, on behalf of UCONN, YALE, Wesleyan and the principal investigators thanked the Committee members for the time spent reviewing the grants.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Kiessling, the Committee voted unanimously in favor of adjourning the meeting at 6:00 p.m.

Respectfully submitted:

Dr. Jewel Mullen, Chair