CONNECTICUT STEM CELL RESEARCH ADVISORY COMMITTEE Minutes – Special Meeting Tuesday, July 19, 2011

A special meeting of the Connecticut Stem Cell Research Advisory Committee "Advisory Committee" was held on Monday, July 19, 2011, at the Farmington Marriott, 15 Farm Springs Road, Farmington, Connecticut.

<u>Call to Order</u>: The meeting was called to order at 8:50 a.m. Members present: Treena Livingston Arinzeh, Ph.D.; Richard H. Dees, Ph.D.; Gerald Fishbone, M.D.; Myron Genel, M.D.; David Goldhamer, Ph.D; Ronald Hart, Ph.D.; Anne Hiskes, Ph.D.; Ann Kiessling, Ph.D.; Robert Mandelkern (by phone); Jewel Mullen, M.D., M.P.H., M.P.A.; and Milton B. Wallack, D.D.S.

Advisory Committee Member Absent: Paul Pescatello, J.D., Ph.D.

<u>Other Attendees</u>: Srdjan Antic (UCONN); Isolde Bates (UCONN); David Bawman (UCONN); Rong Fan (Yale); Marianne Horn (DPH); Marc LaLande (UCONN); June Mandelkern (Parkinson Rep. to Stem Cell Coalition); Chelsey Sarnecky (CI); Paula Wilson (Yale); and Jing Zhou (Yale);

Opening Remarks:

Attorney Horn welcomed everyone and stated that there is approximately \$9,800,000 of funding available for the 2011 grant round. She reviewed the process suggested at the May 17, 2011 meeting for reviewing the proposals. Attorney Horn mentioned that in accordance with previous discussions, the grant proposals are listed by score with the best ranked first and broken at funding levels of \$13,800,000, \$15,500,000 and \$16,700,000. Once the best ranked proposals are preliminarily reviewed, Attorney Horn stated that the proposals can be put into one of three categories—1) fundable, 2) maybe fund or 3) not fund. She noted that any Advisory Committee members could have a lower ranked proposal discussed and considered. A discussion ensued on the proposed process. A suggestion was made to review only those proposals that received a score better than 4.5. Discussion ensued on the proposed process.

A suggestion was made to reduce the grant amounts in an effort to provide funding to as many researchers as possible. Some concern was expressed with arbitrarily reducing the funding and the potential for researchers not being able to perform the specified research as a result of

the reduced funding. Dr. Mullen suggested that the first review of the proposals be based on merit and priority score and then consider making reductions if necessary. There was consensus that quality should be a priority while trying to provide funding to as many researchers as possible.

In response to a question, Attorney Horn noted that language was taken out of the latest Request for Proposals specifying a minimum allocation for seed grant funding. Dr. Kiessling indicated that four applications were received from the private sector, which is higher than any previous funding round. She noted that the Advisory Committee has been trying to encourage companies to apply and to partner with institutions to help get their work funded. Dr. Wallack suggested sponsoring a workshop in the fall or sooner to help the public and industry better understand the process.

There was consensus to discuss only those projects that received a score better than 4.5 and any other proposal brought forward by any member for consideration. The Advisory Committee members agreed to the following order for reviewing the proposals: 1) Established Investigator, 2) Group and Disease Specific, 3) Seed, and 4) Core.

Attorney Horn mentioned that only those members eligible to vote on a proposal should participate in the discussion and vote on the proposal. Attorney Horn reviewed the list of members generally eligible to vote on the UCONN proposals and those generally eligible to vote on the Yale proposals. Additionally, it was noted that if any members have other conflicts, they should refrain from discussion or vote on those specific proposals.

Dr. Mullen asked the members for nominations of any proposals with a score of 4.5 or higher. Dr. Hart asked the Advisory Committee members to add to the list of proposals to review grant proposal 11SCB06, Dr. Xu, principal investigator.

Ms. Sarnecky identified the proposals that indicated proprietary information, and she asked the Advisory Committee members not to discuss the specified information during the public session. 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.

Review of Established Investigator Grant Proposals:

The two Advisory Committee primary reviewers discussed the following Established Investigator grant proposals with scores lower than 4.5:

- 11SCB19, Yale University, Dr. Wolin, principal investigator, peer review score of 1.5, grant request of \$750,000
- 11SCB04, UCHC, Dr. Carmichael, principal investigator, peer review score of 2.5, grant request of \$750,000
- 11SCB08, UCHC, Dr. Drissi, principal investigator, peer review score of 2.5, grant request of \$749,775
- 11SCB23, Yale University, Dr. Vaccarino, principal investigator, peer review score of 2.5, grant request of \$744,446
- 11SCB11, UCHC, Dr. Han, principal investigator, peer review score of 3, grant request of \$570,000
- 11SCB16, UCONN, Dr. O'Neill, principal investigator, peer review score of 3, grant request of \$744,013
- 11SCB18, Yale University, Dr. Qyang, principal investigator, peer review score of 3, grant request of \$750,000
- 11SCB20, UCHC, Dr. Aguila, principal investigator, peer review score of 3, grant request of \$750,000
- 11SCB21, UCHC, Dr. Aguila, principal investigator, peer review score of 3, grant request of \$750,000
- 11SCB22, Yale University, Dr. Swenson, principal investigator, peer review score of 3, grant request of \$750,000
- 11SCB24, UCHC, Dr. Li, principal investigator, peer review score of 3, grant request of \$750,000
- 11SCB28, Wesleyan, Dr. Grabel, principal investigator, peer review score of 3.5, grant request of \$750,000
- 11SCB05, UCHC, Dr. Chamberlain, principal investigator, peer review score of 4, grant request of \$750,000
- 11SCB15, UCONN, Dr. Nelson, principal investigator, peer review score of 4, grant request of \$750,000
- 11SCB17, Yale University, Dr. Park, principal investigator, peer review score of 4, grant request of \$750,000
- 11SCB26, Yale University, Dr. Zhong, principal investigator, peer review score of 4, grant request of \$750,000
- 11SCB06, UCHC, Dr. Xu, principal investigator, peer review score of 4.5, grant request of \$750,000

The Advisory Committee members discussed the science, the proposed project, the peer review scores and peer review recommendations. Concerns were expressed with some of the peer review scores, and it was noted that some of the scores do not accurately reflect the peer

review narratives. The Advisory Committee members questioned whether there is a mechanism to handle discrepancies between the two peer reviewers. Attorney Horn explained that if there is a discrepancy, the peer reviewers get together to discuss the proposal and/or a third reviewer is brought in to weigh in on the issue.

A question arose regarding collaboration in one of the proposals with an out of state university. Attorney Horn indicated that this issue was discussed when the application was received, and she does not think that there is an issue because the research is being conducted in Connecticut. However, Attorney Horn agreed to double check the issue.

The Advisory Committee members discussed funding for proposals of rare diseases; and it was noted that often the research for rare diseases provides significant information for other diseases and public health issues.

After a preliminary review, the Established Investigator proposals were put into the following categories:

Preliminary Fundable Established Investigator Proposals:

- 11SCB19
- 11SCB04
- 11SCB08 (at \$650,000 rather than \$750,000)
- 11SCB23
- 11SCB11
- 11SCB28

Preliminary Maybe Fund Established Investigator Proposals:

- 11SCB16
- 11SCB18
- 11SCB21
- 11SCB22
- 11SCB24
- 11SCB15
- 11SCB06

Not Fund Established Investigator Proposals:

- 11SCB20
- 11SCB05
- 11SCB17

• 11SCB26

Review of Group Project Grant Proposals:

The two Advisory Committee primary reviewers discussed the following Group Project grant proposals, including disease directed collaborations with scores lower than 4.5:

- 11SCC01, Chondrogenics, Inc., Dr. Dealy, principal investigator, peer review score of 2, grant request of \$1,635,766
- 11SCDIS02, UCONN, Dr. Boelsterli, principal investigator, peer review score of 3, grant request of \$1,747,172
- 11SCD01, UCHC, Dr. Hager, principal investigator, peer review score of 4, grant request \$176,735

The Advisory Committee members discussed the collaboration between Chondrogenics and UCHC. In response to a question about Embryonic Stem Cell Research Oversight ("ESCRO") approval for the company, it was noted that there won't be an issue because of the collaboration with UCHC.

After a preliminary review, the Group Project proposals were put into the following categories:

Preliminary Fundable Group Project Proposals:

- 11SCC01
- 11SCDIS02

Not Fund Established Group Project Proposals:

11SCD01

Review of Core Grant Proposal:

Dr. Goldhamer and Dr. Arinzeh summarized core grant proposal 11SCD02, Yale University, Dr. Lin, principal investigator, peer review score of 2, grant reguest of \$2,499,791. Goldhamer discussed the activities at the existing Yale core and noted that the funding for the core will end this year, and the request is to extend the Yale core with the purchase of new equipment. The Advisory Committee members discussed the funding of cores in general and asked Attorney Horn to read excerpts from the Request for Proposals regarding Core Facilities. Attorney Horn read the following: "Core funding is not a priority for this round of funding. Some additional core funding may be considered for applications with novel or unusual scientific merit. Applications will be considered for additional support for expansion or enhancement of already established cores that will be made widely accessible to the Connecticut stem cell research community, and that are likely to advance stem cell research throughout the State. Proposals must include an explanation of the need for a new core or expansion of an existing core, along with estimates of likely capacity and usage. Previously funded cores should provide specific details in their budget justification about the necessity of additional funding; including explanation of how new and existing funding will be integrated without overlap. . ." There was a philosophical discussion as to whether or not funding should be given to core proposals especially when the Request for Proposals indicated that funding of cores would not be a priority. Concerns were expressed that if the funding is totally cut off, it could be detrimental to the researchers that are dependent upon the core. There was general consensus about the importance of the cores becoming self-sustaining and that the Advisory Committee should discuss how to deal with this issue in the near future. After further discussion, there was consensus to put core grant proposal 11SCD02 in the maybe fund category.

Preliminary Maybe Fund Core Proposal:

11SCD02

Review of Seed Grant Proposals:

The two Advisory Committee primary reviewers discussed the following Seed Grant proposals with scores lower than 4.5:

- 11SCA37, Yale University, Dr. Guo, principal investigator, peer review score of 1.5, grant request of \$200,000
- 11SCA35, UCONN, Dr. Rasmussen, principal investigator, peer review score of 2, grant request of \$200,000
- 11SCA01, UCHC, Dr. Martins-Taylor, principal investigator, peer review score of 2.5, grant request of \$200,000
- 11SCA33, Yale University, Dr. Amos, principal investigator, peer review score of 2.5, grant request of \$200,000
- 11SCA34, Yale University, Dr. Drane, principal investigator, peer review score of 2.5, grant request of \$200,000
- 11SCA15, Yale University, Dr. Fan, principal investigator, peer review score of 2.75, grant request of \$195,251
- 11SCA28, UCHC, Dr. Ma, principal investigator, peer review score of 2.75, grant request of \$200,000
- 11SCA07, UCHC, Dr. Carmichael, principal investigator, peer review score of 3, grant request of \$200,000
- 11SCA44, Yale University, Dr. Wang, principal investigator, peer review score of 3.25, grant request of \$200,000
- 11SCA03, UCHC, Dr. Resch, principal investigator, peer review score of 3.5, grant request of \$200,000
- 11SCA12, Yale University, Dr. Yu, principal investigator, peer review score of 3.5, grant request of \$200,000
- 11SCA18, Yale University, Dr. Halene, principal investigator, peer review score of 3.5, grant request of \$200,000
- 11SCA22, Yale University, Dr. Xu, principal investigator, peer review score of 3.5, grant request of \$200,000
- 11SCA40, Yale University, Dr. Sundaram, principal investigator, peer review score of 3.5, grant request of \$200,000

- 11SCA11, Yale University, Dr. Zhou, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA23, UCONN, Dr. Javidi, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA24, UCHC, Dr. Lieberman, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA36, UCHC, Dr. Rogina, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA39, UCHC, Dr. Covault, principal investigator, peer review score of 4, grant request of \$196,836
- 11SCA41, Yale University, Dr. Thomas, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA42, Yale University, Dr. Ge, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA45, Yale University, Dr. Park, principal investigator, peer review score of 4, grant request of \$200,000
- 11SCA02, Yale University, Dr. Kloc, principal investigator, peer review score of 4.25, grant request of \$200,000
- 11SCA21, Yale University, Dr. Herzog, principal investigator, peer review score of 4.25, grant request of \$200,000
- 11SCA38, Yale University, Dr. Sosa, principal investigator, peer review score of 4.25, grant request of \$200,000

There was a discussion about the researchers for seed proposals, and it was noted that established investigators new to stem cell research or developing new research directions can be considered for a seed grant. Concerns were expressed with the discrepancy in several of the peer review scores and the summaries.

After a preliminary review, the Seed proposals were put into the following categories:

Preliminary Fundable Seed Proposals:

- 11SCA37
- 11SCA01
- 11SCA33
- 11SCA34
- 11SCA28
- 11SCA03
- 11SCA39

Preliminary Maybe Fund Seed Proposals:

- 11SCA35
- 11SCA15
- 11SCA07
- 11SCA40
- 11SCA02

Not Fund Seed Proposals:

- 11SCA44
- 11SCA12
- 11SCA18
- 11SCA22
- 11SCA11
- 11SCA23
- 11SCA24
- 11SCA36
- 11SCA41
- 11SCA45
- 11SCA21
- 11SCA38

The Advisory Committee members discussed how to proceed. The proposals in the "preliminary fundable" category total \$8,994,220, and the proposals in the "preliminary maybe" category total \$8,739,055. Dr. Mullen indicated that the focus of grant funding is to increase and create jobs based on good science and the future benefits for the community. It was noted that the focus this year was on the disease directed group proposals.

Second Review of Group Project Grant Proposals:

The Advisory Committee revisited the disease directed and group project grant proposals. A suggestion was made to keep the full funding for the better-rated disease directed proposals and maybe consider reduced funding for the lower rated proposals.

The Advisory Committee members discussed the disease directed and group proposals. Since the proposal for 11SCC01, Chondrogenics, Inc., Dr. Dealy, principal investigator was not categorized correctly by the applicant, there was no objection to reducing the funding to

\$1,500,000 which is the limit for the group grant proposals in accordance with the Request for Proposals.

There was consensus to reduce proposal 11SCDIS02, UCONN, Dr. Boelsterli, principal investigator to \$1,500,000.

Second Review of Core Grant Proposal:

The Advisory Committee members discussed core grant proposal 11SCD02. Several members spoke about the importance of continuing the funding for a year so that the university has time to find alternate funding and/or to become self-sustaining. It was noted that many of the Yale projects are dependent upon the Yale core. Several other members expressed concern with taking funding away from other proposals when the language in the Request for Proposals indicated that funding of cores was not a priority. It was noted that for all proposals, funding of the grant is conditioned upon resources being available. After further discussion, there was general consensus to fund the core proposal for one year and to urge the principal investigator to seek other funding to continue the core. The Advisory Committee members noted the need to be more clear in the Request for Proposals for the next round of funding.

Second Review of Established Investigator Grant Proposals:

The Advisory Committee members discussed the potential reduction of funding for the preliminary established investigator fundable proposals. Attorney Horn mentioned that the maximum amount in the Request for Proposals for established investigator grants was reduced from \$1,000,000 to \$750,000 for the 2011 funding round. A discussion ensued on the preliminary maybe proposals. After discussion of 11SCB15, Dr. Nelson, principal investigator, there was general consensus to fund the proposal for one year at \$250,000.

After further discussion of 11SCB16, there was general consensus to move the proposal to the "no" category.

With respect to 11SCB18, Dr. Qyang, principal investigator, it was confirmed that the R01 application has not yet been reviewed and therefore not funded. After further discussion, there was consensus to move grant proposal 11SCB18 from the maybe to the fundable category but to fund the project for two years. The Advisory Committee asked CI to confirm that the research will be performed in Connecticut.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Kiessling, the eligible Committee members voted unanimously in favor of putting established investigator grant proposal 11SCB18, Yale University, Dr. Qyang, principal investigator, into the "preliminary fundable" category and to fund the proposal for two years at \$375,000. MOTION PASSED.

There was consensus to move grant proposal 11SCB21, UCHC, Dr. Aguila, principal investigator into the "no" category.

There was consensus to move grant proposal 11SCB22, Yale University, Dr. Swenson, principal investigator into the "no" category.

The Advisory Committee members discussed grant proposal 11SCB24.

MOTION: Upon a motion made by Dr. Dees, seconded by Dr. Hart, the eligible Committee members voted unanimously in favor of putting established investigator grant proposal 11SCB24, UCHC, Dr. Li, principal investigator, into the "preliminary fundable" category and to fund the proposal for two years at \$337,470. MOTION PASSED.

Second Review of Seed Grant Proposals:

The Advisory Committee members discussed the seed grant proposals in the preliminary "maybe" category. There was consensus to move grant proposal 11SCA02 from the "maybe" category to the "no" category. There was consensus to move grant proposals 11SCA15 and 11SCA40 from the "maybe" category to the "preliminary fundable" category.

Discussion of Reserved Grant Proposals:

The Advisory Committee discussed the need to have several proposals from the established investigator and seed categories as backups in the event funding for any of the funded proposals do not come to fruition. After discussion, there was consensus to have the following established investigator grant proposals in the reserved category:

- 11SCB15, UCONN, Dr. Nelson, principal investigator, in the amount of \$250,000, ranked #1; and
- 11SCB16, Dr. O'Neill, principal investigator, in the amount of \$744,013, ranked #2.

In response to a request, Ms. Sarnecky agreed to keep a record of the grant recipients that also receive funding from the National Institutes of Health.

There was consensus to put the following as backup for the seed category:

- 11SCA35, UCONN, Dr. Rasmussen, principal investigator, in the amount of \$200,000
- 11SCA07, UCHC, Dr. Carmichael, principal investigator, in the amount of \$200,000

Vote on Funding for Grant Proposals:

Attorney Horn reminded those members that have a conflict not to vote on that specific proposal. She noted that Dr. Genel has a conflict with the Yale University proposals, and Dr. Hiskes and Dr. Goldhamer have a conflict with the UCONN proposals.

MOTION: Upon a motion made by Dr. Arinzeh, seconded by Dr. Wallack, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA37, Yale University, "*MicroRNA mediated derivation of hemapoietic stem cells from human embryonic stem cells*" Dr. Guo, principal investigator, in the amount of \$200,000 **VOTE: 10-0** (In favor: Arinzeh, Dees,

Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Hiskes, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB19, Yale University "*Mechanisms of RNA Surveillance in Human Embryonic Stem Cells*" Dr. Wolin, principal investigator, in the amount of \$750,000 **VOTE: 10-0** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Dees, the eligible Committee members voted unanimously in favor of providing funding for Group grant proposal 11SCC01, Chondrogenics, Inc. "Development of a Potential Therapy for Osteoarthritic Cartilage Damage using hESC-derived Chondrogenic Cells," Dr. Dealy, principal investigator, in the amount of \$1,290,499 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA01, UCHC, "Identification of novel targets abnormally expressed in Prader-Willi Syndrome," Dr. Martins-Taylor, principal investigator, in the amount of \$200,000 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA33, Yale University, "The Role of Endocardial Cells in Human Down Syndrome-Related Heart Defects," Dr. Amos, principal investigator, in the amount of \$200,000 **VOTE: 10-0** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Hiskes, seconded by Dr. Hart, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA34, Yale University, "Role of the histone variant H2A.X in the establishment of the epigenetic landscape of human embryonic stem cells," Dr. Drane, principal investigator, in the amount of \$200,000 **VOTE: 10-0** (In

favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Wallack, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB08, UCHC "Devising a multidisciplinary approach for the treatment of articular cartilage damage using human ESC-derived chondrocytes" Dr. Drissi, principal investigator, in the amount of \$650,000 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Hiskes, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB23, Yale University, "Differentiation of human iPSC and ES into functional neurons" Dr. Vaccarino, principal investigator, in the amount of \$744,446 **VOTE: 10-0** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB04, UCHC "Cytoplasmic dsRNA response in human embryonic stem cells" Dr. Carmichael, principal investigator, in the amount of \$750,000 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Dees, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA28, UCHC, "Role of Kalirin, a risk factor for schizophrenia, in human stem cells," Dr. Ma, principal investigator, in the amount of \$200,000 VOTE: 9-0 (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Wallack, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB11, UCHC "*Phosphorylation Dynamics of Pluripotent Stem Cells*" Dr. Han, principal investigator, in the amount of \$570,000 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Wallack, the eligible Committee members voted unanimously in favor of providing funding for Disease Directed Group grant proposal 11SCDIS02, UCONN "Stem Cell Approaches for Defining Patient-specific Predisposition to Idiosyncratic Druginduced Liver Injury," Dr. Boelsterli, principal investigator, in the amount of \$1,290,499 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA03, UCHC, "Regulation of mRNA stability and translation in pluripotent and differentiated hES cells," Dr. Resch, principal investigator, in the amount of \$200,000 **VOTE: 9-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Goldhamer, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB28, Wesleyan, "Angiogenesis of Embryonic Stem Cell Derived Hippocampus Transplants," Dr. Grabel, principal investigator, in the amount of \$750,000 **VOTE: 11-0** (In favor: Arinzeh, Dees, Fishbone, Genel, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA39, UCHC, "Investigation of gene expression adaptations to alcohol in iPS cell derived neural cultures from alcohol dependent control subjects," Dr. Covault, principal investigator, in the amount of \$196,836 **VOTE:** 9-0 (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Wallack, seconded by Dr. Hart, the eligible Committee members voted unanimously in favor of providing funding for Core grant proposal 11SCD02, Yale University, "," Dr. Lin, principal investigator, in the amount of \$500,000 for one year **VOTE: 10-0** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Dees, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA15, Yale University, "Single Cell Molecular Signatures for Hematopoietic Differentiation of Human Embryonic Stem Cells," Dr. Fan, principal investigator, in the amount of \$195,251 VOTE: 10-0 (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

<u>MOTION:</u> Upon a motion made by Dr. Hiskes, seconded by Dr. Dees, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB18, Yale University "*Pulsatile tissue-engineered grafts for surgical correction of single ventricle cardiac anomalies,"* Dr. Qyang, principal investigator, in the amount of \$375,000 for two years **VOTE: 10-0** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Hart, seconded by Dr. Dees, the eligible Committee members voted unanimously in favor of providing funding for Established Investigator grant proposal 11SCB24, UCHC "*Elucidating the development and disease of cortical motor neuron using human pluripotent stem cells,"* Dr. Li, principal investigator, in the amount of \$337,470 VOTE: 9-0 (In favor: Arinzeh, Dees, Fishbone, Genel, Hart, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

MOTION: Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of providing funding for Seed grant proposal 11SCA40, Yale University, "Identification and purification of smooth muscle cells from differentiating human embryonic stem cells for vascular tissue engineering," Dr. Sundaram, principal investigator, in the amount of \$200,000 **VOTE: 10-0** (In favor: Arinzeh, Dees, Fishbone, Goldhamer, Hart, Hiskes, Kiessling, Mandelkern, Mullen, Wallack) MOTION PASSED.

Vote on Reserves:

The Advisory Committee members considered the remaining grant proposals for a reserve category in the event one or more of the funded proposals does not come to fruition or there are funds remaining.

<u>MOTION:</u> Upon a motion made by Dr. Kiessling, seconded by Dr. Fishbone, the eligible Committee members voted unanimously in favor of putting the following grant proposals in order of highest ranked as the reserved grant proposals for future consideration if the opportunity arises:

Established Investigator proposals in rank order:

- 11SCB15, UCONN, Dr. Nelson, principal investigator, for one year in the amount of \$250,000.
- 11SCB16, Dr. O'Neill, principal investigator, in the amount of \$744,013

Seed proposals in rank order:

- 11SCA35, UCONN, Dr. Rasmussen, principal investigator, in the amount of \$200,000
- 11SCA07, UCHC, Dr. Carmichael, principal investigator, in the amount of \$200,000

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Ms. Sarnecky reviewed the next steps and noted that all of the applicants will be notified about the outcome of the grant review process. If grant amounts were lowered, Ms. Sarnecky stated that grant recipients will be asked to provide revised budgets. Revised budgets will be sent to the Advisory Committee for review. It was noted that the Department of Public Health will issue letters of certification when everything has been completed. Ms. Sarnecky mentioned that the next Advisory Committee meeting will be held on Tuesday, August 16.

Public Comments:

Mr. LaLande, on behalf of UCONN and Yale, thanked the Advisory Committee members for their hard work and efforts. He noted that he will be informing the grant recipients from UCONN about the awards.

MOTION: Upon a motion duly made and seconded, the Advisory Committee voted unanimously in favor of adjourning the meeting at 5:25 p.m.

Respectfully submitted:	
Dr. Jewel Mullen, Chair	