

SPINAL CORD INJURY RESEARCH BOARD

Regular Business Meeting

May 25, 2023

10:00 am to 2:30 pm

ADOPTED

Location

NYS DOH, Metropolitan Area Regional Office, Conference Room 4B, 90 Church Street, New York, NY
NYS DOH, Wadsworth Center, Biggs Laboratory, Sturman Conference Room, Empire State Plaza, Albany, NY
9 Corwin Place, Lake Katrine NY

SCIRB Members Present

April B. Coughlin, Ph.D.
Jessica Daigle, MA, OTR/L
Bernice Grafstein, Ph.D., D.Sc.(hon.)
Keith Gurgui
Lorne Mendell, Ph.D.
Rachel Santiago, M.D.
Fraser J. Sim, Ph.D.
Adam B. Stein, M.D., Chair
Lauren A. Varriale, M.S., OTR/L

NYS DOH Staff Present

Terry Ascienzo
Alana Buscher, Executive Secretary
David Googins
Farrah M. O'Brien
Brian Rourke
Alexa Nagy

Members of the Public

Alzahraa Amer, Ph.D.
Noam Harel, M.D., Ph.D.
Caitlin Hill, Ph.D.
Nurit Kalderon, Ph.D.
Monique Rease

Call to Order, Passing of Nancy Lieberman (former member and advocate for the SCIRB) and Opening Remarks of the Chair

The meeting was called to order at 10:10 am with a welcome by Chair, Adam B. Stein, M.D.

Dr. Stein said a few words in honor of Nancy Lieberman, former SCIRB and advocate for the NYS Spinal Cord Injury Program, who passed away on April 12, 2022. He thoughtfully recognized Nancy for her work and dedication to SCIRB and the spinal cord injury community. Dr. Mendell also recognized Nancy for her work and advocacy, noting her passing is a big loss for the SCIRB and the spinal cord injured community and Mr. Gurgui seconded their words.

Dr. Stein welcomed the new SCIRB members, Dr. April Coughlin, Jessica Daigle, Dr. Rachel Santiago, and Lauren Varriale. Board members and DOH staff introduced themselves.

Board Membership Updates

Dr. Stein thanked Dr. Krisjan Ragnarsson and Dr. Michael Goldberg whose terms had ended, along with Nancy Lieberman for their hard work and tireless dedication to the SCIRB. He reiterated the four new appointments to the SCIRB. He also discussed the four (4) vacant board seats remain out of a total of thirteen (13), one (1) to be filled by Governor Kathy Hochul, two (2) by Speaker of the Assembly, Carl Heastie, and one (1) by the Temporary President of the Senate, Andrea Stewart-Cousins. Members were asked to forward any recommendations of potential Board members to Department of Health staff.

Consideration of May 11, 2022 Meeting Minutes

Dr. Stein asked the SCIRB to consider Exhibit 1, the minutes from the May 11, 2022, meeting. Mr. Gurgui noted that on page 5 "Dr. Gurgui" should be amended to "Mr. Gurgui".

ACTION

Bernice Grafstein, Ph.D., Sc.(hon.), made a motion to approve the minutes as presented with edits. Dr. Sim seconded. A roll call vote was taken, and the motion carried unanimously (9-0).

Predoctoral and Postdoctoral Fellowships in Spinal Cord Injury Research (Round 5): Request for Applications (RFA)

Ms. O'Brien provided an overview of the applications received in response to this RFA; the procurement timeline is bulleted below:

- This RFA was issued on March 17, 2022.
- Applicants were given a period of eleven (11) weeks to prepare and submit their applications.
- Eleven (11) applications were submitted by the June 1, 2022 due date.
- Independent peer review took place on August 8, 2022. Eight (8) of the eleven (11) applications passed mandatory eligibility requirements and these eight (8) critiques are presented in your meeting binder today.
- The RFA made \$1.5 million available to fund approximately six (6) to ten (10) training (pre- or post-doctoral) awards.
- If all eight (8) of the applications received are approved for funding, they would total \$1,221,359.
- Scoring ties were resolved using the score for the "Training/ Career Development Plan Score" among those applications involved in the tie.
- If the SCIRB recommends the top five to six (5 to 6) scoring applications funding of over a 700 million dollars would be programmed. *(Note: This was said in error, the amount should have read as 700 thousand).*
- Contracts are expected to begin October 1, 2023 for a multi-year term of two (2) years.

Projects to Accelerate Research Translation (PART) and Innovative, Developmental or Exploratory Activities in Spinal Cord Injury (Round 6) RFA

Ms. O'Brien provided an overview of the applications received in response to this RFA; the procurement timeline is bulleted below:

- This RFA was released on September 14, 2022.
- Applicants were given a period of ten (10) weeks to prepare and submit their applications.
- Twenty-One (21) applications were submitted by the November 22, 2022 due date.
- Independent Peer Review took place on February 7 and February 9, 2023.
- Twenty (20) of the twenty-one (21) applications passed mandatory eligibility requirements. Seventeen (17) critiques are presented in your meeting binder today.
- This RFA made \$5M available to fund approximately five (5) to fourteen (14) (PART and/or IDEA) awards.
- If the SCIRB recommends the top eight (8) scoring applications funding of \$5.3 million would be programmed
- Contracts are expected to begin October 1, 2023 for a multi-year term of three (3) years for PART awards and two (2) years for IDEA awards.

For both abovementioned RFAs, Ms. O'Brien said that the SCIRB may vote in favor or against any application submitted for funding, and if an application for which there are available funds is not recommended for funding, the SCIRB will fully justify why the application was not approved. She stated the SCIRB could approve, but not fund other meritorious applications due to limited resources, which could become recommended awards for funding, should there be any declinations.

The SCIRB adjourned into Executive Session for the purpose of considering applications for research funding and future RFAs at 10:30am. Members of the public were asked to leave the meeting with the expectation they could return at approximately 1:30pm.

After discussing the research applications, future RFAs, current funding opportunities, and proposed changes to the Bylaws, the SCIRB reconvened in Public Session at 1:30pm.

SCIRB Recommends Fellowship (Round 5) and PART and IDEA (Round 6) applications

Dr. Stein began the process of considering the applications in response to the Fellow (Round 5) and PART and IDEA (Round 6) in Spinal Cord Injury RFAs. Ms. Buscher announced the application number, organization, and principal investigator.

In summary, the SCIRB recommended funding of \$1.22 million in the form of eight (8) Fellowship awards using the peer review results as the basis for the decision.

The SCIRB also recommended funding of \$5.3 million in the form of four (4) PART and four (4) IDEA awards using the peer review results as the basis for the decision.

Dr. Mendell said that the SCIRB could recommended to approve, but not fund other meritorious applications due to limited resources. A listing of all the SCIRB's recommendations is provided on pages 5-9.

Ms. O'Brien said the SCIRB's recommendations will be forwarded to the Commissioner of Health for approval.

Future RFA: Predoctoral and Postdoctoral Fellowships in Spinal Cord Injury Research (Round 6)

ACTION

Dr. Grafstein made a motion to approve a Fellowship (Round 6) RFA for release in 2023 with \$1.5 million available. Dr. Mendell seconded. A roll call vote was taken, and the motion was unanimously approved (9-0).

Future RFA: Projects to Accelerate Research Translation (PART) and Innovative, Developmental or Exploratory Activities in Spinal Cord Injury (Round 7)

ACTION

Dr. Mendell made a motion to approve a PART & IDEA (Round 7) RFA for release in 2023 with \$5 million available. Dr. Grafstein seconded. A roll call vote was taken, and the motion was unanimously approved (9-0).

Consideration of SCIRB Reports

The SCIRB considered the draft SCIRB reports in their meeting materials. Ms. O'Brien noted that the final reports will be sent to the Commissioner of Health for approval, and then the reports will be provided to the Governor and Legislative leaders.

ACTION

Dr. Grafstein made a motion to approve the draft 2022 SCIRB Annual Report as presented authorizing updates to the highlighted sections. Dr. Mendell seconded. A roll call vote was taken, and the motion was unanimously approved (9-0).

DOH Program Update

Ms. Buscher provided an update on the status of other program activities and previously awarded contracts:

- Our peer review contract with the American Institute for Biological Sciences (AIBS) continues and ends in December 2024.
- One (1) PART and seven (7) of the eight (8) IDEA (Round 4) contracts began in November 2021. These multi-year contracts will end in October 2023 (IDEA) or October 2024 (PART). One (1) of the eight (8) IDEA awardees from the Research Foundation of SUNY Albany, Dr. Ben Szaro declined his award and announced his retirement.

- Four (4) PART and five (5) of the nine (9) IDEA (Round 5) contracts began in October 2022. These multi-year contracts will end in September 2024 (IDEA) or September 2025 (PART).
- Two (2) awards from Translational Research Projects (Round 4) began October 2022 and will end in September 2027.

Future NYS SCI Research Symposium

Dr. Stein brought up the success that was the last Symposium and floated the idea to have another.

Public Comment

No members of the public provided a written statement and there was no public comment.

Future Meeting & Adjournment

At its next meeting in fall 2023, the SCIRB will consider the creation of a new RFA, possibly to assist in fellows becoming faculty. The business meeting was adjourned at 2:30 pm.

*s/ Alana Buscher
Executive Secretary to the
Spinal Cord Injury Research Board
Approved: _____*

Predoctoral and Postdoctoral Fellowships in Spinal Cord Injury Research (Round 5)

\$1.22 million in the form of eight (8) Fellowship awards were recommended. Projects are two-year awards.

| Organization | Award Mechanism | Research Category | Project Title | Fellow and PI | Approved Budget | Recusals | Votes (Y-N) |
|--|-----------------|---|---|--|-----------------|---------------|-------------|
| Winifred Masterson Burke Medical Research Institute DBA Burke Neurological Institute | Postdoctoral | Cellular Regeneration & Therapeutics | Restoration of Motor Function following Spinal Cord Injury via Optical Stimulation | Alzahraa Amer, Ph.D., P.T. and Yutaka Yoshida, Ph.D. | \$ 180,581 | Dr. Grafstein | 8-0 |
| Columbia University | Postdoctoral | Rehabilitation | Functional Dissection of the Rat Corticoreticular Pathway in Spinal Cord Injury | Windsor Ting, Ph.D. and Jason B. Carmel, M.D., Ph.D. | \$ 190,000 | | 9-0 |
| The Research Foundation of CUNY - City College of New York | Predoctoral | Rehabilitation | Activity and connectivity maintain premotor interneuron viability after SCI | Jasmine Pathan, B.A. and John H. Martin, Ph.D. | \$ 118,000 | | 9-0 |
| Rensselaer Polytechnic Institute | Predoctoral | Cellular Regeneration & Therapeutics | Novel Poly(Pro- Gabapentin) Films to Provide Neuroprotection and Increase Neurite Extension | Adelle Hamilton, B.S. and Ryan J. Gilbert, Ph.D. | \$ 122,400 | | 9-0 |
| Columbia University | Predoctoral | Rehabilitation | Improving Trunk and Neck Coordination during Reaching Tasks with a Robotic Neck Brace in Individuals with Spinal Cord Injury | Priya Kulkarni and Sunil K. Agrawal, Ph.D. | \$ 116,000 | | 9-0 |

| Organization | Award Mechanism | Research Category | Project Title | Fellow and PI | Approved Budget | Recusals | Votes (Y-N) |
|--|-----------------|--------------------------------------|--|---|-----------------|---------------|-------------|
| Icahn School of Medicine at Mount Sinai Subcontract: Bronx Veterans Medical Research Foundation | Postdoctoral | Cellular Regeneration & Therapeutics | Multi-drug combination effects on physical therapy-enabled recovery after SCI | Nicholas Johnson, Ph.D. and Ravi Iyengar, Ph.D. Subcontract PI: Christopher Cardozo, Ph.D. | \$ 191,978 | | 9-0 |
| Columbia University | Postdoctoral | Rehabilitation | Improving Trunk Control while Seated on Wheelchairs in Individuals with Spinal Cord Injury using Robotics | Cahwin Ophaswongse, Ph.D. and Sunil K. Agrawal, Ph.D. | \$ 180,000 | | 9-0 |
| Cornell University | Predocctoral | Cellular Regeneration & Therapeutics | Examine the effects Goldfish Extracellular Matrix (ECM) Hydrogel and Chondroitinase ABC (ChABC) in Injured Mice. | Catia Dombaxe, B.S. and Yadong Wang, Ph.D. | \$ 122,400 | Dr. Grafstein | 8-0 |

PART and IDEA (Round 6)

\$5.75 million in the form of four (4) PART and four (4) IDEA awards were recommended.
Projects are three (3) years for PART awards and two (2) years for IDEA awards.

| Organization | Award Mechanism | Research Category | Project Title | PI & Co-PI(s) | Approved Budget | Recusals | Votes (Y-N) |
|--|-----------------|-----------------------|---|--|-----------------|---------------|-------------|
| Icahn School of Medicine at Mount Sinai Subcontracts: 1. Feinstein Institute for Medical Research 2. Bronx Veterans Medical Research Foundation | PART | Rehabilitation | Biomarkers of Spinal Cord Injury Pain Evolution during Acute Rehabilitation (BioSPEAR) | Thomas Bryce, M.D. Subcontract PI: 1. Ona Bloom, Ph.D. 2. Wei Zhao, Ph.D. | \$910,611 | Dr. Stein | 8-0 |
| Winifred Masterson Burke Medical Research Institute | PART | Cellular Regeneration | Ephrin-mediated cortical motor circuit rewiring | Edmund Hollis, Ph.D. | \$988,622 | Dr. Grafstein | 8-0 |
| Icahn School of Medicine at Mount Sinai | IDEA | Cellular Regeneration | Investigate glial communication in neural repair after SCI | Hongyan Jenny Zou, M.D., Ph.D. | \$360,000 | | 9-0 |
| Winifred Masterson Burke Medical Research Institute | IDEA | Cellular Regeneration | Structural plasticity of cortico-brainstem projections after spinal cord injury and their contribution to functional recovery | Vibhu Sahni, Ph.D. | \$360,000 | Dr. Grafstein | 8-0 |
| Bronx Veterans Medical Research Foundation Subcontracts: 1. Feinstein Institute for Medical Research 2. University of Kansas | PART | Rehabilitation | Optimizing spinal cord associative plasticity to enhance response to hand training in cervical spinal cord injury | Noam Harel, MD, Ph.D. Subcontract PI: 1. Ona Bloom, Ph.D. 2. Joseph Weir, Ph.D. | \$946,581 | Dr. Stein | 8-0 |

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| Organization | Award Mechanism | Research Category | Project Title | PI & Co-PI(s) | Approved Budget | Recusals | Votes (Y-N) |
|--|-----------------|-----------------------|--|--|-----------------|---------------|-------------|
| University of Rochester | IDEA | Cellular Regeneration | PDE10A treatment for neuropathic pain after spinal cord injury | Bradford Berk, M.D., Ph.D. | \$359,294 | | 9-0 |
| Winifred Masterson Burke Medical Research Institute Subcontract: University of Michigan | IDEA | Cellular Regeneration | The contribution of Wallerian degeneration to neural tissue inflammation and axon regenera | Edmund Hollis, Ph.D. Subcontract PI: Roman Giger, Ph.D. | \$360,000 | Dr. Grafstein | 8-0 |
| Bronx Veterans Medical Research Foundation Subcontract: University of Nebraska Medical Center | PART | Cellular Regeneration | Novel Targeting Nanotherapeutics for Functional Recovery after Acute SCI | Weiping Qin, M.D., Ph.D. Subcontract PI: Dong Wang, Ph.D. | \$990,000 | | 9-0 |

PART and IDEA (Round 6)

\$5.75 million in the form of four (4) PART and four (4) IDEA awards were recommended.
 Projects are three (3) years for PART awards and two (2) years for IDEA awards.

| Organization | Award Mechanism | Research Category | Project Title | PI & Co-PI(s) | Approved Budget | Recusals | Approve, Not Award Votes (Y-N) |
|---|-----------------|-----------------------|---|---|-----------------|----------|--------------------------------|
| University of Rochester | PART | Cellular Regeneration | Targeted Inhibition of Transglutaminase 2 for the Treatment of Spinal Cord Injury | Christoph Proschel, Ph.D. | \$990,000 | | 9-0 |
| Icahn School of Medicine at Mount Sinai | PART | Rehabilitation | Long-term effects after exoskeletal-assisted walking during SCI acute inpatient rehabilitation on motor, functional independence, and neural connectivity – a RCT | Chung-Ying Tsai, Ph.D., DPT | \$887,110 | | 9-0 |
| Research Foundation for SUNY at Buffalo | IDEA | Rehabilitation | Neuromodulation Therapy to Improve Grasping Function After Spinal Cord Injury | Hang Jin Jo, Ph.D. | \$348,440 | Dr. Sim | 8-0 |
| Regenerative Research Foundation | IDEA | Cellular Regeneration | Preclinical assessment of intracellular antibodies against alpha-synuclein for spinal cord injury | Caitlin Hill, Ph.D. and David Butler, Ph.D. | \$360,000 | | 9-0 |