

FY 2024 Indiana Spinal Cord and Brain Injury Research Fund - Annual Fiscal Report





Indiana Spinal Cord and Brain Injury Research Fund (ISCBIRF)

Annual Report for State Fiscal Year (FY) 2024 - July 11, 2023 - June 30, 2024

The ISCBIRF was created by the 2007 Indiana General Assembly under <u>Indiana Code (IC) 16-41-42.2</u>. Recommendations for grant funding are made by the Spinal Cord and Brain Injury Research Board (Board) to the Indiana Department of Health (IDOH). Board members are appointed by the governor, Indiana University, Purdue University, Brain Injury Association of Indiana, National Spinal Cord Injury Association and Rehabilitation Hospital of Indiana. This report is in compliance with <u>IC 16-41-42.2-5</u>. The report was compiled by the IDOH Division of Trauma and Injury Prevention.

The ISCBIRF was established to support research on spinal cord and brain injuries. The fund, administered by the state department, is financed through appropriations, donations, fees, and grants. The Board evaluates policy matters, reviews research applications, awards grants for research and healthcare clinics, monitors project efficacy, establishes policies, and oversees fund expenditures. This report has been created to provide an update on funding to the Governor and the Indiana General Assembly.

The state appropriates to this fund revenue that is utilized for operational costs for the Board to carry out its statutory duties. The table below summarizes actual fund expenditures for FY24:

Total	\$ 1,315,063
Operating costs (non-personnel)	\$138,923
IDOH staff support	\$ 345,837
Peer review contract (CTSI)	\$ 40,803
Grant funding	\$ 789,500

Revenues collected during the year amounted to \$1,803,297. The fund ended the fiscal year with a cash balance of \$488,234. The fund's cumulative available cash balance is \$839,395.

The Board met during the 2024 dates of June 27, Aug. 6 and Aug. 26, to conduct official business including preparation for the release of the FY26 and FY27 biennial request for application process, review research and activity-based therapy project progress reports, and address requests for project extensions.





The Board issued the research request for proposals in September 2022 with a deadline of Dec. 12, 2022. Twenty-five proposals were received, and all were peer reviewed. Wade Lange, as a Board liaison, attended the early commercialization portion of the review and Howard Zelaznik attended the remainder of the review, also as Board liaison. The peer reviewers ranked the proposals with the National Institutes of Health (NIH) scoring system and nine applications were recommended to the Board for funding, via a tiered approach that accommodated funding based on financial availability. These nine applications were reviewed by the Board, with guidance from the peer review comments. Eight were selected for funding. The total commitment for the proposals was valued at \$639,892.50 for FY24. A list of research-related FY24 awards is included in Appendix I.

The Board issued the activity-based therapy request for proposals July 2022 with a deadline of Nov. 1, 2022. Three proposals were received, and all were peer reviewed. Whitney Pratt, as Board liaison, attended the peer review committee meeting. Reviewers ranked the proposals with the NIH scoring system and submitted the scores for the Board's consideration. Based on the peer reviewers' comments, the Board agreed to fund both spinal cord injury (SCI) applications at one-half the request (over two years) and the traumatic brain injury (TBI) application at the full amount requested. The total commitment for the proposals was valued at \$149,593.75. The FY24 activity-based therapy awards are included in Appendix II.

Board Membership:

The Board successfully identified and filled open vacancies with the addition of the following members:

- Rehabilitation Hospital of Indiana Dr. Sheryl Katta-Charles, MD
 Medical Director, Brain Injury Rehabilitation Services, Rehabilitation Hospital of Indiana
- Physical Therapist Ross Nelson, PT, DPT, CSRS, CBIS
 Board Certified Clinical Specialist in Neurologic Physical Therapy
 Parkview Hospital Randallia Parkview Rehabilitation Center

A complete list of Board members is provided in Appendix III.





Appendix I

FY2024- FY2025 Indiana Spinal Cord and Brain Injury Grant Recipients

Basic Research

- Amol Yadov, Indiana University, \$160,000
 - "A high-density spinal cord dorsal column stimulation-based sensory neuroprosthetic"
- Xiaoming Jin, Indiana University, \$160.000
 - "Neuroprotection followed by neuroactivation for the prevention of posttraumatic epilepsy"
- Chandler Walker, Indiana University, \$159,785
 - "A novel target for neuroprotection and regeneration following traumatic spinal cord injury"
- Cody Smith, University of Notre Dame, \$160,000
 - "Identification of glial targets that enhance regeneration after traumatic injuries"
- Maria Dadarlat, Purdue University, \$160,000
 - o "Effects of traumatic brain injury on cortical physiology and visual perception"
- Lingxiao Deng, Indiana University, \$160,000
 - "Changes in inflammatory biomarkers from locomotor exercise-induced sex-based recovery after contusive spinal cord injury"
- Fletcher White, Indiana University, \$160,000
 - o "Therapeutic Strategies for Posttraumatic Pain Due to Mild Traumatic Brain Injury"
- Naikui Liu, Indiana University, \$160,000
 - "Carnitine palmitoyltransferase 1 as a novel target for therapeutic intervention after spinal cord injury"





Appendix II

FY2024 - FY2025 Activity-Based Therapy Grant Recipients

- Elliott Cohee, NeuroHope, \$74,893.50
 - "Extended Care Programs and Hospital Readmission for SCI"
- Baumgartner, Christina, Rehabilitation Hospital of Indiana, \$74,763
 - "Activity-Based Therapy for Individuals with Spinal Cord Injury"
- Baumgartner, Christina, Rehabilitation Hospital of Indiana, \$149,526
 - "Activity-Based Therapy for Individuals with Traumatic Brain Injury"

Appendix III

Indiana Spinal Cord and Brain Injury Fund Board Members

1. Physician/Neurosurgeon*

Dr. Hank Feuer (Board chairman)

2. Spinal Cord/Head Injury Person or Family Member*

Kira Hudson, MBA Clinical Data Analyst, Ascension St. Vincent Indianapolis Hospital

3. Physiatrist, Board Certified APMR*

Dr. Whitney Pratt, MD PhD Assistant Clinical Professor, Department of Physical Medicine and Rehabilitation Indiana University School of Medicine

4. Technical Life Sciences Industry*

Wade Lange, MS Vice President, Lange Advisors

5. Owner or operator of a facility that provides long term activity-based therapy services*

Michael Freeman
Director, Pat's Pals Therapy Ranch, Inc.

6. Physical Therapist*

Ross Nelson, PT, DPT, CSRS, CBIS Board Certified Clinical Specialist in Neurologic Physical Therapy Parkview Hospital Randallia – Parkview Rehabilitation Center





7. Indiana University

Bruce Lamb, PhD Executive Director, Stark Neuroscience Research Institute Indiana University School of Medicine

8. Purdue University

Howard Zelaznik, PhD Associate Vice President for Research

9. National Spinal Cord Injury Association

Janeen Earwood
Director of Rehabilitation, American Senior Communities

10. Rehabilitation Hospital of Indiana

Dr. Sheryl Katta-Charles, MD Medical Director, Brain Injury Rehabilitation Services, Rehabilitation Hospital of Indiana

11. American Brain Injury Association/Brain Injury Assoc. of Indiana

Sachin Mehta, MD Physical Medicine and Rehabilitation, Franciscan Health





^{*} Designates governor-appointed position