REQUEST FOR PROPOSALS (RFP)

INVESTIGATOR INITIATED RESEARCH

ISSUED BY THE SPINAL CORD INJURY RESEARCH FUND
ADMINISTERED BY THE MEDICAL UNIVERSITY OF SOUTH CAROLINA (MUSC)

RFP 2023 – I

Date of Release: May 5, 2023 Deadline for Submission: Open

Background: Amendment (Bill S54 44-38-510) to Section 2, Chapter 38, Title 44 of the 1976 SC Code was ratified on July 20, 2000 and authorized the new South Carolina Spinal Cord Injury Research Fund (SCIRF) provided from a \$100 surcharge on each Driving Under the Influence (DUI) conviction. The SCIRF is administered by the SCIRF Board appointed by the Governor and is attached to MUSC for staff and administrative purposes. The law authorizes the SCIRF to utilize monies to cover basic operating and administrative costs but directed that the balance be provided for spinal cord injury (SCI) research projects.

SCI is a serious cause of disability, results in an increased lifelong risk of secondary health conditions, and is typically associated with elevated risk of mortality. Often traumatic in origin, it may also result from inflammatory, neoplastic, developmental, or rarely infectious causes. The consequences of SCI are legion, including paralysis of legs and arms, even muscles of respiration; loss of sensation and autonomic control; chronic pain; impairment of bowel, bladder, and sexual function; metabolic disorders, such as hypercalcemia; muscle spasticity with contractures of joints, fractures, and heterotopic ossification; complications such as decubitus ulcers, uncontrolled blood pressure, and frequent infections. People with SCI may face extraordinary demands due to the costs of medical care, limitations in rehabilitation resources after profound loss of mobility, and the absence of environmental supports. The families of people with SCI also face additional demands, and the costs of care to families and the residents of South Carolina are extraordinary and ongoing. The long-term goal of this research initiative is to minimize the risk and incidence of SCI, interrupt or reverse the process of SCI, and improve the health and quality of life for residents of South Carolina with SCI.

Areas of potential research interest include: basic neurobiology, including regeneration of cells and axons, modulation of inflammatory and destructive processes, prevention of injury-induced neurotoxicity or secondary injury; pre-clinical studies, including refinement of animal models of SCI; translation of pre-clinical findings into treatment, including pharmacological trials, surgical approaches, and previously unexplored treatments; clinical issues, including diagnostic assessment and monitoring, relationship to other spinal cord disorders and psychological disorders; outcomes of rehabilitation, including therapies (prosthetic, physical, occupational, speech/language, recreational), secondary health conditions, quality of life (technological solutions, functional improvement), and attendant care; epidemiology, including factors affecting incidence, availability, and quality of SCI care in South Carolina; education and prevention, including education curriculum for people and families in appropriate and adequate SCI care (classroom, career), community (prevention of alcohol-related injury, opportunities for therapy and rehabilitation), and health care providers (curriculum at South Carolina colleges and universities, professional education).

Request for Proposals: The SCIRF invites applications for *Research Investigator Initiated* research on all aspects of SCI in an effort to develop a better understanding and ultimately treatment for paralysis and other consequences of SCI and spinal cord disease.

Funding Mechanism: Investigator Initiated Research Grants

Investigator Initiated Research grants will not exceed \$150,000 over a 24-month period. The primary goal of this research grant will be to perform studies that lay the foundation for larger projects which may bring federal funds into the state of South Carolina. The project may be basic science, applied, or translational. We are particularly interested in funding projects specifically addressing issues faced by people with SCI in South Carolina. A maximum of 20% effort for the principal investigator is strongly encouraged.

Eligibility and Terms of Support: *Investigator Initiated Research* grant applications will be accepted from clinicians, therapists, educators, and scientists in South Carolina who have a terminal professional degree in their field and, in the case of research involving human subjects, have access to an Institutional Review Board. Note that IRB approval is required for all human subject research before any human subject activities are initiated. Investigators must be located at a non-profit facility that is currently supported by state or federal funding in South Carolina. This includes, but is not limited to, faculty members of research and educational institutions throughout the state. Continued funding for the second year of the grant is contingent upon successful completion of the first-year activities as reported in the 10-month Technical Progress Report.

Reporting/Presentations: A Technical Progress Reports is due at 10 months. A Final Report is due within 60 days after termination of the grant. All reports should be submitted to the Executive Director. Progress will be evaluated by the Scientific Directors. In addition, all applicants will be required to present their research/findings at a SCIRF meeting and/or Scientific Conference once per grant year.

Funding: *Investigator Initiated Research* grants will not exceed \$150,000 over a 24-month period (\$75,000 max/per year). The period of funding will be a maximum of 24 months. Continued funding for Year 2 is contingent upon progress indicated in the Technical Progress Report, with no guarantee of renewal. Grant fund uses for equipment require approval prior to application submission and must be clearly justified as essential to successfully conduct the proposed research. The SCIRF does not provide support for indirect costs, and any such related costs essential to the proposed research should be included in the direct cost budget request.

Timeframes: The review of all *Investigator Initiated Research* grant proposals will be completed within 120 days following the grant submission deadline. The deadline for applications in response to this RFP recurs each January 15th and August 15th or the next business day if the deadline falls on a weekend or official state holiday. The SCIRF will make money available within 30 days following approval from the Board of Directors, and receipt of signed acceptance forms from successful applicants.

Review Process: *Investigator Initiated Research* grant proposals will be reviewed by at least one external reviewer and by the SCIRF Scientific Directors. Investigators are encouraged to submit the names of two (2) reviewers qualified to review their proposals. These individuals *may* be selected as ad hoc reviewers. The SCIRF Board of Directors will consider reviews in making final award decisions.

Submission Address: Grant applications should be submitted in PDF form by e-mail to the SCIRF Executive Director.

Application Format: The proposal (Sections III and IV) must not exceed 8 pages. The application format is as follows:

- I. Face page
- II. Abstract
- III. Project Proposal according to current NIH format which includes:
 - A. Specific Aims and Hypothesis

- B. Background and Approach
- C. Innovation
- D. Preliminary data (if any)
- E. Experimental design and expected results of outcome
- IV. Value to the State of South Carolina (benefit to the people of the State and specific plans for obtaining extramural funding)
- V. References
- VI. Detailed Budget (with narrative justification) Form PHS398 preferred
- VII. Biosketch (of all critical participants) abridged NIH format

Review Criteria: *Investigator Initiated Research* grant proposals will be reviewed according to the following criteria:

- 1. Significance
- 2. Innovation
- 3. Investigator(s)
- 4. Approach
- 5. Environment availability of adequate facilities to conduct the proposed project and to support the career of the research candidate
- 6. Appropriateness of the budget
- 7. Value to South Carolina (considered by the Board of Directors independent of scientific merit) The Board of Directors will consider the value of the investigator initiated research above and beyond the quality of the science, including the likelihood that the research will result in federal funding. The PI should include potential plans for continuing the research.

Scoring Procedures: 1-9 scale according to current NIH standards. Scores ranging from 1-3 are considered as High Impact, 4-6 as Moderate Impact and 7-9 as Low Impact.

- 1. Exceptional; exceptionally strong with essentially no weaknesses
- 2. Outstanding; Extremely strong with negligible weaknesses
- 3. Excellent; Very strong with only minor weaknesses
- 4. Very good; Strong but with numerous minor weaknesses
- 5. Good; Strong with at least with one moderate weakness
- 6. Satisfactory: Some strengths but also some moderate weaknesses
- 7. Fair; Some strengths but with at least one major weakness
- 8. Marginal; A few strengths and a few major weaknesses
- 9. Poor; Very few strengths and numerous major weaknesses

Number of Awards: The SCIRF anticipates making up to 4 *Investigator Initiated Research* grant awards per year.

Awarding of Funds: Projects will be awarded by grant or contract based upon applicable South Carolina policies, procedures, and laws concerning the expenditure of State funds. Grants or contracts are made to the principal investigator's institution, not to any individual or principal investigator.

For Questions or Additional Information:

Potential applicants should contact Ms. Catherine Leigh Graham, Executive Director, South Carolina Spinal Cord Injury Research Fund.

Catherine Leigh Graham, MEBME

Executive Director

Email: grahacat@musc.edu Phone: 843-614-1756

Questions regarding applied or clinical research should be addressed to Dr. James S. Krause, Scientific Director, South Carolina Spinal Cord Injury Research Fund.

James S. Krause, PhD Scientific Director

Email: <u>krause@musc.edu</u> Phone: 843-792-1337

Questions regarding basic science research should be addressed to Dr. Naren L. Banik, Associate Scientific Director, South Carolina Spinal Cord Injury Research Fund.

Naren L. Banik, PhD

Associate Scientific Director Email: baniknl@musc.edu Phone: 843-792-7594

FACE PAGE

SOUTH CAROLINA SPINAL CORD INJURY RESEARCH FUND

INVESTIGATOR INITIATED RESEARCH

RESPONSE TO: <u>**RFP 2023 – I**</u>

Title of Project:	
Name of Principal Investigator:	
Institution:	
Address:	
Phone:	
Fax:	
Email:	
Is this a resubmission:	
Yes No	
Total Amount Requested:	
Year 1: Year 2:	
Name of Contact Person:	
Phone of Contact Person:	
Signatures	
Principal Investigator:	
Authorized Institutional Official:	