

REQUEST FOR PROPOSALS (RFP)
POSTDOCTORAL RESEARCH FELLOWSHIP

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

RFP 2020 – PD

Date of Release: July 1, 2020
Deadlines 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 *Postdoctoral Research Fellowships* to work with established programs of research on all aspects of SCI. The goal of this mechanism is to build SCI research capacity in South Carolina by increasing the number of individuals with doctorates who seek postdoctoral training in SCI, working with a mentor who has an independent program of research in SCI. Capacity will be built by transitioning postdoctoral fellows to faculty and research positions within the state of South Carolina, or by enhancing the work of existing SCI investigators.

Funding Mechanism: Postdoctoral Research Fellowships

Postdoctoral research fellowships will not exceed \$67,500 over a 12 month period. The primary goal of this grant will be to support the postdoctoral training of the research fellow for 12 months so that the individual may work in the laboratory of an established SCI investigator who will provide mentorship and the basic resources to complete the training. The postdoctoral fellow and mentor research 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.

Eligibility and Terms of Support: Applications for *postdoctoral research fellowships* will be accepted from investigators (mentor) who have established programs of SCI research, at non-profit facilities, that are currently supported by state or federal funding. This includes, but is not limited to, faculty members of research and educational institutions throughout the state. The applicant must have the time to provide the mentorship and the resources for the postdoctoral candidate to complete their research training. A small portion of the grant may be used to purchase supplies related to the research, travel for the postdoctoral candidate to attend the SCIRF scientific conference, or other reasonable minor expenses. All research activities must be approved by the appropriate institutional review board. By accepting the award, the applicant institution and the grantee ensures that the postdoctoral candidate spends 100% FTE committed to SCI research and related SCI training activities. The postdoctoral candidate may submit a grant application as part of the postdoctoral training, so long as the application is an extension of the training and focused in the area of SCI.

It is preferred that the grantee (mentor) have an individual named and submitted as part of the grant application, attaching the appropriate curriculum vita of both the mentor and the postdoctoral candidate. However, mentors may request funding to seek a postdoctoral candidate and therefore may submit the grant application with the postdoctoral candidate "to be named". This may facilitate the process of identifying an appropriate postdoctoral candidate. Under this circumstance, the mentor must submit the name of the postdoctoral candidate who is eventually identified, along with their curriculum vita so that the scientific directors may review and approve the candidate. This will ensure the appropriateness of the candidate and the availability of all necessary resources to maximize the benefits of the postdoctoral experience.

Funding for a second year is possible, but will require a new application which must, in part, demonstrate the successful completion of the first year activities. Any intent to apply for a second year of funding must be stated in the 6 month Technical Progress Report.

Reporting/Presentations: A Technical Progress Report is due at 6 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: *Postdoctoral research fellowships* will not exceed \$67,500 over a 12 month period. 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 *postdoctoral research fellowship* grant proposals will be completed within 90 days following the receipt of the proposal. 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: Grant proposals for *postdoctoral research fellowships* will be reviewed by the scientific directors of the SCIRF. One external reviewer may be utilized if it is deemed helpful by either the SCIRF

Scientific Directors or the Board of 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: Submit proposals in PDF format via e-mail to the SCIRF Executive Director.

Application Format: The application format is as follows:

- I. Face page
- II. Abstract
- III. Proposal (not to exceed five pages)
 - a. Candidate
 - b. Training/Career Development Plan
 - c. Research Plan – specific project the Post Doc will be working on
 - d. Mentor(s)/Collaborators
 - e. Environment
 - f. Value to South Carolina
- IV. References
- V. Detailed Budget (NIH form PHS398 preferred) and with narrative justification
- VI. Biosketch (of all mentors and critical participants) – abridged NIH format

Review Criteria: *Postdoctoral Research Fellowship applications* will be reviewed according to the following criteria:

1. Candidate

Demonstration that the candidate is appropriate for a postdoctoral fellowship with specific application to SCI. Although it is preferred that the candidate have some specific experience with SCI, this is not required. However, the candidate must demonstrate interest in SCI in a written statement, as well as have the credentials to build a successful career that will include applications to SCI.

2. Training/Career Development Plan

Demonstration of a training plan which will help prepare the postdoctoral candidate in both developing the basic skills related to the candidates PhD training and specifically in the area of SCI. Training plan should indicate frequency of mentor/mentee meetings.

3. Research Plan – specific project(s) the candidate will work on

The plan must be scientifically sound and address all elements important to the development, implementation, conduct, and dissemination of important research related to SCI. If there will be any use of human subjects, the mentor must have access to an IRB and demonstrate the ability to successfully recruit the number of participants proposed. Mentor should also state contingency plans if the recruitment numbers fall short.

4. Mentors/Collaborators

The primary mentor must have the proper training to mentor the candidate in the field of their PhD and/or more specifically in the area of SCI. The mentor(s) must have the time/effort available (effort

reporting time line may be required). The combination of individual postdoctoral candidate, mentors, and research plan must demonstrate the ability to conduct SCI research and advance individuals training in that field. The qualifications of the mentor will be evaluated. Any potential collaborators will also be considered in terms of their ability to promote the development of the postdoctoral candidate in the application of her/his research to SCI.

5. Environment

Research environment conducive to the conduct of the research and training must be demonstrated.

6. Value to South Carolina (considered by the Board of Directors independent of scientific merit)

The Board of Directors will consider the value of the postdoctoral training above and beyond the quality of the science, including the likelihood that the postdoctoral fellow may be retained by the applicant institution after completion of the fellowship. The PI must make the case as to how this work will benefit people with SCI in South Carolina via sustaining SCI research and/or the SCI research laboratory as well as the relevance directly to South Carolina. The potential likelihood that the PostDoc will stay in South Carolina and whether the mentor's institution is looking at the PostDoc for a faculty position should be clearly described along with any long-term benefits of the postdoctoral fellows work to SCI research in South Carolina.

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 *Postdoctoral Research Fellowship* 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. Questions regarding applied or clinical research should be addressed to Dr. James Krause, Scientific Director, South Carolina Spinal Cord Injury Research Fund. Basic science questions should be addressed to Dr. Naren L. Banik, Associate Scientific Director, South Carolina Spinal Cord Injury Research Fund.

Catherine Leigh Graham, MEBME

Executive Director

Email: grahacat@musc.edu

Phone: 843-614-1756

James S. Krause, PhD

Scientific Director

Email: krause@musc.edu

Phone: 843-792-1337

Naren L. Banik, PhD

Associate Scientific Director

Email: baniknl@musc.edu

Phone: 843-792-7594

FACE PAGE
SOUTH CAROLINA SPINAL CORD INJURY RESEARCH FUND
POSTDOCTORAL RESEARCH FELLOWSHIP
RESPONSE TO: RFP 2020 – PD

Title of Project:

Name of Principal Investigator:

Institution:

Address:

Phone:

Fax:

Email:

Is this a resubmission:

Yes
 No

Total Amount Requested:

Name of Contact Person:

Phone of Contact Person:

Signatures

Principal Investigator:

Authorized Institutional Official:
