

**RESEARCH ON SPINAL CORD INJURY (SCI)
REQUEST FOR PROPOSALS (RFP) 02A**

ISSUED BY THE SPINAL CORD INJURY RESEARCH FUND BOARD

Judge Charles L. Allen, Brian G. Cuddy, MD(Chair), David Griesemer, MD, Terry Peacock, Phanor L. Perot, MD, PhD, David L. Shallcross, MD, and W. Daniel Westerkam, MD

ADMINISTERED BY THE MEDICAL UNIVERSITY OF SOUTH CAROLINA (MUSC)

RFP 02A

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Deadline for Submission: Open

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

SCI is a serious and seldom reversible cause of disability. 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 dysfunction; 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 spouses and children of people SCI also face additional demands and the cost 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), 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 patients 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).

The South Carolina Spinal Cord Injury Research Fund acknowledges the need to increase the number of highly qualified spinal cord injury researchers in the state. Building a critical mass of spinal cord injury investigators that have the capacity and resources to establish research programs in basic and applied sciences is an essential step in facilitating spinal cord injury research. Qualified scientists, not only contribute to the advancement of the field, but increase the overall capacity within the state to successfully compete for federal research funds that will enhance both the visibility and the scope of spinal cord injury research in the state of South Carolina. The Fund must assist in the recruitment of the outstanding researchers if we are to fully address the mission of enhancing the quality of life of citizens of South Carolina with spinal cord injury.

Request for Proposals: The South Carolina Spinal Cord Injury Research Board invites grant and contract applications to promote the recruitment of scientists who specialize in the area of spinal cord injury to the state of South Carolina.

Funding Mechanism

Qualifying institutions within the state of South Carolina may apply for a grant of \$75,000 to assist in the recruitment of a scientist specializing in the area of spinal cord injury. Recruitment may be based on the availability of a particular individual under consideration for a position opening or to initiate a search where no specific individual has yet been identified.

In the latter circumstance, evaluation of the request will be based upon the qualifications of the individual, the candidate's relevant research experience with spinal cord injury, and her/his potential to develop a stable research program in spinal cord injury. The request should outline how funds will be utilized by the investigator to promote spinal cord injury research. Utilization of funds to develop research laboratories or to accrue other needed types of equipment that is necessary to perform the research will be a priority.

If no specific individual has been identified, an organization or an entity within an organization, such as a specific department or college within a university, may request funds to recruit a researcher with expertise in spinal cord injury. In this case, the application must highlight the program to which the individual is being recruited and the qualifications of an acceptable applicant. If an award is made to institution to initiate a search for qualified spinal cord injury researcher, the institution will be required to gain approval of the specific individual after a specific candidate has been identified. Whereas the goal of the preliminary application is to evaluate the need of an environment to which the individual will be recruited, the second more abbreviated review will focus on the extent to which the individual meets the initial approved recruitment. This step is necessary to ensure that the primary focus of the scientist is in the area of spinal cord injury. Institutions will have a twelve month period from the time of the award to identify and recruit an appropriate candidate, although the actual hire date may exceed this timeframe. If a candidate has not been identified/selected at the end of twelve months, the money will revert back to the SCSCRIF.

Eligibility and Terms of Support: Applications will be accepted to recruit scientists to 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. This includes, but is not limited to, faculty members of research and educational institutions throughout the state. All applicants will be required to submit a two-page progress report within 60 days of the termination of the award period. In addition, all applicants will be required to present their research at a Spinal Cord Injury Research Fund meeting and to have prepared a research proposal on SCI to be submitted within 6 months of the termination of the award. Multiple applications may be submitted from the same institution, but no institution may hold more than 1 grant at a time for which a specific candidate has not been identified. Once an institution has successfully competed for recruitment grant and has filled that position with a qualified applicant, they will then become eligible to apply for and obtain an additional award for a different candidate or position. The factors that will determine whether a second grant is funded will be quality of the application and availability of funds.

Funding: Grant or contract support will be awarded initially for 24 months (i.e., the individual will have 24 months to expend the funds and may request a no cost extension after that time). Funds will be provided to the individual once they have moved to a SC institution of higher education. Institutions may apply for and receive multiple awards for recruitment. However, no institution that has a current award for which there is no identified candidate may receive a second award until the first award has been utilized to successfully recruit a candidate with expertise in spinal cord injury research. A maximum of 20% of the award may be used to support the recruits salary and fringe benefits. The Spinal Cord Injury Research Fund 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. Once the individual is recruited, the funds will be used only for salary support, supplies, or equipment. No funds will be used for the search.

Timeframes: The review of all proposals will be completed within 60 days following the grant submission deadline. There will be no specific deadline for this competition, as we understand that the timing of recruitment of new faculty is based on multiple considerations. The South Carolina SCI Research Board will make money available within 30 days following a recommendation for funding by the Review Committee and approval.

Review Process: Proposals will be reviewed by committees of reviewers approved by the Spinal Cord Injury Research Fund Board as drawn from a list of volunteers as well as those recommended by knowledgeable peers. One review committee will consider basic science or pre-clinical proposals, and another review committee will consider applied or clinical proposals. Investigators will be asked to submit the names of two (2) reviewers qualified to review their proposals, and these individuals may be selected as ad hoc reviewers. Each member of the Review Committees will have or have had a national competitive research award. Grants will be scored in a manner similar to an NIH grant review committee where 100 is the best possible score and 500 is the lowest score. At least two reviewers will be assigned to each grant and all members of the appropriate review committee present for the review will have an opportunity to vote on each proposal. The Board will consider these reviews and scores in making all final award decisions.

Submission Address: Grant applications should be submitted to Naren L. Banik, PhD, Associate Scientific Director, South Carolina Spinal Cord Injury Research Fund, c/o Fund Administrator, Office of the President, Medical University of South Carolina, PO Box 250001, Charleston, SC 29425.

Application Format: The proposal must not exceed 5 pages, not including the cover letter or the vita/biosketch of the recruit, if available. The application format is similar to that of a National Institutes of Health (NIH) research proposal. Specific elements that should be included are:

- I. Face page (name, department, proposal title, abstract)
- II. Specific aims
- III. Value to the State of South Carolina (benefit to the people of the State and/or plans for obtaining extramural funding and/or compatibility with Fund's primary objectives and initial priorities.
- IV. Background and rationale
- V. References
- VI. Detailed Budget (with narrative justification)
- VII. Biosketch – if available (abridged NIH format, additional biosketches for each co-investigator should be included, adjusting page limit to accommodate more than one)

Please submit the original and six copies.

Review Criteria: Proposals will be reviewed by the Review Committees according to the following criteria:

1. Feasibility and adequacy of the candidate, if one has been identified.
2. Likelihood of the candidate ultimately receiving extramural support and/or benefiting the people of the State of South Carolina.
3. Availability of adequate facilities to conduct the proposed project and to support the career of the research candidate.
4. Appropriateness of the budget.
5. Relevance to the Fund's primary objectives and initial priorities as presented in the Background section of this RFP.

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.

For Questions or Additional Information: Potential applicants should contact Dr. James Krause, Scientific Director or Dr. Mark S. Kindy, Associate Director, South Carolina Spinal Cord Injury Research Fund. Procedural and basic science questions should be addressed to Dr. Kindy. Questions regarding applied or clinical research, the set aside funds for special needs of people with SCI in South Carolina, career development awards, or consumer education should be addressed to Dr. Krause.

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