RESEARCH ON SPINAL CORD INJURY
REQUEST FOR PROPOSALS (RFP) 07
ISSUED BY THE SPINAL CORD INJURY RESEARCH FUND BOARD
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ADMINISTERED BY THE MEDICAL UNIVERSITY OF SOUTH CAROLINA (MUSC)

RFP 07
Date of Release: December 15, 2007
Deadline for Submission: February 15, 2008

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 (SCI) 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 include 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).

**Request For Proposals:** The South Carolina Spinal Cord Injury Research Board invites grant and contract applications for research on all aspects of SCI in an effort to develop better understanding and ultimately treatment for paralysis and other consequences of SCI and disease. This is the seventh annual call for grants that outline innovative and potentially groundbreaking research. It is estimated that $250,000 will be available for projects funded in response to this request (3-4 awards).

**Funding Mechanisms**

1. Primary research grants will not exceed $100,000 over a 24-month period ($50,000 per year). These will support research activities of junior faculty (usually within 1 to 5 years of their first faculty position or first research position) that may include, basic, applied, or translational research. Those proposing translational projects may wish to contact the directors of the Center for Interdisciplinary Spinal Cord Injury Research (Dr. Krause or Dr. Banik) to discuss collaboration or coordination of projects. This is not mandatory, but may be helpful in addressing the larger goals and needs of people with SCI throughout the state of South Carolina. The primary goal of these research grants will be to perform studies that lay the foundation for larger projects that may bring federal funds into the state of South Carolina. For applied research, we are particularly interested in funding projects that address issues that are most relevant to the citizens of South Carolina with SCI, particularly those which show promise for helping to facilitate better outcomes and problematic areas. Possible topics include but are not limited to attendant care, access to primary rehabilitation, access to follow-up services, availability of physicians and other health care professions, the efficacy of existing programs, or outcomes associated with the quality of existing or pilot programs. No more than 20% effort for principal investigator may be paid from primary grant funds. Applicants may find it helpful to review the results of a recent report on the needs for primary rehabilitative services in South Carolina [add link].

2. Career development awards will be utilized to support new investigators in the field of SCI, or to support the work of individuals crossing over to SCI research from other areas. A maximum of $80,000 will be granted over a 24-month period. The primary goals of this mechanism will be to increase the likelihood that a researcher will be able to successfully compete for a federally funded K grant or other federally funded career development award upon completion of the project. The proposed award will give new investigators set-aside time from their other activities to focus on research, not to exceed 50% effort and lay the foundation for them to obtain awards. These awards may reflect either basic science projects or applied projects. Investigators must include a plan to develop an application for a federal career development as part of their scope of work. Quality of investigators career plans and likelihood of success in obtaining future extramural funds will be heavily weighed in evaluating career development applications.

   Successful applicants must submit a draft of a K-application or another federal career development application (e.g., Veterans Administration) at the end of
the first year in order to secure funding for the second year. This application should be relatively complete in terms of all elements, except those that specifically relate to the research plan. Applicants are encouraged to propose research that will lay a foundation for the research plan of the federal grant application (K-application or other federal grant).

3. Small pilot grant funds of up to $25,000 will be available for single year projects. The goal of this award is specifically to support investigators who need to collect a modest amount of pilot data or purchase equipment necessary to position themselves for NIH grants. This mechanism will support the work of senior investigators.

Eligibility and Terms of Support: 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. 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.

Funding: Grant or contract support will be awarded initially for 24 months (except for pilot projects which are 12 months), with no guarantee of renewal. Further funding will depend on progress reports at 12-month intervals that include evidence of productivity, with consideration for renewal of projects that show progress or significant promise on re-submission. All grantees and must submit a progress report summarizing the accomplishments during the preliminary year of the award and submit this to the fund administrator 30 days prior to completion of the first 12 months of project. Reasonable amount of funds for support of the Principal Investigator’s salary will be considered, but should not exceed 20% of the total requested budget (except for Career Development applications where it shall not exceed 50%). Grant or contract fund uses for equipment are not encouraged, but minor items will be considered provided they are clearly justified as absolutely essential to successfully conduct the proposed research. Requests for travel should be focused on development of networking necessary for the conduct of the research. 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.

Timeframes: The review of all proposals will be completed within 60 days following the grant submission deadline. The deadline for applications in response to this Request for Proposals is February 15, 2008, at 5:00 PM. The South Carolina SCI Research Board will make money available within 30 days following a recommendation for funding by the Review Committee, approval from the Board of Directors, and receipt of acceptance forms from successful applicants.
**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. Investigators may submit the names of two (2) potential reviewers qualified to review their proposals, and these individuals may be selected as ad hoc reviewers (there is no guarantee that they will be selected). 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. A minimum of two reviewers (generally 3) 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:** Both hard copies and electronic copies must be submitted. Electronic copies must be sent in PDF form and emailed to sci-researchfund@musc.edu. Five hard copies should also be sent to Naren 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, 171 Ashley Avenue, Suite 200-A, PO Box 250001, Charleston, SC 29425.

**Application Format:** The proposal must not exceed 8 pages in length, not including the biosketch of the Principal Investigator. Pilot proposals should not exceed 5 pages. Proposals not adhering to page limitation may be refused. Please send a cover letter and complete the face page (attached to the end of this announcement) indicating which of the grant mechanisms to which you are applying and you may include the names and contact information for up to 2 reviewers who are experts in the field (there is no guarantee they will be used). The cover letter will not count against the page limit. The 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, position, department, proposal title, abstract)
II. Response to previous critique (only for renewal applications or resubmission of a previously unfunded proposal – maximum of 1 extra page)
III. Specific aims
IV. 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.)
V. Background and rationale (Note: Career Development applications should focus on their rationale on how the proposed activities will facilitate the applicant’s research career development and how the award will assist the applicant in successfully competing for a federally funded career development award. Applicants also need to describe and highlight the qualifications of at least one mentor who will provide mentorship to them during the 24-month period and outline a plan for mentorship (e.g., how often they will meet).
VI. Methods
VII. Evaluation strategy (with measurable goals)
VIII. References
IX. Detailed Budget (with narrative justification)
X. Biosketch (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. Originality and significance of the hypothesis or product.
2. Feasibility and adequacy of the proposed research or product.
3. Qualifications and experience of the Principal Investigator and other key personnel.
   Special consideration will be given to new faculty and individuals less familiar with the extramural funding process.
4. Likelihood of the project ultimately receiving extramural support and/or benefiting the people of the State of South Carolina.
5. Availability of adequate facilities to conduct the proposed project
6. Appropriateness of the budget.
7. Relevance to the Fund’s primary objectives and initial priorities as presented in the Background section of this RFP.

Note: Career Development Awards will be reviewed based on the quality and clarity of the overall career development plan and how the current award will enhance the qualifications of the investigator and assist in obtaining an extramural career development award. Quality of mentorship will also be evaluated in applications for Career Development Awards. Although applicants’ research plan will be evaluated, it will not be expected to be as rigorous as with primary grants, as a greater emphasis will be placed on the career development plan, particularly how the applicant will gain expertise in SCI.

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. Naren Banik, Associate Director, South Carolina Spinal Cord Injury Research Fund. Procedural and basic science questions should be addressed to Dr. Banik. 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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FACE PAGE
SOUTH CAROLINA SPINAL CORD INJURY RESEARCH FUND

Title of Project: _______________________________________________________
_____________________________________________________________________

Name of Principal Investigator: ________________________________________

Institution: __________________________________________________________

Address: ____________________________________________________________

____________________________________

____________________________________

Phone: ______________________________________________________________

Fax: _________________________________________________________________

Email: _______________________________________________________________

Type of Grant (choose one)

____ Primary grant
____ Career Development
____ Pilot Project

Is this a resubmission    ____ yes    ____ no

Amount Requested

Year 1  ______________

Year 2  ______________

Name of Contact Person: _____________________________________________

Phone: _____________________________________________________________

Signatures

Principal Investigator  _______________________________________________

Authorized Institutional Official _______________________________________