

# Development of Technical Devices to Assist in Self-Healing and Self-Regulation



#### Request for proposal.

## \$50,000 for study development of technical devices to assists in self-healing and self-regulation.

#### Overview:

Both the experience of a traumatic event and the recovery process are linked to measurable phenomena. Trauma disturbs both mental and physiological dimensions, and effective treatments of traumatic stress are putatively associated with restoration of functional brain-body connections. Wearable sensors and computerized interventions hold the promise of conducting these measurements in the real world for live technology-informed treatment and research.

The objectives of the proposed project should meet at least one of these two criteria. 1) creation of a novel electronic device, technology, or app to be used in research into the impact and/or treatment of traumatic stress or trauma treatment; and/or 2) generation of pilot data as a result of to the development of novel electronic device, technology, or app, demonstrating physiological or behavioral changes resulting from traumatic stress and/or effective treatment.

In addition to direct financial support in the amount of \$50,000, the grant recipient will receive at least 10 hours of direct support during the period of their performance.

The two-page letter of intent for study needs to be submitted to research@traumaresearchfoundation.org and will be judged quarterly for further fine-tuning and elaboration to follow. These initial proposals need to include a clear response to the questions as listed in the Project Description section below.

### Project Description: What do you propose to do?

Your submission must include a brief synopsis of the following items, to be completed in a maximum of 2 pages total; just the facts.

- 1. Title of the project, what specifically do you plan to study? What is your scientific question? Population to be studied.
- 2. Location of project, nature of applicant organization. Principal investigator
- 3. Previous research experience in device and/or app design
- 4. How do you intend to measure design success?
- 5. Summary of proposed process.
- 6. Statistical analysis capacities.
- 7. Proposed budget and personnel for this pilot project.
- 8. How do you plan to disseminate the results?

We request that you be as specific and concise as possible. As a part of the submission, please include a (maximum) two-page Curriculum Vitae for your Principal Designer/Engineer.

#### **Eligibility Criteria:**

Applicants must belong to a non-profit academic or research institute, or qualified governmental agency with an active biomedical research program. At the final submission applicants will need to provide documentation of proof of 501c3 status, EIN, and IRS form 990.

Proposed research projects should be led by someone with terminal degree in their field of study and a proven track record of design and engineering, or a student with demonstrated access to the necessary technical and statical support to bring this project to satisfactory conclusion.

Institutions can submit more than one proposal, but each proposal must identify and be led by an unique Designer/ Engineer.

#### Review:

The Trauma Research Foundation will seek independent expert review for each application. Applications will be reviewed based on their technical merit, team capabilities and competencies, the potential impact of the project, and the realism of the cost effectiveness for individual use.

#### **Consideration of Review:**

Proposals received following the guidelines outlined above will be considered and evaluated by our scientific advisory board, at which point the Grants Committee will request more specific details. After the more elaborate proposals have been received, we plan to make the final award announcements.