



for the Improvement of Mine Safety and Health, Inc.

## **Solicitation for Alpha Designated Request for Proposals (AFCRFP20)**

### **Projects in Mining Safety and Health Research**

#### **Background**

The Alpha Foundation for the Improvement of Mine Safety and Health is a private foundation with the mission to improve mine safety and health through funding research and development projects at qualified academic institutions and other not-for-profit organizations. The goal is to address the root causes of disease, injuries, and fatalities in the mining industry and, where possible, to achieve successful implementation of practical solutions derived from the research effort.

Since we began grant making in 2013, the Alpha Foundation has supported a portfolio of research that comprises 89 projects awarded to 34 institutions. We are nearing the end of our funding allocation and unlike previous solicitations which have been open ended in terms of submission topics, we are now seeking to fund research in specific priority topics where proposals and accomplishments have been lacking. Furthermore, the submissions must be in response to the designated Request for Proposals (RFPs), which defines a project goal and provides a scope of work framework for the project.

The following RFPs are available for proposal submission. Note, only the title is presented here. A link to the full Request for Proposal which is provided on the Foundation website

<https://www.alpha-foundation.org>.

- Minimizing Rib Failure Hazard (includes 3 subtopics)
- Time Dependent Pumpable Roof Support Assessment
- Study of The Impact of Macro-Scale Fractures on Seal Integrity
- Intrinsically Safe Propulsion System for Mine Drone Applications
- Stopping Design for Hardening Emergency Escapeways
- Application of Exoskeleton Technologies
- Health and Safety Management Data Analytics and Machine Learning System

The funding allocation for the RFPs will be dependent upon the remaining funds in the Foundation at the time of solicitation awards. It is expected to be approximately \$3 million. While there is no rigid funding limit for a proposal, the cost of the effort and perceived probability of a successful and impactful outcome will be significantly weighed in the funding decision. Projects with a performance period not

more than 2 years are preferred, but performance periods up to 36 months will be considered if appropriately justified.

### **Eligibility Criteria and Limitations**

Research project proposals in response to this solicitation will be accepted only from U.S.-based academic institutions and not-for-profit organizations qualifying as exempt from taxation under the Internal Revenue Code.

It is Foundation policy that grant funds may not be used to support clinical trials of unapproved drugs, to construct or renovate facilities, for lobbying, for political activities, or as a substitute for funds currently being used to support similar activities.

### **How to Submit a Proposal**

Proposals must be prepared in Adobe pdf format and adhere to the format provided below. The proposals must be submitted through the Alpha Foundation Grant Management System, which can be accessed at <https://glenmede.smartsimple.com/welcome/alpha>.

The submission deadline for this solicitation is 5 pm Eastern Time on July 31, 2020. Any proposal, modification, or revision received after the exact time specified is “late” and will not be considered.

Questions regarding the submission of the Proposals can be addressed to [grants@alpha-foundation.org](mailto:grants@alpha-foundation.org).

### **Proposal Submission Format**

The following proposal format is required in order to facilitate uniform reviews. All submissions shall include a cover page followed by **not more than 20 pages** of documentation (with no smaller than 11-pt font) that address the designated topics. In addition to the (20-page) proposal, Appendices documenting biographical sketches of any key personnel as well as **letters of commitment shall also be included and do not count towards the 20-page limit. Note that failure to follow the format can result in the Proposal being disqualified.**

## **COVER PAGE**

### **PROPOSAL FOR ALPHA FOUNDATION REQUEST FOR PROPOSALS (AFCRFP20)**

A single cover page shall be labeled “Proposal to the Alpha Foundation’s Request for Proposals, AFCRFP20”. It shall include the following information and must be signed by an authorized officer.

**Title:** *Selected Request for Proposal (title).*

**Submitting Organization:** *Name and address of organization.*

**Principal Investigator:** *Name and contact information (phone and email)*

**Administrative Contact:** *Name and contact information (phone and email)*

**Cost:** *Proposed total project cost.*

**Period of Performance:** *Estimated time required to complete the research (months).*

## PROPOSAL

**Synopsis:** *Provide a one-page synopsis that includes: 1) Understanding of the project goal and, 2) Approach to the suggested scope of work, and 3) Expected outcome of the project.*

**Research Plan and Timeline:** *The RFP included a Scope of Work section that is intended to provide a blueprint for conducting the project. The submitter has flexibility to tailor the proposed scope of work to meet the project goals, but deviations from this blueprint must be clearly cited and justified.*

Using the blueprint provided in the RFP for the scope of work, provide a detailed research plan to accomplish the project goal. It is noted that the blueprint is structured in phases that are designed to build upon one another. This structure should be preserved in your research plan since funding allocations will be based on successful completion of each phase of work.

The research plan should provide an objective(s) and associated research tasks necessary to achieve each phase of work. Objectives should provide direction to the project and are precise statements that concisely describe what the research is trying to achieve in a particular segment of the work. Research tasks are a group of logically connected activities or undertakings that must be done to achieve a specific objective. A full description of the effort associated with each research task must be provided so that a clear understanding is presented of what is being done and how it is being done.

Identify the desired start date and provide a monthly timeline depicting a planned schedule for each phase of work along with associated research tasks. The timeline must be provided in the form of a Gantt chart or similar graphical display.

**Reporting and Decision Points:** *The Foundation will require submission of interim reports midway through each phase of the project to assess grant progress. A milestone report will be required at the completion of each phase of work that provides supporting evidence for a successful completion of the objectives for this segment of work. A decision regarding continuation of the project and advancement of the next payment will be made based on the milestone report. A final report documenting all project findings and conclusions is required at the completion of the project.*

**Staffing and Proposed Budget:** *This section details a project budget and justifies that the staffing and requested budget is sufficient and necessary to accomplish the efforts described in the research proposal. A total budget should be provided along with a sub-budget for each research phase (or objective if proposing a subtopic research plan).*

In terms of staffing, the proposal should designate the role and time allotment planned for the PI and/or other professional staff and identify the number of students planned for incorporation into the project and whether these are new recruits or if they have been part of previous Foundation research efforts on this or related topics.

The budget should include a breakdown of direct costs, indirect costs, and subcontract costs:

- **Direct costs:** Direct costs include salaries, wages, tuition, fringe benefits, materials or supplies, equipment, services, travel.
- **Indirect Costs:** The Foundation's maximum allowable rate for indirect costs is 20%, based on a Modified Total Cost Model (see 2CFR Ch. II (1-1-14 Edition, section 220.68).
- **Subcontract Costs:** Provide a separate listing for subcontract costs along with an explanation of why they are needed and the scope of their efforts.

**Partnerships:** *Identify partnerships needed to fulfill the research objectives and include commitment letters in the Appendix with these essential partners. Also identify any industry collaborations that are planned to be included.*

**References:** *Provide listing of relevant references for supporting the research approach.*

**Appendices:** *Note this information does not count toward the 20-page proposal limit.*

- **Biographical Sketches:** *Provide single-page biographical sketches of any key personnel not included in the related Alpha project.*
- **Letters of Commitment:** *Provide letters of commitment from any partners involved in the project.*

## **Proposal Review and Funding Notification**

The RFP provided review criteria that was specific to the research topic. These criteria will form the basis for the proposal review. The proposal will be reviewed by the Alpha Foundation staff, an advisory panel if deemed necessary, and Foundation Board of Directors. Grant decisions will be made in the timeliest manner possible with a goal of September 30, 2020.