



for the Improvement of Mine Safety and Health, Inc.

Solicitation for Alpha Designated Request for Proposals (AFCRFP21)

Projects in Mining Safety and Health Research

Background

In 2020, the Alpha Foundation released a solicitation for requesting proposals for seven specific research topics and associated scopes of work. We funded proposals in 4 of the 7 topics. In two of the topics, namely Application of Exoskeleton Technologies and Health and Safety Management Data Analytics and Machine Learning System, we received proposals that did not fully meet our expectations for the project goals. As a result, we have revised these two topics to more clearly detail what we are looking for and are now accepting proposal submissions for these topics:

- Assessing Mining Industry Readiness for Exoskeletons
- Health and Safety Management Predictive Data Analytics Study

The full Request for Proposals for these two topics are provided on the Foundation website <https://www.alpha-foundation.org>.

The *Exoskeleton* topic has a cost limit of \$60,000. There is no cost limit for the *Health and Safety Management Predictive Data Analytics Study*, but the cost of the effort and perceived probability of a successful and impactful outcome will be significantly weighed in the funding decision. The time limit for the *Exoskeleton* project is 1 year and 3 years for the *Health and Safety Management Predictive Data Analytics Study* if properly 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 February 12, 2021. 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.

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 25 pages** of documentation (with no smaller than 11-pt font) that address the designated topics. In addition to the (25-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 25-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 (AFCRFP21)

A single cover page shall be labeled “Proposal to the Alpha Foundation’s Request for Proposals, AFCRFP21”. 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 March 30, 2021.