

## **Request For Proposals: Pharmacodynamic Biomarker Development**

The Friedreich's Ataxia Research Alliance (FARA) is issuing a request for proposal (RFP) to support clinical drug development programs in Friedreich's ataxia (FRDA) by promoting the discovery of technologies to measure frataxin or surrogates of frataxin in inaccessible tissues. This RFP focuses on the development and validation of pharmacodynamic and/or efficacy biomarkers that can be used to support early-phase clinical trials that test promising pharmacological interventions, specifically aimed at frataxin gene and protein replacement, increasing frataxin levels and restoring/substituting for frataxin function.

This RFP supports the discovery of methodologies to measure in FRDA affected tissues (nervous system, heart, muscle):

- Frataxin
- Biochemical activities related to/downstream of frataxin function
- Metabolic functions that are modified/negatively impacted by frataxin loss, and correlate with disease pathophysiology and progression

This RFP also supports the advancement and further validation of biomarkers with established success in exploratory studies, to facilitate their clinical trial utility validation.

The proposal should indicate where the proposed biomarker fits in the pathophysiology of the disease and demonstrate a correlation with clinical outcomes.

The development of peripheral pharmacodynamic biomarkers will be considered only if they reflect the pathology of the affected tissues and if a compelling biological rationale and connection to disease is established.

Examples of areas of development include, but are not limited to:

- Validating established molecular imaging ligands that allow measuring frataxin and/or biochemical processes closely related to frataxin function in affected tissues
- Developing novel CSF biomarkers with strong correlation with disease progression
- Developing functional assays to measure metabolic consequences of frataxin loss in muscle biopsies
- Further validating promising biomarker assays at multiple clinical sites or expand their use to clinical trials

Please note: The development of pharmacodynamic biomarkers for pharmacological interventions that do not result in frataxin or frataxin function increase or restoration are not supported by this RFP and will not be considered.

Applicants are encouraged to propose bold and creative approaches to these longstanding challenges, while applying scientific rigor and demonstrating plausibility of the approach.

For a list of available research resources please visit <https://www.curefa.org/researchresources>

All proposals will be evaluated for:

- Novelty and biological plausibility linking the biomarker to frataxin loss and disease pathophysiology in human studies
- Scientific and technical merit of the proposed approach
- Strength of preliminary data
- Level of innovation
- Feasibility in clinical studies, research design and methodology
- Investigators, organizational capabilities, and budget for the project

### **Eligibility**

Those eligible to submit proposals include investigators from public and private nonprofit universities, colleges, hospitals, laboratories, government agencies, biotechnology/pharmaceutical companies, other for-profit entities; irrespective of the country of origin. Investigators at all academic levels (or equivalent) may be named as the PI on the application. Collaborative efforts are encouraged.

### **Letter of Intent Submission Deadline**

7/01/2021

### **Application Submission:**

Please submit your Letter of Intent (LOI) here ([https://webportalapp.com/sp/login/fara\\_grants](https://webportalapp.com/sp/login/fara_grants)). See <https://www.curefa.org/grant-apply> for detailed instructions regarding the information that needs to be included in the LOI and page limits. CVs/biosketches for the Principal Investigator and all other key personnel must be submitted.

All submitted LOIs will be review by FARA's Scientific Review Committee and selected applicants will be invited to submit a full application.

**Budget**

Allowed budget will depend on stage and scope of research. The anticipated direct costs should be detailed and adequately justified, and an estimate of the budget must be included with the LOI submission. Funding will be awarded for a maximum of 2 years. FARA does not fund indirect costs.

Please contact [grants@curefa.org](mailto:grants@curefa.org) or [liz.soragni@curefa.org](mailto:liz.soragni@curefa.org) for questions or assistance with the application.