**Spring 2023 Request for Applications:**

**CIRCUITS & CELLULAR TARGETS FOR PARKINSON’S SYMPTOMS – PRE-CLINICAL PROGRAM**

#### **Pre-PROPOSAL TEMPLATE**

*Please use the following template to create an executive summary of your experimental plan and upload a PDF copy with your online submission. Text should be no smaller than 11 point font and should not exceed* ***2 pages, including optional references****. You may delete the italicized instructional text here and in each box below to save space.*

Principal Investigator:

Institution/Company:

Project Title:

|  |  |
| --- | --- |
| Project Goal | *Briefly describe the overall rationale and specific goals to be achieved in this research plan. Please highlight which of the program goals and/or priorities outlined in the RFA Overview Document will be addressed by this work.* |
| PD Animal Model(s) | *Briefly specify the precise animal model systems (mouse, rat, and/or non-human primate) and Parkinson’s disease model constructs (genetic, toxin administration, lesion, protein-aggregation, etc.) to be used in the course of this research plan. Please also include information on the sex and age of animal cohorts being proposed.* |
| PD Symptom(s) | *Briefly specify the behavioral endpoints, assays, and/or tasks to be used in the course of this research plan. Please also include a description of how the aforementioned behavioral endpoints, assays, and/or tasks relate to characteristic PD symptom domains such as:*     * *Motor Symptoms – Tremor, Rigidity, Bradykinesia, Akinesia, Dyskinesia, Fine Motor Skill Impairments, Gait & Balance Impairments, Speech/Swallowing Impairments.* * *Non-Motor Symptoms – Cognitive Impairments, Sleep/Circadian Impairments, Pain, Sensory Deficits, Autonomic Dysfunction, Gastro-Intestinal Dysfunction, Depression, Anxiety, or other Psychiatric/Mood Symptoms.* |
| Experimental Research Plan | *Briefly describe your proposed experimental research plan, including methods,*  *experimental design, controls, and statistical analyses. Where applicable, please include specific details related to the following questions:*   * *Which brain regions, neural circuits, and/or connections will be the focus of investigation?* * *Which methods will be used to monitor and/or manipulate the aforementioned regions, circuits, and/or connections?* * *How will behavioral endpoints, assays, & tasks be monitored longitudinally to assess symptom emergence, progression, or severity?* * *What methods will be used to identify novel, potentially “druggable” biology enriched in brain regions, neural circuits, and/or connections shown to contribute to behavioral symptoms?* * *What translational therapeutic approaches will be used to test the efficacy of targeting an identified circuit element for symptomatic amelioration?* |
| Impact | *Briefly describe how successful completion of the proposed research plan will further our understanding of the mechanisms and biological substrates that cause specific types of symptoms in PD to inform the future development of more targeted and efficacious therapeutic interventions to ameliorate motor and non-motor symptoms in people with Parkinson’s.* |
| *Preliminary Data (optional)* | *Please report any published, preprinted, or unpublished preliminary data demonstrating proficiency with the animal model(s) of choice, methods for quantitative behavioral analysis, methods for circuit monitoring and manipulation, biological target identification, and/or therapeutic intervention.* |
| *References (optional)* | *When referencing published literature, preprints, or protocols/resources, please include a PMID, DOI, or other unique persistent identifier to facilitate look-up and access.* |