**The 2023 Raynor Cerebellum Project Research RFA**
**March 7, 2023**

**www.RaynorCerebellumProject.org**

The Raynor Cerebellum Project is a new initiative that invites applications from collaborative teams in order to bring together research teams and clinicians with the goal of treating individuals with cerebellar disorders. Our aim is to advance our understanding of the basis for cerebellar disorders and identify novel therapeutic strategies. The RFA Topic Areas outlined below aim to advance the understanding of the pathophysiology and mechanistic underpinnings of circuit level changes in cerebellar disorders and identify novel therapy.

Together, these RFA topics seek to support patient-centered, foundational, science-focused projects that seek to characterize the impact of cerebellar impairment on brain function in humans and treat the resulting network impairment in cerebellar disorders --- with the ultimate goal of finding the shortest path to improving the lives of people suffering from cerebellar disorders. We want to invent new ways of thinking. In the words of Robert Kennedy, we want to dream things that never were and say “why not?”

For cerebellar disorders, even when there is a diagnosis, the lack of understanding of how this impacts overall brain function is a critical bottleneck for developing treatments. Each of these funding opportunities recognizes clinicians studying human disease as central to connecting researchers and the patient community, defining research questions and priorities, contributing to study design and execution, supporting outreach, disseminating study results and more.

The following four projects are the programmatic focus of the current 2023 RFA and are intended to be the logical continuation of the work started at the RCP’s Fall 2022 Big Ideas Summit in New Mexico.

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**RFA Topic Areas**

**A) Cerebellar circuit-targeted interventions.** Proposed projects will be centered around boosting cerebellar function for intervention and/or understanding how proposed interventions (behavioral, pharmacological, modulation, etc) impact cerebellar function and regulated circuits in humans.

Time Frame: 3-year study, $1,000,000 USD award

**B) Understanding longitudinal anatomical changes in developmental cerebellar disorders.** Proposed studies will be centered around developing/utilizing anatomical imaging to better characterize typical cerebellar development throughout childhood and to investigate alterations in that development in individuals with developmental cerebellar processes – including but not limited to injury, genetic/metabolic, oncologic processes.

Time Frame: 3-year pilot study, $1,000,000 USD award

**C) Cerebellar "Prosthesis".** Proposed projects will seek to develop an initial framework for pilot studies centered around development of a cerebellar prosthetic device that augments/replaces lost cerebellar function in disease.

Time Frame: 2-year study, $500,000 USD award.

**D) Circuit network changes in cerebellar disorders.** Proposed projects will be centered around characterization/development of pre-clinical models of human cerebellar disease.

Time Frame: 3-year study, $500,000 USD award

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**Funding Structure**

Two-year award will be distributed as follows: 50% up front for an initial year of funding, followed by an evaluation, followed by the additional 50%.

Three-year awards will be distributed as follows: 33% up front for an initial year of funding, followed by an evaluation, followed by the additional 33%, followed by an evaluation, then final year of funding.

**LOIs**

Letters of Interest (LOIs) for each RFA will be due by June 23, 2023 and should be submitted to submissions@raynorcerebellumproject.org. LOI's should include rationale, background, and proposed aims in sufficient detail to assess significance and feasibility of each proposed study and to understand how these proposed studies fit in with the RCP's funding priorities. LOIs will not exceed ***one*** page in length (excluding references, biosketch). *All proposed studies must be new projects for which research teams do not have existing funding.*

Proposals must involve a multi-disciplinary team spread across at least two different centers of research, in addition to inclusion of a clinician/clinical team member who may be at one of the sites or outside. Broad collaboration across institutions is a cornerstone of all RCP initiatives. Please clearly identify all members of your team and their roles in your LOI. A NIH-style biosketch for all key investigators should be included.

All submissions will be reviewed by RCP's Scientific Advisory Board. Finalists will be notified before August 4th and invited to submit a Full Application with an anticipated timeline in the Fall.

## Full Applications

*For LOIs that have been selected to apply, full grant applications will be requested to include the following:*

**Project Description**
The description of the project should not exceed 5 pages, which should include the specific aims, background, preliminary data, and research plan, plus a brief statement on the contributions of the research team, the suitability of the scientific environment, and the availability of the necessary resources/equipment for the proposed research. This page limit excludes references. All grant proposals must provide adequate detail for reviewer evaluation.

**Budget**
A detailed budget must be submitted with all proposals, including a justification of all requested expenses. Indirect costs/overhead limited to 10%. Expenses that will not be covered include: memberships in scientific societies.

**Milestones**
All projects must have objective milestones that are clearly communicated. If a proposal is funded, RCP will utilize the proposed milestones to evaluate continued funding as discussed above.

**Human Subjects**
If human subjects are used in the proposed study, the study must be approved by the Institutional Review Board (IRB) or equivalent. Full funding will not be provided until proof of IRB approval is demonstrated to RCP. Human subjects studied during research conducted under a RCP grant are under no circumstances a responsibility of RCP.

**Animal Research**
If animals are used, the proposed study must be approved by the Institutional Animal Care and Use Committee (IACUC), or equivalent, indicating that appropriate precautions have been taken to assure that proper treatment and care of animals is being prioritized.

**Other documents**
This can include additional supporting materials including letters of support, etc.

## Participation in RCP summits

All key participants receiving RCP funding will be expected to participate/share findings in annual RCP summits.