



MEMORANDUM

TO: Chairman Imbasciani and Members of the ICOC

FROM: CIRM Leadership

Rosa Canet-Avilés, Vice President, Scientific Programs & Education

SUBJECT: Proposed ReMIND Concept Plan to Support Research using Multi-disciplinary, Innovative approaches in Neuro Diseases

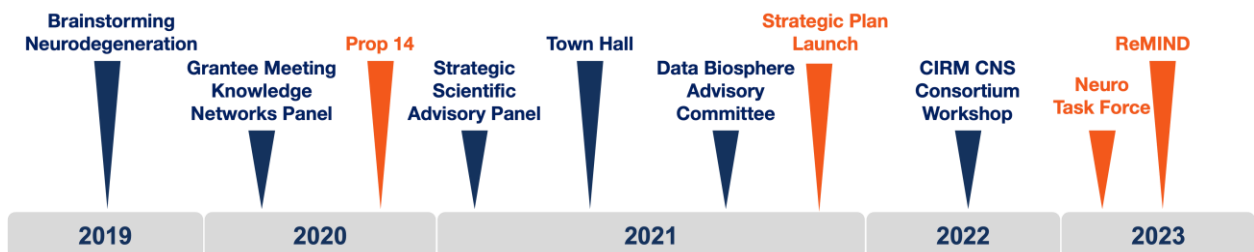
DATE: SEPTEMBER 28, 2023

The following is a comprehensive overview of how the ReMIND (Research using Multidisciplinary, Innovative approaches in Neuro Diseases) concept plan has evolved and why it is a vital addition to CIRM's initiatives. The program's concept development has been shaped by extensive discussions, expert input, and a recognition of the pressing need to advance research in the field of neuropsychiatric diseases.

Background

ReMIND was conceived in response to Proposition 14, which allocates at least \$1.5 billion of CIRM's total \$5.5 billion bond funding specifically for research and development of treatments for diseases affecting the brain and central nervous system.

The initial vision for ReMIND took shape through discussions and workshops conducted by CIRM staff with a diverse group of scientific experts over the past three years as illustrated in the following timeline chart.



These collaborative discussions and feedback sessions underscored the following 3 main takeaways:

- a. **Gaps in Understanding Neuro Disease Mechanisms:** There are significant knowledge gaps in our understanding of the mechanisms underlying brain diseases. Unlike the heart, where we have a relatively robust understanding, the complexity of the brain remains a challenge. This knowledge deficit has hindered progress in developing effective therapies, particularly for mental illnesses. The lack of insight into brain mechanisms is a major obstacle to therapeutic development.
- b. **Multidisciplinary Approach for Discovery in Neuroscience:** To bridge these knowledge gaps effectively, the development of a multidisciplinary approach is essential. A multidisciplinary approach for discovery research in neuroscience disease mechanisms involves collaborating across diverse scientific disciplines and methodologies to gain a comprehensive understanding of the underlying causes and mechanisms of neurological diseases. This approach integrates the expertise of researchers from various fields, such as genetics, neuroscience, stem cell biology, computational biology and clinical medicine to collectively tackle complex brain-related disorders.
- c. **Promoting Knowledge Sharing and Resource Expansion:** To maximize the output of such a consortium, it's crucial to encourage knowledge sharing and expand available resources. These collaborative efforts will accelerate research into complex diseases of the brain, fostering breakthroughs and advancements in the field.

Concept Proposal Development:

Over the past 8 months, CIRM's Scientific staff have worked closely with the Neuroscience and Medicine Task Force, comprising 13 ICOC members, including scientific experts and representatives from patient advocacy organizations. This task force, led by Dr. Larry Goldstein, was established to craft a comprehensive plan for the \$1.5 billion neuroscience research commitment while also identifying unusual opportunities for high-impact (see summary of TF charge [here](#)). The Task Force initiated its work with an overview of the current CIRM grant portfolio, confirming compliance with Proposition 14's allocation mandate. However, it was noted that **neuropsychiatric disease research** was underrepresented in the CIRM portfolio with zero grants. Given the large and growing unmet need for effective treatment in the US and California, the Task Force set to explore this area's potential by gathering insights from eminent scientists who underscored the feasibility of utilizing genetic and stem cell technologies to study neuropsychiatric disorders, as well as recent progress in understanding the genetic architecture of these disorders.

Collectively, the above considerations have driven the development of the current concept plan to support Research using Multidisciplinary, Innovative approaches in Neuro Diseases (ReMIND) -see separate concept plan document and supporting presentation-. ReMIND responds to the pressing need to address these challenges while harnessing the opportunities within neuroscience, stem cells and genetic research. This plan aligns with CIRM's mission to foster groundbreaking scientific advancements and represents a significant step toward accelerating the discovery of treatments and therapies for CNS disorders.

At the most recent meetings of the Science Subcommittee and the Neuro Task Force, this concept plan and budget were reviewed, and each body unanimously voted to recommend approval to the ICOC.

Requested Actions:

- 1) CIRM requests Board's approval for the ReMIND Program concept plan that includes two funding opportunities with distinct award structures that will be offered through independent Requests for Applications (RFAs);**
- 2) To fully fund the ReMIND-L program, the Board is also requested to supplement the original placeholder budget for this program in the amount of \$26 million.¹**

¹ In June, the agency's research budget had a placeholder of \$62.2M for the ReMIND concept plan – a number understood to be subject to revision as the concept plan was further refined. With the benefit of further work of this task force, the actual program budget is now clear and will require \$26M more for ReMIND-L FY23/24 Budget. (The ReMIND-X budget request will be made next year as part of the FY 24/25 research budget.)