CIRM Application Review Subcommittee
California Institute for Regenerative Medicine
601 Gateway Blvd #400
South San Francisco, CA 94080

August 23, 2024

Regarding: ReMind-L Proposal DISC4-16360 (PI: Dr. Giorgia Quadrato)

Dear CIRM Application Review Subcommittee,

I am writing to express my strong support for funding research to discover electrophysiological biomarkers for stratifying intellectual disability (ID) in California's population, with a particular emphasis on its importance for underrepresented minority (URM) communities. I am delighted that I will be able to contribute by providing patient EEG data and blood samples out of my diverse patient pool at Children's Hospital Los Angeles (CHLA).

ID affects approximately 1-3% of Californians, with a disproportionate impact on URM populations due to various socioeconomic and healthcare access factors. As a physician specializing in neurodevelopmental disorders at Children's Hospital Los Angeles (CHLA), I have witnessed firsthand the critical need for improved diagnostic and prognostic tools, especially in serving our diverse patient population.

Electrophysiological biomarkers offer a promising avenue for addressing the current gaps in ID diagnosis and treatment. By measuring brain activity patterns, we can potentially:

1. Identify subtypes of ID with greater precision
2. Predict developmental trajectories and outcomes
3. Guide personalized treatment plans
4. Evaluate the efficacy of interventions
5. Pioneering a novel neuromodulation paradigm for ID

This research is particularly crucial for URM communities for several reasons:

1. Reduced disparities: Objective biomarkers could help reduce bias in diagnosis and treatment, addressing long-standing healthcare disparities.
2. Earlier intervention: Many URM children face delays in diagnosis due to various barriers. Biomarkers could enable earlier, more accurate identification of ID, allowing for timely interventions.
3. Culturally informed care: Understanding how these biomarkers manifest across diverse populations could lead to more culturally competent care strategies.
4. Community engagement: This research presents an opportunity to involve URM communities in the research process, fostering trust and ensuring that the outcomes are relevant and beneficial to all Californians.

CHLA's partnerships with large independent federally-qualified community health centers and community clinics allow us to reach a multitude of URM communities in Los Angeles County.

Funding this research would position California at the forefront of inclusive neurodevelopmental science. Early, accurate stratification of ID could lead to more timely and effective interventions, potentially reducing long-term healthcare costs and improving quality of life for affected individuals and their families, with a particular benefit for URM communities.

Moreover, the knowledge gained from this research could have far-reaching implications beyond ID, potentially informing our understanding of other neurodevelopmental and neurological disorders that affect diverse populations.

I urge the CIRM Application Review Subcommittee and CIRM Board to recognize the transformative potential of this research and its alignment with CIRM's mission to accelerate stem cell treatments for patients with unmet medical needs while also addressing health equity. Your support would be an investment in the future of all California's children and families affected by intellectual disability, with a significant positive impact on our URM communities.

Thank you for your consideration.

Sincerely,

Shafali Jeste, MD
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Las Madrinas Chair
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