

UNIVERSITY OF CALIFORNIA MERCED

5200 N LAKE ROAD | MERCED, CA 95343 UCMERCED.EDU 209.228.4400

February 21, 2024

Dear CIRM Application Review Subcommittee:

On behalf of our team on Application INFR6.1-15413 (PI: McCloskey, Co-PIs: Manilay, Li and Gravano), I am submitting a short response to the reviewers' comments on our proposal. We were excited to receive unanimous scores of "1"s and a recommendation for funding by the Facilities Working Group. We appreciate the opportunity to address some of the Grant Working Group's comments in an effort to secure this funding.

The Grants Working Group felt our proposal's overall value proposition may not address critical needs of California researchers in geographic areas where access to stem cell models are limited. In response, we respectfully note that the Central Valley of California, where UC Merced is located, is indeed a geographic area where stem cell models are limited. A shared resource laboratory in Merced would be highly impactful in the region and support current and future stem cell researchers for years to come. At UC Merced, we have been committed to developing experimental models and shared resource labs to support stem cell research and training programs since 2005. Our proposal is an extension of this commitment. We envision that this facility will be utilized by researchers within the Central Valley, ranging from Sacramento to Bakersfield, and other regions where local facilities may be impacted.

The Grants Working Group noted the proposal could be improved by limiting cell types to those with the greatest benefit to local researchers who lack access to stem cell models. Our scientific proposal focused on human cardiovascular models, as that is our campus' area of strength. However, we also proposed to generate novel human iPSC lines from a wide range of ancestries, by inviting people of all races, ethnicities and genders represented in the Merced community. These diverse iPSCs will fill a severe gap and unmet need in stem cell research models that are reflective of the demographics of the California population.

Building from this, we can improve our proposed comprehensive stem cell course to include characterization of the novel diverse iPSC lines. This would be a unique aspect of our course, serving not only to educate but also to add important scientific data on these cell lines to the public. We already have experience offering stem cell culture courses to UC Merced researchers and trainees, and have designed them to not interfere with the shared resource lab services. Rather, we have found that training courses utilizing shared resource labs promote effective and novel uses of their resources and services. We are also well poised to create quality online courses to complement our hands-on training.

We hope these comments will convince the board to fund our proposal now. We welcome the opportunity to submit a revised application.

Sincerely,

Jennifer O. Manilay, PhD
Professor and Founding Faculty
Department of Molecular and Cell Biology
School of Natural Sciences
University of California, Merced
jmanilay@ucmerced.edu