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California Institute for Regenerative Medicine
210 King Street, San Francisco, CA 94107

October 18, 2014

RE: California Institute for Regenerative Medicine Alpha Clinic Application # AC1-07637

Dear Members of the ICOC,

We are respectfully requesting further consideration of our Alpha Clinic Application. We are pleased to augment the working group's review with additional information, including the status of a "pipeline trial" to treat HIV with stem cell gene therapy that has just received a favorable IND review by the FDA, with three minor clinical hold issues that will be resolved this week. The planned investigator-initiated trial, "stem cell gene therapy for HIV mediated by lentivector transduced, preselected CD34+ cells", will begin in early 2015, thus has leapfrogged into a lead trial since the application was submitted. In view of this exciting new development which has occurred since the initial review, we are appealing to the board to consider the added value that a centralized stem cell clinic at UC Davis would bring to California.

An investment in the UC Davis Alpha Clinic would be an outstanding opportunity, to maximize the number of clinical trials and successful therapies per dollar invested. We wrote our proposal to reflect the breadth and depth of stem cell trials going on at UC Davis and in doing so there was not enough room for some of the detail apparently desired. We feel that a broad portfolio, with a wide variety of partners that includes CIRM and industry will increase likelihood of success and optimally leverage investment in time and dollars.

We took this approach because we have a robust "disease team"- based translational stem cell program with a rich spectrum of animal models and numerous trials either ongoing or about to begin, that we wanted to present to the reviewers and the Board. Our five lead candidates include two CIRM funded projects, one ongoing investigator-initiated IND accruing patients, one multicenter investigator-initiated trial, and one multicenter trial with an industry partner. Our stem cell/regenerative medicine clinical trials that are ongoing or in the pipeline (n=28) are listed in the appended table.

As the Board may know, the focus of the UC Davis stem cell program is on translational medicine and novel clinical trials, with ten stem cell and regenerative medicine clinical trials currently ongoing or recently completed, and another 18 in the pipeline, with five of those currently funded by CIRM. Our focus is on teamwork and providing a service role for other investigators throughout the state, including working closely with our numerous industry partners, to provide IND-enabling studies and GMP manufacturing. The rural emphasis at UC Davis together with an internationally recognized telemedicine program open unparalleled avenues to bring affordable therapies to all Californians. We believe we are poised to do so throughout northern California, with a variety of clinical trials and stem cell treatments currently going on and planned for the future.

The best, most talented people with the most experience in Stem Cell and gene therapy clinical trials at UC Davis would be pulled over to work 100% on this important clinic, with their positions backfilled. We see this as a major plus, not a negative, because the CIRM Stem Cell Clinic at UC Davis would start immediately, if funding was obtained.

As is often the case in large applications, effort conflicts may arise. Program Director Dr. Wun is indeed currently overcommitted, as with many people in similar positions. He has clearly stated in the application that he will divest other duties in order to focus on this clinic, which is an endeavor for which he is very committed and excited. We were likely not specific enough in our application about what duties he would relinquish if awarded. He will no longer be the CTSC Clinical Research Center Medical Director and will also decrease his VA commitment to allow for the full 30% commitment to the Alpha Stem Cell Clinic.

Finally, we did not succeed in making it clear to the reviewers how adding the alpha clinic CRCs and personnel could dramatically increase our productivity and patient enrollment. The leaders and CRCs slated to run the stem cell clinic have been working on the trials listed in the attached page while completing other projects in parallel. As part of an Alpha Clinic, these talented and highly productive individuals would each be poised to focus entirely on stem cell trials. In addition to our ongoing stem cell trials there are a large number of interested PIs who want to develop IND-enabling studies and Phase I trials at UC Davis, and interested industry partners who would like to run stem cell trials at UC Davis. The addition of an Alpha Clinic, would greatly augment this already vital community and can easily be expected to triple our productivity.

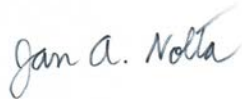
We are extremely enthusiastic about the degree of expertise our leadership team can bring to treat the people of the State of California. Our team at UC Davis is ready and able to take on the task to accelerate stem cell trials, to rapidly bring them to conclusion and to translate findings into cures for patients. We believe that an Alpha Clinic would create the dynamic and necessary environment allowing us to do so. We hope that you will be able to join with us in bringing our large slate of proposed clinical trials to Californians.

Sincerely,



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Professor and Associate Dean
Chief, Division of Hematology Oncology
UC Davis School of Medicine

Sincerely,



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Director, Stem Cell Program and Institute for Regenerative Cures
Scientific Director, UC Davis GMP facility
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Frederick J. Meyers, MD, MACP
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Cell Therapies at UC Davis

Disease Or Injury Indication	Basic biology Proof of Concept	Translational Studies Animal models	Pre-IND submitted	IND submitted	Clinical trial	CIRM funded?
Huntington's disease	X	X	Pending CIRM approval			yes
Critical Limb Ischemia- biomet	X	X	X	X	X	no
Critical Limb Ischemia- MSC/VEGF	X	X	Pending CIRM approval			yes
Bone Damage	X	X	X	X	X	no
Vetertebral disc degeneration	X	X	X	X	X	no
Retinal Damage/ blindness	X	X	X	X	X	no
Vertebral Fusion: pain	X	X	X	X	X	no
Heart Attack- MSCs	X	X	X	X	X	no
Heart Attack- bio-patch	X	X				yes
HIV-HSC gene tx	X	X	X	X		no
Lymphoma	X	X	X	X	X	no
Traumatic Brain Injury	X	X	X	X		no
Leukemia	X	X	X	X	X	no
Non-healing ulcers	X	X	X	In progress		yes
Burns	X	X	X	X	X	no
Spina Bifida	X	X				no
Osteoporosis	X	X				yes
Liver disease	X	X				yes
ALS/ Lou Gehrig's disease	X	X				no
Scleroderma	X	X				no
Cartilage degeneration	X	X	X	X	X	no
Stroke	X	X	X	X		no
Myelodysplastic syndrome	X	X	X	X	X	no
Multiple Sclerosis	X	X				no
Lichen Planus	X	X	In progress			no
Multiple Myeloma	X	X	X	X	X	no
Swallowing Disorders	X	X	In progress			no
Trachea Engineering	X	X				yes