

CONCEPT PLAN FOR THE ACCELERATING CENTER:

Stem Cell Clinical Research Organization

Objective

The mission of the California Institute for Regenerative Medicine (CIRM) is to accelerate the safe delivery of stem cell treatments to patients with unmet medical needs. A primary strategic theme is to fund the creation of strategic programs that will work in coordination with one another to address key challenges to the progression of therapeutic candidates through the translational and preclinical (IND-enabling) phase and into well conducted stem cell clinical trials.

To address the unique challenges that currently delay the translation of laboratory based stem cell research to high-quality clinical trials, CIRM is proposing two new strategic programs: (1) the Translating Center: Stem Cell Preclinical Research Organization and (2) the Accelerating Center: Stem Cell Clinical Research Organization. These centers are designed to complement each other and work synergistically with one another and the Alpha Clinics Network to support CIRM-funded Translational and Clinical projects. The Translating Center will support activities related to cell process development and manufacturing and preclinical research necessary to obtain an Investigational New Drug (IND) application, which is a prerequisite for clinical testing of cell therapy product candidates, while the Accelerating Center will support IND submissions and clinical trials for these projects.

It is important to note that these two centers are designed to address common concerns raised by **both researchers and regulatory officials**, making them particularly valuable tools to increase the quality and speed of clinical and translational stage projects.

This award will fund the Accelerating Center, a top quality clinical research organization with stem cell-specific regulatory expertise, a proven track record of providing the required services on a contract basis, the capacity to support multi-center national and international trials, and a dedicated focus on cell therapy clinical trials. Operating from a facility permanently located within California, the Accelerating Center will provide logistical, operational and consultative services to clinical trial sponsors and clinics in order to accelerate the regulatory review process and the conduct of high quality cell therapy clinical trials, with an initial emphasis on CIRM-funded projects and a business plan to extend the services to other clients in the future. Core services shall include:

- Regulatory management
- Clinical trial planning, operations and management
- Data management systems, biostatistics and analytics



Award Information

What is the CIRM funding allocation and project term?

Under this program announcement, a single applicant organization will be funded to operate the Accelerating Center within California. The Accelerating Center will receive \$15M in funding over a 5 year period to work in coordination with CIRM's other strategic programs to support the conduct of stem cell clinical trials.

What activities will CIRM fund?

CIRM will support the following activities under this opportunity:

- Regulatory management services (including IND preparation and submission)
- Clinical trial planning and management, including site selection, contracting, and clinical site management (e.g., patient recruitment and operational and logistical support)
- ✓ Data management, biostatical and analytical services
- ✓ Provision of services to the Alpha Clinics Network, CIRM-funded investigators and sponsors with translational and clinical stage projects, and clinical sites seeking to join the Alpha Clinics Network

What activities will CIRM not fund?

CIRM funds cannot be used to support the following activities under this opportunity:

- * Activities already funded by CIRM under a prior or existing award
- Conduct of, or support for, discovery research
- Early translational projects (projects that have not yet been through a pre-IND meeting)
- Construction or renovation of physical facilities
- Activities performed by the Translating Center

How will funds be awarded?

CIRM will disburse funds pursuant to a Notice of Grant Award and based on operational milestones. Costs resulting from a delay or failure to meet an operational milestone will be the sole responsibility of the recipient. Successful applicants will have thoughtfully accounted for foreseeable project risks and developed contingency plans that do not involve additional funding from CIRM.

Project Requirements

What are the eligibility requirements for partnering with CIRM?

To be eligible, the proposed project must satisfy the following requirements:

(1) Must be ready to initiate work on the funded project within 45 days of approval

Given the urgency of CIRM's mission, all approved awardees must initiate work on the funded project within 45 days of approval and authorization for funding by the Application Review



Subcommittee of CIRM's governing board, the Independent Citizens' Oversight Committee ("ICOC").

(2) Must provide core support services

The Accelerating Center must have stem cell-specific regulatory expertise and the capacity and experience to provide services to optimize translational and clinical programs involving cell based therapeutics. Systems and services must include:

- Regulatory support, including planning and consultative services related to activities
 necessary to obtain regulatory approval for a clinical trial, compilation and submission of
 regulatory applications (IND), and management of regulatory requirements necessary for
 clinical trial conduct
- Clinical trial planning, operations and management, including site selection, patient
 recruitment and management and logistical support across multiple clinical sites, in
 coordination with vendors and third party organizations necessary for the efficient conduct
 of high quality clinical trials
- Data management systems, biostatistics and analytics to enable the researchers and stem
 cell community to optimally leverage the cumulative and aggregated knowledge to inform
 the best path forward for delivering promising cell therapeutics to patients

For translational and pre-clinical programs, the Accelerating Center will offer to manage and coordinate the assembly of the necessary preclinical and cell/product manufacturing components, in an effort to assist sponsors in filing strong IND packages with the FDA. The Accelerating Center will also be available to serve as the lead organization for assisting sponsors with their FDA interactions or other relevant regulatory bodies.

For clinical stage programs, the Accelerating Center will work with the Alpha Clinics Network, CIRM-funded projects, and clinical trial sponsors to evaluate and implement an optimal configuration of services proportional to the needs of specific trials. The scope of services may range from complete reliance – where the client is dependent on Center's infrastructure and capacities, to facilitation – where the Accelerating Center facilitates the sponsor's use of Alpha Clinic Network resources. Service contracts will be scaled to meet the needs of a specific program, sponsor or site.

Through the development of systems and the provision of essential clinical services, the Accelerating Center will obtain unique experience and insight into optimal approaches for accelerating the conduct of stem cell therapy clinical programs.

(3) Leveraging CIRM Infrastructure Capacities

The Accelerating Center will coordinate with the Translating Center to best serve the objectives of the two infrastructure programs and to create an efficient work flow to support the submission of INDs. The Accelerating Center will serve as the lead organization in interactions with the FDA.

The Accelerating Center will coordinate with the Alpha Clinics Network to leverage, improve upon, and scale up the Accelerating and Value Add Resources (AVARs) of the Alpha Clinics Network, and to offer these AVARs broadly to support stem cell clinical trials throughout the state, and where necessary, to administer subcontracts and licenses in order to access these assets on behalf of sponsors.

(4) Business and Sustainability Planning



Through the aggregation of regulatory, clinical and operational knowledge, the Accelerating Center will develop unique information assets. The Accelerating Center is expected to develop a Sustainability Plan for the deployment of these assets to leverage CIRM's strategic programs (i.e., Translating Center and Alpha Clinics Network). The aim of this leveraging strategy is to create a sustainable platform for ongoing development of stem cell treatments for patients. Systems and planning should:

- Perform ongoing evaluation to align capacity with demand for services.
- Document the clinical/regulatory efficacy and market competitiveness of the services provided within the strategic programs to support business development.
- Support infrastructure expansion by facilitating the entry of new clinical sites into the Alpha Clinics Network.
- Guide the planning and implementation of any "course corrections" emerging from ongoing evaluation activities.

(5) Operational Requirements for the Accelerating Center

The Accelerating Center must provide a competitive discount for services provided for all CIRM related activities (current and future CIRM translation and clinical programs, and Alpha Clinic programs) during the term of the award. The CIRM funds will be used to off-set the costs of providing services supported under this award during the funding period.

The Accelerating Center may charge commercially reasonable fees to support other non-CIRM projects. However, the Accelerating Center must utilize its own funds to provide services to non-CIRM programs.

This organization must be designed to (i) maximize broad access to a clients throughout the state who are developing cellular therapeutics, (ii) increase the probability of creating a sustainable business enterprise and (iii) minimize competing interests.

(6) Participation in Steering Committees

The Accelerating Center Director will serve on a newly formed joint Translating Center/Accelerating Center/ CIRM Steering Committee to oversee the coordination of CIRM's strategic programs. The Accelerating Center Program Director will also serve on the Alpha Clinics Network Steering Committee.

(7) Must have a California operating location

Applicants must conduct a majority of the Accelerating Center's operations from a facility permanently located within California that is equipped to provide the services required under this opportunity. The Center Director and a majority of the Center's dedicated staff must work out of the California facility and must be paid within the state.

(8) Applicants must demonstrate solvency

Applicants must provide documentation that shows 180 days' cash on hand from date of application submission to fund operations and the financial ability to meet the contingency requirements for the term of the project. The determination of solvency will be made at CIRM's sole discretion.



Who can apply?

California Based Organizations

California organizations (for-profit and non-profit) may use CIRM funds for eligible project costs incurred both in California and outside California. To qualify as a California organization, the organization must have >50% of its employees located in, and paid in, the state of California, and manage the award activities from the California location.

Non-California Based Organizations

Non-California organizations may also apply; however, CIRM funding can be used only for allowable expenditures incurred within California. Furthermore, non-California based organizations are required to meet all conditions of set forth in paragraph 7 ("Must have a California operating location") under "Project Requirements, What are the eligibility requirements for partnering with CIRM".

Who can serve as the Center Director (CD)?

To be eligible, the CD must satisfy the following requirements:

- Must be an employee of the applicant organization
- Must commit 100 percent effort to working on the project for the first three years of CIRMfunding and no less than 80 percent effort in years four and five.

Estimated Schedule and Deadlines¹

Applications Due	1H2016
Grants Working Group (GWG) Review	1H2016
ICOC Review and Approval	2H2016
Award Start	Must start within 45 days of award approval

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¹ This schedule is subject to change by CIRM's President depending upon CIRM's resources and priorities.