DISCOVERY

CIRM
CALIFORNIA'S STEM CELL AGENCY

DISC0: Discovery Stage Research Funding Opportunity for Foundation Awards

PROGRAM ANNOUNCEMENT

4.11.22

CIRM

CALIFORNIA'S STEM CELL AGENCY

DISC0: Discovery Stage Research Funding Opportunity for Foundation Awards

Objective

The mission of the California Institute for Regenerative Medicine (CIRM) is to accelerate world class science to deliver transformative regenerative medicine treatments in an equitable manner to a diverse California and world.

The objective of the DISC0 Foundation Awards is to support rigorous studies addressing critical basic knowledge gaps in the biology of stem cells and regenerative medicine approaches and to advance stem cell-based tools. Projects funded through the Foundation Awards should propose impactful or innovative research that culminates in a discovery or technology that would:

- Advance our understanding of the biology of stem or progenitor cells[1] (collectively, "stem cells") that is relevant to human biology and disease; or
- Advance the application of genetic research[2] that is relevant to human biology and disease and pertains to stem cells and regenerative medicine[3]; or
- Advance the development or use of human stem cells as tools for biomedical innovation; or
- Lead to the greater applicability of regenerative medicine discoveries to communities representing the full spectrum of diversity.

As part of implementing the new Strategic Plan, CIRM is in the process of developing concepts for focused research consortia that are designed to accelerate stem cell and gene therapy research through coordinated and collaborative efforts. While CIRM intends to issue this Program Announcement for Foundation Awards to broadly re-initiate funding of basic stem cell science and genetic research, future DISC0 Program Announcements will be adjusted to align with collaborative infrastructure needs.

---

[1] Under Proposition 14, progenitor cells are "multipotent or precursor cells that are partially differentiated, but retain the ability to divide and give rise to differentiated cells." Progenitor cells may include directly reprogrammed cells if they meet the criteria in the above definition.

[2] For the scope of this solicitation, CIRM considers genetic research to mean research that alters genomic sequences of cells (edit, remove, or add DNA sequences) or introduces or directly manipulates nucleic acids (such as mRNAs, antisense oligonucleotides) in cells.

[3] For the scope of this solicitation, CIRM considers regenerative medicine to mean therapeutic approaches that are intended to replace, regenerate or repair the function of aged, diseased, damaged or defective cells, tissues, and/or organs.

CIRM

CALIFORNIA'S STEM CELL AGENCY

Since Proposition 14 dedicates more than a quarter of funds to support of research and the development of treatments for diseases and conditions of the brain and central nervous system (CNS), **CIRM encourages the submission of proposals focused on increasing our understanding of the fundamental biology of CNS disorders.**

Award Information

What is the award amount and duration?

CIRM will fund direct project costs of up to $1,000,000 per award. Direct project costs must be adequately justified and are subject to adjustment prior to the issuance of an award based on assessments by the Grants Working group (GWG), the CIRM team, or by the Application Review Subcommittee of CIRM's Governing Board. The proposed project period must not exceed 3 years.

If the project period is less than three years with an annual proposed budget above $400,000, a strong justification will be required, and the GWG will be instructed to consider that budget rationale in their scoring.

How will funds be awarded?

Awards will be made in the form of a grant. Funds will be disbursed pursuant to a CIRM Notice of Award. The first payment will be issued upon initiation of an award and subsequent payments will be disbursed on a regular interval at CIRM's option. Continued funding is contingent upon timely progress, as outlined in the project or milestones and timeline established under the Notice of Award, and, when applicable, the ongoing ability of the applicant to fund its operations and to satisfy its co-funding commitment.

What activities will CIRM support?

CIRM funds will support the following activities under this opportunity:

- ✓ Basic research into stem cell mechanisms as they relate to human biology
- ✓ Investigating stem cells or their derivatives as tools for discovering and enabling therapeutic or other innovations, e.g., for studying or modeling disease
- ✓ Basic genetic research relevant to human biology and as it pertains to stem cells or regenerative medicine
- ✓ Research and tools related to diversity, equity and inclusion in science, i.e., extending or validating the applicability of regenerative medicine discoveries to underserved populations (e.g., use of human induced pluripotent stem cell (hiPSC) lines or omics analyses from diverse groups of individuals, target diseases or disease subtypes more frequently experienced by underserved groups)
- ✓ Basic research and tool discovery to address bottlenecks in the development of stem cell-based and gene therapies, such as cell/tissue targeting, immunogenicity and toxicity, in vivo gene therapy delivery, engineering human pluripotent stem cells (hPSC) to evade the immune system

- ✓ Studies to better understand human cells and tissues (healthy and/or diseased) to be modeled in vitro or targeted with regenerative medicine approaches (e.g., omics and other profiling, human cell / tissue atlases), a human stem cell / regenerative medicine component (wet lab and/or data-related) must be included in the project
- ✓ Auxiliary research activities that support regenerative medicine science (e.g. biomarker discovery, genome and epigenome editing tools, imaging tools, mechanism of disease to enable rational design of stem cell- or gene therapy-based treatments, data science and computational approaches), a human stem cell / regenerative medicine component (wet lab and/or data-related) must be included in the project
- ✓ Reverse translation studies related to stem cell- or gene therapy-based regenerative medicine therapies

Activities should focus on human cells but may include supportive studies using nonhuman cells provided that human cells are also investigated, or activities may focus on nonhuman cells if a strong justification is provided that the proposed research is of immediate relevance to human biology / disease but cannot be conducted using human cells.

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

- Projects targeted by DISC2, TRAN and CLIN programs (see www.cirm.ca.gov)
- Projects that propose solely or mainly to derive new pluripotent stem cell lines from somatic cells or embryos

Eligibility

What types of projects are eligible for funding?

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

(1) The applicant must

a) define a key knowledge gap (including bottlenecks in the field) (i) in our understanding of the biology or application of stem cells, or (ii) in the application of genetic research as it pertains to stem cells or regenerative medicine;

b) propose research that addresses this knowledge gap; and

c) validate any discoveries made in nonhuman cells with a relevant human cell equivalent.

(2) Projects that generate molecular omics data must include an experienced Data Project Manager on the team

To ensure effective contribution of data to selected data platforms (see Data Sharing and Management Plan), a dedicated Data Project Manager must be part of the team (minimum 15% effort) in projects that collect omics data, such as genomics, transcriptomics, epigenomics, proteomics, metabolomics, lipidomics, etc. This

CIRM

CALIFORNIA'S STEM CELL AGENCY

individual must have demonstrated experience in data handling and is responsible for interfacing with a data management team(s) and reporting data progress as well as maintaining the integrity of data during ingestion.

(3) The applicant must be ready to initiate work on the funded project within 90 days of approval.

Given the urgency of CIRM's mission, all approved awardees must initiate work on the funded project within 90 days of approval and authorization for funding by the Application Review Subcommittee of CIRM's governing board, the Independent Citizens' Oversight Committee ("ICOC").

(4) Co-funding is not required.

If the project does, however, require funding over and above that which CIRM provides, documentation demonstrating the commitment of funds to cover the proposed co-funding amount must be provided at the time of application submission (e.g., copy of executed term sheet showing amount of co-funding, conditions and source).

(5) For-profit organizations must demonstrate solvency.

For-profit organizations must provide documentation that shows 180 days cash on hand from date of application submission and the financial ability to meet the co-funding, if applicable, for the term of the project. The determination of solvency will be made at CIRM's sole discretion.

(6) Application must be accurate and complete

All required components of the application must be completed and may not contain false or inaccurate information.

(7) Applicant must be in "good standing"

In order to be eligible to apply for CIRM funding, an applicant must certify that it is in good standing, as follows:

a. The applicant's Chief Executive Officer, Chief Financial Officer, and Principal Investigator must not have been convicted of, or currently under investigation for, crimes involving fraud/misappropriation;

b. The applicant must have accounting systems in place that are capable of tracking CIRM funds; and

c. The Principal Investigator or key personnel named in the application must not be currently under investigation for research misconduct by the applicant institution or a funding agency and must not be currently debarred by HHS Office of Research Integrity.

CIRM

CALIFORNIA'S STEM CELL AGENCY

Who can apply?

Only California Organizations are eligible to apply for this opportunity.

A California Organization is a for-profit or non-profit organization that employs and pays more than 50% of its employees in California and that directs and controls the award activities from California.

For a California Organization, Allowable Project Costs include:

- Costs for research activities conducted wholly in California; and
- Costs for research activities conducted outside of California, provided that the California Organization exercises direction and control over the activities.

Unallowable Costs

Allowable Project Costs do NOT include the costs of activities performed by a separate out-of-state organization that retains intellectual property or independent publication rights in any intellectual property (e.g., invention, technology, data) arising out of the CIRM funded project. Unallowable costs also include project costs incurred before the date the ICOC approves the application for funding, which can be as early as 90 days post application submission.

Who can serve as the Principal Investigator (PI)?

To be eligible, the PI must satisfy the following requirements

- Must be an employee of the applicant organization or be accountable for the conduct of the proposed project to the applicant organization through a formal contract.
- Must commit at least 20 percent effort to working on the project. Any effort for which salary from CIRM is claimed must be expended in California.
- Must be authorized by the applicant organization to conduct the research and assume the responsibilities of the PI.
- Must not currently have another application pending review or approval under this funding opportunity.
- Must not currently have another application that is substantially similar or has overlapping activities pending review or approval under any CIRM opportunity.

CIRM

CALIFORNIA'S STEM CELL AGENCY

Schedule and Deadlines

Applications Due	One or two cycles per year
Grants Working Group (GWG) Review	Approximately 90 days post submission
ICOC Review and Approval	Approximately 120 days post submission
Award Start	Must start within 90 days of award approval (i.e., approximately 210 days post submission)

Application Review Information

What is the process for evaluating an application?

Pre-submission Consultation

In accordance with CIRM's mission, the Agency is committed to helping develop promising stem cell-based technologies by partnering with world-class investigators. Therefore, prospective applicants are encouraged to contact CIRM before applying with questions or to discuss their project's eligibility.

Eligibility Review

CIRM will assess whether the proposed project meets eligibility requirements sought under this program. If CIRM determines, in its sole discretion, that an application does not meet the eligibility requirements of the program or that the submitted application is incomplete or contains false or inaccurate information, CIRM will notify the applicant of its decision and, if CIRM deems it appropriate, allow an opportunity to remedy. If CIRM deems it inappropriate, or if the applicant does not remedy the error in a timely manner, CIRM will terminate all further action on the application.

Scientific Review

The scientific merit of each application will be assessed by the GWG, which is composed of fifteen subject matter experts from outside California, seven patient advocate members of the ICOC, and the Chair of the ICOC. The list of scientific members who may participate in the GWG review can be found at http://www.cirm.ca.gov/WorkingGroup_GrantsReview. The composition of the ICOC can be viewed on the CIRM website http://www.cirm.ca.gov/GoverningBoard.

The fifteen participating scientists on the GWG will evaluate the applications and score them according to scientific and technical merit, applying the review criteria described below.

CIRM anticipates that the number of applications submitted will be very high for this competition. When the number of applications received in a cycle is significantly in excess of the number that can be reviewed by the GWG panel, the GWG members conduct the review in two stages. In the first stage, GWG members (including

scientific members and patient advocate and nurse members of the Governing Board) will conduct a pre-review of applications (called "Positive Selection") to identify applications that the panel believes are most responsive to the funding opportunity and hold the most potential for impact. Applications that are not selected are examined by the CIRM scientific team and CIRM President to determine whether any additional applications merit a full GWG review. The remaining non-selected applications are deemed to be denied. Since the selection process is focused on quickly identifying promising proposals rather than identifying deficiencies in applications, no reviewer comments are collected at this stage. Positively selected applications advance to the second stage of review, which involves assignment to specific reviewers on the panel, a full discussion at review meeting, and scoring by the GWG.

The Application Review Subcommittee will make final funding decisions giving consideration to the GWG recommendations and any CIRM team recommendations.

Consideration of Past CIRM Award Information (If Applicable)

The GWG may consider information from a previously funded and related CIRM award as part of its review. CIRM will provide the GWG with objective information regarding a related award that CIRM, in its sole discretion, deems relevant, including but not limited to achievement of specific milestones, data, and outcomes for a related CIRM award or awards.

A "related CIRM award" includes: (1) an award for which the applicant PI served as the PI, a co-PI, a co-investigator, or otherwise substantially participated in the conduct of the award; (2) an award involving the same research project or product; or (3) an award that includes overlapping team members.

Diversity, Equity and Inclusion in CIRM-Funded Projects

Applicants should discuss the limitations, advantages and/or challenges of their research proposal as it relates to the diverse California population, including underserved racial/ethnic communities. Examples include use of models and tools that account for population diversity (e.g. HLA types, gender, genomics data, cell models **– see Appendix: Other Resources**). Applicants should also address how the research team has or will incorporate diverse and inclusive perspectives and experience in the implementation of the research project, including, for example, developing partnerships with patient organizations, acquiring training in cultural competence and/or DEI, utilizing institutional resources for DEI, and allocating funds and/or personnel to address DEI.

The GWG and CIRM's governing board will evaluate these statements as a review criterion in making funding recommendations. Priority will be given to projects with the highest quality plans in this regard.

Data Sharing and Management Plan

The sharing of data and knowledge produced from CIRM-funded projects is key to advancing the field of regenerative medicine and accelerating treatments to patients. CIRM requires applicants to develop and execute a Data Sharing and Management Plan that includes management and preservation of data and making applicable data available to the broader scientific community. CIRM also requires applicants to allocate funds in their proposed budget for personnel and/or activities related to managing and sharing data produced from the funded project. CIRM requires sharing of data in accordance with FAIR data principles (Findability, Accessibility,

Interoperability, and Reusability) through established repositories including, but not limited to, specialized repositories, generalist repositories, cloud platforms and institutional repositories.

The Data Sharing and Management Plan must be included in the application and the plan is subject to evaluation (not scored) by the Grants Working Group. Reviewers will be asked to comment on the quality of the Data Sharing and Management Plan and advise CIRM on any improvements they recommend.

Confidentiality

CIRM's confidentiality and conflict screening rules apply to everyone who will have access to applications or who will attend any review meeting in which confidential information is discussed, including but not limited to CIRM team members, reviewers and members of the ICOC. (Per Gov. Code §6254.5(e), non-public records may be disclosed to government agencies under confidentiality agreements.)

How will the scientific merit of an application be evaluated?

Scientific and patient advocate members of the GWG will evaluate applications and the scientific members will score them based on the following key questions:

1. Does the project hold the necessary significance and potential for impact?

Does the project define and address a key knowledge gap in our understanding of the biology or application of stem cells, or in the application of genetic research as it pertains to stem cells or regenerative medicine? Or does it define and address a major bottleneck to the discovery, development or use of stem cell-based or gene therapies?

Would the project, if successful, have a major impact on scientific knowledge in the stem cell / regenerative medicine field or on potential applications of stem cell or genetic research to regenerative medicine, rather than incrementally advancing the field? Will the outcome ultimately contribute to the advancement of world class science?

2. Is the rationale sound?

Is the proposed project based on sound scientific rationale? Are preliminary data compelling and supportive of the proposed project? Is the project significantly relevant to human biology and disease?

3. Is the project well planned and designed?

Is the project appropriately planned and designed to give meaningful results? Are potential pitfalls identified and alternative approaches presented? Do the project plan and timeline demonstrate an urgency that is commensurate with CIRM's mission? For projects shorter than 3 years and that propose annual budgets above $400,000, is the budget rationale appropriately justified?

4. Is the project feasible?

Are the proposed aims and expected project outcome logical and likely to be achieved within the proposed timeline? Is the proposed team appropriately qualified and staffed? Does the team have access to all the necessary resources to conduct the proposed activities? Is the budget appropriate for the research proposed?

5. Does the project uphold the principles of diversity, equity and inclusion (DEI)?

Does the project plan and design adequately address and account for the influence of race, ethnicity, sex, gender, and age diversity? Would the project outcomes extend or validate the applicability of regenerative medicine discoveries to underserved populations, including underserved racial/ethnic communities? Has the applicant described prior efforts or proposed plans for outreach, partnership, or educational activities to inform the development of DEI within the research project?

Application Components and Submission

How does one apply?

Applications must be completed and submitted online using the CIRM Grants Management Portal at http://grants.cirm.ca.gov. Any prospective PI must create a login in the system to access application materials and apply. Applications are available in the system only to the PI. A PI may submit only a single Foundation Award application in a given review cycle.

What components does an application include?

The Grants Management Portal provides instructions for completing all the necessary components and submitting a final application, including guidelines with examples for the Data Sharing and Management Plan. The application is designed to collect information necessary to appropriately evaluate the proposal and for CIRM to rapidly initiate an award if approved for funding. Applicants are required to indicate key personnel involved in the project, describe how the proposal addresses the objective of the partnering opportunity, provide a detailed plan of proposed activities, and prepare and justify an appropriate budget.

The main components of the application include the following key sections:

1. **Application Preview Page:** This section will be utilized by reviewers to prescreen applications and select a subset to move forward to the second and final stage of review.
    - Knowledge Gap/Bottleneck/Outcome
    - Project Summary
    - Area of Impact
    - Consideration of diversity, equity and inclusion in project design and execution
2. **Resubmission Statement:** If this application is a resubmission then the applicant will provide a brief statement on how this application addresses the reviewers' critiques.

CIRM

CALIFORNIA'S STEM CELL AGENCY

3. **Statement of Significance and Impact:** Description of how the proposed research, if successful, could: a) address a critical basic knowledge gap in the biology of stem cells or regenerative medicine approaches that is relevant to human biology or disease, or b) advance the development or use of human stem cells as tools for biomedical innovation, addressing a major bottleneck to the discovery, development or use of stem cell-based or gene therapies, or c) lead to the greater applicability of regenerative medicine discoveries to communities representing the full spectrum of diversity.

4. **Statement of Diversity, Equity and Inclusion**: A statement describing how the overall study plan and design has considered the influence of race, ethnicity, sex, gender and age diversity. An explanation of how the project outcomes might extend or validate the applicability of regenerative medicine discoveries to underserved populations, including underserved racial/ethnic communities. The statement should also include a description of the research team's prior efforts or proposed plans for outreach, partnership, or educational activities to inform the development of DEI within the research project.

5. **Objective and Specific Aims:** A concise description of the project objective and project aims, and criteria for success.

6. **Rationale:** Description of the scientific rationale for the proposed research and the preliminary data.

7. **Research Plan**: A concise but detailed description of methods and techniques to be employed to achieve aims, and potential pitfalls and alternative approaches.

8. **Data Sharing and Management Plan (DSMP)**: A description of the proposed plan to share and manage data generated from the project. Guidelines to complete this section will be provided in the application. The description must include:

    a. Data types (i.e., the type(s) and quantity of data expected to be produced, what data will be preserved and shared, a justification for not sharing certain data, and what metadata and other relevant data will be made accessible),

    b. Related tools, software and/or code needed to access or manipulate shared scientific data,

    c. The standards that will be applied to the data and associated metadata,

    d. Data preservation (i.e., repository(ies) where shared data and metadata will be archived), access (how will shared data be findable and identifiable) and associated timelines,

    e. Considerations of factors affecting access, distribution, or reuse of shared data by others,

    f. The approach and personnel for oversight of data management and sharing, and

    g. Expected costs and budget justification.

9. **Timeline**: Activities-based timeline for achieving project aims.

10. **Principal Investigator and Team:** A description of the PI and team's expertise and experience.

11. **Resources and Environment:** A brief description of the resources available to the project and environment.

12. **References**

CIRM

CALIFORNIA'S STEM CELL AGENCY

Who are Key Personnel?

In the application, we ask you to identify by name pertinent Key Personnel and their specific roles on the project. Key Personnel are defined as (1) the principal investigator or program director; or (2) any other person, including an independent consultant or an employee of a Subcontractor or Partner, who is expected to contribute to the scientific development or execution of the project in a substantive, measurable way *and* who is expected to: (a) receive or has been promised income, or anything else of value, of $10,000 or more per year for his or her contribution to the project or (b) contribute one percent (1%) or more effort to the proposed project. "Key Personnel" does not include a person who is expected to be involved in the proposed project but who does not satisfy conditions (1) or (2).

Individuals who do not meet the definition of Key Personnel may be supported with CIRM funds, but should not be identified by name in the application. Such unnamed personnel may be referenced indirectly by their role on the project (e.g., technician). The budget includes a line item for requesting support for unnamed personnel.

What should one know before preparing the budget?

Budgets must be justified in detail, including all subcontracts and consulting fees, including, if applicable, any additional costs that would be funded from another source. Allowable Project Costs for research funded by CIRM are detailed in the CIRM Grants Administration Policy for Discovery and Translation Stage Programs. Generally, project costs for personnel, supplies, travel, equipment, data sharing/management and subcontracts may be claimed. Limits for specific cost categories must be observed.

What are Direct Facilities Costs?

Direct Facilities Costs are the general operating costs of the grantee's facilities attributable to housing all elements of the CIRM-funded project or activity. Facilities costs for non-profit applicant organizations are limited to the current applicable, federally negotiated rates for the organization as defined by the Office of Management and Budget (OMB) Circular A-21 or A-122. Facilities rates for for-Profit applicant organizations are limited to 35% of the direct project costs. Facilities rates are applied to direct project costs exclusive of the costs of equipment, tuition and fees, research patient care costs, as well as the costs of each individual subcontract, consultant, and service agreement in excess of $25,000. The facilities cost rates approved and in place at the time of the application are to be applied to the entire award project period.

How much can an applicant claim for indirect costs?

For-profit organizations cannot claim indirect costs. For non-profit organizations, indirect costs will be limited to 20% of allowable direct research funding costs awarded by CIRM (i.e., project costs and facilities costs), exclusive of the costs of equipment, tuition and fees, research patient care costs, as well as the costs of each individual subcontract, consultant, and service agreement in excess of $25,000. The indirect cost rate budgeted at the time of application is to be applied to the entire award project period.

CIRM

CALIFORNIA'S STEM CELL AGENCY

Award Administration

Issuance of Award

A CIRM award is issued via a Notice of Award (NOA), which is the formal contract that defines the terms and conditions of an award and documents the commitment of funds from CIRM. CIRM reserves the right to modify or establish funded project activities and the associated budget prior to issuance of the Notice of Grant Award, including, when applicable, establishing project milestones, success criteria and timelines at its sole discretion after consultation with the PI and based on information provided in the application. CIRM may also review key contracts/agreements that are critical to the success of the project for compliance with CIRM's policies and regulations.

Payments and Reporting

The first payment will be issued upon initiation of an award and subsequent payments will be disbursed on a regular interval at CIRM's option. Continued funding is contingent upon timely progress, as outlined in the project or milestones and timeline established under the Notice of Award, and, when applicable, the ongoing ability of the applicant to fund its operations and to satisfy its co-funding commitment.

Grantees will be required to provide periodic written progress and financial reports to CIRM. CIRM will partner with the grantee to foster the success of the project. Grantees will have ongoing communication with the CIRM Program Officer throughout the duration of the award, typically meeting by teleconference and periodically in person.

Upon approval of an award, CIRM may appoint a Data Advisory Panel (DAP) to partner with the awardee for optimal sharing and managing of data. In such cases, awardees will have ongoing communication with the DAP throughout the duration of the award.

No-Cost Extensions

Timely progress on funded projects is of critical importance to CIRM. Therefore, CIRM will consider a one-time, No-Cost Extension (NCE) request of no more than 6 months, submitted at least 30 days before the project end date. Such requests should properly justify how such an extension will advance the project towards its expected outcome, but Grantees should not assume CIRM will approve a NCE request.

CIRM

CALIFORNIA'S STEM CELL AGENCY

Contacts

For information and assistance with this program announcement please contact:

Send email correspondence to Discovery@cirm.ca.gov

CIRM

CALIFORNIA'S STEM CELL AGENCY

Definitions

"California organization" means: An entity, regardless of profit status, that has >50% of its employees located in, and paid in, the state of California, and conducts the award activities from the California location.

"For-profit organization" means: a sole-proprietorship, partnership, limited liability company, corporation, or other legal entity that is organized or operated for the profit or financial benefit of its shareholders or other owners. Such organizations also are referred to as "commercial organizations".

"Non-profit organization" means: (1) a governmental entity of the state of California; or (2) a legal entity that is tax exempt under Internal Revenue Code section 501(c)(3) and California Revenue and Taxation Code section 23701d.

"Partner" means an organization that, in exchange for the right to the opportunity for a future financial return, has (1) agreed to provide matching funds for the proposed project or (2) entered into an agreement with the applicant organization relating to the commercialization of the proposed project.

"Subcontractor" means an organization (other than the applicant organization) that is expected to: (a) contribute to the scientific development or execution of the project in a substantive, measurable way *and* (b) receive $25,000 or more through the proposed project. "Subcontractor" does not include suppliers of widely available goods.

Appendix

CIRM Regulations

Grant awards made through this PA will be subject to all applicable CIRM regulations. These regulations can be found at http://www.cirm.ca.gov/reg/default.asp.

Other Resources

CIRM iPSC Repository

As a resource to the regenerative medicine community, CIRM has funded the creation of an Induced Pluripotent Stem Cell Repository, a large, genetically diverse collection of stem cells produced from thousands of individuals representing various diseases of interest and healthy controls. The 2600+ lines were uniformly derived, have undergone rigorous quality control, and include demographic and clinical data. The CIRM Repository is managed by Fujifilm Cellular Dynamics, Inc., who have made the lines available for purchase at https://www.fujifilmcdi.com/cirm-ipsc-products/. SNP data for 2166 CIRM lines and whole genome sequence data for 299 of the CIRM iPSC donors is available at dbGaP. A list of CIRM lines with WGS data can be found here.

Applicants who are interested in using iPSCs to investigate mechanisms of disease, develop novel tools, discover therapeutic targets, or increase diversity in their

CIRM

CALIFORNIA'S STEM CELL AGENCY

experimental design are encouraged to explore the CIRM iPSC Repository or request additional information from CIRM program officers at discovery@cirm.ca.gov using the subject line “DISC0 application - iPSC Repository”.

Please note, cells in the CIRM iPSC Repository are for research use only and are not eligible nor consented for clinical use.