DISCOVERY

CIRM
CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE

DISC4: Funding Opportunity for Discovery Stage Research



Program Announcement
April 11, 2025

Summary

OVERVIEW	
Objective	Support comprehensive discovery research across a diverse range of diseases and bottlenecks that will accelerate the development of potential therapeutics and biomarkers in regenerative medicine.
Scope	Expansive, cross-disciplinary and integrated studies led by large collaborative teams applying a range of technologies and approaches to address knowledge gaps or bottlenecks in our understanding of human diseases.
Program Recurrence	Once per year
AWARD DETAILS	
Investigators	1 Principal Investigator (PI) + 4 or more Co-Investigators (Co-I)
Amount	Up to $13,000,000 total costs
Duration	Up to 4 years
Matching Fund Contributions	Maximum total project costs may be increased (up to additional $1,000,000 per award to maximum of $14,000,000) **if** an equivalent (or larger) amount of eligible matching fund contributions is provided.
ELIGIBILITY REQUIREMENTS	
Applicant Organization	Only non-profit and for-profit organizations* that meet CIRM's definition of a California Organization* are eligible to apply.
Applicant PI and Co-I*	The PI and all Co-Is must be employed by a California organization* at the time of application and throughout the project duration. PI must commit at least 15% effort. Each Co-I must commit at least 10% effort. At least 1 Co-I must be employed by a different institution than the PI.
Critical Role(s) and Expertise	Applicant team must include 1) a Data Project Manager; 2) a team member with clinical expertise; 3) a team member with industry/translational expertise 4) a team member with computational or bioinformatics expertise.
Co-funding	Not required
SCHEDULES AND DEADLINES	
Pre-submission Due	Once per year. Approximately 60 days post PA posting
Invitations to Apply	Approximately 60 days post pre-submission due date
Application Due Date	Approximately 90 days post invitation to apply
GWG Review	Approximately 120 days post application due date
Award Approval	Approximately 180 days post application due date
Start Date	Must be ready to start award activities within 120 days of award approval
CONTACT AND ADDITIONAL RESOURCES	
https://www.cirm.ca.gov/researchers/funding-opportunities-discovery-stage-research/ For additional information on the program or applications, contact discovery@cirm.ca.gov. For questions related to the review and approval of applications, contact review@cirm.ca.gov. ***Additional requirements and definitions may be found in CIRM Funding Opportunities: Common Requirements and Definitions and are incorporated here by reference.**	

Table of Contents

Background 4
Objective 4
Scope and Structure 5
Eligibility 7
Pre-Submission and Application Preparation 9
Application Review Information 13
Award Administration 14
Resources 16

Background

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. In September of 2024, CIRM's Governing Board, the Independent Citizens' Oversight Committee (ICOC), approved a Strategic Allocation Framework (SAF) to guide and optimize the value of CIRM's current and future investments. One key outcome of this exercise was defining an ambitious goal for CIRM, through its discovery stage opportunities, to catalyze the identification and validation of at least 4 novel targets and biomarkers and ensure their integration into preclinical or clinical research for diseases in California.

The most important impediment to the development of effective treatments is the lack of well-validated or actionable therapeutic targets due to an incomplete understanding of disease biology. Due to the complexities of disease processes, sustained investments in foundational, cross-disciplinary research are necessary to identify high-quality targets for therapeutic or biomarker development. In 2024, the ICOC determined to support comprehensive discovery research through at least 2 new complementary award structures (DISC4 and DISC5) that promote innovative, collaborative research at varying levels of scale and maturity. These awards will fund a network of multidisciplinary research teams that will be supported by CIRM to facilitate knowledge sharing and to leverage other CIRM-funded resources to ensure readiness for further translational efforts.

CIRM's Discovery Program seeks to build on rapid advances in stem-cell biology and genetic research including:

1. Advances in stem cell biology and stem cell derived models in basic and translational research, particular in facilitating the study of human tissues, cells and genes.
2. Advances in the understanding of the genetic underpinning of diseases and biological processes including insights derived from human genetic studies and functional genomic tools that map genes to cellular functions and disease processes.
3. Advances in a broad range of research technologies (single-cell omics, imaging, machine-learning etc.) that greatly enhance the study and use human stem cells in research and medicine.

The DISC4 program aims to integrate these advances with CIRM's pioneering support for stem cell science to accelerate foundational insights in disease biology across a wide range of disease areas. The program will also incentivize the integration of diverse sources of evidence (clinical specimens, *in vivo* models, stem-cell models, computational modeling) to strengthen the validity and reproducibility of novel targets and biomarkers uncovered.

DISC4 awards build on the multi-disciplinary framework piloted through CIRM's 2024 DISC4 ReMIND-L awards which have a specific focus on neuropsychiatric disorders. The DISC4 program will support a broad set of disease areas while new program elements will facilitate readiness for target validation and preclinical translation by the end of the award.

Existing federal funding opportunities for discovery research are primarily driven by the internal priorities and interests of the administering body and may be unpredictable or limited in scope or focus. Since its inception, CIRM has created funding opportunities for basic research that are unique in scope and design, provide reliable and predictable funding, support data and knowledge sharing, and accelerate translation of research insights into therapies and diagnostics. Through the following unique opportunity, CIRM continues its support for basic discovery research that are unlikely to receive timely or sufficient funding from federal or other sources.

Objective

The overarching objective of CIRM's Discovery Program is to support comprehensive, discovery research across a diverse range of diseases and bottlenecks that will accelerate the development of potential therapeutics and biomarkers in regenerative medicine.

This vision is achieved through unique funding opportunities supporting research at different scales and levels of maturity, with an emphasis on multidisciplinary innovation, knowledge sharing and leveraging synergies across CIRM-funded programs, to catalyze the discovery of targets and biomarkers and support their entry into preclinical development.

Scope and Structure

The DISC4 Awards will support expansive, cross-disciplinary and integrated studies led by large collaborative teams applying a range of technologies and approaches to achieve one or more of the following outcomes:

- Discovering novel mechanistic insights or advance our understanding of the pathobiology of human diseases,
- Extending understanding of disease mechanisms to all affected human populations, and/or
- Identification and validation of novel therapeutic strategies, targets, and/or biomarker(s).

To maximize the impact of these project outcomes, applicant teams must appropriately manage and share data generated in the course of a DISC4 award.

Program funding areas

The DISC4 program awards are open to all applications that fulfill eligibility requirements detailed below, without restrictions in research topics or disease indications.

However, to align with Proposition 14's mandate, optimize synergy across teams, leverage external partnerships, and remain responsive to an evolving research landscape, funding preferences will be set on an annual basis. These preferences will be guided by recommendations from CIRM's Task Force on Neuroscience and Medicine (NTF), portfolio analyses, and other strategic considerations in a cyclical manner. These preferences will be implemented through the DISC4 pre-submission process (see "Pre-submissions", page 9) and via programmatic considerations by the Application Review Subcommittee of the ICOC, ensuring a structured yet flexible approach that balances inclusivity with strategic focus.

Preference topics (cycle-specific)

For the FY 2025-2026 cycle, the following preference topics will be prioritized:

Neurological Diseases (including conditions and disorders of the brain, spinal cord, and peripheral nervous system)

Proposals that focus on advancing our understanding of diseases and disorders affecting the brain, spinal cord, or peripheral nervous system, including neurodegenerative, neurodevelopmental, neuropsychiatric, neuroinjury, and neuromuscular conditions, will be prioritized during the pre-submission process and in programmatic considerations by the Application Review Subcommittee (ARS) of the ICOC.

Proposals that investigate shared mechanisms or biological pathways across multiple conditions, that also include diseases of the central or peripheral nervous system, may also be prioritized for their potential to enable cross-disease impact and innovation. Pre-submissions that fall outside of these preference areas may still be considered if they represent a unique opportunity to advance the strategic goals of the DISC4 program.

Program activities

Applicants may request funds to cover costs for research activities conducted wholly in California and may also request costs for activities conducted outside of California, provided that the California Organization exercises direction and control over the activities.

CIRM **will fund** the following activities under this opportunity:

REQUIRED ACTIVITIES	
✓	Activities associated with managing, preserving, and sharing data and knowledge from the study.

ALLOWABLE ACTIVITIES	
✓	Any activities contributing to expansive, cross-disciplinary and integrated research that meets the DISC4 objective to address knowledge gaps or bottlenecks in our understanding of human disease, where human stem cells or genetic research is part of the central approach or hypothesis, and that seeks to achieve one or more of the following outcomes: • Discovering novel mechanistic insights or advance our understanding of the pathobiology of human diseases • Extending understanding of disease mechanisms to all affected human populations • Identification and validation of novel therapeutic strategies, targets, and/or biomarker(s)
✓	Partnering activities with patient-centered organizations or other project-relevant community groups.
✓	Activities to support outreach or communication of research plans or outcomes with the wider public.
✓	Travel and accommodation expenditures associated with attendance of CIRM organized meetings and conferences.
✓	Engagement activities with trainees supported through CIRM's EDUC or INFR programs.

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

UNALLOWABLE ACTIVITIES	
✘	Therapeutic or other commercial development activities including lead optimization, manufacturing, pre-clinical toxicology and pharmacology studies and other activities targeted by CIRM's PDEV and CLIN programs.
✘	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.
✘	Costs incurred before the date of ICOC approval.
✘	Activities already budgeted or paid for under a prior, existing or pending CIRM award, or which are already supported by another funder.

Award amount and duration

The maximum amount of funding that may be requested for a DISC4 Award is $13,000,000 per award, inclusive of direct and indirect project costs. The maximum award duration is four (4) years.

Maximum total project costs may be increased up to an additional $1,000,000 per award (maximum $14,000,000 per award) IF an equivalent (or larger) amount of eligible matching fund contributions is provided (see Matching fund contributions below).

The proposed budget may not exceed $5.0 million in total costs in any single budget year.

The amount requested must be adequately justified. The requested amount is subject to adjustments prior to the issuance of an award based on assessments by the Grants Working Group (GWG), the CIRM team, or by the ARS of the ICOC. CIRM funds will be disbursed to the Applicant Organization, which will be

responsible for subsequent disbursement of funds (subawards/subcontracts) to co-Investigators and Key Personnel.

Matching fund contributions (optional)

Eligible matching fund contributions must take the form of either:

(i) Unique resources that will be leveraged by the project team e.g. cell-lines, biosamples, research/computational resources, etc.; or

(ii) Independently funded activities undertaken during the award period to generate data or resources that will be leveraged by the project team during the award period.

Matching fund contributions should be provided by a non-CIRM source. Annual verification of matching fund contributions is required and will be reviewed closely by CIRM staff.

Funding allocation

CIRM anticipates funding 6 DISC4 awards in FY25-26.

Provisional timetable

DISC4 awards will recur annually. The timeline of each funding cycle is as follows:

PROVISIONAL TIMETABLE	
Pre-submission Open	Once per year
Pre-submissions Due	Approximately 60 days after pre-submissions open
Invitations to submit application	Approximately 60 days after pre-submissions due date
Applications Due	Approximately 90 days after invitation to submit application
Grants Working Group (GWG) Review	Approximately 120 days after applications due date
Application Review Subcommittee (ARS) Award Approval	Approximately 60 days after Grants Working Group Review
Award Start	120 days after award approval

Eligibility

All the following requirements must be fully satisfied for an application to be accepted and considered for funding by CIRM.

(1) The proposed project must address knowledge gap(s) or research bottleneck(s) in the study of human diseases

DISC4 awards support comprehensive discovery research across a diverse set of human diseases without restriction. However, funding preferences will be set on an annual basis, subject to ICOC approval (see Preference Topics, pg. 4)

(2) The proposed project must include studies that employ human stem cells or genetic research as part of the central approach or hypothesis.

Applicants are encouraged to integrate a variety of approaches, models or technologies as part of the overall proposal to maximize the scientific impact of the proposal. However, to ensure alignment with CIRM's mission, the overall project must include studies that employ human stem cells or genetic research as part of the central approach or hypothesis.

CIRM defines genetic research as studies that alter genomic sequences of cells (edit, remove or add DNA sequences); or introduce or directly manipulate nucleic acids (e.g., coding and non-coding RNAs, antisense oligonucleotides) in human cells.

(3) Strong justification must be provided for any proposed use of non-human models.

DISC4 awards should be centered on human biology, and employ human derived cells, tissue or data where possible. However, the use of non-human models to achieve specific objectives is permitted. Applicants must provide strong justification for any proposed use of non-human models.

(4) The Core Team must be multi-institutional and include at least five (5) CA-based investigators.

The applicant teams must, at a minimum, include the following California-based investigators:

- One (1) Principal Investigator (PI) who will serve as primary point of contact between the team and CIRM staff
- At least four (4) Co-Investigators (Co-I)
- At least one (1) Co-Investigator (Co-I) must be based outside of the applicant organization.

(5) The broader applicant team (Core Team and Key Persons) must include members with specific relevant expertise and include an experienced Data Project Manager.

To encourage the integration of multiple disciplines, at least one member of the applicant team (PI, Co-I, or Key person) must:

- Possess relevant translational/industry expertise
- Possess relevant clinical expertise
- Possess relevant bioinformatic and/or computational expertise

To ensure effective and collaborative sharing and management of data, a Data Project Manager must be part of the team. This individual must have demonstrated experience in data handling and is responsible for interfacing with any data management team(s), interfacing with CIRM's planned data infrastructure, reporting progress on data management and sharing as well as maintaining the integrity of data during ingestion. The Data Project Manager role can be distributed among multiple people and may be fulfilled by Key Personnel with other Critical Roles.

(6) An investigator may be listed as PI on only 1 DISC4 application or pre-submission per funding cycle.

(7) An investigator may be listed as a Core Team member (PI/Co-I) on up to 2 DISC4 applications or pre-submissions per funding cycle.

An investigator may be listed as PI on 1 application/pre-submission and co-I on 1 other application/pre-submission. An investigator may be listed as co-I on up to 2 different applications/pre-submissions.

(8) The PI and/or any Co-I must not currently have another application that is substantially similar or has overlapping activities pending review or approval under any CIRM opportunity.

(9) The Principal Investigator (PI) and co-Investigators (co-I) must adhere to several requirements including minimum effort commitments.

PI and Co-Investigator (Co-I) must adhere to general eligibility requirements described in CIRM Funding Opportunities: Common Requirements and Definitions, and the following minimum effort commitments to be eligible for DISC4 awards:

- PI must commit at least 15 percent effort to working on the project. All effort must be expended in California.

- Each Co-I must commit at least 10 percent effort to working on the project. All effort must be expended in California.

(10) The applicant must be ready to initiate work on the funded project within 120 days of approval.

Given the urgency of CIRM's mission, all approved awardees must initiate work on the funded project within 120 days of approval and authorization for funding by the Application Review Subcommittee (ARS) of CIRM's governing board, the Independent Citizens' Oversight Committee (ICOC).

(11) The application must be accurate and complete.

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

(12) The applicant organization must meet CIRM's definition of a California Organization.

The applicant organization must be a California organization per CIRM's definition described in CIRM Funding Opportunities: Common Requirements and Definitions at the time of application.

An institution or organization may submit more than one application per funding cycle under this opportunity.

(13) For-profit organizations must demonstrate solvency.

Solvency requirements are defined in CIRM Funding Opportunities: Common Requirements and Definitions.

(14) The applicant must be in "good standing".

Applicants and their affiliates must represent and certify that they are in good standing, as described in CIRM Funding Opportunities: Common Requirements and Definitions.

Pre-submission and Application Preparation

Consultations and Webinars

CIRM staff aims to conduct public webinar(s) and Q&A sessions after posting of this program announcement. Prospective applicants are encouraged to sign up for email alerts and register for these sessions on our website.

Prospective applicants who are invited to submit a full application will have the opportunity to request in-depth consultations with CIRM Science Officers to address questions of eligibility, matching funds, budgets and other topics to improve alignment with program design and CIRM requirements.

Pre-submission Components and Evaluation

To ensure that proposals most well-aligned with the scope, objectives and preferences of the program receive an in-depth scientific review by the GWG panel, CIRM will implement a pre-submission process for the DISC4 awards. Pre-submissions are designed to gather sufficient information to perform preliminary eligibility assessments, and evaluate program fit.

All prospective DISC4 applicants must submit an online pre-submission. The DISC4 pre-submission must be completed through CIRM's online grant portal and includes the following sections:

- Online intake section.
  - Information on Core Team members, Project Title/Keywords and eligibility certifications.
  - Brief questionnaire to allow staff to assess alignment with program fit.

- Proposal Outline. Objectives and aims, research outline, scientific rationale and requested budget. All pre-submissions must use provided templates.

Pre-submissions will be evaluated by CIRM staff to assess alignment with program objectives and scope, incorporating funding preferences set annually by the ICOC (see Scope and Structure, "Preference topics"). Pre-submissions will NOT be evaluated for scientific merit or feasibility.

Pre-submissions will be evaluated and ranked according to the following criteria:

- Does the project align with the cycle-specific preference topic?
- Does the project hold strong relevance for understanding or addressing human diseases?
- Does the project integrate cross-disciplinary approaches?
- Does the project incorporate innovative approaches particularly in stem-cell or genetic research?

No comments will be provided for pre-submission proposals. Based on the above, a subset of pre-submissions will be invited to submit full applications.

How does one submit a Pre-submission or Application?

All pre-submissions and applications must be completed and submitted online using the CIRM Grants Management Portal at https://grants.cirm.ca.gov. A prospective PI must create a login in the system to access and submit pre-submission or application materials. Applications are available in the system only to the PI.

What components does an Application include?

The DISC4 application, will be open to invited teams only, and is designed to collect information to assess eligibility, for Grants Working Group reviewers to evaluate the project, and for CIRM to rapidly initiate an award if the project is approved for funding.

In the online portal, invited applicants must fill out an eligibility form, indicate Key Personnel involved in the project, describe how the proposal addresses the objective of the funding opportunity, provide an overview of proposed activities, and prepare and justify an appropriate budget.

The application uploads page provides templates and guidelines for writing the Proposal, Budget, Budget Justification, Biosketches, Project milestone and timelines, and other key components of the application. Applicants **must** use the provided templates.

What are the contents of the Application Proposal?

The Application Proposal comprises the bulk of detailed information on the project, organized within the following sections. Page limits and formatting information will be provided on the actual Proposal template.

1. **Executive Summary, Overall Objective and Major Aims:** May include graphical abstract if desired.
2. **Statement of Significance and Impact:** Brief description of how the proposed research, if successful, could lead to new insights and/or shared resources/data that will advance our understanding of human diseases and lead to new targets and biomarkers.
3. **Statement of Innovation:** Brief description of how the proposed research incorporates new approaches, technologies or frameworks, particularly in stem-cell or genetic research. A description of how this project integrates different disciplines and has unique value as an integrated collaboration rather than as a series of independent projects.
4. **Statement of Population Impact:** Statement describing how the project will broaden or extend the relevance of scientific discoveries to the spectrum of affected California patients or populations.

5. **Rationale and Research Plan:** Description of the scientific rationale for the proposed research and supportive preliminary data. A description of methods and techniques and analytical plan to be employed to achieve aims, and potential pitfalls and alternative approaches, with sufficient detail to assess feasibility.
6. **Vision for Progression:** Brief description of plans to ensure research findings will be optimally positioned for timely and successful progression into new therapeutic or biomarker development efforts.
7. **Data Sharing Overview:** A description of how raw data, processed data and metadata produced from the project will be made available to the research community consistent with FAIR (Findability, Accessibility, Interoperability, and Reusability) data sharing principles. Refer to CIRM Data Sharing and Management for additional information on how applicants should address data sharing and how the data sharing overview will be evaluated. The requirements described in CIRM Data Sharing and Management are incorporated here by reference.
8. **Principal Investigator and Team:** A description of the PI, co-Investigators and most relevant Key Personnel, highlighting the team's expertise and experience relevant to the execution of the proposed study. Team members that fulfill the defined eligibility requirements (Project Eligibility, Page 7) for specific expertise must be highlighted here. Key Personnel are defined in CIRM Funding Opportunities: Common Requirements and Definitions.
9. **Project Organization and Management Plan:** Overview of the organizational structure of the project team including significant subcontracts, collaborations, partnerships. This section should include a communication and management plan for the collaborative effort.
10. **Resources and Environment:** A brief description of the resources available to the project and environment in which the research will take place.
11. **References:** Sources cited in the proposal.

What should one know before preparing the budget?

The total CIRM Award is subject to a total Award cost cap of Allowable Project Costs. Allowable Project Costs are those costs permitted under CIRM policies and regulations and include direct, facilities, and indirect costs. CIRM will not fund costs that exceed the specified Award amount, and applicants are expected to justify their budgets within these limits, inclusive of Matching funds or cost-sharing from the applicant or third parties.

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, Translation, and Education Projects Generally, project costs for personnel, supplies, travel, equipment, data sharing/management and subcontracts may be claimed. Limits for specific cost categories must be observed. Generally, project costs for personnel, supplies, travel, equipment, data sharing/management and subcontracts may be claimed. Limits for specific cost categories must be observed. Generally, project costs for personnel, supplies, travel, equipment, data sharing/management and subcontracts may be claimed. Limits for specific cost categories must be observed.

CIRM makes no prior stipulations on how funds are distributed among the Principal Investigator and co-Investigators in the team. However, specific budget allocations for each member of the team (PI and co-Investigators) must be delineated in the budget worksheet and should reflect relative contributions and project needs. This aspect of the budget will be subject to evaluation by the Grants Working Group. If matching funds are provided and supplemental funding is requested, the budgets should detail allocations for these funds as well.

What are direct facilities costs and how much can an applicant claim?

Direct Facilities Costs are the general operating costs of the awardee'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 costs for for-profit awardees or any non-profit awardees without a federally negotiated Facilities & Administrative Rate agreement are limited to 35% of direct project costs and must be consistent with facilities rates applied to similar research awards at the organization. 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.

What are indirect costs and how much can an applicant claim?

Indirect Costs are administrative costs of the awardee incurred for common or joint objectives, which cannot be readily and specifically identified with a particular project. 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.

What are matching funds?

CIRM will fund total project costs of up to $13 million per award. Additional funding of up to $1.0 million per award ($14 million in total) may be requested IF an equivalent (or larger) amount of matching funds is provided and are well-described and well justified.

Eligible matching fund contributions must take the form of either:

(i) Unique resources that will be leveraged by the project team e.g. cell-lines, samples, research/computational resources, etc.; or

(ii) Independently funded activities undertaken during the award period to generate data or resources that will be leveraged by the project team during the award period.

Matching fund contributions may be contributed by any non-CIRM source.

Matching fund contributions must be described in the research proposal and detailed in the application budget. If approved, documentation demonstrating the commitment of contributions and evidence justifying the assigned value of in-kind contributions must be provided during pre-funding administrative review (e.g., copy of executed term sheet showing amount of contribution, conditions and source). CIRM retains the right to make final determination as to the value to any in-kind contributions and adjust final award funding and research plan (including milestones) during pre-funding administrative review accordingly. Applicants should contact CIRM staff to discuss additional guidance on this requirement.

Change in Status

Applicants are required to notify CIRM of any material change in status while the application is pending review, e.g., a change in PI, co-Investigator or any changes that could compromise the applicant organization's status as a CA organization per CIRM's definition.

Application Review Information

What is the process for evaluating a full application?

Eligibility Review

CIRM will assess whether the proposed project meets eligibility requirements sought under this program and confirm that the application reflects what was outlined in the pre-submission. 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.

CIRM may exercise its authority to make eligibility determinations at any time before an award is executed.

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 or nurse members of the ICOC (called "GWG Board Members"), and the Chair of the ICOC. The list of scientific members who may participate in the GWG review, as well as GWG bylaws and policies, can be found at https://www.cirm.ca.gov/about-cirm/working-groups/. The composition of the ICOC can be viewed on the CIRM website https://www.cirm.ca.gov/about-cirm/about-board/.

The fifteen participating scientists on the GWG will evaluate the applications and score them on a scale of 1-100 according to scientific and technical merit, applying the review criteria described below. For purposes of making funding recommendations to CIRM's board, each application shall be assigned to one of two categories based on the median score as follows:

Median score 85 or above: The application has exceptional merit and warrants funding, if funds are available; or

Median score below 85: The application is not recommended for funding.

The Application Review Subcommittee of the ICOC makes final funding decisions.

Consideration of Past CIRM Award Information (If Applicable)

The GWG may consider information from previously funded and related CIRM awards 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 or co-I served as the PI, a co-PI, a co-I, 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.

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?

Applications will be scored based on the following review criteria.

1. Significance: Evaluate the project's significance and potential for impact

- Assess the extent to which a successful project outcome would advance understanding of human disease.
- Assess the extent to which a successful project outcome would have broader impact, for example through the generation of shareable resources/data.
- Assess the likelihood that a successful project outcome would rapidly advance to new therapeutic or biomarker development (including consideration of the applicant's vision for progression).

2. Innovation: Evaluate the project for innovation relative to the current state of research

- Assess the extent to which the project applies novel frameworks to the study of human disease.
- Assess the extent to which the project cuts across silos or employs a unique synergy of technologies or disciplines to understand human disease.
- Assess the extent to which the project employs innovative stem cell or genetic research approaches.

3. Rationale: Evaluate the scientific rationale in the proposal

- Assess the fundamental soundness of the scientific rationale for conducting the proposed research.
- Assess the extent to which the rationale is supported by the body of available data.
- Evaluate the scientific rationale for choice of proposed experimental approaches (including non-human models).
- Assess the extent to which the feasibility of carrying out the proposed experiments is supported by the preliminary data.

4. Plan & Design: Evaluate the project plan and design

- Assess the extent to which the project is planned and designed to give meaningful results.
- Assess the validity of the potential pitfalls identified and alternative approaches presented.
- Evaluate the appropriateness of the budget and timeline for the research proposed.
- Evaluate the appropriateness of leadership, expertise, resources and staffing for the research proposed.
- Assess the effectiveness of the plan for team communications and management of the collaborative effort.

5. Population Impact: Evaluate the extent to which the project considers the potential impact of successful outcomes across affected populations

- Assess how effectively the experimental design accounts for genetic, environmental and other external factors that may influence research findings.
- Assess the extent to which the project may extend or validate the potential applicability of discoveries to additional affected populations or communities.
- Assess how effectively the applicant team's prior or proposed outreach, partnership, or educational efforts inform study design and enhance the population relevance of potential discoveries.

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, optimizing Data Sharing and Management Plans (DSMPs) submitted as Just in Time (JIT) material during pre-funding administrative review (PFAR). CIRM also establishes project milestones, DSMP milestones, success criteria and timelines at its sole discretion after consultation with the PI and based on information provided in the application and DSMP. CIRM may consult with Data Advisors towards optimizing the DSMP and implementing corresponding milestones as part of the NOA. CIRM may also review key contracts/agreements that are critical to the success of the project for compliance with CIRM's policies and regulations.

Milestones and Payment

Upon execution of the NOA, CIRM will issue an initial payment; subsequent disbursements will be made as outlined in the NOA. Continued CIRM funding is contingent upon timely scientific progress against specific aims or milestones, DSMP milestones, and timelines established under the NOA. Where project and/or DSMP milestones are not timely met, CIRM reserves the right to either redirect resources to maximize the project outcome or, at its sole discretion, to suspend payment and/or terminate the project. Five percent (5%) of the award budget will be withheld pending completion of all remaining milestones and reporting requirements.

Reporting

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

Data Sharing and Management

The sharing of data and knowledge produced from CIRM-funded projects is key to advancing the field of regenerative medicine and accelerating the discovery, validation and development of treatments for patients. CIRM requires awardees to manage and preserve raw data, processed data, and metadata, and make applicable data and metadata 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. Refer to CIRM Data Sharing and Management for additional information on how applicants should address data sharing and how the data sharing overview will be evaluated. The requirements described in CIRM Data Sharing and Management are incorporated here by reference.

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 12 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 awardees should not assume CIRM will approve a NCE request.

Discovery/Industry Advisory Panels

Upon approval of an award, CIRM may work with awardees to appoint a Discovery/Industry Advisory Panel to partner with the awardee. The composition of advisory panels will be determined by CIRM Science Officers in collaboration with the awardees. Advisory panel meetings may be convened upon request by the awardee or when deemed necessary by the CIRM Science Officer. Advisory Panel members may provide guidance and advice to awardees and may provide expert input to assist CIRM Science Officers in reviewing progress reports.

Discovery Program Meetings and Conferences

To facilitate knowledge sharing and the formation of collaborative networks, CIRM will fund and co-lead the organization of Discovery program meetings or other CIRM-funded conferences. Awarded teams are expected to attend these events and contribute to planning activities in collaboration with CIRM staff.

Awardees and trainees funded through other CIRM awards may be invited, at CIRM's discretion, to facilitate scientific exchanges across CIRM's network of funded teams.

Dates and frequency of CIRM organized meetings or conferences will be determined by CIRM staff and communicated to investigators in advance of the conference start date. Applicants are required to account for costs associated with supporting investigators, staff and trainees to attend CIRM organized meetings or conferences in their budget.

CIRM Regulations and Policies

Grant awards made through this PA will be subject to all applicable CIRM regulations. These regulations can be found at https://www.cirm.ca.gov/our-funding/cirm-stem-cell-grant-regulations.

Resources

For more information about this and CIRM's other Discovery stage programs, please visit our Current Funding Opportunities page to access program announcements, webinar materials and FAQs. For programmatic questions that are not addressed in the above resources, send email correspondence to discovery@cirm.ca.gov.

For questions related to application review, send email correspondence to review@cirm.ca.gov.

For questions related to budgets or allowable project costs, please consult the Grants Management FAQ on CIRM's website under "For Researchers > Grants > Managing your Grant." For more information on budgets or allowable costs that are not addressed in the above resources, send email correspondence to grantsmanagement@cirm.ca.gov.

Terms used here are defined in CIRM Funding Opportunities: Common Requirements and Definitions.

CIRM Shared Resources Labs for Stem Cell-Based Modeling

CIRM is supporting a network of Shared Resources Laboratories (SRLs) for Stem Cell-Based Modeling across California. These are core laboratories that provide access to expertise and infrastructure for conducting and analyzing stem cell-based modeling experiments. Applicants are encouraged to engage with SRLs as potential partners in their DISC4 applications. Synergies may arise for stem cell-based modeling-experienced labs in need of expertise with additional models or analyses, and for labs that do not have expertise in stem cell-based modeling but wish to test hypotheses using this technology. Please go to CIRM Collaboration Hub to browse SRL Research Offerings and Courses.

Standards in Stem Cell Research

CIRM has a strong interest in promoting the highest quality standards in human stem cell research. In 2023, the International Society for Stem Cell Research (ISSCR) published Standards for Human Stem Cell Use in Research, a document that identifies quality standards and outlines basic principles for the laboratory use of human stem cells and the in vitro models derived from them. CIRM strongly encourages all awardees to adhere to the recommended characterization and reporting practices outlined in this document to ensure rigor and reproducibility of human stem cell research. CIRM science officers will work with all awardees to ensure quality standards are taken into consideration.

For a list of scientific and infrastructure resources that may be integrated into the proposed project, visit our Researcher Resources page.