

Discovery Foundation Awards (DISC0): Webinar Frequently Asked Questions

ADDITIONAL RESOURCES FOR APPLICANTS

- The application is available in our grants management portal
- DISCO Program Announcement
- DISCO Webinar can be found on <u>our website</u>
- Review Summaries from Previous DISCO Cycles: 2024, 2023, 2022
- Consultation Request Form

TABLE OF CONTENTS

Project Scope	1
Individual and Team Eligibility	
Budget, Award Duration, and Award NumberS	
Application and Review Process	6
Data Sharing and Management	7
Contact and other Resources	

PROJECT SCOPE

1. Does the DISCO opportunity allow for discovery work using mouse models or are human tissue/samples required?

Preliminary data from animal studies can be used to support the rationale for and feasibility of exploring similar phenomena in the human system. While the proposed DISCO Research Plan should be focused on and grounded in human biology and/or human disease pathology, this requirement does not entirely preclude the use of animal models and/or systems as part of a DISCO Research Plan. Importantly: if the plan involves studies using nonhuman stem cells or animal models, it must also include corresponding research with human cells to validate any findings derived from nonhuman cells. Please note that studies involving human cells transplanted into animal models are considered to be studying human cells/biology.



2. Are there any focus or priority areas for this round of DISCO?

There are no specific disease, tissue, or organ focus areas for this round. However, applicants are encouraged to connect their proposals to stem cell biology or regenerative medicine, particularly focusing on foundational studies as outlined in the webinar and program announcement linked at the top of this page.

3. How much preliminary data is required for this type of proposal?

Preliminary data is required to support the rationale and establish the feasibility of a given proposal. The amount of data required will be project-specific and may depend on many factors. The strongest types of preliminary data tend to support the rationale for the project and/or the feasibility of executing the Research Plan in the three-year timeframe—including the qualifications of the applicant team to do so.

4. How closely related to clinical applications does the proposed work need to be and how much basic science enquiry is okay?

DISCO is primarily a foundational or mechanistic focused award. Objectives should be centered on knowledge gaps or bottlenecks. The proposed work should balance scientific exploration with clinical relevance. A competitive application will demonstrate how the proposed research would lead to impactful discoveries that advance the field and have potential clinical applications. Applications that are largely "product-focused" or "candidate-focused" (ex: optimizing or developing a therapeutic candidate, or commercial tool) are more aligned with CIRM's later-stage programs and may not be appropriate for DISCO.

5. Can preliminary data include analysis of previously published datasets?

There may be occasions where preliminary data could include new analysis or re-analysis of published datasets. Be sure to appropriately cite the source of the published data and clearly delineate how it informed or contributed to the overall presentation of preliminary data in your proposal.

6. Do platform therapeutic technologies fall within the scope of DISCO awards?

Potentially yes, but this would depend on the stage and aims of the research proposed. DISCO supports exploratory, mechanistic investigations to address key knowledge gaps in regenerative medicine. If addressing the specified knowledge gaps informs the development of a platform therapeutic technology that is relevant to CIRM's mission (for example, a stem cell based or genetic therapy approach) or would help overcome an issue in an existing platform technology of that nature, then one could envision a responsive proposal. Exploring the underlying therapeutic mechanism of action for a platform technology (general or specific) is also an angle that could be in



scope with the DISCO Program, provided the therapeutic mechanism falls within CIRM's remit of stem cell and/or genetic therapy.

7. Are non-neuro related topics supported by DISCO?

Yes. DISCO does not prioritize any one organ/tissue area over any other. Grant reviewers base their decisions and scores on the perceived significance and impact of the proposal as a whole, along with feasibility and other factors that are described in the Review Criteria of the DISCO Program Announcement.

8. What is an acceptable level of risk ("blue-sky" research) that is practical for a DISCO application?

The level of acceptable risk can vary, as reviewers evaluate both the potential impact and the feasibility of the proposal. Their assessment will depend on how they weigh these factors. Generally, reviewers may be open to higher-risk approaches when the potential impact is significant.

9. Is access to patient samples an essential requirement for gene editing and disease modeling types of projects?

The use of authentic human tissues to validate gene editing approaches or discoveries made in stem cell-based disease models can be very valuable but is not a requirement.

10. Does the proposal need to involve stem cells?

The short answer is 'Not necessarily'. Please see part a below; DISCO awards 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.
- c) Validate any discoveries made using nonhuman cells with a relevant human cell equivalent.

If your proposal addresses a knowledge gap in the application of genetic research as it pertains to regenerative medicine, it could be eligible without involving stem cells.

11. Is there an interest in understanding the role of cancer stem cells?

Cancer stem cells are an eligible topic under DISCO. The definition of 'cancer stem cell' can vary widely and it is up to applicant to make the case to the reviewers that the cells under study indeed qualify as cancer stem cells.



12. Are mechanistic studies required?

While mechanistic studies are often included in DISCO proposals, they are not always necessary to address a DISCO-relevant knowledge gap. Some of the activities listed in the program announcement under 'What activities will CIRM fund?' provide examples of non-mechanistic studies, such as:

- Descriptive characterization of primary human tissues (healthy and/or diseased) to obtain ground truth knowledge that is critical for validating in vitro stem cell-based models or to improve regenerative medicine approaches
- Developing a new tool or model system, e.g. genome and epigenome editing tools, organoid model

Please keep in mind that reviewers will assess the significance and potential impact of your proposal, so be sure to refer to the review criteria in the Program Announcement when designing your project.

INDIVIDUAL AND TEAM ELIGIBILITY

13. Can I submit more than one application?

You may only submit one application as the Principal Investigator (PI) under this opportunity, i.e. only one application as the PI for either the "Single PI Track" or the "Team Track." However, you are allowed to be a Co-Investigator (Co-I) on more than one "Team Track" application. There is no formal limit to the number of "Team Track" applications in which you can participate as a Co-I, even if you are the PI on an application.

14. Are there any citizenship requirements for the applicants?

CIRM does not have any citizenship requirements for applicants, but we recommend checking with your institution(s) to confirm if they have any specific eligibility criteria of their own.

15. While Single PI applications do not require Co-I's, do they allow Co-I's from the same lab?

For the Single PI track, the award is only given to a single PI / institution. However, collaborators, including investigators who share scientific and administrative leadership responsibilities with the PI, are allowed, and can be paid from the grant via a subcontract or as a Key Person. The specific roles and responsibilities of each Key Person can be defined in the online portion of the DISCO application.

16. Do key personnel need to be listed if they will not receive CIRM grant salary?

Please refer to Page 14 of the PA for guidance under section "Who are Key Personnel?". Key Personnel includes any 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).

17. How much research can be done out of state as long as the work is managed by a PI in California?

Please see Q18 for requirements related to subcontracts & subawards to organizations outside CA. As long as these requirements are fulfilled, there are no formal limitations on the percentage of the award budget that can be allocated for collaboration or fee-for-service work performed outside of CA. Applicants are advised to exercise good judgement and provide clear rationale for subcontracting outside of CA, where appropriate.

18. Can out of state collaborators be involved, and how does this work administratively?

Yes, out-of-state collaborators can receive funds from a CIRM-funded project through a subcontract with a California-based lead organization. However, CIRM requires that the California Organization exercises direction and control over the subcontracted activities. The funded CA organization must retain any new intellectual property generated from the CIRM funding, and the out-of-state organization cannot retain independent publication rights in any intellectual property (e.g., invention, technology, data) arising out of the CIRM funded project. Additionally, Co-Investigators (Co-Is) in the Team Track must be employed by a California-based organization.

19. Are applications unsolicited (is pre-approval required for submission)?

There is no pre-approval required for submission. Applicants may contact CIRM science officers (<u>discovery@cirm.ca.gov</u>) if they would like a consultation on programmatic fit, eligibility, or other general advice on putting together a competitive application.

20. What are the expectations from early career researchers? Would the "Single PI" or "Team" track be more suitable for them?

All proposals are reviewed based on the scientific review criteria listed in the PA. Historically, investigators across all stages of career have had success in competing for DISCO awards.

All applicants should consider the "Team Track" if investigators are bringing diverse disciplines or tools to the project. Please refer to the review criteria in the PA for guidance on how Team Track proposal will be evaluated.



BUDGET, AWARD DURATION, AND AWARD NUMBERS

21. What is the historical funding success rate for DISCO?

The historical funding success rate for DISCO across its three prior rounds has ranged from 10% to 18%. This reflects the competitive nature of the funding process, where a relatively small percentage of applicants receive funding. The public review summaries linked at the top of this FAQ can provide prospective applicants with a sense of what reviewers found impactful, and what they considered to be strengths or weaknesses of a given proposal. CIRM highly recommends prospective applicants view these public review summaries to help with framing their proposals.

22. Is fund-matching required for this program (i.e. does an organization have to have a certain amount in their bank account)?

Co-funding and/or matching funds are not required under this PA. However, for-profit organizations must provide documentation that shows cash on-hand or funding from committed sources that will cover the organization's expenses for 180 days from the date of application submission. These funds must be distinct from, and in addition to, funds for meeting the co-funding requirement (if applicable) for the term of the project. The determination of solvency will be made at CIRM's sole discretion.

23. Will you support funding if the project has already commenced (within 3 months)?

For an ongoing project, you may only include costs incurred after the date of the CIRM Board's approval of your application. Check the Program Announcement, which specify when you can estimate receiving Board 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 (ARS) of CIRM's governing board, the Independent Citizens' Oversight Committee (ICOC). The proposed project period must not exceed 3 years from the award start date.

APPLICATION AND REVIEW PROCESS

24. Can I submit a similar proposal to CIRM with a pending NIH grant application?

Yes. Applicants must report any pending NIH application in the CIRM application 'Other Support'. The 'Other Support' statement lists all financial resources (current and pending) for the PI and Co-Investigators (Team Track) such as formal agreements, loans, contracts or grants that will be available in direct support of their research endeavors during the proposed CIRM project period. CIRM cannot fund activities that are funded by other organizations.

Please also note that applicants must not currently have another application that is substantially similar or has overlapping activities pending review or approval under any CIRM opportunity.



25. What criteria must a previously submitted application meet in order to be eligible for resubmission?

An application is considered a resubmission if the proposal previously received a scientific score and Review Summary, and the applicant is submitting a revision of the proposal to address reviewer critiques. Applications that did not proceed past the first stage of review (Positive Selection) are not considered resubmissions, as there was no prior scientific score and there are no reviewer comments to respond to. To bypass positive selection, the application must have received a scientific score between 80 and 84 in the prior round. Note that if a project was originally submitted as a single PI application and is now being submitted under the Team Track, it will not be considered a resubmission.

26. Are templates available for the biosketch and research proposal, including the specific aims and abstract?

Templates are available in the CIRM Grants Management Portal as part of your application. You'll find them in the Uploads section once you log in and start a DISCO application.

27. Can an applicant challenge scientifically incorrect reviewer comments?

Applicants with a resubmission may address reviewer comments in the Resubmission Statement of the Proposal template. Differences of scientific opinion between or among applicants and reviewers are not grounds for appeal.

28. Are there qualified reviewers for proposals focused on AI/ML approaches?

Each proposal is critiqued by three scientific reviewers that have expertise relevant to the project, including AI/ML approaches, if applicable.

DATA SHARING AND MANAGEMENT

29. Where will grant research data be deposited? Can a non-CIRM collaborator access the data after the project/grant concludes?

The data generated from a project will be deposited in an established repository identified by the grantee. CIRM has provided guidance for the <u>Data Sharing and Management Plan</u> on our website. At the end of the award, CIRM-funded datasets and associated metadata will be made publicly available through a new platform called "CIRM Data Explorer". Data may be either publicly shared or restricted (controlled access), depending on the conditions set by the PI.



30. How do I address DEI properly in this application?

CIRM provides guidance to reviewers for evaluating Diversity, Equity and Inclusion (DEI) in the <u>Program Announcement</u>, under 'Does the project uphold principles of diversity, equity and inclusion (DEI)?' (pg. 10). This guidance is in the form of sub-questions and is provided in the application critique form that reviewers fill out in advance of the review meeting.

"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?"

Our general advice is:

- Focus on CIRM's Mission: Accelerating world class science to deliver transformative regenerative medicine treatments to a diverse California and world. Determine how the project fits into CIRM's mission and make this very clear in the proposal.
- **Be specific,** e.g., instead of stating that you will ensure the use of a collection of cell lines representing diverse genetic ancestries, delineate the exact cell lines you will be using, and the genetic ancestries they represent. Provide a rationale for the genetic ancestries you seek to include. Describe where you anticipate hurdles in achieving that diversity, and how you plan to overcome those hurdles either at the DISCO stage or, if necessary, in future work.
- **Be intentional,** e.g., instead of stating the access you may have to samples or participants from diverse backgrounds, explain how you will go about ensuring that samples / participants from diverse backgrounds are actually included / recruited into your study.
- Convey that you understand key issues related to diversity, equity, and inclusion. If unfamiliar
 or inexperienced with how best to approach this subject, work with an expert to articulate and
 execute your DEI approach. Remember, you can propose to use CIRM funds for activities
 intended to promote and uphold principles of Diversity, Equity, and Inclusion (DEI) in the conduct
 of your study.
- Tap into your institution's resources, but don't rely on your institution's website text. The reviewers do not expect you to create a sea change on your own, but they are attentive to the project-specific nature of your DEI statement.
- **Don't neglect the third sub-question (above).** Even if the Research Plan fully incorporates DEI principles, your DEI statement (and the budget) should include activities intended to inform further development of DEI within the project. These, too, should be specific and intentional.

Please note: Because CIRM is prohibited from taking race, ethnicity, national origin, and gender into account in making grant decisions, applicants should refrain from including these when describing the applicant team personnel.



31. How do I address data management properly in this application?

Data management can be addressed in the following sections:

- Data Sharing Overview (Proposal)
- Principal Investigator and Team (Proposal)
- Key Personnel (Online Application)
- Resources and Environment (Proposal)

The Proposal section named Data Sharing Overview has instructions (below) and an example response. You are encouraged to describe how you will manage raw data, processed data and metadata, and how it will be shared to the broader research community. If funded, then you will complete a Data Sharing and Management Plan (DSMP) prior to award launch. A DSMP is not required at the time of application.

Data Sharing Overview instructions:

"Describe how raw data, processed data and metadata produced from the project will be made available to the research community consistent with FAIR data sharing principles. The description should include the type(s) of experiments proposed to produce data (e.g., scRNA-seq, imaging, electrophysiology, etc.), how the data will be managed, what raw data, processed data and metadata will be shared and how (i.e., repositories), and, if applicable, justification for not sharing certain data."

In the Principal Investigator and Team section of the Proposal you may describe the role your Data Project Manager will fulfill and their experience in data management. The Data Project Manager name and role can also be addressed in the Key Personnel section of the online application.

If there are facilities, core services, or resources available to you that enable data management or data sharing, you may describe them in the Resources and Environment section of the Proposal.

32. Does an application have to specify a Data Project Manager when being submitted?

You may submit "TBD" instead of naming a Data Project Manager if you are unsure whether you require one or if you have not yet identified someone to fulfill that role. If you propose to generate substantial data that will be shared to the research community and you do not have data management experience within the team (i.e. someone who will be experienced in curating the data, documenting metadata and analytical pipelines, sharing the data to a repository and interfacing with CIRM regarding data sharing activities), then you may describe your plan to appoint a Data Project Manager. CIRM Science Officers will determine during the grant contracting stage whether an award requires a Data Project Manager based on the proposed experiments and the experience within the team.



CONTACT AND OTHER RESOURCES

33. What do new applicants need to know about the CIRM application process?

As a first-time applicant, you should look through the resources at the top of our FAQ. You should also be familiarized with Authorized Institutional Officials (AOOs), the individual with the signature authority for an institution that is submitting a grant application. The AOO must be "cleared" by our Grants Management Team before the final application is considered submitted, which can take up to a week. The submission process takes place in 2 steps: the PI will submit their application first, which is then routed to the AOO. The approved AOO must log in and co-submit through their own interface.