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The state stem cell agency

Strategic Partnership II Funding Initiative: RFA 12-09

Educational Webinar for Potential Applicants Dec 4, 2012

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Providing tips to help you better prepare your application – our Webinar objective

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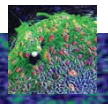
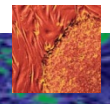
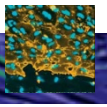
- We will review the following:
  - Goals and intent of the RFA
  - Tips for Success
  - Context of this initiative within CIRM's portfolio
  - Eligibility criteria e.g. of therapeutic candidate, Principal investigator, and Organization
  - Review Criteria for this award
  - Templates to guide your organization of the material
  - Contact Info – how to reach us at CIRM
- We're here to answer your questions and help better position you for success

RFA's goals and intent – attract industry in completing a clinical trial

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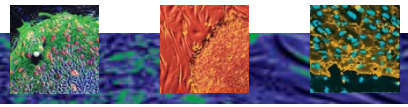
- **Purpose** of the Strategic Partnership Initiative is to attract industry engagement and investment in CIRM funded stem cell research
- **Objective** of this second call, Strategic Partnership II, is to achieve, in 4 years or less, completion of an early clinical trial under an IND application filed with the FDA
- Proposed projects can include preclinical IND-enabling work but must complete one of following:
  - Phase 1 study to demonstrate preliminary safety, assess measures of biological/clinical activity in humans, and determine a range of safe doses to be studied in subsequent trials AND/OR
  - Phase 2 study to evaluate both safety and efficacy of the candidate therapeutic.



Tips for Success – an aid, not a promise!

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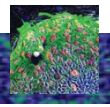
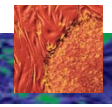
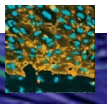
- **Start with a great idea** – we want your best ideas and research to move forward, and a strong rationale. If this program isn't of top interest for your company, you're unlikely to convince the reviewers it should be CIRM's
- **Explain how this program fits into your overall company strategy**, as well as other compounds/ programs for the same target/indication
- **Preliminary data** is important – provide it!
- **Show the data**, not just your interpretation of the data – reviewers base their recommendations on the evidence, not on your hopes

Tips for Success – an aid, not a promise!

- **Describe** what and where the **risks** are, **and plans to mitigate or remove them** – it shows you are on top of the issues and are thinking of all sides; painting a rosy picture and not addressing challenges or risks weakens your application
- Address novelty vs probability of success and disease impact
- **Address commercial viability** of your proposed therapy
  - Differentiate from potentially competing therapies and current standard of care
- **Address freedom to operate** and any investment you've made to ensure it

Tips for Success – an aid, not a promise!

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- **Milestones should be clear and important** - what are the critical experiments for that Go-No Go decision to ensure you have the "truth" about whether or not to proceed
- B**udgets should be well justified -** be good stewards of the $ and provide the rationale for what you really need to conduct the studies and answer the key questions or issues
- **Timelines should be well reasoned** – provide rational, realistic time frames

Tips for Success – read the RFA!

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- **Read the RFA** – make sure you understand what's being asked and be sure to address the points
  - As examples: Show the aspirational Target Product Profile; the development plan; studies to provide the evidence; knowledge of the regulatory steps; data to show your therapeutic candidate is ready to do the IND enabling steps; documentation that you have had a discussion with the FDA about your product and plans; documentation that you have the legal ability to move your product forward to patients; provide a clinical trial protocol that is well-designed, has safety parameters in place for patients, and is designed to answer the key questions you need to make a decision about whether to move the product forward into later stage development

Tips for Success – an aid, not a promise!

- **Know your audience** – who are you trying to convince with your proposal – it's the reviewers with product development, disease, clinical, preclinical, manufacturing expertise and experience, and it's CIRM – know CIRM's mission and read the RFA to understand what's needed
- **Ask questions as you prepare the application** – don't guess, ask CIRM if you are unsure. All potential applicants should pick up the phone or email CIRM – let us know you are interested and let us try to help you
- **Reserve time to write the application** – a competitive application requires focus

Examples of what NOT to do

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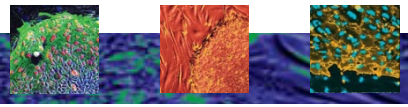
- Propose a large, multi-center, multi-national trial without any evidence you have tested your proposed product in any human
- Propose a clinical indication with no or weak rationale, that is peripheral to the company's main priorities that have much stronger scientific and clinical rationale
- Dismiss or ignore data that doesn't fit with your rationale – go over the data and explain it, state the studies you will do that can answer the question
- List completed studies without providing the data – drafts are informative and it's important to be transparent about your data
- Name a principal investigator with no or very limited product development experience in conducting or successfully guiding studies into the clinic



Examples of what NOT to do

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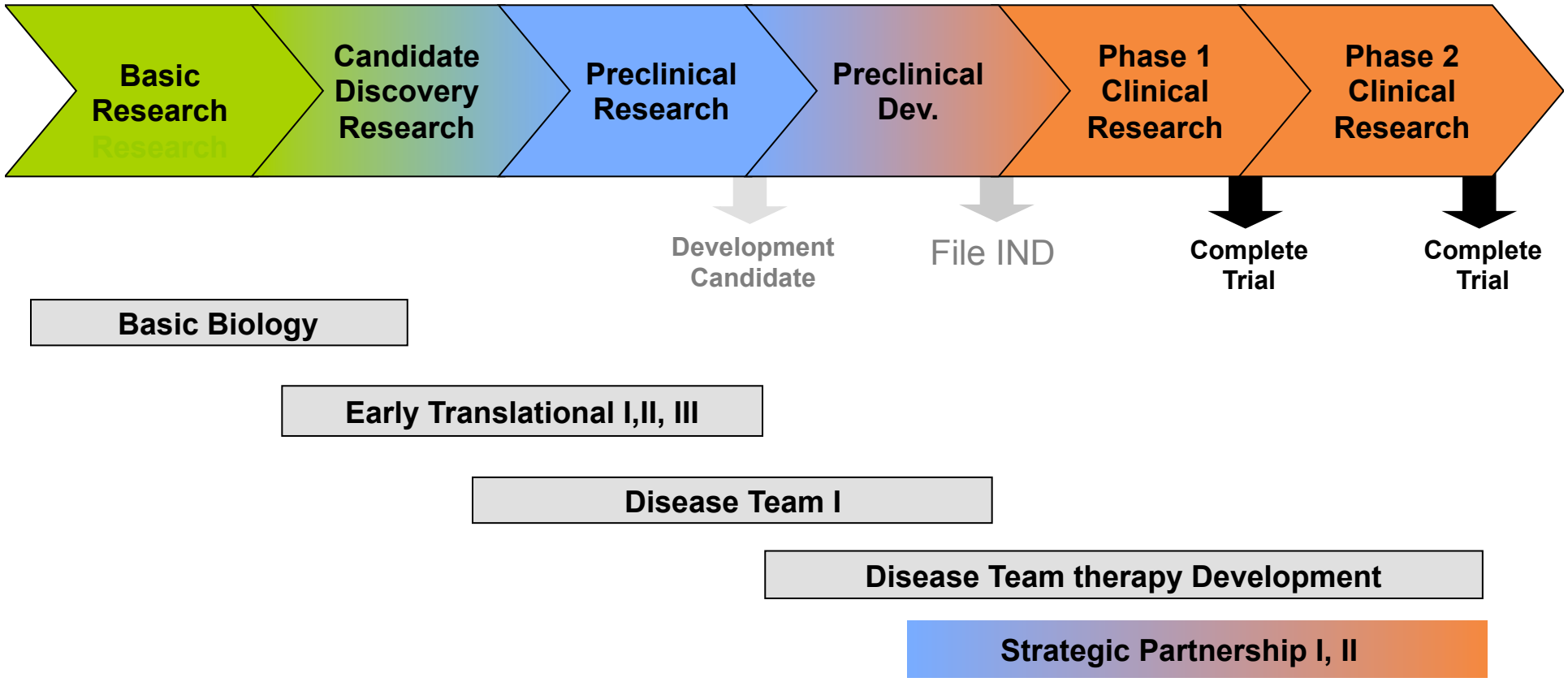
- Provide the idealized view, with no or minimal information on potential scientific, technical, regulatory, or clinical risks or challenges to the project and how you will address them
- Request $millions for “toxicity studies” and provide a one sentence rationale and description of what you intend to do with the $ - all activities, particularly expensive ones, require appropriate justification
- Take the published award ceiling amount and divide by the number of years to arrive at your annual budget needs
- Propose budget and cost sharing for expenses/activities outside the scope of the CIRM funded project
- Propose an unrealistically optimistic time frame – could impact on reviewers’ perception of team’s experience

Scope: Strategic Partnership II

SP II is designed to capture ***mature*** programs close to/at **Early Clinical Development** stage



Readiness: Strategic Partnership II

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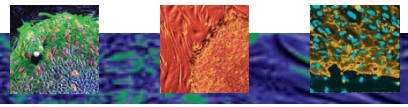
Preclinical Stage Projects must have:

- Single therapeutic development candidate selected
- Preclinical proof-of-concept (POC) in target disease/ injury
- Pre-IND meeting with FDA completed

Clinical Stage Projects must have:

- IND filed



Therapeutic Candidate Eligibility

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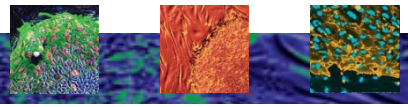
In Scope :

- a cell therapy derived from pluripotent stem cells
- allogeneic tissue-derived stem cells or progenitor cells for repair / regeneration
- stem cell-engineered functional tissues for implantation in vivo
- a small molecule or biologic demonstrated to target normal endogenous stem cells as the primary mechanism of action (MOA) (in vivo) for regeneration and repair
- genetically or pharmacologically-modified hematopoietic stem cells (HSCs)



What's out of scope for this round

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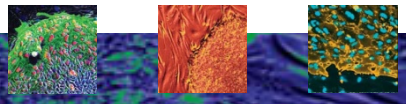
Out of Scope and Specifically Excluded:

- unmodified HSCs
- small molecules and biologics, unless targeting endogenous stem cells as primary MOA (in vivo) for regeneration or repair
- autologous mesenchymal stem cell (MSC) approaches
- autologous tissue-derived stem cell-derived approaches
- minimally manipulated bone-marrow or minimally manipulated cord-blood



Eligibility criteria for PI and Organizations

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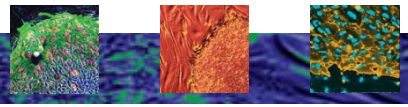
- PIs must have an MD, PhD or equivalent degree and be authorized by applicant organization to conduct the proposed research in California
  - PI is an employee of applicant organization with demonstrated expertise in product development and in managing clinical research programs
  - Documented commitment from applicant organization to provide resources sufficient to carry out research
- Applicant organization must have a CA presence to be eligible; the extent of that CA presence determines the scope of CIRM funding – Refer to Section V,B of RFA



Commercial Validation: Strategic Partnership II

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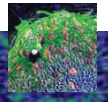
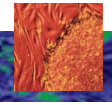
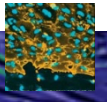
All applicants must provide evidence of commercial validation

- **For-profit applicants**
  - either by financial strength
  - and/or via a development agreement with a large biotech/pharma partner
- **Not-for-profit applicants**
  - must have a development agreement with a large biotech/pharma partner (market capitalization of at least $500 M)

Review Criteria to assess the application

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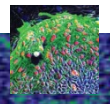
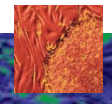
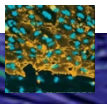
- Applications will be evaluated by Grants Review Group in five key areas:
  - Significance and impact
  - Rationale and Risk/Benefit
  - Design and feasibility
  - Principal investigator, development team and leadership plan
  - Quality of collaborations, assets, resources and environment

Templates to guide the organization of your submission

- CIRM Major Milestones Template
- CIRM Target Product Profile (TPP)
- CIRM Clinical Protocol Synopsis
- CIRM Manufacturing Plan Synopsis
- Other key information you will need to provide includes:
  - Due Diligence Report
  - FDA correspondence
  - Clinical Protocol and Investigator Brochure
  - Copies of authorization for cross reference of Drug, Device or Facility master files
  - Licenses and agreements (MTAs)
  - Evidence of Commercial Validation
  - Related Business Entities Disclosure Form

CIRM's ICOC has allocated up to $40 million for 2-4 awards:

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Key dates to remember:

Letter of Intent due	Dec 18, 2012
Award Applications due	Jan 30, 2013
Grants Review Group review	April 2013
ICOC Consideration	June/July 2013
Earliest Funding	3 Q 2013

Contact us if you have any questions

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- **For information about this RFA:**
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