

CIRM RFA Pipeline

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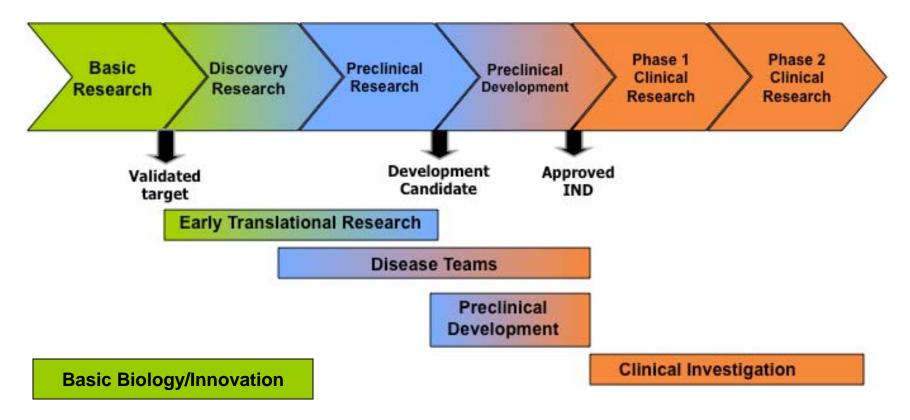
Moving the Pipeline Forward

Preclinical Preclinical Ph 1 Clinical Ph 2 Clinical **Basic** Discovery Research Research Research Development Research Research **SEED Development Approved** Candidate IND Comprehensive **New Faculty I, II Disease Team New Cell Lines Tools and Technology Released RFAs Early Translational Research Upcoming RFAs Training Grants Bridges to Stem Cell Research**

CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE

Core RFA Program

Supplement As Needed



CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE.

Recent/Upcoming RFAs: Commercial Sector Opportunities

Ph 1 Clinical **Basic** Discovery **Preclinical Preclinical** Ph 2 Clinical Research Research **Development** Research Research Research **Development Approved Validated** Candidate IND target **Early Translational Research Disease Team Research Tools and Technology**



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NOW: Early Translational Research

Development candidates

- A cell therapy derived from stem cells
- Biologic or small molecule where use of stem cells advantageous, required

Bottlenecks

- Immunogenicity/tolerance
- Non-invasive assays for teratomas, tumorigenicity
- Methods to preserve chromosomal integrity in culture
- Methods to track migration/integration
- Pre-clinical development bottlenecks on later grants: (We say what we don't want)

Eligibility: Early Translation Research

- PI Eligibility
 - M.D. and/or Ph.D. or equivalent degree
 - Authorized by the applicant institution to conduct the proposed research in California
 - Minimum 10 % effort
- PI may apply for an Early Translational Research Award OR a Disease Team Research Award

What's coming up?

- Disease Team Research Awards
 - Major investment by our Board
 - Essential for success: Industry involvement
 - Milestone driven
 - Go/No-go Decisions
 - Project management
 - Oversight committees
 - Aggressive goal: IND filing

In Development: Preclinical Development

- IND enabling toxicology
- IND enabling pharmacology, PK/PD
- Protocol development, clinical site recruiting, IRB approvals
- GMP Manufacturing processes
- IND preparation and filing

Potentially folded in to Disease Teams

Moving Discoveries into the Clinic: Engagement of the Commercial Sector

"Valley of Death"



Commercial Sector Interest

Grants (and Loans)