July 23, 2015



0 DISCOVERY

O TRANSLATIONAL

0 CLINICAL

0 EDUCATION

INFRASTRUCTURE

CIRM 2.0 for Discovery & Translation Proposed Concept Plans

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Topics

DISCOVERY

TRANSLATIONAL

CLINICAL

EDUCATION

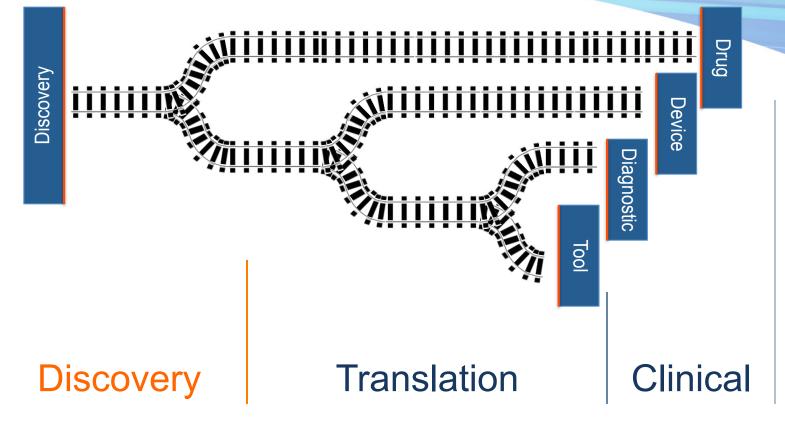
INFRASTRUCTURE

- CIRM 2.0 Discovery Stage Concept Plan
 - Optimized Review Process for High Volume Applications

CIRM 2.0 Translation Stage Concept Plan



CIRM 2.0 Discovery Stage Concept Plan





CIRM 2.0: Discovery Stage Concept Three New Programs



- Smaller seed funding
- Exploration of transformational ideas
- Generate early data for larger, follow-on awards
- Links to Quest Awards

Quest Awards



- Early research on new stem cell ideas or concepts
- "Workhorse" of Discovery
- Incentives for progression of successful programs
- Links to Translation Awards

Challenge Awards

- Timely calls to address highly specific topics
- Address emerging concepts, bottlenecks or downstream needs



Inception Awards CIRM 2.0: Discovery Stage Programs

- Purpose: To provide seed funding for potentially transformational but very early stage concepts involving stem cells
- **Investment:** \$150,000 direct costs per project (est. \$250,000 fully burdened)
- **Duration:** Not pre-specified, proposed and justified by applicant
- **Progression:** Applicant must provide a vision of a successful outcome and subsequent progression steps
- Volume: High application volume expected



Quest Awards CIRM 2.0: Discovery Stage Programs

- Purpose: To discover a novel candidate therapeutic, device, diagnostic or tool and prepare it for translational research
- Investment: \$1.4M in direct costs per project if a <u>therapeutic</u> (est. \$2.25M fully burdened); \$700,000 if a <u>diagnostic</u>, <u>device or tool</u> (\$1.1M fully burdened)
- **Duration:** Up to 2 years
- Progression: Applicant must provide a vision of a successful outcome and subsequent progression steps; incentive award offered for successful progression
- Volume: High application volume expected



Quest-Progression Awards CIRM 2.0: Discovery Stage Programs

- Purpose: To increase the efficiency at which promising Discovery research progresses into the translational stage and to reinvest in Discovery stage researchers that successfully advance research
- **Investment:** \$150,000 direct costs per project (est. \$250,000 fully burdened)
- **Duration:** Not pre-specified, proposed and justified by applicant
- **Progression:** Applicant must provide a vision of a successful outcome and subsequent progression steps
- Volume: Only open to Quest Awardees submitting documentation that successful funding for translational stage research has been achieved. CIRM will verify documentation and proposal.

Challenge Awards CIRM 2.0: Discovery Stage Programs

- Purpose: To address highly specific questions on emerging concepts, bottlenecks or downstream needs as requested by CIRM or the ICOC
- Investment: As appropriate, up to \$2 million
- **Duration:** As appropriate for the topic
- **Progression:** Applicant deliverable must be responsive to the question.
- Volume: Low application volume expected





OPTIMIZED REVIEW PROCESS FOR HIGH VOLUME PROGRAMS



Optimized Review Process CIRM 2.0: Discovery Stage Programs

For rounds with high application volume, a two stage review will be implemented:

- Stage 1: A pre-review will be conducted by the 22 members of the GWG (15 Scientific, 7 Patient Advocate) to select a subset of applications to advance to Stage 2 of review. CIRM will also have an opportunity to select applications for review.
- **Stage 2:** Standard, in-person GWG review meeting resulting in funding recommendations to the ICOC.

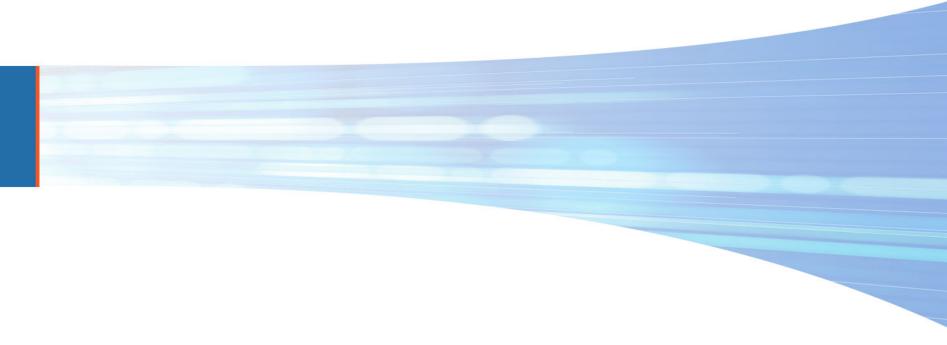
This process improvement offers:

- Single step application process (will eliminate the "Pre-App" process)
- Is scalable in response to application volume
- Can facilitate selection of proposals with high potential for impact from a broad applicant pool





CIRM 2.0 DISCOVERY CONCEPT PLAN PROPOSED ACTION



Proposed Action Items CIRM 2.0: Discovery Stage Programs

Delegation of Board authority to President or designee to accomplish the following:

- To examine and select other applications that merit second stage review beyond those selected by the GWG (if any) and to determine not to fund the remaining applications
- To determine if a Progression Event has been achieved under a Quest Award, evaluate Quest-Progression proposals, and make conforming awards
- To issue timely Challenge Question Announcements that define a specific question and corresponding award terms





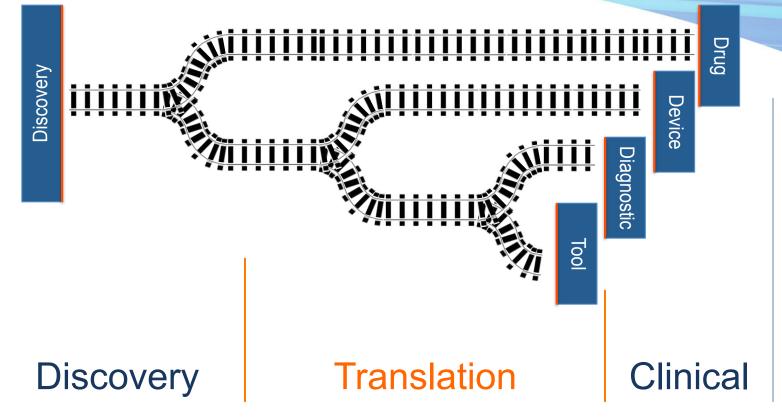
Proposed Action Items CIRM 2.0: Discovery Stage Programs

\$53M funding authorization for the Discovery Stage Concept Plan with the following allocation estimates:

Programs	Number of Awards	Investment
Inception	26	\$6.5 M
Quest / Progression	20	\$42.5M
Challenge	4	\$4 M

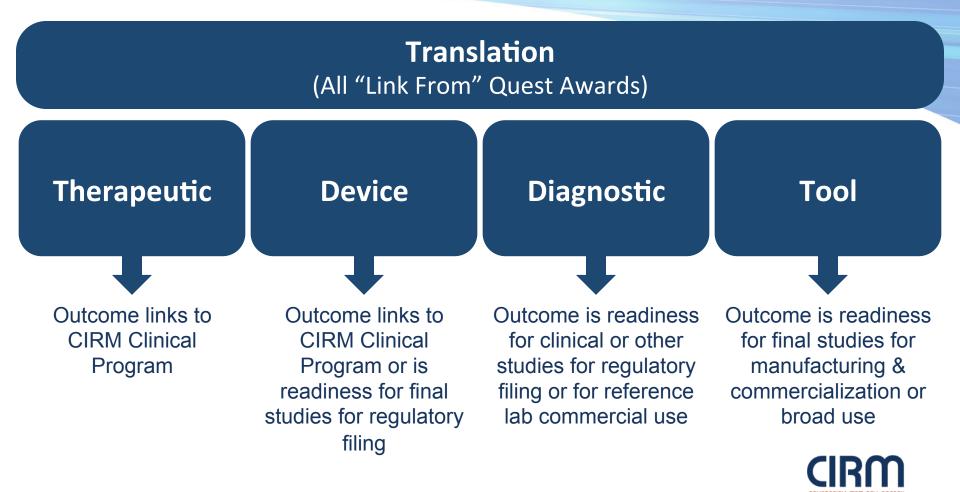


CIRM 2.0 Translation Stage Concept Plan





CIRM 2.0: Translation Stage Concept Four Specific Programs



CIRM 2.0: Translation Stage Concept Four Specific Programs

Therapeutics

- Direct Project Costs up to:
 - \$5M for cell therapy candidate
 - \$2.5M for small molecule candidate
- Project term up to 30 months

Devices

- Direct Project Costs up to \$2M
- Project term up to 24 months

Diagnostic Tests

- Direct Project Costs up to \$1.2M
- Project term up to 24 months

Tools

- Direct Project Costs up to \$1M
- Project term up to 24 months





CIRM 2.0 TRANSLATION CONCEPT PLAN PROPOSED ACTION



Proposed Action Items CIRM 2.0: Translation Stage Programs

Delegation of Board authority to President or designee to accomplish the following:

 To examine and select other applications that merit second stage review beyond those selected by the GWG (if any) and to determine not to fund the remaining applications

AND

\$40M funding authorization for the Translation Stage Concept Plan.

