

# Real Life™

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Vice President, Portfolio Development and Review

Grants Working Group Recommendations CLIN

September 20, 2022

**CIRM**  
CALIFORNIA'S STEM CELL AGENCY

## OUR MISSION

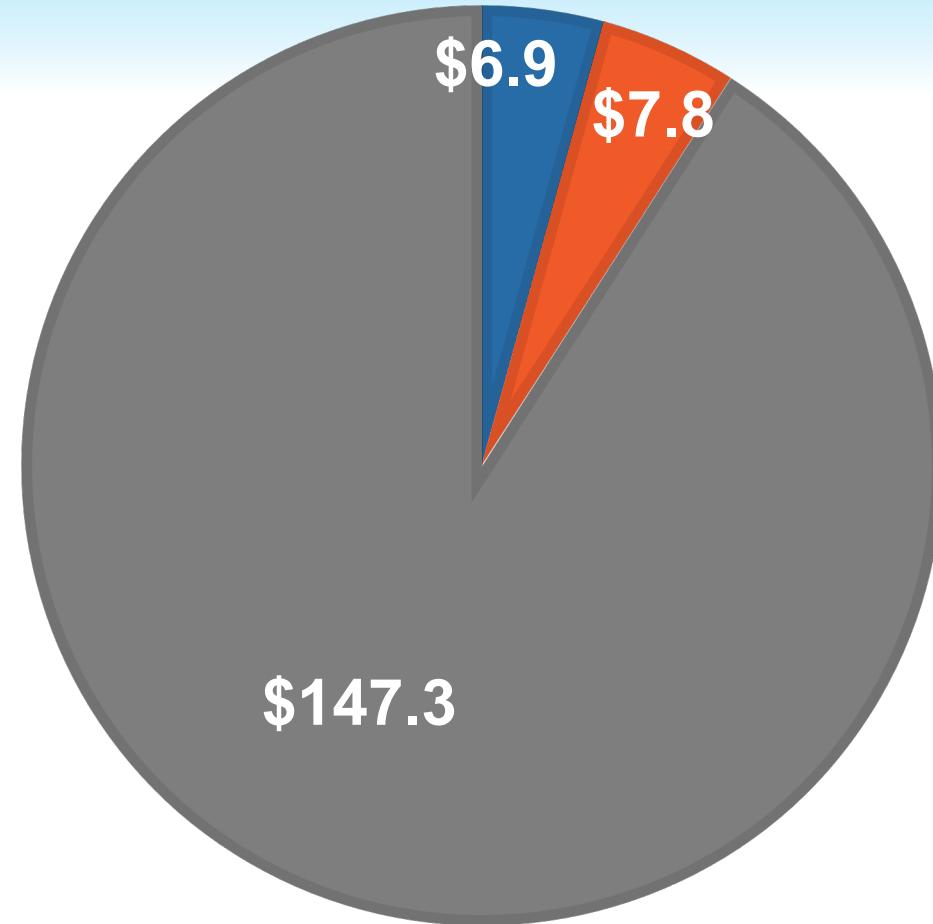
Accelerating world class science  
to deliver transformative  
regenerative medicine treatments  
in an equitable manner to a  
diverse California and world



**Annual Allocation: \$169 million**

- Amount Requested Today
- Approved Awards
- Unused Balance

Amounts are shown in millions



- **Score of “1”**

*Exceptional merit and warrants funding.*

*May have minor recommendations and adjustments that do not require further review by the GWG*

- **Score of “2”**

*Needs improvement and does not warrant funding at this time but could be resubmitted to address areas for improvement.*

*GWG should provide recommendations that are achievable (i.e., “fixable changes”) or request clarification/information on key concerns.*

- **Score of “3”**

*Sufficiently flawed that it does not warrant funding and the same project should not be resubmitted **for at least 6 months.***

Applications are scored by all scientific members of the GWG with no conflict.

1. Does the project hold the necessary significance and potential for impact? (i.e., what value does it offer; is it worth doing?)
2. Is the rationale sound? (i.e., does it make sense?)
3. Is the project well planned and designed?
4. Is the project feasible? (i.e., can they do it?)
5. Does the project uphold the principles of diversity, equity, and inclusion (DEI)?

Scientific GWG  
Member



Scientific evaluation (disease area expert,  
regulatory, CMC, product development)  
Provides scientific score on all applications

Patient Advocate  
or Nurse GWG  
Member



DEI evaluation, patient perspective on significance  
and potential impact, oversight on process  
Provides DEI score on all applications  
Provides a suggested scientific score

Scientific  
Specialist  
(non-voting)



Scientific evaluation (specialized expertise as  
needed)  
Provides initial but not final scientific score

## Board members with Conflicts of Interest for CLIN applications

Haifaa Abdulhaq

Loren Alving

\*Ysabel Duron

\*Elena Flowers

\*Christine Miaskowski

\*Art Torres

Barry Selick

Keith Yamamoto

\* Application Review Subcommittee members

<b>Title</b>	Phase 1 clinical research program for functional cure of HIV with an in-vivo gene therapy
<b>Therapy</b>	Gene therapy targeting latent HIV infected cells
<b>Indication</b>	HIV infection
<b>Goal</b>	Completion of phase 1 clinical trial to assess safety
<b>Funds Requested</b>	\$6,852,486 (co-funding: \$7,236,138)

Maximum funds allowable for this category: \$8,000,000



**Clinical Background:** There are approximately 38 million people world-wide infected and living with HIV. An estimated 1.5 million new cases of HIV were reported in 2020. Standard of care involves anti-retroviral therapy (ART), which is successful in controlling HIV infection, but it requires lifelong adherence and is not a cure.

**Value Proposition of Proposed Therapy:** HIV persists in the body in the form of integrated proviral DNA in latently infected cells. The proposed therapy offers the potential to effectively cure patients of HIV infection by targeting and removing integrated proviral DNA in latently infected cells

**Why a stem cell or gene therapy project:** The therapeutic candidate is a gene therapy targeting HIV infected cells.

Application/ Award	Project Stage	Project End Date	Indication	Candidate	Mechanism of Action
CLIN2	Phase 1/2 clinical trial	Dec 2022	HIV-related lymphoma	Autologous gene-corrected hematopoietic stem cells	Genetically modified HSC using a lentiviral vector that encodes a triple combination of HIV- resistance genes and a pre- selective marker to block further infection.
CLIN1	IND-enabling preclinical studies	Sep 2022	HIV/AIDS	HIV-specific CAR-T cells	Cytomegalovirus (CMV)-reactive T cells that express chimeric antibody receptors (CARs) to recognize and kill HIV-infected cells
CLIN2	Phase 1/2 clinical trial	Dec 2023	HIV/AIDS	HIV-specific CAR-T cells	Genetically modified T cells with two different chimeric antigen receptors (CAR), which enable the newly created duoCAR-T cells to recognize and destroy HIV infected cells.

Applicant has not previously received a CIRM award.

**GWG Recommendation:** Exceptional merit and warrants funding

Scientific Score	GWG Votes
1	10
2	3
3	2

**DEI Score: 8.0 (scale 1-10)**

**CIRM Team Recommendation:** Fund (concur with GWG recommendation)

**CIRM Award Amount:** \$ 6,852,486\*

\*Final award shall not exceed this amount and may be reduced contingent on CIRM's final assessment of allowable costs and activities.