

Real Life™

Gil Sambrano, PhD

Vice President, Portfolio Development and Review

Grants Working Group Recommendations CLIN

September 28, 2023

CIRM
CALIFORNIA'S STEM CELL AGENCY

OUR MISSION

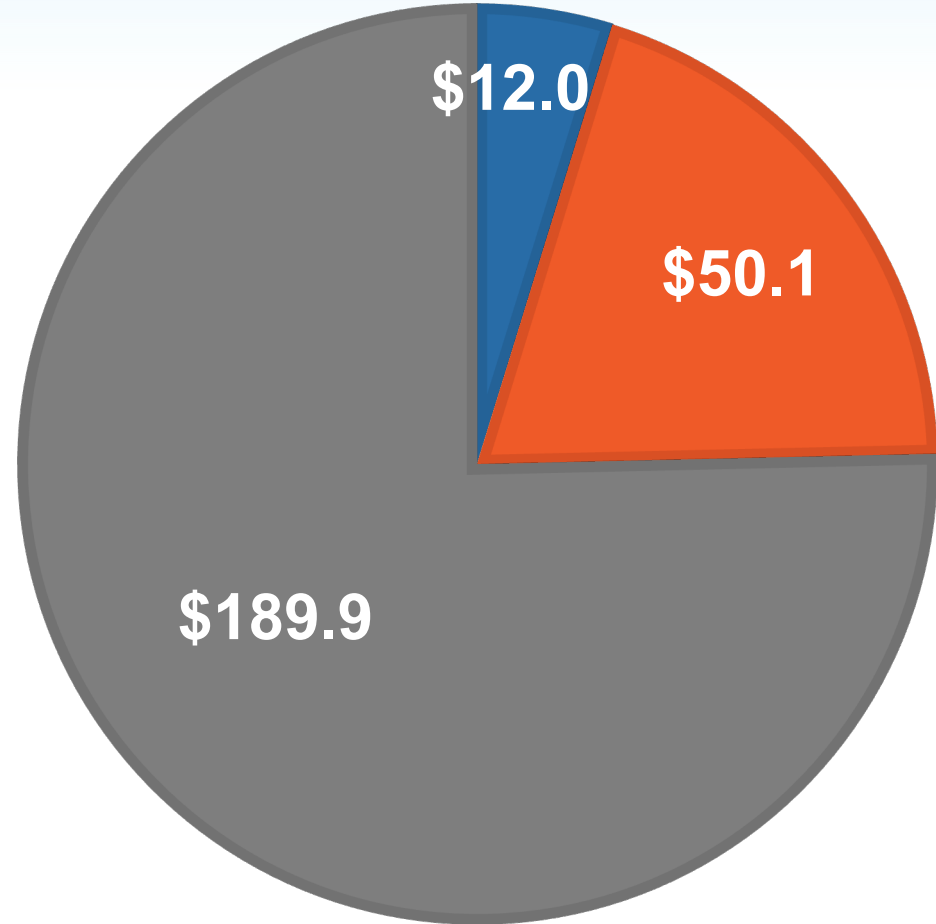
Accelerating world class science to deliver transformative regenerative medicine treatments in an equitable manner to a diverse California and world



Annual Allocation: \$ 252 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.

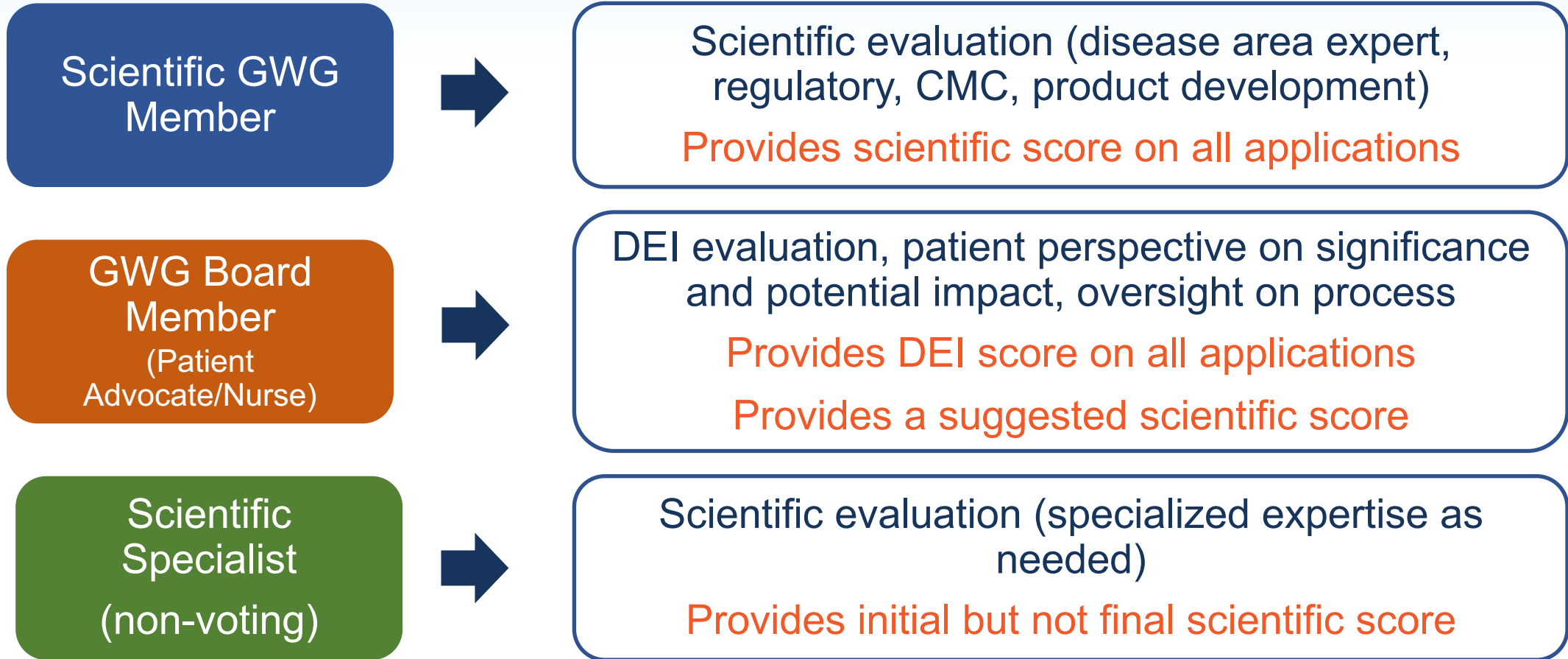
1. Does the project hold the necessary significance and potential for impact? (*what value does it offer; is it worth doing?*)
2. Is the rationale sound? (*does it make sense?*)
3. Is the project well planned and designed?
4. Is the project feasible? (*can they do it?*)
5. Does the project uphold the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

CIRM CLIN Program DEI Rubric				
CRITERIA	Score of 0 to 2	Score of 3 to 5	Score of 6 to 8	Score of 9 to 10
	Not Responsive	Not Fully Responsive	Responsive	Outstanding Response
1. Commitment to DEI	Fails to address how success of this project would lead to a therapy that positively impacts underserved or disproportionately affected communities.	Inadequately addresses how success of this project would lead to a therapy that positively impacts underserved or disproportionately affected communities.	Adequately describes how success of this project would likely lead to a therapy that positively impacts underserved or disproportionately affected communities.	Convincingly and clearly describes how success of this project would lead to a therapy that positively impacts underserved or disproportionately affected communities.
	Does not set goals for diverse trial population enrollment and provides no justification for the target enrollment.	May set trial population enrollment goals that are inappropriate or infeasible relative to the population affected or at risk for the indication.	Sets adequate goals for trial population enrollment relative to the population affected or at risk for the indication.	Trial population goals are based on a deep understanding of health disparities and disease burden.
	Inadequate personnel/expertise or budget to implement DEI-oriented activities.	May have inadequate personnel/expertise or budget to implement DEI-oriented activities.	Adequate personnel/expertise or budget to implement DEI-oriented activities.	Strong personnel/expertise and appropriate budget to implement DEI-oriented activities.
2. Project Plans	Planned activities do not reflect a good faith effort and are unlikely to be effective in outreach and engagement.	Planned activities are incomplete or inadequate and may not reflect a good faith effort for outreach and engagement.	Planned activities reflect a good faith effort and have the potential to be effective in outreach and engagement.	Planned activities reflect an outstanding and comprehensive effort for outreach and engagement.
	Does not demonstrate an understanding of the potential barriers to participation in the clinical trial.	Does not fully demonstrate an understanding of the potential barriers to participation in the clinical trial.	Demonstrates an understanding of the potential barriers to participation in the clinical trial.	Demonstrates a clear understanding of the potential barriers to participation in the clinical trial.
	Inadequate plan to address potential barriers to participation.	May not have an adequate plan to address potential barriers to participation.	Has an adequate plan to address potential barriers to participation.	Has a strong plan to address potential barriers to participation.
	Unlikely to achieve the recruitment of trial participants from underserved or disproportionately affected populations.	May not be able to achieve the recruitment of trial participants from underserved or disproportionately affected populations.	Likely to achieve the recruitment of trial participants from underserved or disproportionately affected populations.	Very likely to achieve the recruitment of trial participants from underserved or disproportionately affected populations.
3. Cultural Sensitivity	Does not include activities to increase cultural sensitivity on the team or at partner institutions, or activities proposed are not appropriate.	Proposed activities may not be effective or sufficient to increase cultural sensitivity on the team or at partner institutions. Activities may not match the needs of the project.	Has appropriate plans to increase cultural sensitivity on the team or at partner institutions. Activities match the needs of the project.	Outstanding plans to increase cultural sensitivity on the team or at partner institutions. Activities are well matched to the needs of the project.

DEI Scores

Applications are scored for adherence to principles of DEI by all GWG Board Members with no conflict.

- **DEI Score of 9-10**
Outstanding Response
- **DEI Score of 6-8**
Responsive
- **DEI Score of 3-5**
Not Fully Responsive
- **DEI Score of 0-2**
Not Responsive



Title	Phase I Trial of Locoregionally Delivered Autologous B7-H3 CAR T Cells (B7-H3CART) in Adults with Recurrent Glioblastoma Multiforme
Therapy	Autologous CAR-T cell therapy targeting B7-H3
Indication	Glioblastoma Multiforme (GBM)
Goal	Complete phase 1 (first-in-human) clinical trial
Funds Requested	\$11,999,991 Co-funding: \$0 (None required)

Maximum funds allowable for this category: \$12,000,000

Clinical Background: Glioblastoma is a critical unmet need as it is the most common malignant primary brain tumor in adults and each year about 12,000 Americans are diagnosed. Because of the diffuse nature of GBM, treatment is challenging and recurrence is high. The 5-year survival rate is less than 10%.

Value Proposition of Proposed Therapy: The current standard of care involves resection of the tumor followed by radiation, chemotherapy, and alternating electric field therapy. Despite these treatments, survival remains low. The proposed therapy has the potential to improve survival and quality of life for patients with glioblastoma.

Why a stem cell or gene therapy project: The therapy involves T cell progenitors and genetic manipulation of the cells.

Application/Award	Project Stage	Project End Date	Indication	Candidate	Mechanism of Action
CLIN1	IND enabling activities	May 2024	Glioblastoma	Genetically modified blood stem cells	Genetically engineered blood stem cells to protect them from chemotherapy, producing better patient survival.
CLIN2	Phase 1 clinical trial	Jul 2023	Brain metastasis from breast cancer	Autologous CAR-T cells	Chimeric antigen receptor T cells engineered to target HER-2 positive tumor cells that have metastasized to the brain
CLIN2	Phase 1 clinical trial	Mar 2025	Pediatric malignant brain tumors	Autologous CAR-T cells	Chimeric antigen receptor T cells engineered to target tumor cells via IL13R alpha2
CLIN2	Phase 1 clinical trial	Dec 2025	Gliomas	Autologous CAR-T cells	Chimeric antigen receptor T cells engineered to target tumor cells via GD2
CLIN2	Phase 1 clinical trial	Nov 2026	Gliomas	Neural stem cells and oncolytic virus	Genetically engineered neural stem cells expressing a cancer-killing virus that target brain tumor cells

Project Stage	Indication	Project Outcome	Project Duration	Award Amount	Milestones/Aims
CLIN2	Gliomas	Phase 1 clinical trial	Oct 2021 – Dec 2025	\$11,998,310	7 milestones proposed to enroll/dose patients and complete study. 4 milestones completed and remainder are on track.

GWG Recommendation: Exceptional merit and warrants funding

Scientific Score	GWG Votes
1	14
2	1
3	0

DEI Score: 10.0 (scale 1-10)

CIRM Team Recommendation: Fund (concur with GWG recommendation)

CIRM Award Amount: \$ 11,999,991*

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