EDUCATION



Funding Opportunity to Manage the 2025 CIRM Annual Trainee Network Conference

EDUC 1.12



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Objective

The mission of the California Institute for Regenerative Medicine (CIRM) is to accelerate world class science to deliver transformative regenerative medicine treatments in an equitable manner to a diverse California and world.

The objective of this request for applications (RFA) is to solicit a highly qualified applicant to help develop and manage an Annual Trainee Network Conference in support of CIRM's Research Training grant (EDUC) Programs, to take place between May and August of 2025 with consultation and final approval of dates from CIRM.

Award Information

What CIRM Education (EDUC) Programs are included in this Trainee Network Conference?

Key to the achievement of CIRM's mission is the creation of a diverse and skilled work force that can tackle the scientific challenges of today and deliver the innovative solutions of tomorrow. To this end, CIRM supports a series of Education programs (EDUC Grants) that provide specialized coursework and laboratory research experiences for students and trainees of various levels around the state of California. Each year, several hundred individuals complete their formal training and progress to new opportunities that may include further education or immediate employment in biomedical related fields. The Trainee Network Conference serves as a culminating event to showcase the achievements of these trainees, and to promote their professional development through peer-to-peer networking and other organized activities.

A summary and description of CIRM's EDUC programs are provided below.

Bridges (EDUC2): The Bridges program provides a diverse cohort of undergraduate and Masters level students from California State Universities and community colleges with specialized coursework followed by 8-12 months long, full-time research internships in regenerative medicine-based host laboratories within research institutions or biotechnology/pharma companies.

COMPASS (EDUC5): The COMPASS program provides sustained academic and mentoring support to a diverse cohort of undergraduate students within California colleges and universities,

with an added focus on identifying untapped talent and bringing diverse and inclusive perspectives to the work force. COMPASS students receive foundational coursework and conduct laboratory internships in regenerative medicine related disciplines.

Research Training (EDUC4): The Research Training program, nicknamed "CIRM Scholars", includes predoctoral graduate students as well as postdoctoral and clinical fellows. All CIRM Scholars receive specialized coursework and complete multi-year fellowships at world class research institutions around the state of California.

What are the goals of the Annual Trainee Network Conference?

The goals of the Annual Trainee Network Conference are to:

- Expand and enhance the CIRM Trainee Network that includes undergraduates, graduates, and post-graduates pursuing different areas of regenerative medicine
- Provide peer-to-peer networking and career-building opportunities for CIRM trainees exploring the next stages of their professional development
- Provide attendees with workshops/sessions of value such as diversity, equity and inclusion, patient advocacy, community outreach, mentorship, etc.
- Provide attendees an opportunity to share their research accomplishments more broadly

What is the size, timing, and location?

The Annual Trainee Network Conference should take place between May and August of 2025 and accommodate up to 600 attendees including culminating EDUC trainees, EDUC program personnel, and invited speakers/guests for a 2.5-day event. The conference should be hosted in a metropolitan area of California containing a major airport.

What activities will CIRM support?

This RFA will support the development and conduct of the 2025 Annual Trainee Network Conference through CIRM's Conference Grant Program. Under this mechanism, the Awardee will retain the primary responsibility for planning, directing, and executing the proposed event; however, the Awardee will work closely with the CIRM team to design and implement an event that is responsive to CIRM needs. The Awardee is expected to engage and collaborate with a steering committee appointed by CIRM to develop a meeting structure, agenda and to identify speakers and panelists.

To allow ample opportunities for trainees to engage and participate in diverse activities of value, CIRM recommends that the 2025 Trainee Network Conference be structured similarly to the 2024 Trainee Network Conference, the agenda of which can be viewed in the Appendix.

More information about CIRM's Education programs can be found on the CIRM website.

CIRM resources <u>will</u> support the following required core activities under this opportunity:

- ✓ Direct meeting logistics
 - Overall management of the conference including, but not limited to, site selection, food and beverage planning, meeting agenda, speaker and conference attendees, conference materials, third party sponsor coordination (if applicable) and other conference related tasks
 - On-site conference registration and services
 - Participation in regular conference calls with CIRM
 - Lodging for up to 18 CIRM team members

Pre-conference logistics

- Website management including website design, online conference registration, capture of poster abstracts from attendees during online registration and, as applicable, CVs/resumes
- Preparation of digital attendee directory/abstract booklet
- Act as main contact for team schedules and contact information and vendors and service providers
- Floor plan and site map preparation including diagrams for offices, break out rooms, speaker ready rooms, food and beverage spaces, event spaces, and poster room environments
- Poster session management, including rental of portable poster boards, set up and return
- Coordination of food and beverage services and ensuring compliance with the California State reimbursement requirements
- · Coordination of travel, parking and housing as needed for attendees and guests
- Management of all internet connectivity, AV and IT requirements before and during the conference
- Management of livestream/internet access for conference sessions OR video recording of designated sections as requested by CIRM
- Discussing and arranging for appropriate signage for posters and other conference related events
- Safety and emergency response plan
- Solicitation and management of outside sponsorship (optional, but encouraged)

Meeting day requirements

- Venue set-up
- Onsite conference registration and management
- Work with hotel/venue contact onsite to coordinate food and beverage and event/meeting logistics
- Manage all IT and AV requirements as needed during the conferences
- Management of Career Fair, Alumni Panel, and/or other special sessions or workshops
- Track attendee participation in sessions/events
- Conference break-down
- Security management

Post meeting requirements

CIRM EDUC1.12

- Survey and evaluation
- Timely reporting to CIRM on meeting results
- Provide photos from event to CIRM Staff
- Make recorded sessions available on demand through the Conference Website
- Report on attendee satisfaction and outcomes
- Budget and Financial Reconciliation

Meeting Information

For purposes of this RFA, CIRM anticipates the Annual Trainee Network Conference will be held at a suitable venue in California for up to 2.5 days between May and August of 2025, with consultation and final approval of dates from CIRM.

The budget for the Annual Trainee Network Conference is up to \$414,000 for all eligible costs and may not exceed this amount. Unspent funds for the 2025 Annual Trainee Network Conference must be returned to CIRM.

The meeting will include:

- Up to 600 attendees for full duration, +/- 50 with partial attendance (e.g., posters only, career fair only, etc.)
- Approximately 1200 room nights for participants (up to 86 of which are for speakers and CIRM staff, which are paid for by this grant)
- Career fair/networking event and special presentations by trainees and leading scientists in the field of regenerative medicine and/or EDUC program alumni
- A subset of conference sessions open or made accessible to the public or invited members of local community.
- 2 Breakfasts, 2 light lunches, 4 refreshment breaks and 1 reception of up to 600 people (all paid by this grant at CIRM allowable rates⁻). If the event plan ends up calling for fewer meals, the budget should reflect appropriate reductions

Solicitation of outside sponsorship is highly encouraged, but not required. CIRM will approve any prospective sponsors to ensure that they are appropriate.

^{*} The maximum per-person expenditures for meals and light refreshments according to CIRM's Business Meeting Expenditure policy may not exceed the following amounts: Breakfast \$28.00 Lunch \$49.00 Dinner \$85.00 Light refreshments \$20.00. The maximum per-person expenditures listed above include the cost of the food and beverages, labor, sales tax, delivery charges, and other service fees. CIRM's full Business Meeting Expenditure policy can be found at

https://www.cirm.ca.gov/sites/default/files/files/funding_page/Business%20Meeting%20Expenditure%20Po licy%2020221205.pdf

Eligibility

What types of applicants are eligible to apply?

- (1) The applicant team and/or applicant organization must satisfy the following requirements:
- Applicant organization has at least five years of experience in planning, implementing and hosting scientific/technical or educational conferences
- Program Director and one additional staff each have at least five years of experience organizing scientific/educational events
- A track record of hosting scientific or education conferences, including events that have required working with individuals and institutions not connected to the applicant organization
- Demonstrated ability to understand and utilize the role of scientific conferences in the professional development of trainees by reinforcing scientific learning, deepening trainees' understanding of the scientific process, and providing an opportunity to practice scientific communication skills

(2) The conference must be held in California by an eligible applicant and have a qualified Program Director (PD)

The conference must be conducted in California. California-based and non- California-based organizations (for-profit and non-profit) may use CIRM funds for eligible conference costs incurred in California. Foreign institutions are not eligible to apply for conference grant support.

Non-profit organization means either:

(1) a governmental entity of the State of California; or

(2) a legal entity that is tax exempt under Internal Revenue Code section 501(c) and California Revenue and Taxation Code section 23701d.

(3) The application must be accurate and complete.

All required components of the application must be completed and may not contain false or inaccurate information.

Schedule, Deadlines, and Budget

Applications Due	2:00 pm (PDT/PST) on November 30 2024
Presidential Review and Approval	Approximately 30 days post submission
Budget	Up to \$414,000 for all eligible costs
Proposed Conference Date Window	May-August 2025
Meeting Length	Up to 2.5 days

Application Review Information

What is the process for evaluating an application?

Pre-submission Consultation

In accordance our mission, CIRM is committed to funding scientific conferences that focus on regenerative medicine research and educational programs to train future scientists. Prospective applicants are encouraged, but not required, to contact CIRM with questions to discuss their proposal, including eligibility, before applying for a conference grant.

Eligibility Review

CIRM will assess whether the application meets the eligibility parameters required under this program. If CIRM determines, in its sole discretion, that an application does not meet the eligibility parameters of the program, CIRM will notify the applicant of its decision and cease all further action on the application.

Application Review

CIRM's governing board, the Independent Citizens Oversight Committee (ICOC), has delegated to the President of CIRM authority to review and make funding decisions for CIRM-initiated conferences.

The following criteria will be considered in the review of applications and funding decisions:

1. Experience and Track Record

Do the applicant organization and Program Director have the appropriate experience to manage and perform the proposed activities? Does the applicant organization have a proven commitment to

educational conferences in science, medicine, biotechnology, and/or science education fields?

2. Resources

Does the applicant organization have the necessary resources to adequately manage the meeting and effectively carry out all the required core activities in a timely fashion? Has the applicant organization appointed an appropriate team that will collaborate effectively with CIRM to understand needs, implement tasks, and manage the process?

3. Overall Value

Does the proposal offer a good value to CIRM by providing quality event management services for a reasonable price that is commensurate with use of California public funds? Are proposed costs appropriately justified?

4. Diversity, Equity and Inclusion

Does the applicant organization promote diversity, equity, and inclusion in the development and implementation of the conference?

Confidentiality

CIRM's confidentiality and conflict screening rules apply to everyone who will have access to applications or who will attend any review conference in which confidential information is discussed, including but not limited to CIRM team members, reviewers and members of the ICOC. (Per Gov. Code §6254.5(e) non-public records may be disclosed to government agencies under confidentiality agreements.)

Application Components and Submission

How does one apply?

Applications must be completed and submitted online using the CIRM Grants Management Portal at https://grants.cirm.ca.gov. Any prospective PD must create a login in the system to access application materials and apply. Applications are available in the system only to the PD. A PD may submit only a single application in a given review cycle and may not submit additional applications during the review period.

Applications are due by 2:00pm (Pacific Time) on Tuesday, November 30, 2024.

What components does an application include?

The Grants Management Portal provides instructions for completing all the necessary components and submitting a final application. The application is designed to collect information necessary to appropriately evaluate the proposal and for CIRM to rapidly initiate an award if approved for funding.

Applicants are required to indicate key personnel involved in the project, describe how the proposal addresses the objective of the funding opportunity, provide a detailed plan of proposed activities, and provide a budget for both meetings.

The application for CIRM Conference Grants consists of an Application Information and Proposal Form (Web-based document). Instructions for submitting an application can be found at: https://www.cirm.ca.gov/about-cirm/education-conference-grants.

The application for CIRM Conference Grant includes the following sections:

1. **Key Personnel:** List of main personnel who will contribute to the execution of the project and a description of their role.

2. Budget: Summary of costs by category requested from CIRM.

All allowable costs for research and conference grants are detailed in the CIRM <u>Grants</u> <u>Administration Policy for Discovery, Translation and Education Projects.</u>

Allowable Costs for CIRM-Initiated Conference Grants include:

- Conference facility and equipment rental (including easels, poster display boards, tables/chairs and associated taxes and service fees)
- Transportation, parking, lodging and per diem or subsistence allowances for the organizers and speakers and other costs
- Hotel room charges and fees (overnight accommodations for CIRM staff and conference organizers and speakers)
- AV equipment rental and planning costs (e.g., audio/visual and internet connectivity) (and associated taxes and service fees)
- Meeting planning and management costs that include up to 10% justified salary support for the Program Director for time spent conducting conference-specific activities; reasonable salary support for administrative staff time conducting conference-specific activities; and meeting planner costs
- Production, publicity and supply costs (website development, program printing or electronic media, name tags, etc.) needed for conduct of the conference (only if received for use during the budget period)
- Meals (food and non-alcoholic beverages) served to attendees during the conference
- Other items as described in the CIRM Grants Administration Policy
- Honoraria for invited speakers

These costs are allowable whether incurred by the applicant or by contracted vendors providing the above services needed to conduct the conference.

Non-allowable Costs for CIRM-Initiated Conference Grants

Non-allowable costs include purchase of equipment; visas; passports; entertainment; alcoholic beverages; personal telephone calls; laundry charges; dues; cash awards; alterations or

renovations. The CIRM Grants Administration Policy also indicates unallowable costs.

Indirect Costs are not allowable on this award.

3. Conference Coordination and Logistics Plan: A description of your ability to work with CIRM to coordinate and plan the Annual Trainee Network Conference. Similarly, describe your plans to coordinate and manage external partnerships with third party vendors or service providers to execute the meeting logistics, including for example, meeting venues/hotels, AV/IT providers, security services, etc.

4. **Experience and Track Record:** A description of the experience of the PD and the applicant institution in the organization and conduct of scientific and educational conferences, including the track record of managing similarly sized conferences in science, medicine, biotechnology, and/or science education fields.

5. Available Resources: A description of the resources you have to ensure that the meeting is adequately managed and that all required core activities are carried out in a timely fashion. A description of how an appropriate team will be appointed that can collaborate effectively with CIRM to understand needs, implement tasks, and manage the conference planning and execution process.

6. **Overall Value:** A summary of how this proposal offers a good value to CIRM by providing quality events management services for a reasonable price that is commensurate with use of California public funds, and by appropriately justifying proposed costs.

7. Diversity, Equity and Inclusion Plan: A description of how your organization will promote diversity, equity, and inclusion in the development and implementation of an Annual Trainee Network Conference.

Because CIRM is prohibited from taking race, ethnicity, national origin, and gender into account in making grant decisions, applicants should refrain from describing the race, ethnicity, national origin, or gender of applicant organization personnel. However, applicants may describe other characteristics of diversity such as individuals who: (a) grew up in low-income families or come from socioeconomically disadvantaged communities; (b) are the first in their family to attend college; or (c) have overcome educational, economic, physical (e.g., disability), or other barriers to opportunities.

8. Supporting Documentation: Available quotes from service providers, a sample agenda and any other relevant documentation as a single PDF file with table of contents.

Award Administration

Issuance of Award

A CIRM Conference Award is issued via a Notice of Award, which is the formal contract that defines the terms and conditions of an award and documents the commitment of funds from CIRM. The

Awardee will be subject to CIRM's Grants Administration Policy, including the insurance requirements specified therein.

Pandemic or other contingency: If CIRM determines that any of the parameters outlined in the Notice of Award must be changed to accommodate unexpected circumstances, CIRM will work with grantee to determine what re-budgeting is necessary and allowable to enable the meeting to go forward.

Reporting

Awardees will be required to provide written outcome and financial reports to CIRM upon completion of the conference. Awardees should include the final conference agenda or program. All unobligated funds at the end of each annual budget period must be returned to CIRM.

Contacts

For general information about CIRM's EDUC Programs or the Annual Trainee Network Conference:

Email: education@cirm.ca.gov

For information about the RFA or Review Process:

Kelly A. Shepard, Ph.D.

Director, Discovery and Education

Email: <u>kshepard@cirm.ca.gov</u>

Patricia Chavira

Project Manager, Portfolio Development & Review

Email: tchavira@cirm.ca.gov

Definitions

A "California Organization" is a for-profit or non-profit organization or is a California-domiciled wholly owned subsidiary of a non-California organization (any entity that does not qualify as a California Organization) that meets all of the following criteria: a) Employment and Payroll: (i) Employs at least one W-2 employee; and (ii) More than 50% of its W-2 employees, whether part-time or full-time, who are paid in any manner (e.g., wage, salary, commission, equity), must be domiciled full-time in California and be required to file California state income taxes due to their employment with the organization.

"For-profit organization" means: a sole-proprietorship, partnership, limited liability company, corporation, or other legal entity that is organized or operated for the profit or financial benefit of its shareholders or other owners. Such organizations also are referred to as "commercial organizations".

"Key Personnel" means (i) the program director; or (ii) any other person, including an independent consultant or an employee of a Subcontractor who is expected to contribute to the development or execution of the project in a substantive, measurable way and who is expected to: (a) receive or has been promised income, or anything else of value, of \$10,000 or more per year through the proposed project or (b) contribute one percent (1%) or more of their effort to the proposed project. "Key Personnel" does not include a person who is expected to be involved in the proposed project but who does not satisfy paragraphs (i) or (ii).

"Non-profit organization" means: (1) a governmental entity of the state of California; or (2) a legal entity that is tax exempt under Internal Revenue Code section 501(c)(3) and California Revenue and Taxation Code section 23701d.

"Subcontractor" means an organization (other than the applicant organization) that is expected to: (a) contribute to the scientific development or execution of the project in a substantive, measurable way *and* (b) receive \$25,000 or more through the proposed project. "Subcontractor" does not include suppliers of widely available goods.

Appendix

CIRM Regulations

Grant or Loan awards made through this RFA will be subject to all applicable CIRM regulations. These regulations can be found on CIRM's website at <u>https://www.cirm.ca.gov/our-funding/cirm-stem-cell-grant-regulations</u>.

Example Agenda and Format from 2024 Trainee Network Conference



Join us for the 2024 CIRM Trainee Networking Conference: Shaping the Future of Regenerative Medicine! August 11-13, 2024

<u>University Park Campus</u> - University of Southern California, L.A., <u>link to MAP</u> Parking and other logistics posted <u>HERE</u>. Entry letter or QR code in the email to all registrants and on Whova

Please note that if you have not registered for the conference, you will not be able to enter campus without the entry letter. Unfortunately, we do NOT have the capacity for onsite registration.

We are using Whova as our conference app! Connect up <u>HERE</u>:





CONFERENCE PROCEEDINGS

DAY 1 - Sunday, August 11, 2024

11:00am - 4:30pm REGISTRATION

Ronald Tutor Campus Center (TCC), USC, UPC campus, entrance to the Trojan Grand Ballroom,

link to MAP

1:00 - 3:10pm

SESSION 1 - Trojan Grand Ballroom, Session Chair, Francesca Mariani, PhD (USC)

- Welcome: Carolyn Meltzer, MD (Dean of the Keck School of Medicine of USC, CIRM Board Member) 1:00-1:05
- 1:05-1:20 Getting the most out of this conference: Louise Menendez, PhD (USC)

1:20-1:45 Patient advocate: Jake Javier: Patient Perspective

1:45-2:15 KEYNOTE SPEAKER: Justin Ichida, PhD (USC, BioMarin) Early development of therapeutics for neurodegenerative diseases through academic-industry partnerships

2:20-3:00 Career panel, Moderated by Britney Pennington, PhD (UCSB)

Jacqueline Hantgan - Patient advocacy (CIRM)

Kyle Sylakowski*, PhD - Biotech Research (Thermo)

René Hubert, PhD - Biotech Research (Amgen)

Arely Briseño, MPH - Outreach coordination (USC)

Denise Theresa de Villa, JD - Policy Management (ISSCR)

Wendie Johnston, PhD - Biotech Start-ups (Pasadena Bio Collaborative Incubator)

Cristy Lytal - Science communication (USC)

Manuel Santana* - Educator (PCC)

3:00 - 3:30pm Refreshment Break

CIRM CALIFORNIA INSTITUTE FOR

3:30 - 5:30pm SESSION 2 - Break-out Sessions at the Tudor Campus Center

Workshops:

Undergraduate level (COMPASS and Bridges) in the Trojan Grand Ballroom, Host: Louise Menendez, PhD

- Connecting STEM identity to home (Disha Chauhan, EdD and Louise Mendendez, PhD, USC)
- Communicating science to the public (Cristy Lytal, USC)
- Applying to graduate school (Mark Frey, PhD, CHLA)
- Searching for entry level biotech jobs (René Hubert, PhD, Amgen)
- Working for non-profits (Arely Briseño, USC)

Graduate level (MS and PhD trainees in Bridge and EDUC4) in the Franklin Room (Rm 350), Co-Hosts: Raana Mogharrab* and Manuel Santana*

- College-level academic positions (Manuel Santana*, PCC
- Surviving and Thriving in Grad School for Industry Careers (Elisabeth Rutledge, PhD, Amgen)
- Finding your best fit in biotech (Shyam Patel, PhD, CIRM)
- Industry positions what's out there? (Kyle Sylakowski, PhD*, Thermo)

Postdocs and Clinical Fellows (EDUC4), in the Forum Room (Rm 450),

Host: Alessandra Rodriguez y Baena*

- Navigating a Career in Academia (Gage Crump, PhD, USC)
- Balancing an academic and biotech career (Justin Ichida, PhD, USC/Biomarin)
- Meeting the Needs of the Biotech Industries (Wendie Johnston, PhD, Lab Director, Pasadena Bio)
- Building professional skills in biotech (Bryce Carey, Vertex)

(4:30 - 6:00pm: Program Director/Coordinators/Administrators meeting, location: South Building, check your invite!)

6pm: Dinner and Music at the Natural History Museum of Los Angeles County! 🔈 🦣 🐋

Networking tables:

- How To Navigate the Ups and Downs of Academic Life (hosted by Gage Crump, PhD)
- Things I Wish I Had Known Before Graduate School (hosted by Mark Frey, PhD and Arely Briseño, MPH)
- Meet Shyam Patel, Senior Director of Business Development & Alliance Management at CIRM
- Let's talk about incubators! (hosted by Wendie and Rich Johnston, Pasadena Bio Collective)
- Meet Denise Theresa de Villa (Policy Management, ISSCR)
- Stem Cell Metabolism in Disease and Cancer (hosted by Onurkan Karabulut, Berkeley City College)
- Challenges navigating the American system for international students (hosted by Robert Lu, UC Berkeley)



DAY 2 - Monday, August 12, 2024

8am- 9am Breakfast (Pick up box at the Moreton Fig)

9am- 10am Informal networking sessions, outdoor picnic tables

- Resources for Bilingual Trainees (hosted by Keau Wong and Rosa Canet-Avilés)
- **Surviving Your PhD** (hosted by Alessandra Rodriguez y Baena* and Raana Mogharrab*)
- Meet Your CIRM Program Officers (hosted by Kelly Shepard, Daisy Xin, Mira Sarwal)
- NorCal COMPASS Networking (hosted by Lily Chen)
- Strategies to Learn New Technologies (hosted by Sushma Kalmodia*)
- **Ethics in Stem Cell Biology** (hosted by Gerald Spangrude)
- Balancing Research and Classes (hosted by Nathan Martinez*)
- Bridges Networking for Success (hosted by Erin Olsan)

10:00 - Noon POSTER SESSION 1 - Town and Gown Ballroom, <u>link to MAP</u>

POSTER numbers 1-120 (remove posters promptly so presenters can install for evening POSTER SESSION 2)

SPECIAL TABLE - National Marrow Donor Program - Town and Gown Patio

Learn about NMDP efforts and maybe you could **Be the Match!** (hosted by Katherine Lopez, Member Recruitment Coordinator, Member, Donor & Product Operations (MDPO) Southern California Territory)

Noon - Box Lunch - Pick up at Town and Gown Patio

Informal lunch discussion, outdoor picnic tables, Campus center courtyard (Purple!)

Building professional skills for the workplace (hosted by Bryce Carey, Vertex and Louise Menendez USC)





1:00 - 3pm

SESSION 3 - Neuroscience focus, Trojan Grand Ballroom, Session Chair: Dennis Clegg, PhD (UCSB)

Plenary Presentations (Faculty and trainees)

- **1:00-1:25** Patient advocate: Kristin MacDonald, Second Vision, L.A. -Second Vision, a light at the end of the tunnel
- 1:25-1:45 FACULTY SPEAKER: Kenneth S. Kosik, MA, MD (UCSB) Physiology of Human Brain Organoids
 1:45-2:00 Trainee Talk: Sushma Kalmodia (CHLA) BEST1 gene editing to restores genotype and phenotype in human induced pluripotent stem cell-derived Best vitelliform macular dystrophy model [#201]
 2:00-2:15 Trainee Talk: Marcella Birtele (USC) Non canonical function of SYNGAP1 in human neural
 - development **[#180]**
- 2:15-2:30 Trainee Talk: Sydney Prange (UCI) Dendrite Injury, but not axon injury, induces neuroprotection in Drosophila models of neurodegenerative disease [#217]
- **2:30-3:00 KEYNOTE SPEAKER: Aileen Anderson, PhD (UC Irvine) -** The Path to Cell Therapies for Spinal Cord Injury

3:00 - 3:30pm Refreshment Break

3:30 - 5:45pm SESSION 4 - *Gene therapy focus*, Trojan Grand Ballroom, Session Chair: Andy McMahon, PhD (USC/Caltech)

Plenary Presentations (Faculty and trainees)

- **3:30-3:50** Patient Advocate: Kim Cade, Director, Sister's Hope Foundation Living with ALSP A Family's Perspective
- 3:50-4:10 FACULTY SPEAKER: Ritchie Ho, PhD (Cedars Sinai) Targeting repeat expansion disease using CRISPR interference gene therapy
- **4:10-4:25** Trainee Talk: Franco Felix (Stanford) GRHL2 and AP2A Transcription Factors Coordinate Surface Ectoderm Development in Pluripotent Stem Cell Derived Induced Skin Composites [#185]
- **4:25-4:40 Trainee Talk: Robert Lu (UC Berkeley)** Long-read sequencing enables high-resolution study of telomere biology in cancers engaging in Alternative Lengthening of Telomeres **[#207]**
- **4:40-4:55 Trainee Talk: Zahir Shah (City of Hope)** iPSC-derived anti-PSCA CAR macrophages possess potent antitumor activity against pancreatic cancer **[#228]**
- 4:55-5:15 FACULTY SPEAKER: Paula Cannon, PhD (USC) Reprogramming human B cells with custom antibodies
- **5:15-5:45 KEYNOTE SPEAKER: Donald B. Kohn, MD (UCLA)** Hematopoietic Stem Cell Gene Therapy

6pm - 8pm POSTER SESSION 2, Town and Gown Ballroom, <u>link to MAP</u> POSTER numbers 121-256 RECEPTION

DAY 3 - Tuesday, August 13, 2024

8am- 9am Breakfast (Pick up box at the Moreton Fig)



9am - 10am

SESSION 5: Mini Break-outs - Workshops on Cells, Tissues, Organs, DMC classrooms, link to MAP

NOTE: Mini Break-out sessions are in smaller classrooms with limited capacity, if your first choice is full, please attend your second choice!

5.1 Hematopoiesis, HOST: Rong Lu (USC) - DMC 101

- Silvia Vicenzi (UCSD) Wnt pathway receptors as novel biomarkers for the identification and characterization of multiple myeloma cancer stem-like cells [#242]
- Aiman Ayesha (SJSU) Unveiling the Role of the GPR25/GPR25LG Axis in Hematopoietic Stem Cell Trafficking and Beyond: Implications for Immune Regulation and Therapeutics [#57]
- Kenneth Nguyen (USC) Marker Genes Distinguish Two Hematopoietic Progenitor Cell Differentiation Pathways that Give Rise to Monocytes [#33]

5.2 Cancer and Cancer Stem Cells, HOST: Mark LaBarge (City of Hope) - DMC 102

- Mark LaBarge (City of Hope) Targeting cancer cells of origin
- Nahal Azimi (Sanford-Burnham Prebys) MULTIMODAL INVESTIGATION OF PROGNOSTIC "STEMNESS" ATTRIBUTES IN AML [#178]
- Vi Dang (UC Irvine) Sorting to enrich for chemotherapeutic-resistant glioma cells based on unique membrane properties [#185]
- Carlos Galván (UCLA) Defining metabolic flexibility in hair follicle stem cell induced squamous cell carcinoma [#187]

5.3 Nervous System 1, HOST: Michael Bonaguidi (USC) - DMC 150

- Michael Bonaguidi (USC) Advancing Brain Regeneration from Discovery to the Clinic
- Razieh Jaberi (UCR) Modeling Traumatic Brain Injury in NSCs [#199]
- Nicholas Hayes (CSUSM) Identifying Drivers of Neurodegeneration in Alzheimer's Disease Patients using Fibroblast-Derived Induced Neurons [#99]
- Emily Xu (UC Davis) Characterization of an Autism-Associated Gene KMT2E in Zebrafish [#55]

5.4 Epithelia- Liver/Gut/Lung, HOST: Linda Sher (USC/CHLA) - DMC 151

- Shally Saini (UCSC) Compartment-dependent Lung Fibroblast Responses to Influenza Virus Infection in Mouse and Lung Organoid Models [#222]
- Courtney Stockman (Stanford) DECIPHERING B-CATENIN'S ROLE IN DISTAL LUNG ENDOTHELIAL DYNAMICS: HOMEOSTASIS, INJURY, AND REGENERATION [#234]
- Michell Tham (PCC) Establishing a Human Organoid Model of the Gut and Enteric Nervous System to Dissect Mechanisms of Autismassociated Gut Dysfunction [#163]

5.5 Cardiovascular System, HOST: Ellen Lien (USC/CHLA) DMC 152

- Subir Kapuria (CHLA) Heterogeneous cardiomyocytes show differential regulation of development and metabolic activities (not confirmed) [#202]
- Katya Marchetti (Sanford Burnham Prebys)- IDENTIFYING MOLECULAR MECHANISMS UNDERLYING HLHS THE ROLES OF ETS FAMILY TRANSCRIPTION FACTORS [#208]
- Tahmina Samad (Stanford) Metabolic derrangement in SV [#223]

5.6 Nervous System 2, HOST: Dhruv Sareen (Cedars Sinai)- DMC 156

- Brijesh Singh (Cedars Sinai) Targeting EZH1/2, epigenetic gatekeepers of neuronal development and maturation as a strategy to enhance iPSC models of Amyotrophic Lateral Sclerosis.[#230]
- Priscilla Ngo (CSUSM) EXPLORING LIPID DROPLET LOAD AND ENHANCING SYNAPTIC DENSITY IN iPSC-DERIVED NEURONS [#129]
- Yaneth Perez (UCLA) Identifying Aberrant Cellular Phenotypes in Neural Cultures derived from Arboleda-Tham Syndrome IPSCs using Alassisted Immunofluorescence [#38]

5.7 Musculoskeletal, HOST: Melissa Spencer (UCLA) - DMC 205

- Kanwalpreet Kaur Bajwa (CSUCI) In Vitro Assessment of Chemical Toxicity on Osteogenic Differentiation Using Human Embryonic Stem Cells [#58]
- Cindy Chu (SFSU) Role of Nitric Oxide in Somite Segmentation (or new section on early development) [#11]
 Amy Zhu (UCSB) The 3D mechanical environment directs osteogenesis through histone demethylases KDM4B and KDM6B [#51]

5.8 Germ Cells and Early Development, HOST: Kenisha Puckett* (Stanford) - DMC 207



- Kenisha Puckett (Stanford) Trophoblast Stem Cells: Building the Human Placenta Blueprint [#218]
- Alka Gupta (UC Santa Cruz) Role of sperm small RNAs in paternal intergenerational epigenetic inheritance.[#191]
- Azra Cruz (UCLA) Immunohistochemical Characterization of In Vivo Mouse Germline Development from Late-Stage Primordial Germ Cells to Prepubertal Oocytes [#12]
- Benjamin Lee (SFSU) Distinct Effects of Wntless on WNT1 and WNT3A Signaling: A Difference in Binding Affinity [#27]

10:00 - 10:30am Refreshment Break, DMC courtyard

10:30- Noon SESSION 6: Mini Break-outs - *Workshops on technology,* **DMC classrooms,** <u>link to MAP</u>

NOTE: Mini Break-out sessions are in smaller classrooms with limited capacity, if your first choice is full, please attend your second choice!

6.1 Cell Therapy, HOST: Peter Cho (Cedars Sinai) - DMC 101

- Kristen Chan (SFSU) Developing Designer Adipocytes as a First-in-Class Treatment for Osteoarthritis [#70]
- Sumedha Kumari (City College of San Francisco) EX VIVO EXPANSION OF HEMATOPOIETIC STEM CELLS [#107]
- Gabriella Cox (CSUN) Evaluating the Role of Endothelial Cells in hPSC-Derived Somite and Muscle Specification [#75]
- Adrian Mora (Loma Linda University School of Medicine) Transcriptomic Insights into Neonatal Islet-1+ Cardiovascular Stem Cell-Mediated Repair in the Sheep Model of Myocardial Infarction [#127]

6.2 Brain Organoids, HOST: Giorgia Quadrato (USC) - DMC 102

- Ryan Hoffman (UCSC) Improved Cerebral Organoid Specification Using a Scalable Hydrogel Application and Physiological Glucose Culturing [#196]
- Thomas Li (UC Berkeley) Altered differentiation and astrocyte reactivity in a human brain organoid model of Tuberous Sclerosis Complex [#203]
- Jacqueline Do (CSULB) Optimizing and Investigating CHIR Dosage and APOE Genotypes in Brain CPEC Organoids Development: Towards Enhanced Models for Alzheimer's Disease Research [#79]
- Negian Shalmani (CSUN) Modeling Dup15q syndrome using human induced pluripotent stem cell-derived brain organoids [#153]

6.3 Translational Immunotherapy, HOST: Saul Priceman (City of Hope) - DMC 150

- Saul Priceman (City of Hope) Engineering Immunity for Solid Tumors
- Cynthia Benitez (CSULB) Minimally invasive, serial cerebrospinal fluid collection to monitor neuroinflammation after mild traumatic brain injury [#61]
- Zeina Elrachid (CSULB) Intracellular C1q as a Potential Mediator of Microglial Behavior [#82]
- Tommy Luong (SFSU) Mediating the Effects of Reactive Enteric Glia-Derived Cytokines via CRISPR-Cas9 [#113]
- Nathan Martinez (CSUCI) Development of Nanobody-Based Therapy for the Specific Targeting of Osteosarcoma [#122]
- Sydney Gillette (UCSD) Deciphering the Contribution of Microglia to Neurodegeneration in Friedreich's Ataxia [#91]

6.4 Genomics, HOST: Patricia Nano (UCLA) - DMC 151

- Patricia Nano (UCLA) A Meta-Atlas of the Developing Human Cortex Identifies Modules Driving Cell Subtype Specification [#212]
- Robert Piscopio (UCSB) Photolabile Oligonucleotides Combined with Topologically Imposed Light Gradients Enable Spatially Resolved Single-Cell Transcriptomics and Epigenomics [#216]
- Ted Tseng (USC) In toto recording of cranial neural crest lineage relationships in the zebrafish head [#241]
- Michael Ramos (Cedar Sinai) CONVERGENT TRANSCRIPTIONAL DYNAMICS OF MICROGLIA IN THE MOUSE SPINAL CORD DURING AGING AND ALS [#220]
- Marc Gumangan (USC) Transcriptome Analysis of Tail Regeneration in Crested Geckos (Correlophus Ciliatus) [#19]

6.5 Gene Editing, Gene Therapy, HOST: Melissa Spencer (UCLA) - DMC 152

- Taylorlyn Stephan (UCSC) Genetic Editing of Archaic Alleles into Human Stem Cell Models: NOTO and Cortical Development [#233]
- Nicole Garcia (UC Davis) Development and Deployment of an ELISA Assay Detecting Sensitization to SaCas9 and SpCas9 [#16]
- Benjamin-Rafael Mingoa (SFSU) Characterization of Bacteriophages and Respective Hosts in Wastewater [#30]
- Raina Min Jae Jung (CSUCI) Variable Penetrant MYH7 G256E Mutation Shows Gene-Dose-Dependent HCM Disease Phenotype on a Transcriptomic, Proteomic, and Functional Level [#105]

6.6 Chromatin, HOST: Matthew Lowe DMC 154

- Matthew Lowe (USC) Understanding How Distinct Heterochromatin States Control Pioneer Factor Binding [#204]
- Yu-Ling Linda Chang (Sanford Burnham Prebys) Transcription Factor-Mediated Control of Chromatin Accessibility During Cell Fate Reprogramming [#183]
- Ftsum Tesfamichael (Berkeley City College) The role of neural crest-derived cardiomyocyte enhancers in zebrafish cardiac regeneration [#162]
- Sophia Peavy (UCLA) Role of PRC2 and XIST in the Erosion of the Inactive X Chromosome in Human Pluripotent Stem Cells [#36]
- Sabrina Rabaya (Pasadena City College) PRC2 exhibits tumor suppressive activity at early stages of CRC [#142]

6.7 Tumor Organoids & Other In Vitro Models, HOST: Shannon Mummenthaler (EIT, USC) - DMC 155

- Shannon Mummenthaler (EIT, USC) Tumor Organoids to Study Cancer
- Gabriele Guarnaccia (Sanford Burnham Prebys) Serum amyloid protein A1 (SAA1) impairs myogenesis and myotube size in pancreatic cancer cachexia [#189]
- Kassidy Curtis (SDSU) Investigating the Tumor Cell Intrinsic Roles of Fibulin 3 in Pancreatic Tumorigenesis [#77]
- Kay Emanuel (Berkeley City College) The Impact of PRDM6 Overexpression on Unipolar Brush Cells in the Developing Hindbrain [#83]
- Olivia Doyle (Berkeley City College) Identifying Divergent Cellular Origin and Therapeutic Targets in Primitive Neuronal Component Glioblastoma [#80]

6.8 CAR Cells, HOST: Sarah Richman (CHLA, USC) - DMC 156

- Diana Gumber (City of Hope) Improving antitumor T cell therapy with membrane-tethered engineered cytokine agonists (MECAs) [#190]
- Zheng Guo (USC) Enhancing Granulocyte-Macrophage Progenitors (GMPs) Expansion for Immunotherapy: Optimization and Mechanistic Investigation [#192]
- Alyssa Chang (SFSU) Development of a Novel Scheme for Generating Nanobodies for Human iPSC-Derived CAR Immune Cell Therapy
 [#183]
- Evelyn Sanchez (UCSB) Hyperactive Rac2E62K Mutation Optimizes CAR-M Cancer Immunotherapies for Triple Negative Breast Cancer By Enhancing Whole Cell Engulfment [#42]

6.9 Transgene, Virus, Drug Delivery, HOST: Griselda Metta Yvone* (Cedars Sinai) - DMC 205

- Griselda Metta Yvone (Cedars Sinai) vMADR: A method for defined copy number viral transgenesis [#210]
- Shreejha Chandrasekar (CSUCI) Enhancing Lentiviral Gene Therapy Efficiency by Reducing IFITM2/3 Expression with Chemical Transduction Enhancers [#71]
- Saipriya Chandrasekaran (CSUCI) AntiSense Oligonucleotide based treatment for mutations using iNeurons [#72]
- Tracy Nguyen (CSUF) Amelioration of breast cancer chemobrain using human neural stem cell-derived extracellular vesicles [#131]
- Samuel Emerson (Cal Poly Humboldt) Optimizing Production of Lipid Raft Nanovesicles from Mesenchymal Stem Cells as a size-tunable EV-mimetic drug delivery platform [#84]'

6.10 Molecular Pathways and Disease Modeling, HOST: Maya Bulos* (Scripps) - DMC 207

- Maya Bulos (Scripps) A druggable ubiquitin-like conjugation system controls Hippo pathway activity [#181]
- Edgar Rolon (CSUSB) Investigating the Impact of Electronic Cigarette Chemicals on Human Airway Basal Stem Cells in the Trachea and Bronchi [#147]
- Jemima Moses (CSUCI) Investigating the Cardiovascular Toxicity of Tyrosine Kinase Inhibitor Lenvatinib on Human-Induced Pluripotent Stem Cell-Derived Endothelial Cells and Cardiomyocytes [#128]
- Alyssa Paynton (Cal Poly Humboldt) Human Cell Modeling of CDKL5-Deficiency Disorder with Patient Derived Organoids and HD-MEA [#184]
- Nethika Ariyasinghe (Cedars Sinai) Modeling Spontaneous Coronary Artery Dissection with iPSC-derived Vascular Systems: Focus on Sex and Female Sex Hormones [#176]

Box Lunch, DMC courtyard (lawn games available!)

Informal lunch discussion:

Creating community around our scholarship (hosted by Disha Chauhan, USC and John Matsui, UC Berkeley)



1:00 - 3pm

SESSION 7 - Innovation in the field, Trojan Grand Ballroom, Session Chair: Jennifer Manilay, PhD (UC Merced)

- 1:00-1:20 INVITED SPEAKER: Wei Yan, PhD, Science Journal Editor (eLife), Evolution of Publishing
- 1:20-1:45 CIRM: Jonathan Thomas, PhD, JD, President and CEO of CIRM
- **1:45-2:10** INVITED SPEAKER: Bryce Carey (Vertex) Stem Cell-Derived, Fully Differentiated Islet Cells for Type 1 Diabetes
- 2:10-2:50 KEYNOTE SPEAKER: Robert 'Bob' Klein, II (Founding Chairman Emeritus for CIRM; Chairman and Author of Proposition 71 – Funding CIRM; Chairman and Author of Proposition 14; Chairman Americans for Cures; Member of the Sanford Stem Cell Institute Executive Council), A Time for Medical Breakthroughs or Repression: A Historic Pivot Point for Stem Cell and Genetic Research and Therapies
- 2:50 3:00pm Thank you, Survey, and Goodbye!

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Bill Lowry (UCLA): Director, CIRM EDUC4 program

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John Matsui (UC Berkeley): Director, CIRM COMPASS, Director/Co-Founder of the Biology Scholars Program

Marcella Birtele (USC): CIRM EDUC4 recipient

Chris Young (USC): CIRM COMPASS recipient

Ricky Cortez (USC): Administrator, CIRM COMPASS program and other educational programs at USC Stem Cell

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