



Stem Cells @ UCR

Stem Cell Center Newsletter – Sept 2023, No. 10

LA Area Regenerative Medicine Consortium Summit

Five faculty from UCR attended a 3-day Stem Cell Summit at the Lake Arrowhead Convention Center in May. The Summit was organized by Dr. Clive Svendsen from Cedars-Sinai and was attended by 8 campuses in Southern California. CIRM leaders and staff were also in attendance. Attendees from UCR included Prue Talbot, Huinan Liu, Martin Garcia-Castro, Iman Noshadi, and Sika Zhang.

The group discussed collaborating on stem cell and gene therapy manufacturing programs, educational courses, core services to support science, scientific innovations, and new regenerative medicine clinical trials. Representatives from these partnering institutions plan to convene annually to discuss collaborative projects and accelerate regenerative medicine projects in California.

The 8 institutions include: UCSB, UCR, UCI, UCLA, USC, Cedars-Sinai, City of Hope, and Cal Tech. For more info [click here!](#)

What's Inside

****New** Stem Cell Consortium in SoCal!**

Summer Symposium for CIRM Trainees

Recent Publications, Grants and Awards

****New** Best Publication Award**

Stem Cell Training Courses

UCR's CIRM Training Programs Held Their 2nd Annual Summer Symposium

In late July, all STRIDE (high school level), RAMP (undergraduate level), and TRANSCEND (predoctoral and postdoctoral level) CIRM Trainees met for a day of presentations, poster sessions, and networking.

The Keynote Speaker was Jacqueline Hantgan - CIRM's Senior Advisor for Community Outreach and Advocacy – and she spoke on “Patient Advocacy & California’s Stem Cell Agency: Impact on Reducing Human Suffering.”



Congratulations to the Presentations Winners (imaged bottom left):

Three STRIDE Trainees won for 1st, 2nd, and 3rd Place Poster Presentations:

Austin Suvunnaph (Iman Noshadi's lab)
Vanessa Xu (Xiaoping Hu's lab)
Neena Gowda (Martin Garcia-Castro's lab)

Two TRANSCEND Trainees tied for Top Poster Presentation:

Youyi Tai (Jin Nam's Lab)
Victoria Wagner (Iryna Ethell's Lab)



Recent Publications!

Learn about Stem Cell Research @ UCR

Witmer A, Theagarajan R, Bhanu B. **Triplet-Net Classification of Contiguous Stem Cell Microscopy Images.** IEEE/ACM Trans Comput Biol Bioinform. 2023 May-Jun;20(3):2314-2327. <https://pubmed.ncbi.nlm.nih.gov/37027755/>

Canale V, Spalinger MR, Alvarez R, Sayoc-Becerra A, Sanati G, Manz S, Chatterjee P, Santos AN, Lei H, Jahng S, Chu T, Shawki A, Hanson E, Eckmann L, Ouellette AJ, McCole DF. **PTPN2 Is a Critical Regulator of Ileal Paneth Cell Viability and Function in Mice.** Cell Mol Gastroenterol Hepatol. 2023;16(1):39-62. <https://pubmed.ncbi.nlm.nih.gov/37030630/>

Nikom D, Zheng S. **Alternative splicing in neurodegenerative disease and the promise of RNA therapies.** Nat Rev Neurosci. 2023 Aug;24(8):457-473.
<https://pubmed.ncbi.nlm.nih.gov/37336982/>

Song A, Ona J, Osuna C, Phandthong R, Talbot P. **Establishing a Disease-in-a-Dish Model to Study SARS-CoV-2 Infection During Prenatal Development.** Curr Protoc. 2023 Apr;3(4):e759. <https://pubmed.ncbi.nlm.nih.gov/37098759/>

Talvio K, Wagner VA, Minkeviciene R, Kirkwood JS, Kulinich AO, Umemori J, Bhatia A, Hur M, Käkelä R, Ethell IM, Castrén ML. **An iPSC-derived astrocyte model of fragile X syndrome exhibits dysregulated cholesterol homeostasis.** Commun Biol. 2023 Jul 29;6(1):789.
<https://pubmed.ncbi.nlm.nih.gov/37516746/>

Keshav Kooragayala, Johanna Lou, Vaishali Krishnadoss, Brian Zilberman, Nicholas Deleo, Olga Ostrovsky, Ping Zhang, Iman Noshadi, Spencer Brown, Jeffrey P. Carpenter. **Impact of adipose-derived stem cells on aortic tensile strength in a model of abdominal aortic aneurysm.** American Heart Journal Plus: Cardiology Research and Practice, Volume 27, 2023, 100279. <https://doi.org/10.1016/j.ahjo.2023.100279>.

Yang YY, Soh R, Vera-Colón M, Huang M, Zur Nieden NI, Wang Y. **Targeted Proteomic Profiling Revealed Roles of Small GTPases during Osteogenic Differentiation.** Anal Chem. 2023 May 2;95(17):6879-6887. <https://pubmed.ncbi.nlm.nih.gov/37083350/>

Yin J, Qi TF, Yang YY, Vera-Colón M, Zur Nieden NI, Wang Y. **Temporal Profiling of Epitranscriptomic Modulators during Osteogenic Differentiation of Human Embryonic Stem Cells.** J Proteome Res. 2023 Jul 7;22(7):2179-2185.
<https://pubmed.ncbi.nlm.nih.gov/37348120/>

SAVE THE DATE – Friday, November 3rd, 2023!!

Inland Empire Stem Cell Consortium (IESCC) Annual Symposium
Hosted by California University of Science and Medicine

Recently Received Grants and Awards

- **Newly Appointed TRANSCEND CIRM-Trainees:**
 - **Dr. Vinicius Canale** – Postdoc in Dr. Declan McCole's lab
 - **Dr. Razieh Jaberí** – Postdoc in Dr. Viji Santhakumar's lab
 - **Reuben Franklin** – Postdoc in Dr. Sihem Cheloufi lab
 - **Yiqing Chen** – Postdoc in Dr. Huinan Liu's Lab
 - **Prince David Okoro** – Predoctoral student in Dr. Iman Noshadi's lab
 - **Jordan Rolsma** – Predoctoral student in Josh Morgan's lab
 - **Lu Jin** – Predoctoral student in Dr. Jin Nam's lab
 - **Alyssa Treptow** – Predoctoral student in Dr. Martin Riccomagno's lab
- **Ann Song** (Dr. Prue Talbot's lab) received the **Earle C. Anthony Graduate Student Travel Award** in Spring 2023 to attend ISSCR and the **Graduate Research Mentorship Award (GRMP)**.
- **Dr. Vinicius Canale** (Dr. Declan McCole's lab) attended the American Physiology Society Summit and was awarded with the **2023 Raj and Prem Goyal Translational Research Award of the Gastrointestinal & Liver Section**, and the **John Forte Distinguished Abstract Award**.

NEW: Annual Award for Best Stem Cell Publication!

- **Apply now!** The winner will receive a prize worth \$1000.
- Applicants must be UCR Graduate Students or Postdocs
- The article must feature stem cells
- Submitted articles must be published or in press between January 2022 – December 2023
- Submit your publication as a PDF to Rachel Behar (rbeha001@ucr.edu) and include any supplementary documents.
- The subject of the email should be: “Submission for the Annual Award for Best Stem Cell Publication”

UCR Training Courses in Stem Cell Culture – Summer 2023

Pluripotent Stem Cell Training Course: In August, 11 CIRM-Bridges undergraduates and Masters students from California State University, San Bernardino completed a pluripotent cell culture course in the UCR Stem Cell Core.

The course had large and small group training sessions with various instrumentation, a Lunch N' Learn with StemCell Technologies, and hands-on pluripotent stem cell culture training. The 11 students are currently working in stem cell labs in Southern California with two carrying out their internships at UCR. We wish them great success!



Adult Stem Cell and Differentiation Training Course: In July, four CIRM-RAMP undergraduate trainees completed a hands-on training class in the UCR Stem Cell Core. The class went over the basics of sterile technique, instrument training, human mesenchymal cell culture, and differentiation. This class, which was offered this year for the first time, was designed specifically for RAMP undergraduate trainees. The four trainees are now doing their internships in UCR stem cell labs.

