



Stem Cells @ UCR

Stem Cell Center Newsletter – Sept 2022, No. 8

New CIRM Training Grant!

CIRM's COMPASS Grant for a Stem Cell Training Program for Undergraduates was just awarded to UCR with Dr. Huinan Liu at the lead as PI.

The Program is titled "**RAMP**" which stands for **R**esearch **T**raining and **M**entorship **P**rogram to Inspire **D**iverse Undergraduates **T**oward **R**egenerative Medicine Careers.

This is fantastic news for UCR which now offers training programs in stem cell biology at all levels:

- **STRIDE**: High School Level
- **RAMP**: Undergraduate Level
- **TRANSCEND**: Graduate and Postdoctoral Level

What's Inside

New CIRM Grant!

**STRIDE and
TRANSCEND
Symposium**

Recent Publications

**Pluripotent Stem Cell
Training Course**

**Congrats, Recent
Graduates!**

STRIDE and TRANSCEND Hold Their First Summer Symposium

In late July, all STRIDE and TRANSCEND Trainees met for a day of presentations, poster sessions, and networking.

The Keynote Speaker was Frances Saldaña, a patient advocate for Huntington's Disease and President Emeritus of HD-CARE (imaged below, left). She presented a wonderful and inspiring presentation on "Advocacy and Promoting Excellent in Patient Care."



A Special Congratulations to the Presentations Winners:

Four STRIDE Trainees won for Most Popular Poster Presentations:

Daniel Alvarado (Iman Noshadi Lab)

Ashley Camacho (Huinan Liu Lab)

Kevin Ayala (Huinan Liu Lab)

Isabella Lepe (Nicole zur Nieden Lab)

Youyi Tai, **TRANSCEND Trainee and graduate student in Dr. Jin Nam's lab,** won Top Platform Presentation.

Youyi is in the photo below with Dr. Prue Talbot after winning his award.



Recent Publications!

Learn about Stem Cell Research @ UCR

Franklin R, Guo Y, He S, Chen M, Ji F, Zhou X, Frankhouser D, Do BT, Chiem C, Jang M, Blanco MA, Heiden MG, Rockne RC, Ninova M, Sykes DB, Hochedlinger K, Lu R, Sadreyev RI, Murn J, Volk A, and Cheloufi S. **Regulation of chromatin accessibility by the histone chaperone CAF-1 sustains lineage fidelity.** Nature Communications. 13, 2350 (2022). <https://doi.org/10.1038/s41467-022-29730-6>

Martinez IKC, Sparks NRL, Madrid JV, Talbot P, zur Nieden NI. **Exposure to Cigarette Smoke Impedes Human Osteoblast Differentiation Independently of Nicotine.** Nicotine & Tobacco Research, 2022; ntac144, <https://doi.org/10.1093/ntr/ntac144>

Karmach O, Madrid JV, Dasgupta S, Volz DC, zur Nieden NI. **Embryonic Exposure to Cigarette Smoke Extract Impedes Skeletal Development and Evokes Craniofacial Defects in Zebrafish.** International Journal of Molecular Sciences. 2022; 23(17):9904. <https://doi.org/10.3390/ijms23179904>

Chang A, Tam J, Agrawal DK, Liu HH, Varadarajan O, Pai R, and Thankam FG. **Synthetic Fibroblasts: Terra Incognita in Cardiac Regeneration.** Tissue Engineering Part B: Ahead of Print <http://doi.org/10.1089/ten.teb.2022.0050>

Xu C, Uahengo G, Rudnicki C, Hung C, Huang A, Xu Q, Chen Y, Halaney DL, Garay JE, Mangolini L, Aguilar G, and Liu HH. **Nanocrystalline Yttria-Stabilized Zirconia Ceramics for Cranial Window Applications.** ACS Applied Bio Materials 2022 5 (6), 2664-2675. <https://doi.org/10.1021/acsabm.2c00119>

Tie D, Guan R, Liu HH, Chen M, Ulasevich SA, Skorb EV, Holt-Torres P, Lu X, AND Hort N. **In vivo degradability and biocompatibility of a rheo-formed Mg–Zn–Sr alloy for ureteral implantation.** Journal of Magnesium and Alloys, 2022 10 (6) 1631-1639. <https://doi.org/10.1016/j.jma.2020.11.005>.

Xu C, Chen Y, Lin J, Liu HH. **Direct and Indirect Culture Methods for Studying Biodegradable Implant Materials In Vitro.** Journal of Visualized Experiments : Jove. 2022 Apr(182). <https://pubmed.ncbi.nlm.nih.gov/35499358/>

SAVE THE DATE – Friday, November 4th, 2022!!

Inland Empire Stem Cell Consortium (IESCC) Annual Symposium
Hosted by Cal State University, San Bernardino

UCR Training Course in Pluripotent Stem Cell Culture – August 2022

In late August, nine CIRM-Bridges undergraduates and masters students from California State University, San Bernardino completed a pluripotent cell culture course in the Stem Cell Core Facility.

The course contained group and one-on-one training with various instrumentation, a demonstration and Lunch N' Learn with StemCell Technologies, and hands-on pluripotent stem cell culture training.

The nine students are currently working in stem cell labs in Southern California with four carrying out their internships here at UCR. We wish them great success!



Congratulations to these recent graduates!



Dr. Esther Omaiye (Talbot Lab)
Dr. Shane Sakamaki-Ching (Talbot Lab)
Dr. George Phandthong (Talbot Lab)
Dr. Morgan Dundon (Rao Lab)
Dr. Dongwei Sun (Liu Lab)