



Stem Cells @ UCR

Stem Cell Center Newsletter - Feb 2021, No. 5

Proposition 14 passed! The California Stem Cell Research, Treatments and Cures Initiative of 2020

By passing Proposition 14, California voters preserved the California Institute for Regenerative Medicine (CIRM) and authorized investment of \$5.5 billion in state bonds to continue funding stem cell research, clinical trials, and the development of stem cell treatments and cures, building on work done during the past 15 years.

Proposition 14 funding will be invested in basic stem cell research and the discovery of stem cell treatments and cures for chronic illnesses, such as cancer, heart disease, diabetes, kidney disease, ALS, stroke, respiratory diseases, immune disorders, neurodegenerative diseases, and HIV/AIDS.

(more on Prop 14 is found on the next page)

What's Inside

Prop. 14 Passed!

What does the passage of Prop. 14 mean for UCR?

Recent Pubs and Grants

The 2020 Inland Empire Stem Cell Consortium (IESCC) Symposium

Welcome CUSM

hESC Cell Training & Other Stem Cell Courses

What Does The Passage Of Prop 14 Mean For UCR Labs And Researchers?

CIRM will award \$182 million in the first 6 months of 2021 for both Clinical Studies and Discovery Stage Programs, which include basic research. There is still time to submit to the Discovery Program (Deadline is March 18th at 2PM). The deadline for CLIN applications is 2PM on the last business day of the month.



Funding Opportunities are Described in Full on the CIRM website: https://www.cirm.ca.gov/researchers/funding-opportunities

Additional CIRM Programs will be announced throughout the year. These will include: Infrastructure, Discovery, Translational, Clinical, and Education. Use the above map on the CIRM website to keep up to date on funding opportunities.

If you plan to submit a proposal to CIRM, we strongly recommend discussing your proposal concept with a CIRM Staff member. They are friendly and very helpful.

CIRM 1999 Harrison Street, Suite 1650 Oakland, CA 94612 Phone: (415) 361-2903

Email: info@cirm.ca.gov

Recent Publications and Grants! Learn about Stem Cell Research @ UCR

PUBLICATIONS

Prasad MS, Charney RM, Patel LJ, Garcia-Castro MI. (2020). **Distinct molecular profile and restricted stem cell potential defines the prospective human cranial neural crest from embryonic stem cell state.** Stem Cell Research. doi.org/10.1016/j.scr.2020.102086.

Pandya-Jones A, Markaki Y, Serizay J, Chitiashvili T, Mancia Leon WR, Damianov A, Chronis C, Papp B, Chen CK, McKee R, Wang XJ, Chau A, Sabri S, Leonhardt H, Zheng S, Guttman M, Black DL, Plath K. (2020). **A protein assembly mediates Xist localization and gene silencing**. <u>Nature</u>. https://doi.org/10.1038/s41586-020-2703-0

Lin L, Zhang M, Stoilov P, Chen L, Zheng S. **Developmental attenuation of neuronal apoptosis by neural specific splicing of Bak1 microexon.** (2020). Neuron. https://doi.org/10.1016/j.neuron.2020.06.036

Davis, Barbara, Vivian To and Prue Talbot (2019) **Comparison of cytotoxicity of IQOS aerosols to smoke from Marlboro Red and 3R4F reference cigarettes.**<u>Toxicology In Vitro.</u> https://doi.org/10.1016/j.tiv.2019.104652

GRANTS, AWARDS, AND FELLOWSHIPS

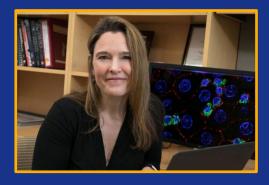
- **Dr. Rebekah Charney**, a postdoctoral researcher working in Dr. Martin Garcia-Castro's lab was awarded a 5-year **K99 "Pathway to Independence" grant** from the National Institute of Dental and Craniofacial Research of the NIH.
- **Dr. Maneeshi Prasad**, an Assistant Project Scientist in Dr. Martin Garcia-Castro's lab, has received a **School of Medicine Dean's Postdoc to Faculty Fellowship**.
- **Dr. Prue Talbot** was recognized by Clarivate Analytics as **one of the most highly cited researchers in 2020**. In its annual list, Clarivate Analytics names the most highly cited researchers those whose work was most often referenced by other scientific research papers across the sciences and social sciences. The researchers rank in the top 1% in their fields in producing widely cited studies. https://recognition.webofscience.com/awards/highly-cited/2019/

Have an announcement for the next newsletter? Email Dr. Rachel Behar (rbeha001@ucr.edu), the Academic Coordinator of the UCR Stem Cell Core.

9th Annual Inland Empire Stem Cell Consortium Symposium

On October 29th, 2020, the 9th annual symposium was hosted virtually by Loma Linda University. Researchers and students from Western University, UCR, Loma Linda University and California State University at San Bernardino, and the California University of Science and Medicine came together to share a day of learning, networking, and discussing their latest stem cell research through podium and poster presentations via Zoom.

Keynote speaker (photo below):
Dr. Leanne Jones, PhD from UCLA, who
studies age-related changes to stem cells and
the stem cell niche from UCLA, delivered a
very interesting presentation titled "Gut Instinct:
The Intestine as a Model to Study Age-related
Changes to Stem Cells and the Niche."



Congratulations to the poster winners!

1st Place: Evgeny Chirshev (Unternaehrer Lab - LLU) Exploring Appearance And Effect Of Let-7 On Germ Layer Formation During Embryonic Development.

2nd Place – Rattatol Phandthong (Talbot Lab – UCR) Zinc in Electronic Cigarette (EC) Aerosols Induces Exosome Release, Oxidative Stress and an Inflammatory Response in Human Bronchial Epithelial Cells

3rd Place – Kiana Panbechi (Western University) The Effect of Autocrine C3A-C3AR Interaction on Neural Stem Cells

Welcome California University of Science and Medicine to the IESCC!

We would like to welcome the California University of Science and Medicine (CUSM) to our Inland Empire Stem Cell Consortium.

A new university located in the city of Colton, CUSM received its first cohorts of students for their Medical School and Masters in Biomedical Sciences programs in 2018.



Join us for the Winter Stem Cell Seminar Series on Monday's from 12pm-1pm via Zoom

Jan 11: David Baylink, MD (LLU)

Feb 8: Sanford H. Barsky, MD (CUSM)

Feb 22: Changlu Xu and Jiajia Lin (UCR) Dr. Huinan Liu's Lab

Mar 1: James McMullen (LLU)
Dr. Ubaldo Soto's Lab

Mar 8: Carys Layton (UCR)
Dr. Hideaki Tsutsui's Lab

Zoom Meeting ID: 943 7000 4736

Passcode: 504849

UCR Training Course in Pluripotent Stem Cell Culture – January 2021

On February 5th, nine CIRM-Bridges students from California State University, San Bernardino completed a 2-week pluripotent cell culture course in the Stem Cell Core Facility.

The course contained remote lectures, demonstrations, journal clubs, a webinar with Stem Cell Technologies and hands-on training sessions.

The nine students are all currently interning in stem cell research labs at UCR and Loma Linda University. We wish them great success in their internships!



Interested in learning more about stem cells?

CMDB 207 - Stem Cell Biology and Medicine will be offered in the Spring Quarter!



This course is open to graduate students from all Inland Empire Stem Cell Consortium campuses and advanced undergraduates.