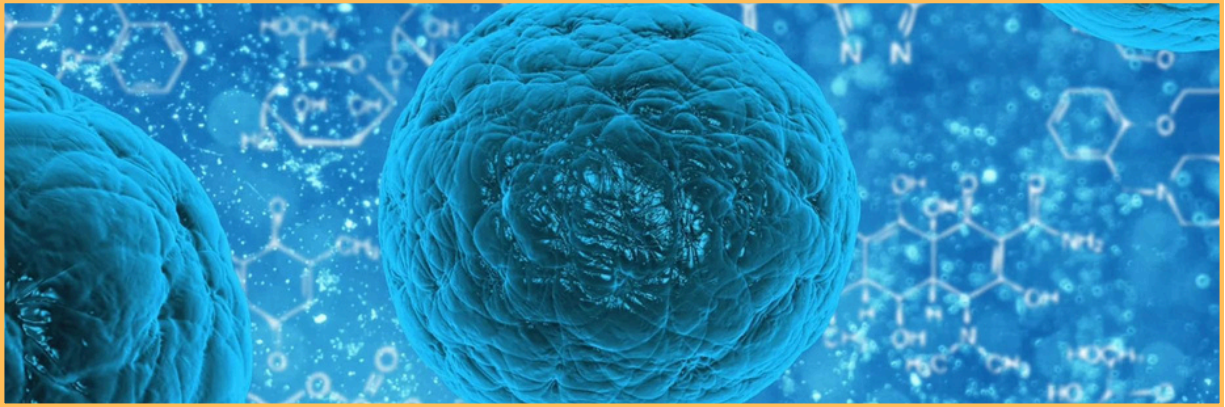


Stem Cells @ UCR

STEM CELL CENTER NEWSLETTER



Important Dates and Info

- **Postdoctoral Recruitment for UCR's TRANSCEND - CIRM Scholars Training Program.**
 - Appointments are for 2-years
 - Funds: 11-12 months of salary and ~\$10,900 of supplies and travel allowance per year.
 - Must be currently in a UCR stem cell lab or plans to join
 - Application deadline: November 4th by 5:00PM.
 - For more info, contact rbeha001@ucr.edu

- **IESCC Annual Symposium - November 22nd, 2024**
 - Hosted by UCR
 - Registration is now open! [Click here!](#)

What's Inside:

Spotlight on Researchers

CIRM-SPARK Conference

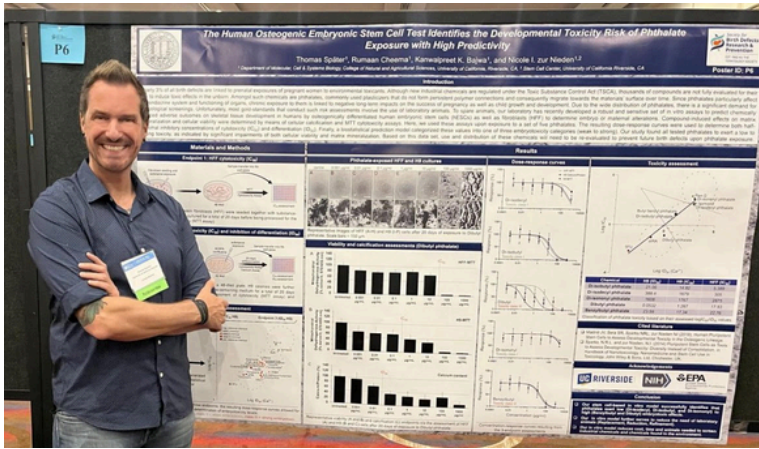
Stem Cell Meetings

Recent Publications

Awards and Grants

Spotlight on Current and Past Stem Cell Researchers

Dr. Thomas Spaeter (below), a postdoc in Dr. Nicole zur Nieden's lab, was **awarded a Bradley C Bradford Award** funded by the Middle Atlantic Reproduction and Teratology Association. The awarded study is titled: *The human osteogenic embryonic stem cell test identifies the developmental toxicity risk of phthalate exposure with high predictivity.* He presented his work at the Society for Birth Defect Prevention & Research Annual Meeting 2024.



**Dr. Atena Zahedi -
UCR Alumni**

Previously a member of Prue Talbot's lab, Dr. Zahedi is now **a new Assistant Professor** in the Department of Clinical Pharmacy Practice at UC Irvine.



**Dr. Rebekah Charney -
UCR Alumni**

Previously a member of Martin Gacia-Castro's lab, Dr. Charney is now **a new Assistant Professor** in the Department of Biochemistry at the University of Buffalo.

UCR Hosted the Statewide CIRM-SPARK Conference



Summer Program to Accelerate Regenerative Medicine Knowledge (SPARK) is a CIRM training program for high school level students. On August 5th and 6th, all SPARK programs across California met at UCR for the Annual Symposium at the Riverside Convention Center.

More than 100 students traveled to UCR to engage in networking, presenting their summer projects, and acquiring not only scientific knowledge, but information and advice for their futures.

In a panel (image below, left), several UCR CIRM trainees discussed their academic and professional journeys. The panel included, Isabella Bagdasarian (TRANSCEND-Scholars Program), Esmeralda Ruiz-Garcia (previously in the Bridges program), and Sabeen Rasheed (RAMP-Compass Program).

CIRM's top administrators were also in attendance for the conference. Jonathon Thomas, CIRM's new President and CEO, and his team were able to tour the campus and the Stem Cell Core facility (image below, right).



Faculty and CIRM Trainees Attend Stem Cell Meetings

LA-Area Regenerative Medicine Consortium's Annual Summit at Lake Arrowhead



Faculty and TRANSCEND-CIRM Trainees from UCR attended a 3-day Stem Cell Summit at the Lake Arrowhead Convention Center in May.

The group discussed collaborating on stem cell 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 nine institutions of the consortium include: UCSB, UCR, UCI, UCLA, USC, Cedars-Sinai, City of Hope, Children's Hospital, and Cal Tech.

CIRM Trainee Networking Conference: Shaping the Future of Regenerative Medicine



In August, TRANSCEND-CIRM Scholars Trainees and RAMP-CIRM Compass Trainees attended the CIRM Trainee Network Conference which was hosted by USC. For three days the trainees engaged in networking and career development in the vibrant field of regenerative medicine. The attendees also had the opportunity to connect with leading scientists, attend insightful workshops, and showcase their research accomplishments.

Recent Publications

P. Basu, A. Banerjee, P. D. Okoro, A. Masoumi, B. Kanjilal, M. Akbari, M. Martins-Green, D. G. Armstrong, I. Noshadi, Integration of Functional Polymers and **Biosensors to Enhance Wound Healing**. Adv. Healthcare Mater. 2024, 2401461. <https://doi.org/10.1002/adhm.202401461>

Do, Brian T...Cheloufi, Sihem...Vander Heiden G, Matthew. **Nucleotide depletion promotes cell fate transitions by inducing DNA replication stress**. Developmental Cell, Volume 59, Issue 16, 2203 - 2221.e15. [https://www.cell.com/developmental-cell/abstract/S1534-5807\(24\)00327-7](https://www.cell.com/developmental-cell/abstract/S1534-5807(24)00327-7)

Larsen, P. B., He, S., Meyer, T. J., Szurman-Zubrzycka, M., Alfs, C., Kwasniewska, J...Murn, J. (2024) **The stem cell niche transcription factor ETHYLENE RESPONSE FACTOR 115 participates in aluminum-induced terminal differentiation in Arabidopsis roots**. Plant, Cell & Environment, 1–17. <https://doi.org/10.1111/pce.15032>

Rolsma, J.L., Darch, W., Higgins, N.C., Morgan, J.T. **The tardigrade-derived mitochondrial abundant heat soluble protein improves adipose-derived stem cell survival against representative stressors**. Sci Rep 14, 11834 (2024). <https://doi.org/10.1038/s41598-024-62693-w>

Youyi Tai, Robyn Goodrich, Maricela Maldonado, Jessica Ortiz, Jeniree Martinez, Gerardo Ico, Angel Ko, Hung Ping Shih, Jin Nam. **Nanofiber-microwell cell culture system for spatially patterned differentiation of pluripotent stem cells in 3D**. Materials Today Bio, Volume 26, 2024, 101109, ISSN 2590-0064. <https://doi.org/10.1016/j.mtbio.2024.101109>.

Witmer, A., Bhanu, B. **Iterative pseudo balancing for stem cell microscopy image classification**. Sci Rep 14, 4489 (2024). <https://doi.org/10.1038/s41598-024-54993-y>

Awards and Grants

- **Ann Song**, a graduate student In Prue Talbot's lab, received several awards this year:
 - Yvonne Danielson Endowed Graduate Award
 - US-Korea Conference 2024 Paper Award for her poster session presentation
 - Dexiang Dong and Yiyun Cao Graduate Scholarship in Human Virology from UCR CNAS
 - **Brian Zhang**, a graduate student in Sihem Cheloufi's lab, received the Dexiang Dong and Yiyun Cao Graduate Scholarship in Human Virology from UCR CNAS
 - **Jonah Frazier**, an undergrad biochem major in Sihem Cheloufi's lab, received the CRCC Diversity and Disparities in Cancer Research Traineeship Supplement
 - **Dr. Declan McCole and colleagues** were awarded a new 4-year NIH R01 grant (\$1.7 Million). Titled: "Targeted Identification of IBD Risk Gene Variant Impact on Immune-Epithelial Crosstalk and Intestinal Barrier Function". The project will involve developing iPSCs from genotyped Inflammatory Bowel Disease (IBD) patients in order to generate intestinal organoids. These organoids will be used to study the influence of an IBD risk gene variant on multiple aspects of stem cell biology and intestinal barrier function.
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