

Postdoctoral Researcher in Stem Cell and Developmental Biology of the Uterus and Placenta

The lab of HHMI Freeman Hrabowski Scholar Dr. Elisa Zhang is in search of a highly motivated postdoctoral scholar to study uterine, placental, and pregnancy biology. Located on the Davis campus in the Departments of Physiology & Membrane Biology (PMB) and Obstetrics & Gynecology (OB/GYN) at the University of California, Davis (zhang.faculty.ucdavis.edu), our group is broadly interested in mammalian stem cell biology, reproduction, and development. We use cutting-edge single-cell, spatial, in vitro, and surgical approaches in multiple model species and in human organoids to investigate the uterine endometrium and maternal-fetal interface, with the goal of improving female and fetal health.

What we are seeking

The successful candidate will have a strong track record of rigorous research experience in the biosciences with high potential for further scientific and professional growth. “Wet lab” candidates should have a strong background in developmental, molecular, cellular, and/or reproductive biology, or related disciplines. “Dry lab” candidates should have a strong foundation in bioinformatics and prior experience analyzing single-cell RNA-seq and/or other high-throughput datasets (e.g. RNA-seq, ATAC-seq, CUT&Tag, proteomics, etc.). Candidates are expected to be capable of working independently, including staying abreast of current literature and designing and executing experiments; collaborating effectively within a multidisciplinary team; and clearly communicating ideas and results in internal meetings, at international conferences, and in publications and grants. In addition, this position includes training and mentoring of other lab members as well as assisting with laboratory maintenance.

What we offer

The successful candidate will enjoy a vibrant and stimulating lab and departmental environment. We offer multiple exciting opportunities in setting their own and the lab’s research directions, a strong culture of collaboration, training, and mentorship, and access to cutting-edge instrumentation and facilities. The candidate will be able to mentor junior colleagues, engage in fellowship and grant writing, and present at symposia and conferences, all excellent training for a variety of career paths. We offer many cross-disciplinary collaborative opportunities at UC Davis and beyond, including with the UC Davis Medical Center, School of Veterinary Medicine, and Primate Center.

Several projects are currently available, including:

1. Embryo implantation and placentation in both a physiological context and following uterine injury and regeneration
2. Uterine stem cells, their niche, and hormone-mediated intercellular communication during the menstrual cycle
3. Human uterine and maternal-fetal interface function and associated conditions (e.g. endometriosis, preeclampsia, etc.) modeled in novel human endometrial and placental organoids

For each of these projects, we use a variety of approaches in mice, rhesus macaques, and human organoids.

UC Davis is a supportive, inclusive, and collaborative community, ideally situated in the peaceful, family-friendly town of Davis in the sunny Sacramento Valley, located between the San Francisco Bay Area and beautiful Lake Tahoe.

Requirements

- Ph.D. or M.D./Ph.D. degree in Molecular and Cellular Biology, Developmental Biology, Reproductive Biology, Neuroscience, Bioinformatics, or related field, anticipated to be completed by the start date of the position
- A strong track record of research achievement
- Proficiency in multiple wet lab techniques OR bioinformatic approaches
- Prior experience in one or more of the following areas is desired but not necessary: advanced microscopy, mouse genetics, single-cell transcriptomics, 3D organoids, uterine biology, placental biology, reproduction

Salary

The salary offered for this position begins at \$72,000. Higher salaries may be offered to meet competitive conditions, qualifications, and experience.

To apply, please email Dr. Elisa Zhang (elszhang@health.ucdavis.edu) with the following:

1. Cover letter, incl. your scientific interests in relation to the lab's focus and a summary of research accomplishments
2. Curriculum vitae (C.V.)
3. Contact information for three references

Applications will be accepted on a rolling basis. For more information, visit zhang.faculty.ucdavis.edu or contact Dr. Zhang.