



**University of California, Davis**  
**Translational Human Pluripotent Stem Cell Shared**  
**Research Facility**  
[www.tsrfs.ucdavis.edu](http://www.tsrfs.ucdavis.edu)

## OVERVIEW

The UC Davis Translational Human Pluripotent Stem Cell Shared Research Facility (TSRF) is a ~2,500 sq. ft. facility that includes 3 fully equipped cell culture laboratories; flow cytometry and cell sorting; molecular core for quantitative real-time RT-PCR; histology core; controlled-rate cryopreservation and cell storage for cell lines and banks for investigators; and an infrastructure of experienced personnel to ensure efficient operation, to provide services, and to ensure the necessary training and guidance in the growth and culture of human stem cells.



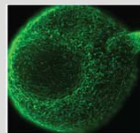
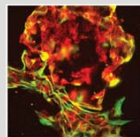
Videoconferencing and videotraining is routinely used for ongoing interactions with other sites including the Institute for Regenerative Cures on the Sacramento campus, and trainees at the State University sites.

The TSRF has a central focus on training and provides a week-long training course for students and fellows at institutions around the State of California.

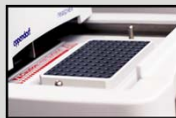
Conference room, shared cubicles, internet access, and computer workstations are available.

## SERVICES

- Assistance with cell culture
- Feeders (mouse embryonic fibroblasts, MEFs)
- Media preparation and lot testing
- Cryopreservation and cell storage
- Maintaining cell banks and karyotyping
- Designing primers and probes for PCR
- DNA/RNA preparation, real-time PCR
- Quality control testing (e.g., mycoplasma, endotoxin)



- Embedding, sectioning, staining (fixed, frozen sections)
- Morphological assessments (e.g., phase contrast, brightfield, fluorescence)
- Immunohistochemical analyses
- Flow cytometry, cell sorting
- Tissue engineering strategies
- Differentiated human pluripotent stem cells for transplantation or organoid culture



## WORKING IN THE TSRF

Interested investigators to email the Facility Coordinator (TSRF@ucdavis.edu) to ensure that all UC Davis requirements are met :



- MTA between the distributor and the P.I. for cell line(s) as required
- Approvals from campus committees (e.g., SCRO, BUA)
- Campus training (e.g., biological and chemical safety)
- Prior experiences relevant to human stem cell research
- Facility use training

Research objectives, facility needs, consumables, and services are discussed in advance with scientific and technical staff.

Equipment sign-up is provided through online calendars, which requires a user ID and password for security purposes.

Down-loadable forms are available on the TSRF website to request reagents and supplies that will be provided by the TSRF and recharged to users.