

Research Opportunity in Neuroscience/Stem Cell Research

A postdoctoral position is available in the laboratories of Dr. Wenbin Deng and Dr. Lin Tian at the University of California, Davis to a highly motivated candidate who has a passion for neuroscience and stem cell research. The focus of our joint project is on pluripotent stem cells and their differentiation towards neuronal and glial lineages for disease modeling and regenerative medicine. We are working on novel methods of cellular reprogramming, stem cell differentiation, calcium and neurotransmitter imaging, and derivation of disease-specific cells from induced pluripotent stem cells to model human diseases and to find new therapeutics. We are seeking an individual who is interested in reprogramming somatic cells to pluripotent stem cells, characterizing cell lineages and precursor populations and identifying factors that influence growth/expansion of neuronal/glial lineage cells, and developing genetic/chemical platforms to control cell differentiation to achieve directed differentiation of stem cells, to engineer and transfect genetically encoded calcium or neurotransmitter fluorescence probes, and to monitor and control neural activities. The trainee will be given opportunities to independently design and execute incisive experiments and interpret results, and to author papers in high-quality journals in areas of relevance to the research. The candidate should demonstrate excellent communication skills and should have a strong passion and commitment to science, and will also work closely with the Principal Investigators to help supervise and train students and assistants and to ensure smooth functioning of an active research program.

We are building a stem cell technology platform for differentiation of human pluripotent stem cells into neural cells with the goal to develop highly relevant human in vitro assays to support disease modeling and drug discovery projects. Your responsibilities include: 1) Implementation of new differentiation protocols; 2) Molecular and functional characterization of the cells; 3) Investigation of in vitro phenotypes of patient iPS derived cells; 4) Preparation of manuscripts on scientific work for internal or external communication; and 5) Coordination of scientific project work with internal and external collaborators. You also have the opportunity to pursue your interests across functions.

You are a stem cell biologist with excellent scientific and organizational skills.

- PhD level scientist with strong scientific background in stem cell research and no more than 2 years of postdoc experience
- Expertise in in vitro differentiation protocols, characterization of the cells with flow cytometry analysis, immunostaining, RT-PCR, molecular imaging, functional assays
- Experience with human ES/iPS cells
- Expertise in the area of in vitro assays, drug screening and molecular cell biology is a plus
- You communicate effectively orally and in written form, and are used to write manuscripts
- Proactively oriented and committed to innovation and team work

This position offers the unique opportunity to gain first hand insights into stem cell technologies applied to drug discovery. We expect outstanding motivation, creativity, analytical thinking and a strong scientific commitment. Preference will be given to individuals with US citizenship or permanent residency and who have demonstrated a good track record of publications. Interested individuals are welcome to contact Dr. Deng (wbdeng@ucdavis.edu).