Post-doctoral Fellowship Position (Pathogenesis of Cancer) - University of Washington Medical School

The Department of Pathology at University of Washington Medical School is seeking a highly motivated research fellow to work in the laboratory of Dr. Eleanor Chen. The Chen lab uses gene editing (CRISPR) technology, functional genomics, cell-based and animal models to study disease pathogenesis and discover translational applications for pediatric rhabdomyosarcoma, a devastating pediatric soft tissue cancer. As part of the interactive network of researchers in the Department of Pathology at the University of Washington Medical School, the individual will be integrated into both the medical and research community. The research fellow will also have the opportunity to interact with prominent researchers at the Stem Cell Institute as well as Fred Hutchinson Cancer Research Center.

Research will focus on integrating the zebrafish genetic model, mammalian in vitro and in vivo work (e.g. loss-of-function and gain-of function characterization in human cell lines and xenograft mouse models) as well as functional genomics to better understand molecular and cellular mechanisms underlying human cancer. The ultimate goal of the research is to develop novel therapeutic insights. Projects will include:

- Functional genomics studies (RNA and ChIP sequencing to identify and characterize cancer essential genes)
- Molecular and cellular characterization of oncogenic/tumor suppressor gene functions
- Live imaging and transplantation studies of fluorescently-labeled zebrafish tumors to characterize cellular events during tumor progression
- High-throughput gene/drug target discovery studies (e.g. CRISPR screens and chemical screens)
- Tumor xenograft mouse models for genetic or therapeutic characterization of promising therapeutic targets.

Required qualifications:

- A successful candidate should have a degree in PhD and/or MD
- Productive scientific contributions through publication of high-impact papers

Desired qualities:

- A candidate with background in cancer research and/or animal models is highly desired but not required.
- Advanced skills in any of the following areas: human cell line/mouse/zebrafish work, functional genomics (RNA/ChIP sequencing), bioinformatics analysis, gene editing (CRISPR) technology and molecular biology.

For additional information about research in the Chen lab, please refer to recent publications from the lab:


Lab website:

http://faculty.washington.edu/eleanor2

If interested, please send a CV and 3 references of contact to Dr. Eleanor Chen (eleanor2@uw.edu or echen791@gmail.com). Salary will be competitive with NIH Fellowship pay scales. Position start date is negotiable.