

Post-Doctoral Position for Experimental Molecular Genetics of Cancers

In the laboratory of Hanlee P. Ji, M.D. Associate Director of Stanford Genome Technology Center, Associate Professor, Dept. of Medicine Division of Oncology, Stanford School of Medicine.

Job Description

Ji Research Group is searching for an enthusiastic postdoctoral scholar in experimental molecular genetics of cancers. To study complex molecular genetics of cancers, we develop novel molecular technologies, which are generally based on high-throughput sequencing. The new technologies and methods aim to substitute or complement existing technologies for genetics, genomics, molecular biology, and molecular diagnosis. Therefore, our focus is on the genetic information that is not accessible with current technologies. The examples are complex genetic rearrangements, microsatellite instability, and long-range haplotype. Moreover, we have a major interest in challenging samples such as genetic materials from single cell, complex genetic mixtures, FFPE, and liquid biopsy. Most of our work uses next-generation DNA sequencing. Not only conventional Illumina short reads but also recent long read technologies are being adapted in our new methods. In addition, we use CRISPR/Cas9-based high-throughput genome editing, to study the functional consequences of potentially pathogenic cancer mutations.

For more information about the lab, please visit our website (<https://dna-discovery.stanford.edu/>).

Available Resources

Sequencers (Owned: iSeq, Oxford Nanopore Promethion; Access to MiSeq, NextSeq, NovaSeq), 10X Chromium, automated liquid handlers

Experience and Training

- Ph.D. in cancer molecular genetics, biomedical engineering, analytical chemistry or related field
- Experience in recent molecular technologies (e.g. next generation sequencing, genome editing)
- (Optional) Experience in bioinformatics tools for omics analysis (e.g. R and python packages, and software)

Postdoc Appointment Term

Two years with possibility of continuing longer depending on grant sources.

Appointment Start Date

Fall 2021

Please send your CV and a brief explanation of your research interests to hanleeji@stanford.edu.