Lin Lei

Work Experience

National Human Genome Research Institute (NHGRI), NIH   Bethesda, MD

    Contractor/biochemist   Nov.2013 --

- Record and store PBMC samples from patients
- Extract DNA from blood and/or PBMC samples
- Pull, clean, quantify and aliquot DNA for sequencing
- ELISA
- BIO-Plex
- RT-PCR
- DNA stamp
- Genotype using sequeno

ExonHit Therapeutics   Gaithersburg, MD

    Research Associate   Dec. 2005—Jul. 2011

- Record and store blood and tissue samples from customers
- Extract RNA from blood and tissue samples
- QC RNA on Agilent Bioanalyzer 2100
- Synthesis and label cDNA
- Conduct Affymetrix or Agilent arrays
- RT-PCR to verify RNA splicing events
- Primer design

National Human Genome Research Institute (NHGRI), NIH   Bethesda, MD

    Contractor/research assistant   Sep. 1999—Nov.2005

- Treat male zebrafish with ENU and look for mutated zebrafish
- Maintain and keep mutated zebrafish lines
- Harvest zebrafish or eggs to do in situ hybridization with hematopoietic markers
- Inject zebrafish under microscope with GFP
- Extract DNA from zebrafish
- genotype and sequence zebrafish DNA
- General lab work such as: PCR, gel running, DNA digest, ligation, etc.

Shandong University   Jinan, China

    Chemistry department   Jul 1995—Jun 1998

    Research associate in inorganic chemistry

Zaoyang Nurse School   Hubei, China

            Teacher   June 1987—June 1995

            Lecturing Chemistry, Biochemistry

Laboratory skills

Clinical Sample processing: handling and processing human blood, and tissues from human and animal; RNA extraction from the samples, cDNA synthetic for microarray.

Molecular Biology: DNA/RNA extraction, DNA digest, DNA amplification, ligation and subcloning, Northern blotting, Southern Blotting, DNA transfection, PCR/RT-PCR, genotyping and sequencing.

Lab Documentation: keeping daily lab work record, writing experimental procedures (GLP) and application notes, updating database for sample banks, phenotype and genotype

Computer Skills:

Experienced in different operating systems, Windows and MacOS
Proficient in most Microsoft applications: Word, Excel, Access and PowerPoint
Skillful in bioinformatics tools such as GeneBank, BLAST

Education

1997-1998 Chemistry department, Shandong University, Jinan, China

            Graduate student in inorganic chemistry

1985—1987 Xiangyang teacher's college, Hubei, China

            College student in chemistry

Publication

Lyons S, Lawson N, **Lei L**, Bennett P, Weinstein B, and Liu PP. A nonsense mutation in zebrafish gata-1 causes the bloodless phenotype in Vlad Tepes.*Proc Natl Acad Sci USA* 99:5454-5459, 2002.

English MA, **Lei L**, Blake T, Wincovitch S, Sood R, and Liu PP. Incomplete splicing, cell division defects, and hematopoietic blockage in dhx8 mutant zebrafish. *Developmental Dynamics,* 241:879-889, 2012.