**Statement of Research Interests and Goals**

My research interests and activities over the past five years have mainly centered around the following three areas: 1) DNA methylation based association study and biomarker identification leverage high dimensional dataset, 2) Genome-wide DNA methylation profile (methylome) drafting for the genome of human normal cells or complex disease with NGS technique, 3), Population based association study between genetic variants (SNP, CNV) and complex disease. I am deeply interested in all kinds of question about DNA methylation, such as DNA methylome difference between different species, tissues and different disease status, DNA methylation based biomarkers, novel DNA methylation detection methods, the evolution of DNA methylation modification system. On the other side, I want to do some works on mGwas (methylation based genome-wide association study), meQTL(methylation based quantitative trait loci), Interaction contribution to gene expression between DNA methylation and genetic variants (SNP, CNV), DNA methylation heritability in the populations and specific disease,