Dr. Yu is a molecular epidemiologist, and his research focuses on cancer etiology and tumor biomarkers. Being trained in medicine, epidemiology and laboratory medicine, Dr. Yu conducts laboratory-based clinical and epidemiologic studies. He has designed and completed many clinical studies which assess the molecular and genetic features of tumor specimens in relation to disease characteristics and survival outcomes of patients diagnosed with breast, ovarian, prostate or lung cancer. He has also developed and participated in population-based epidemiologic studies to investigate gene-environment interactions in breast, endometrial, liver and pancreatic cancers.

Dr. Yu has knowledge and experience in a wide range of research methodologies and laboratory technologies. Currently, using online data, omics-technologies, molecular biology experiments, and bioinformatics tools, he and his research team have characterized the function and regulation of non-coding RNAs, and elucidated their molecular mechanisms in tumorigenesis. In collaboration with investigators from several research institutions, he has completed an epidemiological study on liver cancer.