Abstract: The tumor microenvironment (TME) is the ecosystem that surrounds a tumor inside the body. It includes immune cells, cytokines, metabolites, and other organisms, like microbes. TME serves an important function in tumor tolerance and escapes from immune surveillance leading to tumor progression. I will present my collaborating research on TME, involving immune systems and metabolites; the research on exogenous sequences in unmapped transcriptome data from ORIEN consortium; the association between the microbes and clinical outcome(s) in colorectal cancer.

About the Speaker: As a biostatistician and biologist working at the interface of statistics and bioinformatics, I have been making substantial contributions to study design (pre-clinical studies, clinical trials, retrospective and prospective studies), data analysis of laboratory and clinical research, analysis of high through-put data (RNA-seq, metabolomics, microbiome, methylome) and their integration; pathway/network analysis; and prognostic and predictive biomarker discovery from biochemical measures and omics data. I lead the statistical support team for a multi-institute grant funded by the NCI moonshot initiative and navigate statistics support for the program of Molecular Carcinoma and Chemoprevention (MCC) at the OSU Comprehensive Cancer Center (OSUCCC). My current research focus is on the development of pipelines characterizing intra-tumor exogenous sequences using the OSU total cancer care (TCC) database and data from other institutes in the Oncology Research Information Exchange Network (ORIEN) consortium; with the goal of identifying biomarkers that can predict immunotherapy outcomes.

Xiaokui-Molly Mo, PhD
Associate Professor- Clinical
Department of Biomedical Informatics
The Ohio State University

Friday, February 25th, 11:00am-12:00pm
Carmen Zoom