Lifestyle factors such as diet and physical activity play crucial roles in shaping long-term health outcomes. Diet and exercise can induce lasting changes to the epigenome, potentially impacting future generations.

Research Interests
- Elucidating the metabolic memory of exercise
- Determining the impact of parental exercise across generations
- Study of lipidomic signatures of health and disease
- Identify novel age-related lipid biomarkers

Current Projects
- Intestinal sphingolipids as mediators of age-dependent dysfunction
- Muscle and liver epigenetic memory of exercise
- Effect of paternal exercise on offspring metabolism

Interest Areas for Collaboration/Future Work
We are interested in analyzing multi-omic data including lipidomic analysis (structural and bioactive lipids) for the identification of novel biomarkers of aging, stress, and physical inactivity.

Keywords
Epigenetics, exercise, diet, lipidomics, lipid mediators, metabolic memory, intergenerational effects