The use of omics technologies such as metabolomics and proteomics has the ability to both generate data related to phenotype that can assist in testing a research question and provide direction for further investigations. Due to its range of applications, they can be a powerful tool for a variety of researcher interests.

**Research Interests**

- Nutritional metabolomics
- Biomarkers of gestational diabetes
- Metabolic consequences of micronutrient deficiency
- Multi-omics

**Current Projects**

- Food intake biomarkers for culturally-adapted diets
- Effectiveness of lifestyle intervention for gestational diabetes prevention
- Metabolic changes associated with hypervitaminosis A
- Mechanistic triggers of excessive mucus during lung infections by bacterial volatile organic compounds

**Keywords**

Metabolomics, proteomics, multi-omics, phenotype, nutrition, food intake biomarkers, gestational diabetes, micronutrient deficiency

**Interest Areas for Collaboration/Future Work**

Dr. La Frano is interested in investigating food intake biomarkers as objective measures of diet intake. He is also interested in utilizing multi-omic approaches involving metabolomics and proteomics to investigate the metabolic changes predictive of or associated with the severity of disease.