

Dr. Amy Ham

Areas of expertise and research interests:

Areas of biomedical research expertise

- ◆ Mass spectrometry of proteins and peptides
- ◆ Analysis and interpretation of peptide mass spectrometric data using multiple algorithms
- ◆ Multi-dimensional separation of peptides/proteins
- ◆ Micro/nano-scale high pressure liquid chromatography
- ◆ Protein post-translational modifications
- ◆ Proteomics
- ◆ DNA damage and repair
- ◆ Carcinogenesis

Research Interests

- ◆ Personalized medicine
- ◆ The use of proteomics in the discovery of biomarkers
- ◆ The use of proteomics to track the therapeutic effectiveness of and/or resistance to drug therapy, particularly tyrosine kinase inhibitors
- ◆ Differentiation of cancer subtypes for therapeutic strategies using protein and/or post-translational biomarkers
- ◆ Protein-DNA crosslinks and their effect on DNA repair and carcinogenesis