# BCHM 421/422 – 2019/2020

**Project Outline:** Lung cancer responds poorly to conventional chemotherapy and is responsible for the highest number of cancer deaths. Immunotherapy attempts to use the body's own immune system to battle this cancer and has resulted in very encouraging results. However, we cannot predict very well which tumours will respond to immunotherapy. We have developed a methylation based blood test that is able to both follow tumour load and predict outcomes in lung cancer, thus allowing us to identify if this treatment works. This will be a powerful tool for better managing lung cancer patients in a timely and appropriate manner.

**Supervisor:** Christopher Mueller

**Project Title:** A blood test for directing Immunotherapy in Lung Cancer

**Project Goals:** Advance the development of this test by analyzing patient samples from the community and optimizing aspects of the test.

**Experimental Approaches:** Circulating tumour DNA, targeted PCR, Next Generation Sequencing

**References:** https://www.ncbi.nlm.nih.gov/pubmed/29057681