

BCHM 421/422 – 2020/2021

Project #4 Outline: Mammography is actually relatively insensitive, only detecting tumours in the range of 15-19 mm when the risk of the disease having spread is high. We have developed a methylation based blood test that is superior to mammography in detecting very small tumours, theoretically less than 5 mm, when spread is much less likely. Early detection is a key factor in improving outcomes in breast cancer.

Supervisor: Christopher Mueller

Project Title: A blood test for Breast Cancer, replacing mammography.

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/29088906>