Head and neck cancer is the sixth most common cancer in the world. Despite its global health impact, we know very little about the exact mechanisms driving this disease. Further to this, the majority of patients present with late stage disease. More recently, small RNAs such as microRNAs have been shown to have important roles in gene regulation.

My laboratory is interested in using microRNAs as 1) biomarkers for oral cancer detection and 2) to understand the role of these microRNAs in cancer. We have discovered several serum miRNAs which may have the potential for early diagnostic markers.

To explore a mechanistic role, we show that specific miRNAs may partake in co-regulation of certain tumour suppressor genes such as PDCD4.