

## RCPA Foundation Postgraduate Research Fellowship Award – Victoria Ling

This RCPA Foundation award will fund my PhD, studying epigenetics in myelodysplastic syndromes (MDS). MDS are clonal disorders of haematopoietic stem cells causing morbidity and mortality from blood cytopenias and progression to acute myeloid leukemia. More than half of all MDS have one or more mutations in epigenetic regulators involved in DNA methylation or post-translational modifications of histones (such as EZH2). The hypomethylating agent, Azacitidine, is one of very few treatments in MDS, but not all patients will respond. Using mouse models and cell lines, my project will investigate the contribution of EZH2 and other epigenetic regulator mutations (DNMT3A, IDH1/2, etc) to the development of MDS and mechanisms of action of Azacitidine, including ways to enhance response. Through this generous award, I hope this project will improve our understanding and treatment of MDS.

