

**Florey Medical Research Foundation's Clinical Cancer Research Fellowship
November 2013 Report**

Title of Project

Targeting the p53 pathway in cancer

Summary

Sarcomas are a diverse group of rare solid bone and soft tissue malignancies that disproportionately affect the young. Despite aggressive treatment strategies, overall mortality rates for sarcoma patients remains at fifty percent, amongst the least favourable for any cancer type diagnosed in paediatric, adolescent and young adult groups. For this reason, there is an imperious need to develop more effective systemic treatments to improve the outcomes for sarcoma patients. Providing a personalised treatment approach is the future for cancer research. The ability of cancer genomics to predict which patients will be responsive to new targeted agents will be critical for more efficient treatment strategies. Over the next few years the primary focus of my research will be to unravel the complexities of an individual's cancer genome, through the use of next generation sequencing technologies. This will allow us to identify the key mutations that drive the growth of an individual's cancer and design tailored therapeutic approaches using targeted agents that can inhibit these mutated genes. With support of the Florey Medical Research Foundation it is hoped that findings from our research will significantly improve the treatment options and survival rates for patients diagnosed with sarcoma.