

<b>Project title</b>	<b>What events in cancers can we use to improve the response rate when treating with immunotherapy?</b>
Recipient	Mr Andre Wang
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Research description	<p>The immune system usually recognises and defends us against diseases. Unfortunately, it sometimes fails to recognise cancer as a threat. More recently, cancer treatment with immunotherapy has been developed. This involves the use of antibodies that take away ‘brakes’ on immune cells, allowing them to target cancer cells. While this may allow for tremendous results, most notably in melanoma, a majority of patients do not respond, with some cancers such as mesothelioma being less sensitive to this therapy.</p> <p>Currently, it is not known why this is the case and there aren't reliable ‘biomarkers’ that would tell us whether a patient would respond or not. To address this problem, the team will compare all the genes in responsive and nonresponsive tumour samples from animal models and patients treated with immunotherapy. They can then use ‘big data’ approaches to identify key genes involved in the response and try to improve recovery rates by targeting these genes with new drug combinations.</p>
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