

Anti-cancer bioactives

Project duration:	10 months
Description:	<p>The bacteria within the gut microbiome produce a variety of metabolites and bioactives with untapped biologic activity.</p> <p>Colorectal cancer is the second most common cancer in Australia with significant morbidity and mortality. It has been associated with an altered microbiota. My group has successfully identified multiple anti-inflammatory bioactives from cultured gut bacteria. We now wish to expand this program to identify potential bacterially derived anti-cancer bioactives that could be used as future therapeutics.</p>
Expected outcomes and deliverables:	<ul style="list-style-type: none"> • Developing a robust B-catenin assay using an existing reporter cell line • Preparing a library of cell free culture supernatants from an existing library of gut bacteria • Screening the library for activity and confirming in secondary assays • Identifying the bacteria responsible for the activity
Suitable for:	<p>This project would be suitable for an Honours candidate who has taken lab based courses and is familiar with basic laboratory techniques.</p> <p>Prior experience with cell culture work is a plus but not required.</p> <p>This project could easily be expanded into a PhD project in the future.</p>
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