

<b>Project Title</b>	A bioelectronic implant for cancer treatment
<b>Supervisor</b>	Dr Rylie Green
<b>Theme(s)</b>	Medical devices
<b>Project Type</b>	Lab Based
<b>Project Description</b>	<p>This project revolves around aiding in the development of a device for the selective delivery of chemotherapy directly to the site of non-operable brain tumors (glioblastoma multiforme). This device consists of a conductive polymer-based material that can be used as an electrically controlled drug delivery system.</p> <p>The goal of this project is to evaluate the drug release profiles for multiple different molecules that are analogs to those commonly used in chemotherapy. Parameters such as molecule size, charge, and stability will be investigated. Characterization of the drug release profiles will be accomplished through chemical, electrochemical, and spectroscopic techniques.</p>