**HONOURS PROJECT 2017**

**Project Title:**  *The role of gut endocrine cells in metabolism and diabetes*

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CNS Lab:  Molecular and Cellular Physiology Lab  
Location of Project:  Flinders Medical Centre

**Brief Outline of Project:**

Hormone-secreting cells in the gut (called enteroendocrine cells) represent the largest endocrine tissue in our body. Yet we know the least about them in terms of their function. Research in the past decade demonstrates that these cells have major effects on our metabolism and are the sites of novel drug targets for obesity and Type 2 diabetes. Our group has developed novel methods to examine the function of these cells in humans.

This project will identify how they respond to their environment, including in response to nutrients and the microbiome, and how their function changes in human disease such as type 2 diabetes and obesity. We are the only group able to perform these investigations internationally, allowing us the chance to lead the world in this research area.

We currently partner with Pfizer Inc, located in Boston, on this project, providing students with the chance to work with one of the largest Pharmaceutical companies in the world.

We publish regularly in high-impact international journals and are well-funded. Past staff and students of our lab have gone onto successful research careers at esteemed research institutes such as Stanford University and to positions in Academia and Industry. We are a strong lab that can provide a supportive environment to help you develop your own career.

**Key References:**

Gastroenterology. 2015 Jul;149(1):253-5  
J Cell Physiol. 2016 Jul;231(7):1593-600  