

Proposed Research Area(s)/Topic(s)

IN-VITRO DIAGNOSTIC MEDICAL DEVICE IN LIVER DISEASE

The project will focus on the development of an *in-vitro* diagnostic medical device for the measurement of aspartate transaminase (AST) and alanine aminotransferase (ALT) in blood samples. The concentrations of AST and ALT measured will provide doctors with information for the management of liver diseases (e.g. titrating statin dosage to minimize liver damage to the patient) at the point-of-care setting.

The candidate will be required to develop an *in-vitro* diagnostic medical device with the following user requirements to enable point-of-care usage:

- Portable (hand-held device without the need for external power supply)
- Room temperature storage (capable of storing at 20 to 35 degrees Celsius)
- Finger-prick sample as sample input (no more than 20 microlitres)
- Simple and usable (no additional laboratory equipment required)

Candidate Attributes

- Degree in Life Science/Bioengineering/Biotechnology or a related discipline
- Knowledgeable and experience in handling immunoassay (e.g. ELISA and lateral flow) and clinical chemistry (e.g. enzymatic assays)
- Understand reagent preparation and manufacturing workflow for large scale production
- Able to work independently and in a cross functional team
- Comfortable with writing up documents in English

