

# PERKINS PROFS ACADEMY

Starting term 2 2017 | Monday 4.15pm to 6.15pm

**Year 10 - 12**

**\$350 per student**

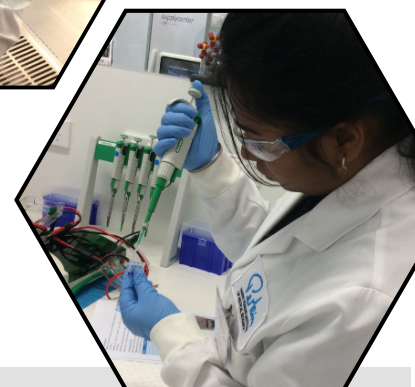
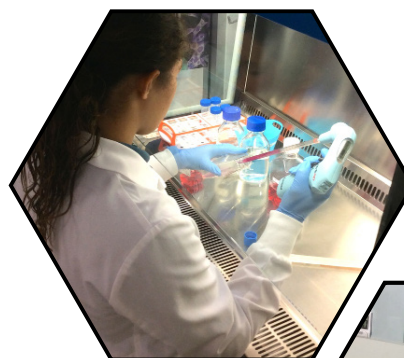
**10 weeks** (1 term)

**12 - 18 students**

To offer a STEM (science, technology, mathematics, engineering) education program to capable high school students by immersing them into a real life application of a typical STEM career pathway - medical research.

This program will run for 10 weeks and is offered each term in 2017. Students will attend the Harry Perkins Institute of Medical Research once a week for a 2 hour session after school.

This course will allow students a unique opportunity to work alongside real medical research scientists and be challenged to question, explore, think, collaborate and discover solutions to some of our most complex health issues facing West Australians including diseases like cancer and diabetes.



## Perkins Profs Academy 1.0

**Course: Searching for disease genes**

**Two modules**

### 1. How do we do it?

Techniques including PCR, Sanger sequencing, histochemical staining, CRISPR gene editing.

### 2. Why should we do it?

Ethical exploration of medical research in the 21st century.

This course will finish with a graduation in the final week. Parents will be invited to experience the students achievements.

## Perkins Profs Academy 2.0

**Course: The genome and beyond**

**Three modules**

### 1. Epigenetics

The molecular layer above DNA that is unlocking secrets to disease and health.

### 2. Bioinformatics

Computational biology, managing all the data generated by the human genome project.

### 3. Bioengineering

Using engineering principles to solve our biggest health problems.