



Excellence and innovation in cell and molecular biology education

FORENSIC INVESTIGATIONS & DNA SCIENCE

This program immerses students in the field of forensic science as they employ a variety of methods to solve a murder investigation. Through a study of the structure and function of DNA, the nature of chromosomes and the principles of inheritance they gain an understanding of the mechanisms behind blood typing and DNA profiling.

Students will maintain the chain of custody as they analyse samples collected from the crime scene. They will determine if trace evidence is blood and will perform serology tests to determine the blood type of any blood samples collected from the crime scene, and of the victim, the victims parents and 6 suspects.

Using research grade equipment students perform Gel Electrophoresis to construct DNA profiles using Short Tandem Repeats (STRs) from 3 chromosomes. Analysis of DNA profiles enables students to place a suspect at the crime scene; establish the identity of the victim; and the paternity of a child involved in this case.

Students will also explore the role of the Infectious disease identification and response forensics unit, utilising bioinformatics tools to identify an infectious agent using global genomic data bases.



STANDARD PROGRAM STRUCTURE

09.30: Arrival & registration..
09.40: Presentation of concepts.
10.50: Morning break: School canteen.
11.15: Laboratory workshop.
13.00: Lunch (University of Melbourne).
14.00: Laboratory workshop.
15.00: Departure..

Times may be modified upon request

YEAR LEVEL : YEARS 9&10 . BOOKING CODE: MSB 101
STANDARD RATE \$22-00/STUDENT (APPLICABLE SCHOOLS)

Contact Administrative Assistant for booking enquiries:
E-mail: gtac@gtac.edu.au or Phone 03 9340 3600

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