GENE TECHNOLOGY ACCESS CENTRE

Excellence and innovation in cell and molecular biology education

THE GREEN GENE

This program immerses students in the world of gene technology. They explore human development and learn that cells specialise to form tissues, organs and systems during embryonic development. They realise that the instructions for cell specialisation are found in the DNA of genes that code for making proteins.

Students build DNA models and learn to crack the DNA code that is used by ribosomes to build proteins. They understand that this DNA code is universal amongst organisms, thus discovering the potential for gene transfer between organisms.

Students transform bacteria with a plasmid containing the gene coding for Green Fluorescent Protein, creating a Genetically Modified Organism (GMO). Students discuss the ethical use of GMOs in research and some pivotal advances in biotechnology and agriculture using this technology.

Students perform Gel Electrophoresis to determine the GMO status for some common supermarket food items by looking for the presence of a commonly used gene promotor region. They also explore some medical breakthroughs involving gene technology and its application to the treatment of disease.

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 7 & 8. BOOKING CODE: MSB 102
STANDARD RATE $20-00/STUDENT (APPLICABLE SCHOOLS)

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

Accredited 2011