GENE TECHNOLOGY ACCESS CENTRE

Excellence and innovation in contemporary bioscience education.

2010 TEN YEARS ON

PROTEIN SPECIFICITY AND THE IMMUNE RESPONSE

This program has been developed in collaboration with research scientists from Pfizer VMRD Parkville. Students work collaboratively with research scientists and solve "real life" problems using research quality equipment.

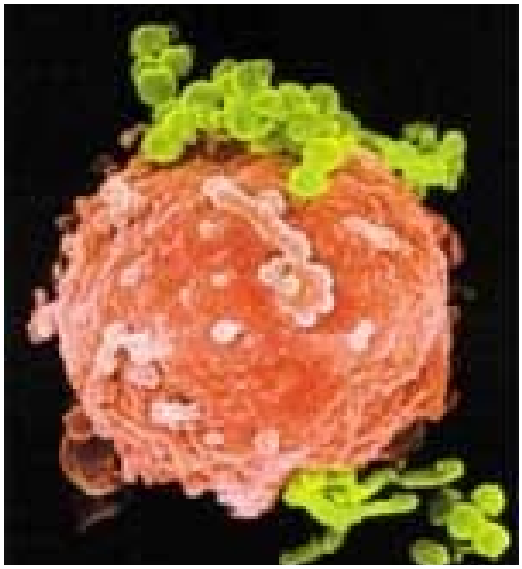
Task 1:
Students investigate positive and negative responses to an infectious agent by a flocculation assay which visually demonstrates antibody-antigen interactions.

Task 2:
Students trace the course of an immune response to a vaccine exploring primary and secondary antibody responses through the use of an ELISA protocol.

Students have the opportunity to consolidate their understanding of protein structure and in enzyme action. The nature and function of the mammalian immune system and, in particular, the role of B lymphocytes and the structure and function of antibodies are outlined.

The tasks provide an opportunity to distinguish between antibodies and antigens and emphasise the importance of specificity in the formation of antibody-antigen complexes. The concepts of vaccination and acquired immunity are explained.

GTAC acknowledges the generous support given by Pfizer VMRD Parkville, in the development and implementation of this program.



Program features:

Introductory lecture.
Pre-laboratory lecture.
Laboratory tasks guided by research scientists from VMRD Parkville.
Lunch at the University of Melbourne.
School assessed coursework provision.

Scheduling: Term 2

YEAR LEVEL: UNIT 3 VCE BIOLOGY
BOOKING CODE: VCE 303
STANDARD RATE $25-00/STUDENT

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