



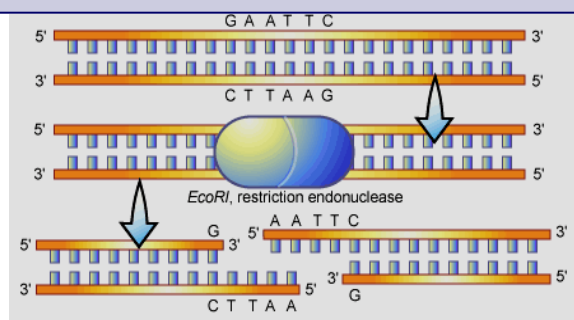
*Excellence and innovation in  
cell and molecular biology  
teaching and learning*

## RESTRICTION DIGESTION OF PLASMID DNA and EXPLORING TWO INDEPENDENTLY ASSORTING CHARACTERISTICS IN CORN

This program offers an overview of the structure and function of DNA, the application of key techniques used to manipulate DNA and an overview of genetic inheritance. This program provides material for the subsequent completion of both mandated school assessed coursework tasks in Outcome 1, Unit 4 VCE Biology.

**Task 1:** Students perform a restriction digestion using several enzymes to identify a specific plasmid. Students gain skills in utilising research grade equipment as they perform the digestion and gel electrophoresis to separate and visualise the DNA fragments.

**Task 2:** Students apply their genetic language and explore the inheritance of two independently assorting characteristics in *Zea mays*. They collect data to determine phenotypic ratios in the F2 generation and compare their results to expected ratios. This task also provides the opportunity to consolidate their understanding of chromosome behaviour during meiosis.



### Program features:

- Lecture on biological concepts
- Pre-laboratory lecture
- Laboratory tasks guided by a scientist mentor
- Lunch at the University of Melbourne
- School assessed coursework provision

**Scheduling: Term 3**

**YEAR LEVEL: UNIT 4 VCE BIOLOGY,  
BOOKING CODE VCE 402  
STANDARD RATE \$25-00/STUDENT**

Contact Administrative Assistant for booking enquiries  
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