

03-117 FRONTIERS, ANALYSIS, AND DISCOVERY



- Elective for **Biological Sciences Majors**
- **6 Units (6 hours lab/week)**
- **Pre-requisites: 03-151 Honors Modern Biology**

Instructors:
Dr Ravichandra Bachu
Dr Annette Vincent

Students will learn to use a gene editing technique called CRISPR Cas9 to edit the genome of *Saccharomyces cerevisiae* (Baker's yeast).

Learning Goals

- To apply your knowledge from your biology courses in order to carry out a research project.
- Research and describe current biological problems and techniques used to analyze them.
- To build analytical, problem solving, and data analysis skills in preparation for completing a student-driven research project.
- To be able to collect, record, and organize data in lab notebooks, excel spreadsheets, etc.
- To be able to read and interpret primary scientific literature through summarization of relevant components and critiquing the final conclusion.
- To Plan, Design, Implement and Perform your own independent investigation.
- To be able to clearly articulate and explain experimental results through oral presentations to your peers and faculty.

