

Bacterial Genetics Art Project - S2015

There are a number of basic molecular concepts that can result in the increase in genetic variability and diversity in bacteria. Your job is to create a drawing, painting, sculpture, or other work of art that can be used to demonstrate the principles of bacterial genetics. **As a pair**, you must prepare your artwork and a clear written description of the principle, *how your artwork illustrates that principle*, and a specific example of how it can contribute to the emergence or reemergence of diseases. Limit your description to 1 page, single-spaced.

Your art project will be graded on the following criteria:

- A. Accuracy: Did you correctly depict and describe your genetic concept?
- B. Completeness: Does your prop or description include an explanation of the manner in which genetic changes ultimately impact bacteria function?
- C. Relevance to disease: Have you clearly made a link between the role of bacterial genetics in bacterial evolution and the emergence of diseases? Did you include something OTHER than (or in addition to) antibiotic resistance in your description of the relevance to emerging diseases?
- D. Clarity: Could a first-year freshman (with no prior college-level biology experience) understand the importance of your genetic event in the emergence of disease?
- E. Creativity: Did you use the materials in an interesting way? Did you provide an interesting twist on the event or concept that will help your audience remember the concept or understand it better?

Your project and description are due at the beginning of class (IN CLASS) on **Monday, 16 February**.

Assigned topics

NOTE: 4 people per group means that there should be 2 art projects for each topic.

Point mutation				
Transformation				
Transposon				
Generalized Transduction				
Specialized Transduction				
Conjugation				