

Week 10 Editing Genomes

Learning Goal: Understand how gene editing can be used to achieve various outcomes for research and disease treatment purposes.

After completing the pre-class assignments, students will be able to:

- Define DNA/gene editing
- Describe the structure and function of the CRISPR/Cas9 system and its application to human gene editing

After completing the in-class activities, students should be able to:

- Identify how RNA complexes interact with complementary sequences
- Evaluate positions in the human genome for potential gene editing using the CRISPR/Cas9 system
- Adapt CRISPR/Cas9 targeting approaches to model small and large scale mutations