

## **Zebrafish Fin Clips**

### **Instructor Information:**

- This experiment is best suited for students who have some general knowledge of animal biology. Because zebrafish embryos are not used in this experiment, previous experience working with zebrafish is minimal.
- Tricaine is necessary in this experiment for anesthetizing the zebrafish. Tricaine is a mutagen, so it must be handled carefully. The instructor will need to dilute the Tricaine solution to a 0.4% (w/v) concentration for anesthetizing the fish. 1.0M Tris is then added to raise the pH to ~7.
- Methylene blue may also be added to the recovery tank to serve as an antibiotic after the fin clip experiment has been completed. This may reduce the chance of infection in the injured tissue of the zebrafish.
- Students should perform individually or in small groups. Upon completion of data collection, the results from each member of the class can be pooled to get a wider sample of zebrafish regeneration data.