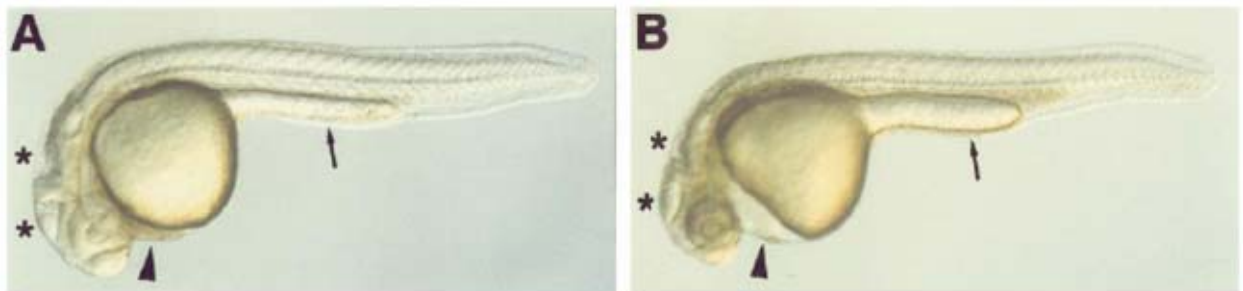


## Casanova Mutations in Zebrafish Pre-Lab Worksheet

1. What are mutations and where must they occur to have an effect on an organism?
2. What is the difference between germ-line mutations and somatic mutations?
3. Using the diagram below as a reference, briefly explain how to distinguish between a wild type embryo and a *casanova* mutation. How can you tell which is which?



4. What is the purpose of the *casanova* protein during development of the zebrafish embryo?