Laboratory Practices For Work With Transgenic Drosophila

1. Keep laboratory doors closed when work with transgenic fruit flies is being conducted

2. Experimental work with both wild-type and transgenic fruit flies should be done in as much isolation as possible to prevent the generation of novel mutants which could have a detrimental effect on the ecosystem

3. A system of anesthetization with CO2 must be used for examination and manipulation of experimental flies

4. After work is completed, make sure that no anesthetized transgenic fruit flies are left adhering to the microscope stage or preparation area

5. Clean experimental area with 70% ethanol before and after experimental work

6. Do not eat, drink, smoke or store foods in areas of experimental work

7. Never mouth pipette. Use large plastic pipettes or mechanical aspirators for collecting and transferring Drosophila

8. Control outside insect and rodent infestation and place fly traps (food or ovaposition traps) in the lab to capture stray Drosophila

9. Fruit flies must be kept in plastic containers with a cotton or other porous cover and must be regularly transferred to fresh food containers to prevent mite infestation of old culture bottles

10. Culture bottles of transgenic flies should be clearly labeled with the following : Genetic transformation made or name of strain, date of cross or transfer, initials of person

11. Fly containers must be autoclaved in the lab or placed in biomedical waste bins for autoclaving by OEHS. Flies may also be frozen (-15 C to -20 C) for 24 hours and then discarded in the biomedical waste bin

12. When large numbers of transgenic flies are transferred to a new food source, the flies must be anesthetized with CO2 or the procedure must be performed in a cold room

13. Only personnel experienced with Drosophila manipulation may conduct these experiments