Standard Operation Procedure:

Injecting Viruses in a Stereotactic System-Yarden Cohen lab

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The objective of this procedure is to regulate working processes of injecting viruses in the stereotactic system in a way that will protect the workers and others in the vicinity.

Background – During injection of viruses into brain regions using a stereotactic system there are several safety issues relating to exposure to the viral suspension, especially when filling the syringe and while injecting. The following procedure intends to restrict the possibility of exposure to the virus suspension and prevent its penetration to the body.

Regulations:

1. 2nd generation lenti system is **not** allowed.
2. Post a clear sign (in Hebrew and English) on the operating room door when lenti work is in progress. Remove sign at the end of the experiment, after disinfection and waste disposal.
3. Fixed signs (obtained at the safety unit) should be posted on the entrance to the experiment rooms stating the use of Lentivirus.
4. Transfer the virus from the group's -80 freezer (located on the same floor) in a screw cap tube inside a secondary sealed plastic container.

5. When injecting lenti, working with lenti infected birds or entering a room where infected birds are kept (up to 48 hours after infection), personal protective equipment (PPE) should include a disposable lab coat, 2 sets of gloves (make sure there is no gap between the glove and the lab coat sleeve), a PP3 respirator, safety glasses and closed shows (made from a waterproof material). Long hair should be tied back. The disposable lab coat will be discarded in a biohazard bag prior to leaving the room.
6. Extra care should be taken when filling the glass capillary and when placing and removing birds from the stereotactic apparatus. Change the external pair of gloves every time you handle a virus containing solution.
7. Remove the glass capillary prior to cleaning the surface.
8. Used capillaries should be placed in a plastic 50 ml tube filled with freshly diluted 0.6% sodium hypochlorite.
9. Following lenti injection, Animals will be housed in the experiment room in cages marked as "biohazard"+ injection date.
10. Handling cages (including bedding), up to 48 hours following injection, will be done only by the researcher, wearing the above mentioned PPE. Entry to this room should be minimized and when possible, monitoring birds will be performed via cameras.
11. Following 48 hours of isolation, the injected animals will be transferred to a new cage and can be handled according to regular regulations.
12. The cage used during the isolation period will be treated by the students/ lab workers only:
    - The cage bedding will be disposed in a double biohazard bag.
    - Cages (without bedding), inside a clean biohazard bag, will be carried on a cart to the washing room. In the washing room, cages will be removed from the bags and placed

directly in the dishwasher. Bringing cages to the washing room should be coordinated with veterinary resources.

- After use, the cart should be cleaned with 70% ethanol. The bags will be disposed as biohazard.

13. The anesthesia should be carried out according to work and safety procedures, depending on the anesthetic procedure used.