Safety Issues In Experiments With Living Organisms

Kourouniotis Costas Veterinarian for IMBB Animal Facility

First time in the premises of the Animal Facility

- Ask to be informed (Protocol of entry and behavior in the "Facility ").
- Contact Phone number: 1013-1015-1019
- Entry: coveralls, surgical caps, shoe covers, etc.
- Sanitize hands, wear gloves.

Have a look around.

- Emergency Exits
- Water faucets
- Fire-extinguisher
- Telephone

Emergency phone numbers:

- Main Gate: 1111
- Security Officer: 1168
- Technical Service: 1095
- Animal Facility: 1013-1015-1017.

<u>More General Issues</u>

- Always wear gloves.
- Do not eat, drink, or smoke.
- Keep your workbench clean and tidy.
- Organize and prepare everything you need before you start.
- Have a second empty cage near you.
- Don't leave mice unattended on the top of the cage.
- Be careful with things like syringes, needles, anesthetics, blood, etc.

Handling Mice

- Calmly! Catch the mouse by the tail and put it on the grill of the cage. Then grab the mouse by the neck getting as much skin as you can between thumb and index.
- If bitten, keep cool! Don't shake or yank your hand abruptly,(that could break its neck or send it flying away).
- Because the animals we use are mutated (transgenic, knock-out, knock-in etc), we have to be very careful not to let them escape in the environment.



- Before leaving, clean and disinfect the workbench.
- Sharp objects (needles, scalpels) in special containers.
- Mice cadavers, tissues, in a bag in the freezer for incineration.
- Contaminated materials sterilized (autoclaving)

- Autoclave
- Complete decompression
- Solution Use protective gloves, without haste
- Euthanasia CO₂:
- Make sure animals are dead (rigor mortis), before throwing away.

<u>General Health/Preventive</u> <u>measures</u>

- Those involved should be vaccinated for Tetanus. (DT vax)
- Some Research Centers ask for Hepatitis B vaccination as well).

Zoonoses:

More important is Leptospirosis. It is transmitted by direct contact with urine or tissues, (embryos and fluids from abortions) or water contaminated by them. Only from wild-free animals.

Other zoonoses that have been reported :

- Rat bite fever.
- Tularemia
- Lemphotic choriomeningitis

Most common Problem:

- Allergies from :
- Allergens like proteins from animal hair follicles, saliva, feces.
- Dust from litter (wood shavings), hair, etc.
- Impaired air (urine, ammonia, etc.)
- If we suffer from allergies we should report it.
- Symptoms that might appear are, asthma, hives, itching, rhinitis, eye irritation.
- Anaphylaxis.
- For protection, we can use, protective masks, coveralls and goggles.

Questions ???

