

Guidelines for bringing live samples in to the imaging facility

BioSafety Levels (BSL) for live samples used in research

- BSL1 - Yeast, E coli etc. not known to cause disease in humans
- BSL2 - All mammalian cells (including cultured cell lines like HeLa) which may contain pathogens (e.g. HIV, *Toxoplasma*, *Salmonella*, Hepatitis B)
- BSL3&4 - Very dangerous e.g. Ebola, airborne pathogens. You CAN NOT image such samples in the core facility

For live BSL1 samples: no particular safety precautions necessary. Please clean all spills immediately. No gloves when operating the equipment

Standard operating procedure for fixed and live BSL2 samples:

- 1. You must get authorization to use BSL2 level samples before work can commence. See Bret**
- 2. Samples must be prepared in your lab using the appropriate TC hoods and safety procedures**
- 3. The culture dishes must be sealed with parafilm to minimize the risk of spills on the microscopes and the outside of the dish wiped with an appropriate disinfectant that is effective against the agent. In the case of slides, coverslips should be sealed with nail polish**
- 4. Samples must be carried to the facility in a closed secondary container with absorbent materials in the bottom of the container**
- 5. Use gloves when moving the dish onto the stage, remove gloves before touching the microscope or computer**
- 6. After imaging, the samples must be removed from the microscope and the microscope stage should be wiped down with tissue soaked in 70% ethanol (or another disinfectant that is effective against the agent). Any spills must be cleaned immediately with an appropriate disinfectant that is effective against the agent. Please inform Bret if you do spill something**
- 7. All samples must be taken back to the host lab for disposal, transported as in #4 above**
- 8. Wash hands with soap on finishing the above**

BSL2 actually encompasses a surprisingly broad range of samples (e.g. HeLa cells to live HIV!) so please consider if there are other things necessary for your samples. See Bret with any questions