Principal Investigator: Date Approved:

**Biohazardous Animal Handling and Restraint**

This SOP applies to individuals who handle and restrain animals that have been exposed to human cells or tissues, infectious agents, viral vectors, biological toxins, or other materials requiring Animal Biosafety Level (ABSL) 2 and/or ABSL2+ containment.

Handling animals without physical or chemical restraint increases the risk for bite/scratch exposures for the animal handler and the general public should a loss of containment occur (e.g., escaped infectious animal). To mitigate risk, chemical and/or physical restraint is strongly recommended for all animal procedures involving biological materials and is required for certain species, procedures and agents (e.g., NHP injections, surgeries).

**Personal Protective Equipment**

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**Engineering Controls, Equipment, and Materials**

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| **Biosafety Cabinet (BSC)** | Enclosed, ventilated laboratory workspace that protects the worker from aerosols |
| **Animal Restrainer** | An animal handling device used to secure animal for routine procedures and avoid bites/scratches and accidental needle sticks due to animal movement |
| **Chemical Restraint** | Immobilization achieved using sedatives, anesthetics or tranquilizers |
| **Stereotaxic Instrument** | Device used to perform stereotaxic surgery |
| **Disinfectant** | Appropriate to the agent(s) (see Decontamination and Disinfection SOP) |

**Procedures**

1. Perform all animal handling and restraint techniques within a certified BSC
2. Select the form of restraint appropriate for the species and technique being performed considering animal wellbeing and procedural risks and logistics
3. Set up workspace with all procedural materials (e.g., prepared syringes, gavage devices, calipers, scales)
4. Safely position the biohazard sharps waste container in an easy-to-reach location within the BSC, if needed. Note sharps may only be used at ABSL2+ following IBC review and approval
5. Place animal into animal restrainer appropriate for the species and procedure or administer chemical restraint
6. Stabilize animal and perform procedure as quickly and safely as possible.
7. Wipe down the site of injection with an EPA-registered disinfectant.
8. Dispose of used sharps immediately after use
9. Remove animal from restraint or recover completely from anesthesia and return to the housing location

**Cautions and Considerations**

* IBC approval is required for all biohazardous animal procedures performed outside of a BSC
* Restraint devices, including general anesthesia, should be employed whenever possible; if not possible consult with the Office of Comparative Medicine to discuss other options
* Use a “biohazard”-labeled transport container to transfer administration tools and biological materials to the location where materials will be delivered to animals (see Biohazardous Material Transport SOP)
* Contact EHS Biosafety at 801-581-6590within 12 hours of an exposure to biohazardous materials