**ISU INSTITUTIONAL ANIMAL CARE AND USE RODENT ASSESSMENT FORM**

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| **Details** | |
| **Protocol Number:** | Enter Protocol number here. |
| **Protocol Title:** | Enter Protocol Title here. |
| **Principal Investigator(PI):** | Enter full name here. |
| **PI Phone Number** | Enter #. |
| **Date Submitted** | Click or tap to enter a date. |
| **Work Locations:** | |
| List Locations Here. | |

**Acknowledgement of Participating Personnel** (add additional pages if necessary)**:**

I, the undersigned, have been trained on this risk assessment and understand the known or potential risks involved with participating in the protocol activities.

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| **Name(s):** | **Signature(s):** | **Date(s)** |
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| **EHS Staff fill out this Box** |  |
| Person reviewing form: | Click or tap here to enter text. |
| Dates of approval: | From: Click or tap to enter a date. |
|  | To: Click or tap to enter a date. |

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| **Step 1 : Consider the Consequences** | **Step 2 : Consider the Likelihood** | | | **Step 3:Calculate the Risk** |
| What are the consequences of this incident occurring? Consider what could reasonably happen. Look at the descriptions and choose the most suitable consequence. | What is the likelihood of the consequence identified in step 1 happening? Consider this without new or interim controls in place. Look at the descriptions and choose the most suitable Likelihood. | | | 1. Take step 1 rating and select the correct column 2. Take Step 2 rating and select the correct line 3. The risk score is where the two rating cross on the matrix below. Add risk to chart.   **E = Extreme H= High M = Medium,**  **L = Low N = Negligible** |
| **Consequences** | **Likelihood** | | | **Risk Guide:** |
| **Consequence** | **Description** |  | **Description** | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | | **CONSEQUENCES** | | | | | **Maj** | **Mod** | **Min** | **Ins** | | **STEP 2** | **A** | E | E | H | M | | **B** | E | H | M | M | | **C** | H | M | M | L | | **D** | M | M | L | N | |
| * **Major** | Death and extensive injuries | **A** | The event is expected to occur in most circumstances |
| * **Moderate** | Medical treatment | **B** | The event could occur at some time |
| * **Minor** | First aid treatment | **C** | The event could occur,  but only rarely |
| * **Insignificant** | No treatment | **D** | The event may occur,  but probably never will |

# STEP 1: IDENTIFY POTENTIAL AND EXISTING HAZARDS

Select applicable hazards and assess their individual risk as extreme, high, medium, low or negligible by using the risk assessment matrix provided above. Space has been provided to list additional Hazards.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Murine Cells** | | **Risk** | **Other Hazards** | | **Risk** | **Other** | | **Risk** |
|  | Murine cells transduced with an ecotropic retroviral vector with benign insert (ex: GFP) | Choose Risk |  | Known Human  Pathogens (ex:  Toxoplasma gondii;  Listeria monocytogenes; etc.) | Choose Risk |  | Physical exertion (lifting > 50 lbs, pushing heavy carts, carrying large bulky objects) | Choose Risk |
|  | Murine cells transduced with an amphotropic  retroviral vector with benign insert | Choose Risk |  | Certain toxins (i.e.,  Diphtheria, chemotherapy drugs, etc.) | Choose Risk |  | Repetitive motions | Choose Risk |
|  | Murine cells transduced with an ecotropic retroviral vector with 'hot' insert (ex: oncogene) | Choose Risk |  | Unmodified  (established) Human  cell lines inserted into  an immunecompromised  mouse | Choose Risk |  | Electrical Equipment | Choose Risk |
|  | Murine cells transduced with an amphotropic retroviral vector with 'hot' insert | Choose Risk |  | PRIMARY human or  non‐human primate  tissues | Choose Risk |  | Animal bites, scratches | Choose Risk |
|  | Murine cells transduced with a pantropic retroviral vector with 'hot' insert | Choose Risk |  | PRIMARY human or  non‐human primate  tissues transplant into  mice | Choose Risk |  | Animal Allergies (cage dumping, cage cleaning, etc.) | Choose Risk |
|  | Unmodified Murine cells | Choose Risk |  | Radioactive Materials  or X‐Ray devices | Choose Risk |  | Punctures from sharps | Choose Risk |
|  | Adenovirus/Adeno‐Cre; Adenoviral vectors; cells Murine cells transduced with adenoviral vectors | Choose Risk . |  | Liquid anaesthetics  (Ketamine, Xylazine  HCl, Butorphanol) | Choose Risk |  | CO2 | Choose Risk |
|  | Chemotherapy Drugs | Choose Risk |  | Isofluorane | Choose Risk |  | Other | Choose Risk |

# Step 2: RISK CONTROL AND ACTIONS

For hazards identified in Step 1, please list appropriate controls to eliminate or lessen the risk to project personnel.

|  |  |  |
| --- | --- | --- |
| **Priority** | **Control** | **Example** |
| 1. | Eliminate | Removing the hazard. |
| 2. | Substitute | Replacing a hazardous process with a less hazardous one. |
| 3. | Isolation | Isolating the hazard from the person at risk. |
| 4. | Engineering | Redesign a process or piece of equipment to make it less hazardous. |
| 5. | Administrative | Adopting safe work practices and providing appropriate training and instruction. |

|  |  |  |
| --- | --- | --- |
| Hazard | Problem | Controls |
| EXAMPLE: Allergies | Cage Dumping | Provide appropriate safety equipment (respirator), monitor allergy symptoms annually. |
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**Table 1. Minimum Personal Protective Equipment based on work category recommended, but not required. (Safety eye protection not required when using a PAP**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cat.** | **Activity** | **Nitrile**  **Gloves** | **Hair &**  **Shoe**  **Coverings or**  **designated shoes** | **Safety**  **Glasses or**  **Safety Eye**  **Protection** | **Lab coat or**  **clothes coverall** | **Surgical particulate**  Mask | **N95**  Respirator  Contact EHS | Other Air purifying respirator  Contact EHS |
| 1 | Corridor Activities |  | X |  |  |  |  |  |
| 2 | Cage Prep. And bedding filling |  | X | X |  | X |  |  |
| 3 | Enter animal holding room for brief visual inspection without opening the cages(s) |  | X |  | X |  |  |  |
| 4 | Contact with the primary rodent enclosure |  | X |  | X |  |  |  |
| 5 | Opening the animal cages, feeding or changing water | X | X |  | X |  |  |  |
| 6 | Direct Contact with the rodent | X | X |  | X |  |  |  |
| 7 | Cage Changing/Cage Dumping | X | X |  | X |  |  |  |
| 8 | Cage Changing using Disinfectant | X | X |  |  |  |  |  |
| 9 | Biohazardous, Radioactive Materials or Toxins used with the animals | X | X | X |  |  | As Required | As Required |

# Step 3: Overall Risk Assessment

Taking into account the hazards identified in Step 1 and the likelihood and consequences of the hazards, assess the overall risk of the research activity.

Negligible Risk

Low Risk

Medium Risk

High/Extreme Risk

Provide copies of risk assessment to all research staff. All participants must have the minimal level of skill, experience, training and physical fitness to safely perform the field activities. **All training must be documented.**

List Training here.

*This Risk Assessment is completed based on information provided on the referenced protocol. The Assessment does not identify each and every risk associated with this protocol.  The Principal Investigator (PI) has primary responsibility for overall health and safety for this protocol. If any changes effecting safety and health are made to this protocol, the PI is to contact the IACUC and ISU Environmental Health and Safety.*