PROGRAM OF HUMANE CARE AND USE OF ANIMALS

GUSTAVUS ADOLPHUS COLLEGE
ANIMAL FACILITY
REVISED: SEPTEMBER 2015
I. Purpose

To provide a written statement of the entire Animal Care Program of the Gustavus Adolphus College Animal Facility. This program has been established and is maintained in accordance with the Guide for the Care and Use of Laboratory Animals (Guide). The Program of Humane Care and Use of Animals will address at least the following areas:

1) Standard Operating Procedures
2) Procurement of Animals
3) Tracking of Animal Assignments
4) Program of Veterinary Care
5) Personnel Training
6) Availability of Emergency or Off Hours Care
7) Security

As mandated by the Public Health Service (PHS) this program will be inspected at least once every six months by the Institutional Animal Care and Use Committee, using the Guide as a basis.

II. STANDARD OPERATING PROCEDURES


Information concerning procurement, housing, breeding and care of specific species is listed below.

III. PROCUREMENT, ASSIGNMENT AND TRACKING OF LABORATORY ANIMALS

A. Procurement
All animals should be obtained from a Registered Dealer. When animals are received they should be immediately inspected for good health, assigned an ID number and transferred to the proper cage (see below).

B. Assignment of Animal ID Number
All animals must be assigned an Animal ID Number. The Animal facility has a series of colored numbered tags used to assign ID numbers to individual animal. A “new” animal should receive
the next available number for that species. The tags are located in the facility. The chart below summarizes the specific uses for each colored tag.

**Number Chart**

<table>
<thead>
<tr>
<th>Animal</th>
<th>Color</th>
<th>Number Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td>Yellow</td>
<td>1-99</td>
</tr>
<tr>
<td>Mouse</td>
<td>Yellow</td>
<td>100-199</td>
</tr>
<tr>
<td>Misc.</td>
<td>Orange</td>
<td>200-299</td>
</tr>
</tbody>
</table>

* REMEMBER -- each animal gets their own tag, so if there are three animals in a cage there should be three tags on that cage.

C. Tracking of Assigned Laboratory Animals

1. A trained animal worker should record newly received or weaned animals and their ID numbers in the Animal Stock List Notebook located in Nobel Rm. 002 and Beck Br. 016. This animal inventory form must be filled out at the beginning of each semester and include all adult laboratory mammals on the Gustavus Adolphus College Campus even if they are not physically located in the Animal Facilities (Nobel 002 or Beck 016). See Appendix A, figure 1 for a copy of this form.

2. To help supply further information about each animal, an **ID Cage Card** is assigned to each cage. This card IDs all animals in the facility and should be assigned to a cage when an animal is newly received or weaned. Minimum information required on the card is species, sex, quantity in cage, birthdate/acquired date and the Animal ID Number(s). Blank cards are located in the animal facilities. See Appendix A, Figure 2.

3. The **Breeder ID Cage Card** is the same as the ID Cage Card except it includes room for breeding information. When a breeder pair is established, this card will replace the other cage card. Fill in the appropriate information as events (mating, birth weaning) occur. Blank cards are located in the animal facilities. See Appendix A, Figure 3.
IV. HOUSING
* See Appendix A, figure 4 for specific recommendations on maximum number of animals per cage.

A. Laboratory Rats
   Are housed in hanging metal cages or large plastic cages. Breeding Rat Pairs are placed in medium (9.5”W x 18”L x 5”H) or large (9.5”W x 18”L x 6”H) plastic cages.

B. Laboratory Mice
   Are housed in hanging metal cages or plastic cages. Breeders may be set up in a small plastic cage.

C. Rabbits
   Are housed in the large metal cage units.

D. Hamsters
   Are housed in large plastic cages.

V. BREEDING ANIMALS

At times we need to breed rats and mice to ensure that enough animals are available for classroom and research use. The following information must be kept in order to provide an organized stock of animals available for use.

A. Breeder History Form
   After the offspring have been weaned from a designated breeding pair, all breeding information is transferred from the Breeder ID Cage Card to the Breeder History Record. This form is kept in the Facility (rm 002) and all forms must remain on file for at least three years. See Appendix A, figure 5 for a sample form.

B. Selection of Breeder Pairs
   1. In general - select males and females from large litters (but not excessively large). Each should have an Animal ID Tag. You may wish to mark individual females with magic marker if there is more than one in the same cage.

   2. Use unrelated animals as much as possible.

   3. Breeding age limits are: Rats- 12 months; Mice- (female) 6-10 litters, (male) 18 months.
C. Breeding Rats
Rats are bred in medium plastic cages (9.5”W x 18”L x 5”H) or large plastic cages (9.5”W x 18”L x 6”H) with 1 male and 1 female.

Each cage should have two numbered Animal ID Tags (Blue-for the female and White-for the male) and a Breeder ID Cage Card.

Males are removed after 10 days. REMEMBER -When the animals are moved to new cages the Animal ID Tags must move with them.

Approximately 26-32 days after mating, the litter will be born. (Estrus cycle 1-3 days, implantation 5 days, gestation 21 days). The young should be weaned between 21-28 days. At this time, they should also be sexed and placed in segregated cages (see below).

1. Sexing
Males have a larger genital papilla and greater ano-genital distance (5mm vs 2.5mm at seven days) than females. Testicles are evident if the rat is held up. (Refer to pp. 37-38 in The Biology & Medicine of Rabbits and Rodents, John E. Harkness and Joseph E. Wagner.) They may be sexed at an earlier age as described in the book but should not be weaned before 21 days.

2. Transfer to Cages
Transfer the weaned rats, males and females, into separate metal cages (5-6 per cage). Identify the cage with an ID Cage Card, and the individual’s animals with an Animal ID Tag (Blue-for female and White-for male).

D. Breeding Mice
For individual breeding, the procedures involved are the same as those followed for rats.

VI. CARE AND FEEDING

A. Daily care
All animals should have access to an adequate supply of fresh tap water (unless restricted by a special diet, which must be approved by the Facility Director and/or Animal Care and Use Committee). If water is required, open and wash the bottle with hot soapy water, rinse well, then fill with cold tap water and return to cage.
1. All animals should have available an adequate supply of food (unless restricted and approved as above). If food is required, pellets are found in the food bins for each species.

2. Make sure cages are clean. If cleaning is required, transfer the animal(s) to a new clean cage. Wash the dirty cage as described below. Old bedding is thrown in the animal waste bin. Provide new bedding (in the white bin) on a clean tray or cage. See Appendix A, figures 6A, 6B and 6C for a specific cleaning schedule.

3. Check and record new litters. Notify the Facility Director.

4. Cages which contain dead or diseased animals should be cleaned promptly and the remaining animals transferred to a new cage. Place the dead animal in a ziplock bag and place in the freezer. Notify the instructor or the Facility Director so that the death can be recorded. If no one is available, leave a clear descriptive note.

5. Clean sink area after each use.


7. Empty the garbage when full. Take the bin to the loading dock and leave it to be emptied. When the bin is emptied, return it to the Animal Facility and replace the bag.

B. Twice a Week
   8. Clean rat trays. Remove old bedding and replace with new. If cages need cleaning, do so as described below.

   9. Clean rabbit trays. Remove old bedding and replace with new. If cages need cleaning, do so as described below.

C. Once a Week
   10. Clean mice trays. Remove old bedding and replace with new.

   11. Clean Rabbit, Rat, Mice and other mammal cages and trays as described below.

D. Once a Semester
   12. Contact custodial to set up a time for them to deep clean the Animal Facility.

E. Cage Cleaning Procedures
   13. Transfer animals to new clean cage with new bedding. Transfer all ID Tags and Cage Cards.

   14. Provide a clean water bottle with fresh water (located in the storage area).
15. Place new food in clean food chute.

16. Disinfect and wash dirty bottles, caps and food chutes with disinfectant and soap (next to the sink). Use Gloves!

17. Wash trays and cages with a 10% Bleach Solution, Lime-away (if needed) and soap. Use Gloves!

G. General Housekeeping
18. Wipe off outside of cages (hanging rat and rabbit cages especially).

19. Clean vents, counter tops.

20. Sweep and mop floor.


VII. PROGRAM OF VETERINARY CARE

A. Veterinarian Agreements:
1. Physical examination of each rabbit will be done upon entry to the facility and annually thereafter. Any illness, ectoparasutesm etc. will be treated as needed at this time.

2. Two combined fecal samples will be evaluated by fecal flotation upon entry and annually. Internal parasite control programs will be instituted as needed.

3. No vaccinations will be routinely given.

4. A veterinarian will be available at all times for emergency and routine medical care.

5. Euthanasia of rabbits will be done by a veterinarian. The method of euthanasia will be an overdose of barbiturates given I.V. or I.P.

6. A veterinarian will inspect the facilities annually.

7. A veterinarian will be available to participate on the Animal Care Committee and consult on any questions concerning the care and treatment of the rabbits.

* The official signed copy of the Program of Veterinary Care Agreement can be found in the Documents notebook in Rm. 232. 
B. Animal Facility Guidelines:

1. Procedures with animals will avoid or minimize discomfort, distress and pain to the animals, consistent with sound research and laboratory design.

2. Euthanasia will employ anesthesia overdose or other procedure approved by the IACUC for mice and barbiturate overdose for rabbits.

3. No animal used for research will be given out to persons other than qualified biology faculty or students under the supervision of qualified biology faculty members, unless approved by the Facility Director, the Animal Care Committee and/or the Biology Chairperson.

4. Before animals can be used by a faculty member or student researcher, a protocol form must be submitted to the Institutional Animal Care and Use Committee and the procedure approved. A copy of the approved protocols will be kept on file by the Facility manager (in IACUC notebook, Nobel 232) and reviewed annually by the federal inspector.

5. No toxic chemicals or radioactive materials may be stored in the animal facility. Toxic materials may only be used on animals if it is part of the approved procedure. We are not licensed to use radioactive materials.

6. No surgical procedure will be performed by students unless under the direct supervision of a qualified faculty member.

7. Any non-routine animal care required by faculty must be submitted in writing to the Facility Director.

C. Disease Control and Prevention

1. All animals will be checked daily.

2. Any sick or suspect animal(s) will be reported immediately to the Facility Director.

3. Sick or suspect animals will be put in quarantine in consultation with a veterinarian and/or disposed of by proper euthanasia methods.

4. All cages that contained apparent sick animals and/or dead animals will be disinfected and sterilized.
5. No wild animals will be allowed in the facility without the appropriate permit(s) from the necessary regulating agencies (DNR). After such approval, the animal(s) must have an adequate quarantine period and will be housed in a room separate from our “normal” stock.

6. General sanitary maintenance will include:
   a) Disinfectant soap for caretakers;
   b) Barriers on the lower edge of doors to confine small animals;
   c) Mice and cockroach traps to be checked daily;
   d) Frequent cleaning of the shelves, table tops and cages.
   e) Cages which contained diseased or dead animals will be cleaned promptly.

7. Animal food will be kept isolated from the animal colonies and/or stored in containers with tight fitting lids.

VIII. PERSONNEL TRAINING

A. Training
   1. All employees must complete the following training before beginning work in the Gustavus Animal Facility:
      a) Attend a one hour Right to Know Meeting, which includes general work, safety and MSDS information.
      b) Read and be familiar with this Program of Humane Care and Use of Animals Notebook.
      c) Attend a half hour hands-on session in the Animal Facility going over guidelines and handling of animals etc.
      d) Sign the Training Form filed in this notebook

IX. AVAILABILITY OF EMERGENCY OR OFF HOURS CARE

Trained workers will normally be scheduled to work during the week and rotating on the weekends. In the event of a holiday or unavailability of workers the Facility Manager will ensure proper care during the “Off” time.
For Emergencies Contact:

Campus Safety - 933-8809 (on campus)

Maureen Carlson, Facility Manager - 933-7334 (work)
For both Beck and Nobel 934-1679 (home)

Dr. Jan Wotton - 933-7305 (work)
Beck only 931-8731 (home)

Dr. Jon Grinnell - 933-7332 (work)
Nobel only 934-4838 (home)

X. SECURITY

The Gustavus Animal Facilities are to remain locked AT ALL TIMES.

Access to the room is available to:

   All Biology or Psychology Faculty and Staff
   
   All trained animal workers

   All orientated and “approved” animal research students.

Keys to these rooms are distributed by the Facility Manager or Campus Safety.
Appendix A, Figure 1

Appendix A, Figures 2 through 5

Appendix A, Figure 6A

Appendix A, Figure 6B

Appendix A, Figure 6C
### ID Cage Card

Species: 
Number of animals in cage: 

<table>
<thead>
<tr>
<th>Animal ID #</th>
<th>Sex</th>
<th>Birth/Aquired Date</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Notes:

APPENDIX A, figure 2

### Breeder ID Cage Card

Species: 
Number of animals in cage: 

<table>
<thead>
<tr>
<th>Animal ID #</th>
<th>Sex</th>
<th>Date(s) Mated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Offspring

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Date of Birth</th>
<th>Date Weaned</th>
<th>Date of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Additional Notes:

APPENDIX A, figure 3
# Recommended Maximum Number of Animals per Cage

<table>
<thead>
<tr>
<th>Type of Cage</th>
<th>Mice</th>
<th>Rats</th>
<th>Rabbits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small - 7&quot; W x 11&quot; L x 4.5&quot; H</td>
<td>4</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Medium - 9.5&quot;W x 18&quot; L x 5&quot; H</td>
<td>10</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Large - 9/5&quot; W x 18&quot; L x 6&quot; H</td>
<td>15</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Metal Hanging Cages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small - 8&quot; W x 10&quot; L x 5&quot; H</td>
<td>6</td>
<td>1</td>
<td>NA</td>
</tr>
<tr>
<td>Medium - 10&quot; W x 17&quot; L x 7&quot; H</td>
<td>10</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Large - 10&quot; W x 26&quot; L x 7&quot; H</td>
<td>15</td>
<td>4</td>
<td>NA</td>
</tr>
<tr>
<td>Metal Rabbit Cages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large - 24&quot; W x 25&quot; L x 17&quot; H</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
</tr>
</tbody>
</table>

** Do not use metal cages for breeding animal
(mesh floor will not work for offspring)

Appendix A, figure 4

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## Breeder History Record

Academic year of Breeding: 
Species: 

<table>
<thead>
<tr>
<th>FEMALE</th>
<th>X</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal ID Number:</td>
<td>Animal ID Number:</td>
<td></td>
</tr>
<tr>
<td>Birth/Acquired Date:</td>
<td>Birth/Acquired Date:</td>
<td></td>
</tr>
<tr>
<td>Parents (if known):</td>
<td>Parents (if known):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Mated</th>
<th>Date Delivered</th>
<th>Number of Young</th>
<th>Date Weaned</th>
<th>Offspring's Animal ID#</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Born</td>
<td>Weaned</td>
<td>Female</td>
</tr>
</tbody>
</table>

Additional Notes:

Appendix A, figure 5
# Record of Animals on Hand

**U.S. Department of Agriculture**

**Animal and Plant Health Inspection Service**

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**1. USDA License No.**

**2. Name and Address of Dealer**

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### Container Tag No.

<table>
<thead>
<tr>
<th>Code</th>
<th>No. of Animals</th>
<th>Individual Ident.</th>
<th>Tattoos or Tag No. (If applicable)</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

### Age, Sex

<table>
<thead>
<tr>
<th>No. Young</th>
<th>No. Adult</th>
<th>Invoice No.</th>
<th>Date (Mo., Day, Year)</th>
<th>Arrival at Premises</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>M</td>
<td>E</td>
<td>G</td>
<td>H</td>
</tr>
</tbody>
</table>

### Disposition

<table>
<thead>
<tr>
<th>Date Sold, Exchanged or Donated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice No.</td>
</tr>
<tr>
<td>J</td>
</tr>
</tbody>
</table>

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**Record is required by law (7 U.S.C. 31:215g). Failure to maintain the record can result in suspension or revocation of license.**

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**Public reporting burden for this collection of information is estimated to average 1.6 annual hours per recordkeeper including the time for reviewing instructions, the time for searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Department of Agriculture, Clearance Officer, ORRMA, Room 406-H, Washington, D.C. 20250, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.**

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**Replaces VS 18-12 (R-72) which may be used.**

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**APHS Form 7019**

(JAN 90)

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**Form Approved: OMB No 0575-0030**

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**INSPECTOR'S INITIALS**

**DATE**