GUIDELINE for Transferring Animals from Agricultural to Biomedical Facilities

1) The Principal Investigator (PI) and the Farm manager/vendor should identify the species of choice and specific animals prior to transfer of animals to biomedical facilities.

2) Timeline for notification of CAR to initiate large animal transfer into CAR facilities:
   - Approximately **6 weeks prior to transfer** of animals into the facility, the PI will alert carvets@msu.edu and carinfo@msu.edu to the number of animals that will be needed for studies. This will allow CAR adequate time to prepare pens in housing rooms and establish medical files, etc.
   - The PI is to provide animal health and medical information to carvets@msu.edu (see #3) for each animal to be transferred. Animals cannot be transferred until all health history information is reviewed and approved by CAR veterinarians.
   - Appropriate animal diet must be identified that will meet nutritional objectives and should be requested at time of CAR notification to allow for processing at farm sites or to order from food vendor; content analysis to be conducted by PI for lots milled on campus.

3) Animal health pre-requisites for large animal housing in biomedical facilities:
   - Vaccination history from farm/vendor
   - Deworming history and any fecal analyses (egg counts)
   - Record of medical treatments provided historically/currently
   - Prophylactic antibiotic regimen, if needed, to treat outbreaks of disease related to shipping stress
   - Results of Q Fever testing (for ruminants) at least 2 weeks prior to the move into CAR facilities

4) Animal descriptors that must accompany delivery of each animal:
   - Individual identification (e.g. tag, tattoo)
   - Breed
   - Age
   - Body Weight
   - Sex
   - Expected gestation stage and delivery due date (if applicable)

5) Animals showing overt signs of disease (respiratory signs, lameness, diarrhea, neurological abnormalities) may be rejected from entry to the biomedical building and returned to the farm/vendor for replacement.

6) Animal medical records will be maintained within CAR and a physical exam will be conducted by CAR veterinary staff upon arrival of the animal to the facility.

7) Follow-up fecal analyses will be conducted by CAR within 1 week of movement into animal facility.
SPECIES SPECIFIC EXPECTATIONS

SHEEP:

- Appropriate vaccination program, including *Clostridium perfringens* C & D, and *Clostridium tetani* (including ewes in last month of pregnancy and lambs).
- Vaccination for contagious ecthyma (orf) if it is endemic in herd.
- Program for appropriate internal and external parasite treatment:
  - Fecal egg count reduction test (FECRT) to show worm burden and efficacy of deworming protocol (this can be arranged with the MSU Veterinary Diagnostic Laboratory (VDL) (formerly referred to as DCPAH)).
  - If FECRT < 200, no deworming will be necessary, as long as animals are clinical healthy, with solid feces
  - If FECRT >200, animals need to be dewormed at the vendor site and it will be the researcher’s responsibility to pursue further clinical evaluation and diagnostic testing to ensure worm burden does not negatively impact health of animals and affect research data. FECRT should be retested 10-14 days after deworming.
  - External parasite infestation will be determined upon physical examination.
- Caseous lymphadenitis-free herd; or if herd is not free, then negative ELISA of individual animals prior to shipment.
- Foot assessment, treatment with zinc sulfate foot bath, and trimming as needed before transfer to housing facility.
- Q fever test for individual animals (send for IFA/ELISA test to MSU VDL; IDEXX Laboratories is an option). Sheep must have Q fever serology (ELISA or IFA test) results completed at least 2 weeks prior to the move from the farm/vendor to the biomedical facilities.

SWINE:

- Appropriate vaccination program, including Parvovirus, *Leptospira*, *Erysipelas* and Circovirus. Different vaccination programs will be evaluated (e.g. swine influenza) on a case-by-case basis.
- Program for appropriate internal and external parasite treatment:
  - Since many conventional confinement swine operations do not routinely deworm for internal parasites, fecal samples from a random sample of 10% of animals to be moved must be submitted to MSU VDL.
  - If fecal results indicate worm burden, keep pigs in holding pen, deworm and move after 5-7 days.
  - Evidence of external parasites will be based on clinical evaluation of pigs upon arrival (scabies!).
- Feet will be assessed and trimmed as needed before transfer to housing facility.

**Biomedical facility entry limitations for research personnel and/or visitors:**

1) With travel outside the US & Canada, persons should not be permitted into MSU agricultural animal facilities for a minimum of 7 days after travel, per institutional recommendations

2) With exposure to domestic or Canadian non-MSU agricultural species, particularly swine and poultry, persons should not be permitted into MSU facilities for a minimum of 48 hours, per institutional recommendations

*Note: If there is a need to access the facilities sooner than the above limitations, a risk evaluation can be done by veterinary and facility staff, on a case by case basis, to minimize any disruption in research/other work.*