Guidelines for Collaborative Animal Studies

Collaborations between investigators, laboratories, or Core facilities are often required to meet the experimental objectives of animal studies. In some cases, collaborations can lead to ambiguities in lines of animal ownership, authority, accountability, and oversight within an animal care and use program. It is the goal of all collaborations to:

- Ensure clear lines of animal ownership, accountability, authority, and communication;
- Establish procedures which permit animals to move to facilities within the NIH for a procedure without having to transfer ownership of the animal;
- Ensure that the Animal Care and Use Committee (ACUC) approving an Animal Study Proposal (ASP) is aware of all procedures and treatments conducted on an animal used in support of the established experimental objectives;
- Ensure that animal procedures conducted on an ASP have been reviewed and approved by the ACUC responsible for oversight of the investigator conducting the procedure and area it is conducted in;
- Ensure that essential information on the nature of the collaboration, a list of procedures to be conducted under collaboration, etc. are present in both the Principal Investigator's and collaborating investigator's ASPs prior to beginning any animal work.

Investigators are encouraged to work closely with their Institute/Center (IC) animal program personnel to determine the most appropriate collaboration mechanism for the situation and any required actions to ensure prior approval. IC animal program personnel are well positioned to facilitate the collaborative process and ensure communication between all parties.

Three (3) possible/typical mechanisms exist for a Principal Investigator (PI) to conduct animal related collaborations with another investigator, an established Core (e.g. IC Centralized Transgenic Core, etc.) or Shared facility (e.g. NIH Mouse Imaging Facility, etc.) facility:

1) Transfer of ownership (Appendix 1). In the case of an NIH investigator collaborating with another investigator outside of the NIH, a transfer of ownership of the animal, is often the simplest way to ensure clear lines of accountability.;
2) Non-Transfer of Ownership with One Investigator Accountability (Appendix 2); and
3) Non-Transfer of Ownership with Two Investigator Accountability (Appendix 3).

For models 2 and 3, where ownership does not transfer from one investigator to another, the PI is the individual "owning" the animal who is requesting the services from a collaborator. With the exception of model 1, Transfer of Ownership, the PI requesting the collaboration, the collaborating investigator, and their respective IC ACUCs must be aware of, and in agreement with, the terms of the collaboration prior to commencement of any animal work.

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Appendix 1: **Transfer of Ownership**

Pros:

- Once ownership has been transferred, the PI transferring ownership has no accountability for the transferred animal(s) once the receiving collaborator and/or their program has accepted the animals.

Cons:

- Multiple short term transfers have resulted in the erosion of animal identification and cage card data.
- The transferred animals must be counted as part of the approved animal numbers; this may increase IC USDA reporting numbers which creates the appearance of an increase in the number of animals used.
- Time required obtaining signed Material Transfer Agreement for the Transfer of Organisms (MTA-TOs), Animal Transfer Agreements (ATAs), and tracking of animals against the receiving ASP. In many cases must be repeated with each animal transfer.

Considerations:

- Best used for "one-way", permanent animal transfers.
- Receiving collaborator must have an approved ASP or, in the case of a Core/Shared Facility Program, an ACUC approved Program Standard Operating Procedure (SOPs). In addition, **the animals received must be in accordance with the animal requirements and study objectives outlined in the approved ASP or SOPs.**
- Animal transfer and transport must be appropriately orchestrated. In many cases this will require the completion of a MTA-TO and/or an ATA.
- All animal transfers require the review and approval of both the receiving IC ACUC, as well as the receiving animal holding facility (i.e. pathogen status, space availability, etc.) prior to the transfer of the animals.

Prior to collaborating and as applicable, the following critical Guidelines, Policies and Manual Issuances must be read, understood, and followed:

1. NIH Animal Transportation Guidelines.
   a. Guidelines for NIH Rodent Transportation
   b. Guidelines for NIH Non-Rodent Transportation
2. Research Animal Transport for the NIH Clinical Center
3. Manual 3043-1: Introduction of Rodents and Rodent Products

Where applicable, the following forms must be completed:

1. NIH Rodent Transfer/Technical Request Form
2. Animal Transfer Agreement (ATA)
3. Material Transfer Agreement for the Transfer of Organisms (MTA-TO)
   - IC Technology Development Coordinators can assist with the MTA-TO process: http://www.ott.nih.gov/technology-development-coordinators

Appendix 2: **Non-Transfer of Ownership with One Investigator Accountability**

Pros:

- No animal transfers required;
- PI maintains ownership and control of all animals at all times.

Cons:

- PI assumes **all** accountability for the collaborator, the animals and procedural outcomes;
- PI **must** ensure that all work conducted under collaboration is conducted as delineated on their approved ASP;
- Collaborator **must** conduct all animal work as approved on the PI's ASP;
- The PI and his or her IC ACUC **must** have immediate access to and oversight authority for the procedure(s), procedure location(s) and/or holding locations used by the collaborator.

Considerations:

- Best used when all procedures can be conducted under the PI's direct oversight in space controlled by their IC ACUC.
- The approved ASP must include the names of the collaborator(s) performing procedures, their training, the procedures to be conducted under collaboration including a detailed description of the procedure(s) (i.e. methodology, restraint, anesthesia, euthanasia, endpoints, etc.), and other information not already included in the approved ASP (e.g. holding locations, procedure sites, final disposition of the animal(s), pain and distress categorization, use of hazardous agents, etc.).
- **The responsible PI and his or her IC ACUC must have access and oversight of all animal procedures and holding locations identified on their ASP.**
- **All animal procedure and holding locations must be included in the PI IC's semi-annual program evaluation.**

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Appendix 3: **Non-Transfer of Ownership with Two Investigator Accountability**

Pros:

- Ownership of the animal(s) is never transferred.
- Once a collaborative structure is established in both the PI's and collaborator's ASP, each scientist only has accountability for the animal when it is in their possession. Emergency and treatment plans should be discussed and agreed upon in advance. Unless alternate arrangements are made in writing, the PI or collaborator in possession of the animal is responsible for emergency treatment.
- Collaborator conducts animal work as detailed on their approved ASP.
- Each investigator (principal (animal owner) and collaborator) and their respective IC ACUCs are only accountable for the laboratories, procedure and animal holding locations already under their oversight.
- Since the originating cage cards and information are preserved throughout the collaboration, there is no erosion of animal identification and cage card data.
- For long-term collaborations, minimal implementation time is required once the collaboration has been established.

Cons:

- Requires prior establishment of a collaborative structure between the originating PI, the collaborator's PI and their respective ACUCs.
- Communication must be maintained at all times between all parties, including the animal facility(s) housing the animals.

Considerations:

- ***The USDA tracking of the animals is simplified; avoiding the potential for duplication, because tracking is the responsibility of the PI owning the animals and their IC ACUC.*** Animal numbers, justifications and USDA reporting is clear and uncomplicated.
- Ideal for multiple collaborations and "two-way" animal transfers.
- *The PI (animal owner) and collaborator (another investigator, Core or Shared facility) must include in their ASP; 1) the name and affiliation (IC and Lab/Branch/Section/Unit) of the collaborating investigator or Core facility; 2) the number and title of the collaborating investigator's ASP or Core/Shared facility's SOP which states the manner in which procedures will be conducted; 3) a list of the procedures to be conducted by the collaborator; 4) the animal procedure location(s); 5) any special post-procedural care required by the animals to be provided by the PI or collaborator due to procedures performed on the other ASP; 6) the individual(s) responsible for the provision of the post-procedural care; and 7) the appropriate USDA column listing for the procedure(s) to be conducted under collaboration.*
- The PI's ASP (animal owner) must include the animals to be used under collaboration in the numbers reflected in Section B of his or her approved ASP. The animals used in procedures conducted under collaboration should not be included in Section B of the collaborator's approved ASP.
- *The collaborating investigator's ASP must clearly state that approved procedures will be offered under collaboration to other investigators. In addition, the procedures to be offered under collaboration should be clearly delineated.*
- When animals are being held in a collaborator's animal holding space for an approved procedure under the collaborator's ASP, the originating cage card must be maintained,

but should be supplemented with a cage card indicating the name of the collaborator, the collaborator's ASP number under which the animals are being tested and the projected dates that the animals will be housed in the collaborator's animal holding space. In addition, the facility must be provided with a copy of the "Emergency Treatment and Care Form" of the originating PI who maintains ownership of the animal(s). This form must clearly identify contraindicated treatments and the final disposition of the animal(s) in the event of mortality.

- Following approval of the PI's (animal owner) ASP requesting the collaboration, a copy of the approved ASP should be submitted to the collaborator's IC ACUC. It is the collaborating IC ACUC's responsibility to review the requesting PI's approved ASP to ensure that the required information is present prior to beginning any collaborative animal work. ***The review process can be conducted by a designated agent of the collaborating IC ACUC and does not constitute a second approval of the PI's ASP. It is the responsibility of the collaborator (investigator, Core/Shared facility) to ensure that this has occurred prior to beginning any animal work.***
- The ACUC of the PI requesting the collaboration may request a copy of the collaborator's approved ASP or, in the case of a Core/Shared facility, their approved SOP(s) which further details the procedures to be conducted. The ACUC of the PI requesting the collaboration may not make changes to the collaborator's approved ASP or, in the case of a Core/Shared facility, SOP. Only the collaborator's ACUC can make changes in the document. Should the PI's ACUC believe that changes should be made to a collaborating ASP or SOP, they can make a recommendation for consideration to the collaborating investigator's or facility's ACUC or choose not to approve the collaboration.
- The collaborator's IC ACUC must ensure that all activities conducted by the collaborator are in accordance with their approved ASP or SOP.
- It is important to ensure that both ICs are aware of their responsibilities for the locations, procedures, activities and services conducted under collaboration.
- It is strongly recommended that animal movement between facilities be arranged through the involved animal facilities.
- The ASP modifications and procedures as outlined above constitute a formal written understanding between the originating PI, collaborator and the involved ICs.

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