Animal Welfare Assurance for Domestic Institutions

I, Mary Ucci, as named Institutional Official (IO) for animal care and use at Northern Kentucky University, herein after referred to as Institution, by means of this document, provides assurance that this Institution will comply with the Public Health Service Policy on Humane Care and Use of Laboratory Animals, hereinafter referred to as PHS Policy.

I. Applicability of Assurance

This Assurance applies whenever this Institution conducts the following activities: all research, research training, experimentation, biological testing, and related activities involving live vertebrate animals supported by the PHS, HHS, and/or NSF. This Assurance covers only those facilities and components listed below.

A. The following are branches and components over which this Institution has legal authority, included are those that operate under a different name:
   Northern Kentucky University, Highland Heights, KY 41099

B. The following are other institution(s), or branches and components of another institution:
   None

[Note: only those entities listed in this section will be entitled to use the Assurance number for grant and contract submissions to PHS agencies.]

II. Institutional Commitment

A. This Institution will comply with all applicable provisions of the Animal Welfare Act and other Federal statutes and regulations relating to animals.

B. This Institution is guided by the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training."

C. This Institution acknowledges and accepts responsibility for the care and use of animals involved in activities covered by this Assurance. As partial fulfillment of this responsibility, this Institution will ensure that all individuals involved in the care and use of laboratory animals understand their individual and collective responsibilities for compliance with this Assurance, and other applicable laws and regulations pertaining to animal care and use.

D. This Institution has established and will maintain a program for activities involving animals according to the Guide for the Care and Use of Laboratory Animals (Guide).

E. This Institution agrees to ensure that all performance sites engaged in activities involving live vertebrate animals under consortium (subaward) or subcontract agreements have an Animal Welfare Assurance and that the activities have Institutional Animal Care and Use Committee (IACUC) approval.

III. Institutional Program for Animal Care and Use

A. The lines of authority and responsibility for administering the program and ensuring compliance with the PHS Policy are as follows:
B. The qualifications, authority, and percent of time contributed by the veterinarian(s) who will participate in the program are as follows:

B1. Primary Name: John Secter, D.V.M.

Qualifications
- Degrees:
  - D.V.M. from Auburn University College of Veterinary Medicine
- Training or experience in laboratory animal medicine or in the use of the species at the institution:
  - Over 20 years of experience in laboratory animal medicine

Authority: Dr. Secter has delegated program authority and responsibility for the Institution's animal care and use program including access to all animals.

Time contributed to program:
Veterinarian visits will be made as a walk-through every six months and when needed. Approximately 10% of the veterinarian's time will be contributed to the program. Veterinary care will be available at all times and if the primary veterinarian is not available, arrangements will be made to identify and contact a back-up veterinarian.
B2. Back-up Veterinarian's Name: Jennifer Quammen, D.V.M., MPH

- Qualifications
  - Degrees:
    - D.V.M. from Ohio State University
    - MPH from University of Iowa
  - Training or experience in laboratory animal medicine or in the use of the species at the institution:
    - Over 10 years of experience working with small and mixed animal, emergency, and specialty practices.

- Responsibilities:
  - Dr. Quammen will fulfill of the responsibilities as the primary veterinarian should the primary veterinarian be unavailable.

- Time contributed to program:
  - Dr. Quammen will serve on an as-needed basis for the Institution's IACUC. Dr. Quammen's contact information will be available should a researcher need to contact a veterinarian and the primary veterinarian is not available.

C. The IACUC at this Institution is properly appointed according to PHS Policy IV.A.3.a. and is qualified through the experience and expertise of its members to oversee the Institution's animal care and use program and facilities. The IACUC consists of at least 5 members, and its membership meets the composition requirements of PHS Policy IV.A.3.b. Attached is a list of the chairperson and members of the IACUC and their names, degrees, profession, titles or specialties, and institutional affiliations.

D. The IACUC will:

D1. Review at least once every 6 months the Institution's program for humane care and use of animals, using the Guide as a basis for evaluation. The IACUC procedures for conducting semi-annual program reviews are as follows:
  - The semi-annual program review is conducted at a convened meeting (regular or special) where a majority of the committee is present.
  - Each member receives or has received a copy of the Guide, the previous semi-annual program inspection report, the IACUC policies and procedures (containing their charges and responsibilities), and this Institution’s IACUC program evaluation checklist (modeled from OLAW) which reviews all aspects of the animal use program including administration.
  - In addition, agenda items for IACUC meetings include review, discussion, and/or recommended revisions to improve the level of care and to ensure compliance.

D2. Inspect at least once every 6 months all of the Institution's animal facilities, including satellite facilities and animal surgical sites, using the Guide as a basis for evaluation. The IACUC procedures for conducting semiannual facility inspections are as follows:
  - At least once every six months, each facility or area will be completely inspected by no less than two (2) IACUC members. The results will be discussed following the inspection. All members are invited to participate in the semi-annual inspection of the animal facilities.
  - Facilities inspection may include review of the animal care records, animal staff interviews, and random interviews with investigators holding active animal use protocols and other laboratory staff involved with animal care and utilization.
  - Any items not in compliance with the Guide will be recorded and submitted by the IACUC to the IO. Significant deficiencies will also be reported to OLAW.
  - The dates of each inspection will be included in the annual OLAW report. The Institution's semi-annual facilities inspection is normally conducted in conjunction with the semi-annual program evaluation.
- Field sites will be reviewed using current photographs and/or video during the semi-annual inspection or meeting. Live visits will be scheduled in years when the field station is actively used for housing or activities involving live vertebrate animals.

D3. Prepare reports of the IACUC evaluations according to PHS Policy IV.B.3. and submit the reports to the Institutional Official. The IACUC procedures for developing reports and submitting them to the Institutional Official are as follows:

- The IACUC administrator prepares a draft of the semi-annual report based, in part, upon the facilities inspection report and applicable program review results. The report contains a description of the nature and extent of this institution's adherence to the Guide for the Care and Use of Laboratory Animals. Any departures from the Guide will be identified specifically and the reasons for each departure will be stated and reported to the IO.
- A draft of the semi-annual report, along with any additional facilities inspection or program review information, is distributed to the IACUC members for review and compiled into a final report.
- The final semi-annual report, identifying significant and minor deficiencies, if any, along with the minority opinions and/or recommendations, will be signed by the majority of the IACUC members and forwarded to the IO. Any deficiencies identified will be designated as minor or significant and will include a reasonable plan and schedule for correction.
- Deficiencies will be communicated to the PI by either the IACUC Chair or the IACUC Administrator. A timeline will be established to rectify the deficiency and will be revisited at the next semi-annual meeting.
- This institution will adhere to the Guide's reporting requirements for deficiencies.
- Minority views will be documented with the deficiency and in the meeting minutes and on the inspection log if appropriate.

D4. Review concerns involving the care and use of animals at the Institution. The IACUC procedures for reviewing concerns are as follows:

- This institution has an anonymous research misconduct reporting hotline and website monitored by the neutral third party company, Ethics Point. The institution's Office of Compliance and Institutional Ethics has flyers posted that are displayed in all buildings and animal facilities on campus with directions on how to make a report anonymously. The directions contain the phone number and web address for anonymous reporting. The IACUC will follow the procedures detailed in the NKU IACUC Procedure for Investigating Concerns Involving Animal Care and Use (Animal Research Non-Compliance Standard Operating Procedure). These procedures include the following:
- Concerns can be submitted anonymously through the Institution's compliance hotline. Concerns can also be submitted in memo or report form via email or hand copy.
- The IACUC Chair will review the formal complaint and follow the procedures in the Investigating Concerns Involving Animal Care and Use Standard Operating Procedure.
- There will be no retaliation or harassment toward anyone who reports concerns.
- All appropriate parties and agencies will be informed, if deemed necessary, by the IACUC and those initiating the concern will receive a response if possible.
- All reports and steps throughout the investigation will be documented.
- If warranted, the Institutional Official will be informed by written report. The written report will contain information about the concern and recommendations will be provided to the IO for corrective actions.
- The IACUC will be informed throughout the process by following specific communication procedures described in the Procedure for Investigating Concerns Involving Animal Care and Use.

D5. Make written recommendations to the Institutional Official regarding any aspect of the Institution's animal program, facilities, or personnel training. The procedures for making recommendations to the Institutional Official are as follows:
Recommendations for changes to any aspect of the Institution's animal program, facilities, or personnel training can come from the program or facilities inspections or from feedback from an IACUC member or researchers.

The recommendation will be approved by the IACUC fist and then submitted in writing by the IACUC Administrator to the IO.

The IACUC Chair and IACUC Administrator will address any recommendations from the IO and report to the IACUC on the final outcome. Recommendations will be kept on file.

D6. Review and approve, require modifications in (to secure approval), or withhold approval of PHS-supported activities related to the care and use of animals according to PHS Policy IV.C.1-3. The IACUC procedures for protocol review are as follows:

Overall Review Information

- No IACUC member may participate in the IACUC review or approval of a research project in which the member has a conflicting interest (e.g. personally involved in the project) except to provide information requested by the IACUC.
- Requests for approval of animal utilization are submitted to the IACUC administrator in the Office of Research, Grants and Contracts by the Principal Investigator for each project.
- Upon submittal, the IACUC Administrator will perform a pre-review of the application to ensure all materials are present.
- All IACUC members will have access to the entire IACUC application.
- A time limit is established for IACUC members to request a full committee review.
- If a full committee review is not requested, the procedure for the Designated Member Reviewer Process will be initiated.
- If a full committee review is requested, the procedure for full committee review will be initiated.

Designated Member Reviewer Process

- Designated Member Review process may only be utilized after all members have been provided the opportunity to call for a full-committee review. Members will be provided with a five business day time period to call for a convened board before the Designated Reviewer will be assigned.
- The IACUC Chair will assign one or more designated reviewers.
- Designed reviewers, if more than one assigned, must be unanimous in their decision.
- The IACUC Administrator sends the reviewers' comments to the PI for reply.
- The PI revisions and replies, based on reviewer comments, are distributed to the designated reviewer/s by the IACUC Administrator.
- The process may be repeated until all reviewer concerns are addressed and the final protocol is approved.
- Designated reviewers will have access to all application materials and may approve, request modifications (to secure approval), or refer the project for a full committee review. Designated review may not result in withholding of approval.
- If a protocol is assigned more than one designated reviewer, the reviewers must be unanimous in any decision. They must all review identical versions of the protocol and if modifications are requested by any one of the reviewers then the other reviewer will be made aware of and agree to the modifications.

Full Committee Review Process

- If a full committee review is requested, the IACUC Administrator coordinates the scheduling of the full committee review, and facilitates communication and distribution of all study materials to IACUC members.
- The IACUC Chair facilitates the meeting. If the IACUC Chair is unable, he may delegate this responsibility which will be documented in the meeting minutes.
- A full IACUC review will take place at a convened meeting with a quorum (simple majority) of members.
- A quorum of members may vote to approve a protocol or require revisions.
- If revisions are required, the IACUC may take the following actions:
  o If all members of the IACUC are present at the meeting, the committee may
    vote at the meeting to require modifications to secure approval and have the
    revised research protocol reviewed and approved by DMR, or returned for FCR
    at a convened meeting.
  o If all members are not present, the committee may vote to return the protocol
    for FCR at a convened meeting or to employ DMR. If the committee votes to
    use DMR, all members of the IACUC including members not present at the
    meeting will receive a copy of the revised research protocol with an
    established timeframe to request a FCR at a convened meeting to discuss the
    response to revisions. If any member requests the response to revisions to
    undergo FCR, the protocol will be reviewed via FCR.
    o If DMR following FCR is utilized, the IACUC Chair will assign at least one
      designated reviewer.
- Minority opinions are allowed to accompany any action. Actions may include approval,
  request for modifications, or disapproval.
- The IACUC Administrator will coordinate communication with the PI including IACUC
  decisions and send a formal notice of approval, requests for revisions, or denial.
- Formal approval must occur before any vertebrate animal may be utilized.

D7. Review and approve, require modifications in (to secure approval), or withhold approval of
proposed significant changes regarding the use of animals in ongoing activities according to PHS
Policy IV.C. The IACUC procedures for reviewing proposed significant changes in ongoing
research projects are as follows:

IACUC Pre-Review of Revisions
- Requests for revisions of IACUC approved protocols are submitted to the IACUC
  Administrator in the Office of Research, Grants and Contracts by the Principal
  Investigator (PI) for each project.
- Initial screening of the protocol is completed by the IACUC Administrator.

Administrative Review (Minor Revision)
- Minor revisions including administrative changes, study or funding source change,
  addition of animals that does not exceed 10% of original study numbers will be
  approved via administrative review by the Chair.

Expedited Review Process (Minor Revisions)
- All IACUC members will have access to all study materials to review the requested
  revisions.
- A time limit of three business days is established for IACUC members to request a full
  committee review.
- If a full committee review is not requested, review and approval will be conducted by
  DMRs assigned by the IACUC Chair. DMR will normally be conducted by the
  veterinarian and the IACUC Chair as available.

D8. Notify investigators and the Institution in writing of its decision to approve or withhold
approval of those activities related to the care and use of animals, or of modifications required to
secure IACUC approval according to PHS Policy IV.C.4. The IACUC procedures to notify
investigators and the Institution of its decisions regarding protocol review are as follows:
- Notification of IACUC review decisions or required modifications shall be the
  responsibility of the IACUC Administrator.
- The IACUC Administrator will provide the PI with a formal approval notice.
- The PI will have the opportunity to respond to a denial of a protocol or protocol
  modification in writing or in person.
D9. Conduct continuing review of each previously approved, ongoing activity covered by PHS Policy at appropriate intervals as determined by the IACUC, including a complete review at least once every 3 years according to PHS Policy IV.C.1.-5. The IACUC procedures for conducting continuing reviews are as follows:

Continuing/Annual Review
- Continuing/annual review will be conducted at twelve month intervals. The PI will be notified electronically prior to the expiration date with a reminder that the annual report is due.
- Submitting the annual report is the responsibility of the PI.
- Continuing/annual reviews with no changes do not require committee approval.
- The IACUC Administrator will monitor annual reports.
- With the exceptions noted below, which will require FCR, continuing/annual reports with significant changes will be reviewed by a designated IACUC member with notification to the entire committee:
  - Pain category "D" and "E"
  - Neuromuscular blocking agents
  - Multiple survival surgeries
  - Primates

Three Year Renewal
- Protocol approval is for three years. At the three year expiration date, the PI may:
  - Allow the project to expire, or
  - Submit for three year renewal.
- If the PI submits for three year renewal:
  - A renewal application must be submitted.
  - The review and approval process will be the same as for a new protocol.
  - The study will retain the original IACUC protocol number.

Post Approval Monitoring

Additional post approval monitoring procedures may include:
- Additional facility inspections outside of the semi-annual facility inspections.
- Review of records of animal use, care, health reports, and related facility records (i.e. temperature/humidity logs). These items should also be available for the semi-annual facility inspections.
- The IACUC Chair, Administrator, and Veterinarian have the authority to request and review records or facilities at any time if warranted.

D10. Be authorized to suspend an activity involving animals according to PHS Policy IV.C.6. The IACUC procedures for suspending an ongoing activity are as follows:

- The IACUC may suspend an activity only after review of the matter at a convened meeting of a quorum of the IACUC present. A majority vote is required and a minority opinion shall be allowed for opposing view point(s). If a suspension is authorized, all activity will immediately cease. The Institutional Official in consultation with the IACUC shall review the reason for suspension, take appropriate corrective action, and report that action with a full explanation to OLAW.
- If circumstances involving animal health, safety and/or welfare dictate, the Veterinarian, a subcommittee of the IACUC, or the IO may immediately halt an activity on a temporary basis until evidence can be reviewed by the full IACUC as stated above.
- All affected parties including, but not limited to, the Principal Investigator, the IO and the appropriate oversight (e.g. Federal) agencies shall be notified of the reasons for the suspension, any applicable corrective action, and any further action(s) anticipated.
- IACUC has the authority to halt animal activities that have not received IACUC approval. An activity that has been undertaken without prior approval shall be halted and subsequently reported to OLAW as serious noncompliance.
The IO (or another authorized official) may unilaterally halt, terminate, or impose sanctions on any animal activity. However, the IO may not approve or reinstate any animal activity without IACUC approval.

E. The risk-based occupational health and safety program for personnel working in laboratory animal facilities and personnel who have frequent contact with animals is as follows:

- The IACUC has a role in ensuring animal researchers receive appropriate occupational health and safety training, comply with environmental safety requirements, and maintain a safe work environment. Review of the housing, care, storage, and procedural areas will be completed as part of the protocol and semiannual reviews.

- Procedural links are established with the Department of Safety and Emergency Management at the Institution who oversees occupational health and safety and maintains communication with faculty, staff, and students who work with animals and the IACUC.

- Hazardous identification and risk assessment is completed through annual training provided by Safety and Emergency Management and in each individual lab according to departmental procedures. Personnel are trained to practice good personal hygiene, be knowledgeable about the hazards in their work environment, understand the proper selection and use of equipment, follow established procedures, and use the PPE provided.

- Personal Protective Equipment (PPE) is available in all labs which involve animal care and use to prevent contamination, accidents or occupational injury. This includes gloves, gowns, masks and respirators. Procedures intended to prevent researchers from wearing PPEs outside of the lab are in place to decrease risk of contamination and injury. Training about PPE is available in the labs from mentors as well as from the biosafety and lab training. PPE prevents contamination, accidents and occupational injury. Prior to working with animals, students must work with the PI or senior technician to learn about such activities as disinfection techniques, use of PPE, and equipment.

- The NKU Institutional Biosafety Committee (IBC) reviews studies involving biologic agents that may be used during animal studies. The IBC has specific policies and procedures to guide researchers in the use of biologic, chemical and physical agents. Training about potentially hazardous biologic agents may be obtained from the IBC, training within individual labs, and through the Department of Safety and Emergency Management.

- Training is available on the use of equipment and the importance of using lab equipment correctly through the Department of Safety and Emergency Management and in individual NKU departments.

- Personnel training regarding zoonosis, chemical safety, physical hazards, allergies, handling of waste materials, precautions taken during pregnancy, illness or immune suppression are covered under lab training, CITI training, biosafety, and lab training, and in the hazardous waste material training.

- The Department of Safety and Emergency Management serves as the conduit for training occupational health and safety. Lab training is protocol-specific, available at the department level, and through CITI. Additional safety training required by personnel involved with animal use activities includes:
  - Online biosafety and lab training
  - Online blood borne pathogen training
  - Online hazardous waste material training
  - Animal care and use training for individuals working with animals
  - OSHA video training library available through Safety and Emergency Management department

- All animal users must complete an electronic Animal Contact Assessment form annually. This form asks health and vaccine related questions to assess risk level. The form is reviewed by a health care professional and guidance is provided to the user.

- Personal hygiene is reviewed in several required training formats. Departmental safety policies prohibit the consumption of food and drink and application of cosmetics in all laboratories where there is a risk of personal contamination, including all animal housing and use facilities. Gloves, masks, scrubs and lab
coats are used solely in the animal facilities until disposal or decontamination by trained personnel. Disinfectants and hand soap are available in all animal facilities. This Institution is a tobacco-free campus; therefore, the use of tobacco products is forbidden in all animal facilities.

- Engineering controls and safety equipment are in place in all areas of animal care and use.
- Other university personnel have limited access to animal housing and procedure rooms. Housekeeping is handled by laboratory personnel, and maintenance personnel must be escorted by trained personnel except in emergencies (e.g. broken pipes, HVAC malfunctions, or electrical failures). The Public Safety Emergency Plan requires notification of the IACUC Chair and other animal users to facilitate communication with first responders. Contact information is posted on all animal facility doors along with signage about the presence of laboratory animals. Standard PPE (gloves, masks, scrubs and lab coats) are available to all non-animal users to reduce exposure to allergens.
- In case of illness or injury, the affected user and PI will follow the IACUC Standard Operating Procedure for reporting bites and scratches and the NKU Department of Safety and Emergency Management's procedures for incident reporting.

F. The total gross number of square feet in each animal facility (including each satellite facility), the species of animals housed there and the average daily inventory of animals, by species, in each facility is provided in the attached Facility and Species Inventory table.

G. The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows:

As part of this Institution's program for animal care and use, all personnel involved in animal use activities (the IACUC, Investigators, technicians, students, and animal care personnel) are required to participate in a training program. This Institution has contracted with the Collaborative Institutional Training Institute (CITI) and required modules and instructions can be accessed through the Institution CITI website.

The following training is required of all personnel involved with animal use activities:

- Prior to working with animals, students must work with the PI or senior technician to learn activities such as recognizing common health conditions, proper procedures for handling adult and pre-weaning animals, and food, water, and enrichment requirements.
- Investigators new to animal research or using new procedures will work with an experienced PI at the institution or other institutions before implementing the procedures.
- Anyone associated with an animal study will receive additional training by the PI on the specific procedures being used.
- Instruction on research or testing methods that minimize the number of animals required to obtain valid results and limit animal pain and distress is continually discussed with research personnel and is ongoing for all personnel involved in animal care through the CITI system. The IACUC strives to practice the "Three R's" recommended by the Guide of replacement, refinement, and reduction whenever possible.
- Ethical conduct of research for lab personnel is required.
- IACUC members are provided the current version of the Guide, current NKU Assurance, and orientation by the IACUC Administrator and comprehensive CITI training modules online. Shared access to relevant PHS documents (e.g. Public Health Service Policy on Humane Care and Use of Laboratory Animals and the OLAW/ARENA IACUC Guidebook) and related standards (e.g. AVMA Guidelines on Euthanasia) is provided electronically.
- IACUC members are provided with information about IACUC educational opportunities and resources. The IACUC administrator shares such information with the committee and encourages the committee to participate in continuing education. Because many of the committee members are part of the animal research community, ongoing education and training occurs regularly.
IV. Institutional Program Evaluation and Accreditation

All of this Institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated by the IACUC within the past 6 months and will be reevaluated by the IACUC at least once every 6 months according to PHS Policy IV.B.1.-2. Reports have been and will continue to be prepared according to PHS Policy IV.B.3. All IACUC semiannual reports will include a description of the nature and extent of this Institution's adherence to the PHS Policy and the Guide. Any departures from the Guide will be identified specifically and reasons for each departure will be stated. Reports will distinguish significant deficiencies from minor deficiencies. Where program or facility deficiencies are noted, reports will contain a reasonable and specific plan and schedule for correcting each deficiency. Semiannual reports of the IACUC's evaluations will be submitted to the Institutional Official. Semiannual reports of IACUC evaluations will be maintained by this Institution and made available to the OLAW upon request.

1. This Institution is Category 2 — not accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC). As noted above, reports of the IACUC's semiannual evaluations (program reviews and facility inspections) will be made available upon request. The report of the most recent evaluations (program review and facility inspection) is attached.

V. Recordkeeping Requirements

A. This Institution will maintain for at least 3 years:
2. A copy of this Assurance and any modifications made to it, as approved by the PHS.
3. Minutes of IACUC meetings, including records of attendance, activities of the committee, and committee deliberations.
4. Records of applications, proposals, and proposed significant changes in the care and use of animals and whether IACUC approval was granted or withheld.
5. Records of semiannual IACUC reports and recommendations (including minority views) as forwarded to the Institutional Official, [Insert name or title of the Institutional Official signing the Assurance].
6. Records of accrediting body determinations.

B. This Institution will maintain records that relate directly to applications, proposals, and proposed changes in ongoing activities reviewed and approved by the IACUC for the duration of the activity and for an additional 3 years after completion of the activity.

C. All records shall be accessible for inspection and copying by authorized OLAW or other PHS representatives at reasonable times and in a reasonable manner.

VI. Reporting Requirements

A. The Institutional reporting period is the calendar year (January 1 – December 31). The IACUC, through the Institutional Official, will submit an annual report to OLAW by January 31 of each year. The annual report will include:
1. Any change in the accreditation status of the Institution (e.g., if the Institution obtains accreditation by AAALAC or AAALAC accreditation is revoked)
2. Any change in the description of the Institution's program for animal care and use as described in this Assurance
3. Any change in the IACUC membership
4. Notification of the dates that the IACUC conducted its semiannual evaluations of the Institution's program and facilities (including satellite facilities) and submitted the evaluations to the Institutional Official, Mary Ucci.
5. Any minority views filed by members of the IACUC

[Note: if there are no changes to report, provide written notification that there are no changes.]
B. The IACUC, through the Institutional Official, will promptly provide OLAW with a full explanation of the circumstances and actions taken with respect to:
   1. Any serious or continuing noncompliance with the PHS Policy
   2. Any serious deviations from the provisions of the Guide
   3. Any suspension of an activity by the IACUC

C. Reports filed under VI.A. and VI.B. above should include any minority views filed by members of the IACUC.
VII. Institutional Endorsement and PHS Approval

A. Authorized Institutional Official

<table>
<thead>
<tr>
<th>Name: Mary Ucci</th>
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<tbody>
<tr>
<td>Title: Director, Research, Grants, and Contracts</td>
</tr>
<tr>
<td>Name of Institution: Northern Kentucky University</td>
</tr>
<tr>
<td>Address: Nunn Drive, UC 405, Highland Heights, KY 41099</td>
</tr>
<tr>
<td>Phone: 859-572-5768</td>
</tr>
<tr>
<td>Fax:</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:uccim@nku.edu">uccim@nku.edu</a></td>
</tr>
<tr>
<td>Acting officially in an authorized capacity on behalf of this Institution and with an understanding of the Institution's responsibilities under this Assurance, I assure the humane care and use of animals as specified above.</td>
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<tr>
<td>Signature: Mary Ucci</td>
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<td>Date: 6/11/19</td>
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B. PHS Approving Official (to be completed by OLAW)

<table>
<thead>
<tr>
<th>Name/Title: Nicolette Petervary, Veterinary Medical Officer</th>
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<tbody>
<tr>
<td>Office of Laboratory Animal Welfare (OLAW)</td>
</tr>
<tr>
<td>NIH/OD/OER</td>
</tr>
<tr>
<td>6700B Rockledge Drive</td>
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<tr>
<td>Suite 2500, MSC 6910</td>
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<tr>
<td>Bethesda, Maryland 20892</td>
</tr>
<tr>
<td><a href="mailto:nicolette.petervary@nih.gov">nicolette.petervary@nih.gov</a></td>
</tr>
<tr>
<td>Signature: Nicolette A. Petervary</td>
</tr>
<tr>
<td>Date: June 20, 2019</td>
</tr>
<tr>
<td>Assurance Number: A4348-01</td>
</tr>
<tr>
<td>Effective Date: July 1, 2019</td>
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<td>Expiration Date: July 31, 2023</td>
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VIII. Membership of the IACUC

Date: 02/04/2019
Name of Institution: Northern Kentucky University
Assurance Number: A4348-01

**IACUC Chairperson**

<table>
<thead>
<tr>
<th>Name*</th>
<th>Mark Bardgett, Ph.D.</th>
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<tbody>
<tr>
<td>Title*</td>
<td>Regents Professor of Psychological Science</td>
</tr>
<tr>
<td>Degree/Credentials*</td>
<td>Ph.D.</td>
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<td>Address*</td>
<td>Nunn Drive, FH 359K, Highland Heights, KY 41099</td>
</tr>
<tr>
<td>E-mail*</td>
<td><a href="mailto:bardgettmm@nku.edu">bardgettmm@nku.edu</a></td>
</tr>
<tr>
<td>Phone*</td>
<td>859-572-5591</td>
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**IACUC Roster**

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<thead>
<tr>
<th>Name of Member/Code**</th>
<th>Degree/Credentials</th>
<th>Position Title***</th>
<th>PHS Policy Membership Requirements****</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kimberly Allen-Kattus</td>
<td>Ph.D.</td>
<td>Associate Professor</td>
<td>Non-Scientist</td>
</tr>
<tr>
<td>Mark Bardgett</td>
<td>Ph.D.</td>
<td>Regents Professor</td>
<td>Scientist, Chair</td>
</tr>
<tr>
<td>Christine Curran</td>
<td>Ph.D.</td>
<td>Associate Professor</td>
<td>Scientist</td>
</tr>
<tr>
<td>Marisa Jutzi</td>
<td></td>
<td>Student</td>
<td>Student Representative</td>
</tr>
<tr>
<td>Kimberly Pishioneri</td>
<td>BS</td>
<td>Retired Substitute Teacher</td>
<td>Nonaffiliated</td>
</tr>
<tr>
<td>Jennifer Quammen</td>
<td>DVM, MPH</td>
<td>Veterinarian</td>
<td>Backup Veterinarian for NKU IACUC (Non-voting)</td>
</tr>
<tr>
<td>Dr. John Sector</td>
<td>D.V.M.</td>
<td>Veterinarian</td>
<td>Veterinarian</td>
</tr>
<tr>
<td>David Thompson</td>
<td>Ph.D.</td>
<td>Associate Professor</td>
<td>Scientist</td>
</tr>
<tr>
<td>Dr. Lindsey Walters</td>
<td>Ph.D.</td>
<td>Associate Professor</td>
<td>Scientist</td>
</tr>
<tr>
<td>Tyler Downey</td>
<td>BS</td>
<td>Lab Assistant</td>
<td>Lab Technician</td>
</tr>
</tbody>
</table>

* This information is mandatory.
** Names of members, other than the chairperson and veterinarian, may be represented by a number or symbol in this submission to OLAW. Sufficient information to determine that all appointees are appropriately qualified must be provided and the identity of each member must be readily ascertainable by the institution and available to authorized OLAW or other PHS representatives upon request.
*** List specific position titles for all members, including nonaffiliated (e.g., banker, teacher, volunteer fireman; not "community member" or "retired").
**** PHS Policy Membership Requirements:

- **Veterinarian**: veterinarian with training or experience in laboratory animal science and medicine or in the use of the species at the institution, who has direct or delegated program authority and responsibility for activities involving animals at the institution.
- **Scientist**: practicing scientist experienced in research involving animals.
Nonscientist member whose primary concerns are in a nonscientific area (e.g., ethicist, lawyer, member of the clergy).

Nonaffiliated Individual who is not affiliated with the institution in any way other than as a member of the IACUC, and is not a member of the immediate family of a person who is affiliated with the institution. This member is expected to represent general community interests in the proper care and use of animals and should not be a laboratory animal user. A consulting veterinarian may not be considered nonaffiliated.

[Note: all members must be appointed by the CEO (or individual with specific written delegation to appoint members) and must be voting members. Non-voting members and alternate members must be so identified.]

IX. Other Key Contacts (optional)

If there are other individuals within the Institution who may be contacted regarding this Assurance, please provide information below.

<table>
<thead>
<tr>
<th>Contact #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Anita Southwick</td>
</tr>
<tr>
<td>Title: Manager, Research Compliance</td>
</tr>
<tr>
<td>Phone: 859-572-5168</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Title:</td>
</tr>
<tr>
<td>Phone:</td>
</tr>
</tbody>
</table>
### Facility and Species Inventory

<table>
<thead>
<tr>
<th>Laboratory, Unit, or Building*</th>
<th>Gross Square Feet [include service areas]</th>
<th>Species Housed [use common names, e.g., mouse, rat, rhesus, baboon, zebrafish, African clawed frog]</th>
<th>Approximate Average Daily Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founders Hall</td>
<td>1168</td>
<td>Rat, Brown rat</td>
<td>89, 70</td>
</tr>
<tr>
<td>Science Center</td>
<td>1,322</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Institutions may identify animal areas (buildings/rooms) by a number or symbol in this submission to OLAW. However, the name and location must be provided to OLAW upon request.*
### III. Semiannual Program Review and Facility Inspection Report

**Date:** 02/22/2019 - No deficiencies  
**Members in Attendance:** See meeting minutes

<table>
<thead>
<tr>
<th>Deficiency Category*</th>
<th>√</th>
<th>Location</th>
<th>Deficiency and Plan for Correction</th>
<th>Responsible Party</th>
<th>Correction Schedule and Interim Status</th>
<th>Date Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* A = acceptable  
  M = minor deficiency  
  S = significant deficiency (is or may be a threat to animal health or safety)  
  C = change in program (PHS Policy IV.A.1.a.-i.) (include in semiannual report to IO and in annual report to OLAW)  
  NA = not applicable  
 √ Check if repeat deficiency