

Animal Welfare Assurance for Domestic Institutions

I, Thomas Risch, Ph.D., Interim Associate Vice Chancellor for Research, as named Institutional Official for animal care and use at Arkansas State University – Jonesboro (A-State), provide assurance that A-State will comply with the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals (Policy).

I. Applicability of Assurance

This Assurance applies whenever A-State 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 A-State has legal authority, including those that operate under a different name:

Arkansas State University - Jonesboro

- B. The following are other institution(s), or branches and components of another institution:

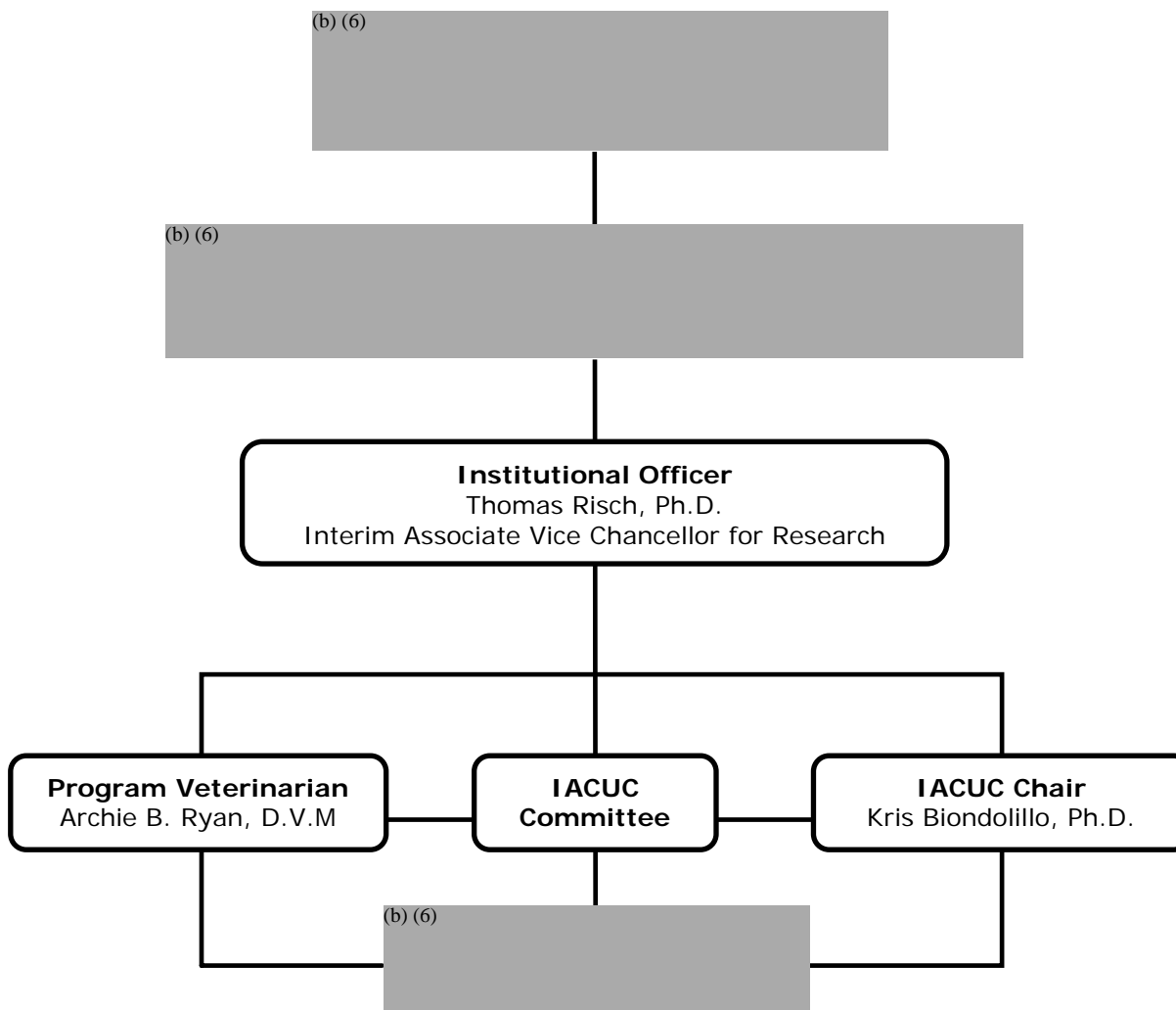
Not applicable

II. Institutional Commitment

- A. A-State will comply with all applicable provisions of the [Animal Welfare Act](#) and other Federal statutes and regulations relating to animals.
- B. A-State is guided by the "[U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training](#)."
- C. A-State acknowledges and accepts responsibility for the care and use of animals involved in activities covered by this Assurance. As partial fulfillment of this responsibility, A-State 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. A-State will email all IACUC members a copy of the final, approved Animal Welfare Assurance. Furthermore, committee members and researchers will have access to the approved assurance through our online IACUC protocol management software, Cayuse.
- D. A-State has established and will maintain a program for activities involving animals according to the *Guide for the Care and Use of Laboratory Animals, 8th Edition* ([Guide](#)). In addition, the *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching* will be used as supplemental material if and when needed.
- E. A-State 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:

1) Name: Dr. Archie B. Ryan

Qualifications

- Degrees: University of Arkansas, BSA; Louisiana State University, DVM, 1987; Arkansas veterinary license 2103; Federal Migratory Bird Permit; Arkansas mammal rehabilitation license
- Training or experience in laboratory animal medicine or in the use of the species at the institution: Dr. Ryan has thirty years of experience practicing veterinary medicine. In his current practice, he sees large animals, small animals, exotic species, avian, and rodent patients. He stays current with C.E. seminars and subscriptions regarding veterinary practice which includes NA-exotics, AVMA, AVRJ, JAALAS, and other journals with articles on exotic

animal species along with veterinary books that has an emphasis on laboratory animal information.

Authority: Dr. Ryan has direct program authority and responsibility for A-State's animal care and use program including access to all animals. Dr. Ryan has the authority to implement the PHS Policy and the recommendations of the *Guide*.

Time contributed to program: Dr. Ryan is available to personnel and researchers as needed. Dr. Ryan contributes, on average, approximately 4 hours per month to the program while off-site, reviewing protocols and providing consultation on various program-related topics.

(b) (6)



C. The A-State IACUC 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. The Chief Executive Officer has delegated the appointment of members of the IACUC to the Provost and Vice Chancellor of Academic Affairs and Research. Attached is a list of the chairperson and members of the IACUC and their names, degrees, profession, titles or specialties, and institutional affiliations (see Part VIII).

D. The IACUC will:

- 1) Review at least once every 6 months A-State's program for humane care and use of animals, using the *Guide* as a basis for evaluation. The IACUC procedures for conducting semiannual program reviews are as follows:

The IACUC will meet at least every six months, usually in April and October, to review the Institutional Program for Humane Care and Use of Animals. Typically, the chair, veterinarian, community member, scientist and non-scientist members meet in the research institute near the animal care facility to evaluate the Program. These certain committee members use the *Guide* and other pertinent resources, e.g., *Use of the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*, the PHS Policy, Animal Welfare Act (7 U.S.C.) as a basis for the review. To facilitate the evaluation, the Committee will use a checklist based on

the sample Semiannual Program and Facility Inspection Checklist from the OLAW website. The evaluation will include, but not necessarily be limited to, a review of the following: a) IACUC Membership and Functions; b) IACUC Records and Reporting Requirements; c) Husbandry and Veterinary Care (all aspects); d) Personnel Qualifications (Experience and Training); and e) Occupational Health and Safety. In addition, the evaluation will include a review of the Institution's PHS Assurance. If program deficiencies are noted during a review, they will be categorized as significant or minor and the Committee will develop a reasonable and specific plan and schedule for addressing each deficiency. A significant deficiency is one that is or may be a threat to the health and safety of the animals or personnel. No member will be involuntarily excluded from participating in any portion of the reviews.

- 2) 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:

The IACUC will meet at least every six months, usually in April and October. At a minimum, the IACUC chair, the consulting veterinarian, and the Director of Environmental Health and Safety will visit all of the institute's facilities where animals are housed or used, i.e., holding areas, animal care support areas, storage areas, procedure areas, and laboratories where animal manipulations are conducted. Equipment used for transportation purposes will also be inspected. The Committee uses the *Guide* and other pertinent resources, e.g., *Use of the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*, the PHS Policy, the Animal Welfare Act (7 U.S.C.), as a basis for the review. To facilitate the evaluation, the Committee will use a checklist based on the Semiannual Program and Facility Inspection Checklist form the OLAW website. If deficiencies are noted during the inspection, they will be categorized as significant or minor and the Committee will develop a reasonable and specific plan and schedule for corrections of each deficiency. A significant deficiency is one that is or may be a threat to the health and safety of the animals or personnel. No member will be involuntarily excluded from participating in any portion of the inspections.

- 3) 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:

Individual IACUC members will convey their observations to the IACUC Chair, or his or her designee. This individual will draft the reports to the Institutional Officer, using the Sample OLAW Semi-annual Report format from the OLAW website. The reports will contain a description of the nature and extent of the institution's adherence to the *Guide* and the PHS Policy, identify specifically any departures from the provisions of the *Guide* and the PHS Policy, and state the reasons for each departure. The reports will distinguish significant deficiencies from minor deficiencies. If program or facility deficiencies are noted, the reports will contain a reasonable and specific plan and schedule for correcting each deficiency. If some or all of the institution's facilities are accredited by AAALAC International, the report will identify those facilities as such. Copies of the draft reports will be reviewed, revised as appropriate, and approved by the Committee. The final reports will be signed by a majority of the IACUC members and will include any minority opinions. If there are no minority opinions, the report will reflect such. Following completion of each evaluation, the completed report will be submitted to the Institutional Official within sixty days.

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

Any individual may report concerns to the IO, IACUC Chair, Institutional Veterinarian, Director of Research Compliance, or any member of the IACUC. Notices are posted in the animal facilities advising individuals how and where to report animal welfare concerns and stating that any individual who, in good faith, reports an animal welfare concern will be protected against reprisals. The identity of the individual registering a concern may remain anonymous if the individual so desires. Anonymous concerns also receive consideration. All reported concerns will be brought to the attention of the full Committee. If necessary the IACUC Chair will convene a

meeting to discuss, investigate, and address any reported concern. Reported concerns and all associated IACUC actions will be recorded in the IACUC meeting minutes. The Committee will report such actions to the IO and, as warranted, to OLAW.

- 5) 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 regarding any aspect of the institution's animal program, facilities, or personnel training are developed and discussed by the Committee. The Committee's recommendations are included in the IACUC Meeting Minutes or a report of the IACUC's evaluations or a separate letter. Such documents are reviewed and approved by the Committee and then submitted to the Institutional Officer.

- 6) 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:

Prior to the review, each IACUC member will be provided with written descriptions of activities (protocols) that involve the care and use of animals and any member of the IACUC may obtain, upon request, full committee review of those protocols. If full committee review (FCR) is not requested, two or three members of the IACUC, designated by the chair and qualified to conduct the review, may be assigned to review those protocols and have the authority to recommend approval, require modifications in (to secure approval) or request full committee review of those protocols. All members of the DMR review identical copies of the proposal. Other IACUC members may provide the designated reviewer with comments and/or suggestions for the reviewer's consideration only. The comments, concerns and questions of the reviewers are then communicated to the researcher allowing the researcher to revise or modify the proposal and resubmit for review and approval. That is, concurrence to use the designated member review (DMR) method may not be conditioned. If multiple designated reviewers are used, their decisions must be unanimous; if not, the protocol will be referred to FCR. If FCR is requested, protocols will be reviewed by a convened quorum of the IACUC. The three possible outcomes of FCR at A-State are: (1) approve, (2), require modifications (to secure approval), or (3) withhold approval. For protocols requiring FCR review, approval may be granted only after review at a convened meeting of a quorum of the IACUC and with the approval vote of a majority of the quorum present or through Cayuse. When full committee reviews are performed through Cayuse software, the committee members are required to participate through <https://astate.cayuse424.com> or by reviewing all documents and other members' reviews then submitting their responses. After this process has been completed and the members have cast an approval vote, then the IACUC Chair sends the Principal Investigator an email notifying the researcher of the vote following an official decision letter for the University and Principal Investigator's records.

Generally, the DMR method will be used; however, should a situation warrant it, the IACUC may want to use the FCR method. In such instances, the protocol will be distributed through Cayuse to all members with a call for FCR; records of polling of members to obtain concurrence to use the DMR method, or concurrence by silent assent after 10 working days, and approval of protocols via DMR are maintained and recorded in the minutes of the next convened IACUC meeting.

Required modifications. When the IACUC requires modifications (to secure approval) of a protocol, such modifications are reviewed as follows:

- a. FCR or DMR following the procedures delineated above.
- b. DMR if approved unanimously by all members at the meeting at which the required modifications are developed delineated AND if the entire current Committee has previously approved and documented a policy of DMR for required modifications, provided however, that

if any member calls for FCR of the modifications, such modifications can only be reviewed and approved by FCR.

- c. Minor modifications of an administrative nature, i.e., typographical or grammatical errors, required signatures, etc. may be confirmed by IACUC administrative/support personnel.

No member may participate in the IACUC review or approval of a protocol in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC; nor may a member who has a conflicting interest contribute to the constitution of a quorum. The IACUC may invite consultants to assist in reviewing complex issues. Consultants may not approve or withhold approval of an activity or vote with the IACUC unless they are also members of the IACUC.

Note: Any use of telecommunications will be in accordance with NIH Notice NOT-OD-06-052 of March 24th, 2006, entitled Guidance on Use of Telecommunications for IACUC Meetings under the PHS Policy on Humane Care and Use of Laboratory Animals.

In order to approve proposed protocols or proposed significant changes in ongoing protocols, the IACUC will conduct a review of those components related to the care and use of animals and determine that the proposed protocols are in accordance with the PHS Policy. In making this determination, the IACUC will confirm that the protocol will be conducted in accordance with the Animal Welfare Act insofar as it applies to the activity, and that the protocol is consistent with the *Guide* unless acceptable justification for a departure is presented. Further, the IACUC shall determine that the protocol conforms to the institution's PHS Assurance and meets the following requirements:

- a. Procedures with animals will avoid or minimize discomfort, distress, and pain to the animals, consistent with sound research design.
- b. Procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator.
- c. Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly killed at the end of the procedure or, if appropriate, during the procedure.
- d. The living conditions of animals will be appropriate for their species and contribute to their health and comfort. Efforts will be made to provide for appropriate environmental enrichment. The housing, feeding, and nonmedical care of the animals will be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied.
- e. Medical care for animals will be available and provided as necessary by a qualified veterinarian.
- f. Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures.
- g. Methods of euthanasia used will be consistent with the current recommendations of the American Veterinary Medical Association (AVMA) Guidelines on Euthanasia, unless a deviation is justified for scientific reasons in writing by the investigator.
- h. The number of animals used in research will be minimized while ensuring that studies are statistically relevant.
- i. Appropriate biosecurity and quarantine procedures will be observed, including periodic monitoring of infectious and zoonotic diseases in the facilities animals.

- 7) 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:

Review and approval of significant changes are handled in the same manner as new protocols. See Paragraph III.D.6., above.

Examples of changes considered to be significant include, but are not limited to, changes:

- a. in the objective of a study;
 - b. from non-survival to survival surgery;
 - c. resulting in a greater discomfort or in a greater degree of invasiveness;
 - d. in the species or in approximate number of animals used;
 - e. in Principal Investigator;
 - f. in anesthetic agent(s) or the use or withholding of analgesics;
 - g. in the method of euthanasia; and
 - h. in the duration, frequency, or number of procedures performed on an animal
- 8) 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:

Principal Investigators (PI) are notified either by e-mail and/or letter through Cayuse from the IACUC Chair. The Institutional Official is notified by receiving a copy of the PI's notification letter or a copy of the IACUC Meeting Minutes. Further, the Institutional Officer has access to protocols, including committee determinations, in Cayuse. If approval is withheld, the PI will be notified in writing by e-mail, official letter, and also by telecommunications providing details on the comments, concerns and questions raised in the review to enable the researcher to address them, revise and re-submit the proposal for approval. Once the PI has received the notification regarding the withholding of approval, the PI has fifteen days from the time of notification to send a written response or may request an in-person meeting with the committee.

- 9) 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:

All ongoing activities are monitored continuously by the animal care and use staff which includes keeping record of the number of animals used under each protocol to make sure that it is not exceeded; making sure the procedures for treatment or surgery are followed as described in the approved protocol; checking if all staff and students have completed all the training required to obtain permission to use the animal and the animal care facility; and checking for signs of illness or pain exhibited by animals. Protocols associated with USDA-covered species will be reviewed by a member or members of the IACUC at least annually. Annual reviews will be conducted in the same month as the date of the initial approval. All IACUC members are informed of annual reviews and are given the opportunity to participate. Any annual protocol reviews will be recorded in the IACUC Meeting Minutes and in our Cayuse protocol management software. The IACUC Meeting Minutes are reviewed and approved by the Committee.

Protocols are approved for a maximum of 36 months. That is, all protocols expire no later than the three year anniversary of the initial IACUC review. If activities will continue beyond the expiration date, a new protocol must be submitted, reviewed, and approved [prior to expiration of the original or preceding protocol] as described in Paragraph III.D.6 above.

- 10) 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 that it previously approved if it determines that the activity is not being conducted in accordance with applicable provisions of the Animal Welfare Act, the *Guide*, the Institution's Assurance, or IV.C.1.a.-g. of the PHS Policy. The IACUC may suspend an activity only after review of the matter at a convened meeting of a quorum of the IACUC and with the suspension vote of a majority of the quorum present. If the IACUC suspends an activity involving animals, or any other institutional intervention results in the temporary or permanent suspension of an activity due to noncompliance with the Policy, Animal Welfare Act, the *Guide*, or the Institution's Assurance, the Institutional Official in consultation with the IACUC shall review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation to OLAW.

- 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:

A State has an office of Environmental Health and Safety (EHS) (<http://www.astate.edu/a/ehs/>) which oversees occupational health and safety of personnel and administers the overall safety Program for Arkansas State University. The EHS director is an IACUC member. As such, he is involved in planning and monitoring the program. The A-State animal care and use facility is a small, biosafety level II animal facility that currently houses 28 rats and 438 mice, as of March 9, 2018. Access to the facility is granted only to those who have successfully completed the appropriate required training. The EHS director participates in the IACUC meetings and also in the inspection of the facility. IACUC members, animal facility manager, staff, faculty and students who use laboratory animals have direct access to the EHS director and staff.

- (1) Appropriate design and operation of facilities and use of appropriate safety equipment (engineering controls)

The A-State animal care facility is part of a relatively new, modern, state of the art research building that is being maintained very well with regards to safety, ventilation, light, animal holding rooms, surgery prep room and surgery rooms. There are additional separate procedure rooms. The cage washer and autoclave are in spacious rooms. There is an in-house building manager who helps with handling loads, gas tanks and maintains the facility in good repair.

- (2) The development processes and standard operating procedures (administrative controls)

The animal facility manager has developed several SOPs which have been reviewed and approved by the IACUC. They are available at the facility and also at the A-State Cayuse website. The facility manager and personnel make sure that these SOPs are followed by users of the facility.

- (3) Provision of appropriate personal protective equipment for employees and users

Clean laboratory coats, disposable gloves, masks, caps, shoe covers are available in the front gowning room for all. Every room has hand sanitizer, proper disinfectant sprays, eye wash station, hand washing soap and paper towels.

- (4) Hazard Identification and Risk Assessment

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

The Director of Environment Health and Safety Program addresses safety issues as outlined below. With regards to occupational health and safety of personnel, the animal care manager provides oversight and training for personnel working in the laboratory animal facilities or that have frequent contact with animals is as follows:

Personnel Hygiene includes the provision or requirement of appropriate clothing depending on the area in which animal care/researchers are working, and upon the species being used. Appropriate protective equipment and/or clothing are provided in the gowning room at the

entrance to the Animal Care Facility. No eating or drinking is allowed in any animal housing or procedure area.

Biohazardous Agent Use is overseen by the Institutional Biosafety Committee (IBC) in collaboration with the Environmental Health and Safety (EHS) Department. The IBC is responsible for the review of the institution's teaching and research activities involving the acquisition, use storage, and disposal of biohazardous agents. The EHS Director and his staff work closely with the Program Veterinarian to provide training in the safe handling and management of biological and chemical agents used in studies with research animals. Detailed Biosafety requirements and safety procedures are contained in the Policies and Procedures for Biosafety.

Radioactive Material Use must be authorized under the radioactive materials license issues to A-State by the Arkansas Department of Health. All projects must comply with pertinent regulations and relevant terms of this license. The A-State Radiation Safety Program is overseen by the Radiation Safety Officer, monitors compliance with regulations, license conditions, and policies. Detailed policies and procedures governing the acquisition, use and disposal of radiation sources are found in the Radiation Safety Manual.

Chemical Agent Use is administered through the Department of Environment Health and Safety through the Chemical Inventory/Hygiene Plan which is directed at controlling exposures to hazardous chemicals in laboratories. The Plan sets forth procedures, equipment, personal protective equipment, and practices that are capable of protecting employees from hazards presented by hazardous chemicals used in laboratories and are capable of keeping chemical exposures below regulatory limits. Supervisors of researchers and husbandry/cage washing staff are responsible, with assistance from EHS, for evaluating the potential exposure risks to their staff. Guidelines and operation specific exposure controls for occupational exposures to hazardous chemicals have been developed and are available to all employees.

Personal Protection for personnel working with laboratory animals includes the issuance of appropriate clothing, the provision of appropriate facilities for maintaining personal hygiene, first aid equipment, and training in safe techniques including emergency responses in the event of an incident. Housekeeping personnel who access the animal facility but have no direct contact with animals, are provided with general animal facility training and advised of the general health concerns associated with working in the facility. When rooms where animals are housed require cleaning, the animal care facility staff accompanies and oversees housekeeping personnel while they are in those rooms.

Pre-employment medical evaluation and immunization. Individuals receive proper training and guidance on the risks of working with animals prior to animal care facility access. A-State does not employ an occupational health specialist. We contract such services through Occupational Health Partners, a St. Bernards Healthcare-affiliated medical practice. Individuals who (a) work with animals in research, (b) work with blood or other potentially infectious materials from humans (or non-human primates), and/or (c) perform work that requires the use of a respirator require special training. They must contact EHS for details regarding specific job requirements. EHS enrolls them in medical surveillance to satisfy safety, health, and compliance requirements. EHS schedules an appointment for the individual with Occupational Health Partners. EHS instructs the individual to complete a medical surveillance form to take to their appointment. A-State does not see or receive a copy of the completed form. Occupational Health Partners directly contacts the individual if additional action is necessary, e.g., immunization, consult with personal physician, etc. A-State receives no protected health information for these individuals. Occupational Health Partners bills A-State for these services, which A-State documents as evidence that these individuals received appropriate medical surveillance.

- A-State Medical Surveillance web page:
<http://www.astate.edu/a/ehs/occupational-safety-health/>
- Occupational Health Partners website:
<https://www.stbernards.info/clinics/clinic/occupational-health-partners>

Allergies. The most effective way to control and prevent allergies is to minimize exposure to the allergens by wearing protective clothing, including long sleeved lab coats and gloves. NIOSH-certified N95 respirators may also be provided in cases where individuals are extremely sensitive to animals. Animal manipulations will be performed in a ventilated hood, a bio-safety cabinet or the work area which is adequately ventilated and that the air handling equipment in the room is delivering at least 10 air changes per hour. If individuals are unfamiliar with the air handlers in the facility, they may ask their supervisor to assist with verifying the flow of handlers. Practices involving frequent handwashing and avoidance of touching the face area while working with or around animals will be followed. Researchers and staff will keep the cages and work areas clean. The primary allergens for mice and rats are urinary proteins and rat saliva. By ensuring use of respiratory protection such as ventilated hood N95 mask or other suitable respirator when handling dirty bedding and cages, for example, while using the bedding dump station will avoid exposure to allergens.

Bites/Scratches. All bites and scratches can expose individuals to biologic hazards which may be transmitted through saliva, secretions, and/or blood and the risk is mitigated in our facility by the purchasing of laboratory rodents from laboratories which excludes zoonotic agents. Exceptions to this best practice would include: 1) animals that have been inoculated with biohazardous materials (e.g., LCMV); or 2) secondary bacterial infections that may occur when common skin and intestinal bacteria are present on the individual or the animal. Training in animal handling techniques and the use of appropriate personal protective equipment help to mitigate risks. Users are trained to follow these basics: Bites or scratches should be washed immediately with soap (preferably an antiseptic soap, such as chlorhexidine - Nolvasan® or Betadine®-povidone iodine) and running water. Bites and scratches that result in bleeding should be thoroughly scrubbed for at least 15 minutes. After cleaning, a topical disinfectant and bandage should be used on the wound to protect it. If a bite or scratch wound is severe, or in the event of injury or illness due to animal exposure, individuals are instructed to seek immediate medical treatment at the Student Health Center located on campus, a local clinic off campus, or either one of the hospital emergency rooms in the event the other centers are closed. Personnel are instructed to file a worker's compensation claim and to inform their immediate supervisor.

Zoonosis. The potential exists through environmental exposure and by handling animals, body fluids, cultured microbial pathogens, tissues and tumors. Infection in animals may sometimes produce severe disease in humans even when the animals appear healthy. Personnel who are pregnant, ill, or immune-compromised are advised of the risk of infection.

Good laboratory practices and common sense can lessen the risk of infection and accidents. The CDC/NIH manual, Biosafety in Microbiological and Biomedical Laboratories, provides guidance on biosafety procedures for a wide spectrum of microbial agents with potential for human infection. Control of Communicable Disease in Man, published by the American Public Health Association, is another resource for information concerning zoonotic diseases and infection control. However, if employees are exposed to infection or have an accident while working with animals, they are to seek immediate medical attention and let their physician know that they work with animals and/or pathogens.

Zoonosis Surveillance is managed by routine screening of animals for their ability to transmit Zoonosis. This institution has appropriate quarantine facilities and procedures in place to prevent Zoonosis. Personnel are provided with Zoonosis information relevant to the species of animals with which they are working.

Procedures for Reporting and Treating Injuries have been incorporated into required training sessions and posted throughout the Animal Care Facility and other areas that utilize animals in research and/or teaching purposes. A-State has also adopted and disseminated a University Emergency Operations Plan which includes the annex for all animals housed or located on this campus.

Covered Personnel are IACUC members, faculty, staff, students, and visiting scholars who work with animals, unfixed animal tissues or body fluids, and those who work in animal housing areas, i.e., all personnel involved in animal care and/or use. The level of participation is dependent upon the level of assessed risk.

Procedures for Hazard and Risk Assessment involve evaluation of the protocols used, questionnaire review for specific and general risk factors, veterinarian input, as well as, physician consultation as needed.

Training of Personnel (e.g., zoonoses, allergies, hazards, special precautions for pregnancy, illness, and immune suppression) are provided through targeted, CITI Program in-service training, other web-based and hands-on trainings. These programs/trainings are in addition to the education materials provided to all animal users via email or booklets, emphasizing the specific risks associated with different types of research with laboratory animals and guidance on the appropriate methods of exposure control and protection. New personnel who use or handle animals are required to complete the health questionnaire, agree to treat animals in the manner specified in the animal protocol, are provided with Health Hazard Protocols and Pathogen identification information. All individuals must renew their trainings every 3 years unless the individual changes the species of their research project. All employees' health questionnaires are reviewed and updated annually by EHS.

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

IACUC Orientation – The Provost and Vice Chancellor for Academic Affairs and Research appoints new members. New members are provided with information on the purpose and scope of the IACUC and on their responsibilities as a member. New members are required to complete the training described below prior to participation on the IACUC. New members also receive instruction in use of Cayuse IRB, A-State's protocol management software.

IACUC Training – Each IACUC member will be provided with a copy or website link of the following:

- a. The PHS Policy for the Humane Care and Use of Laboratory Animals;
- b. The National Research Council (NRC) Guide for the Care and Use of Laboratory Animals;
- c. The ARENA/OLAW IACUC Guidebook;
- d. The AVMA Guidelines on Euthanasia;
- e. The USDA Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching;
- f. A copy of this Assurance

All members of the IACUC will complete the Essentials for IACUC Members Curriculum located on the American Association for Laboratory Animal Science (AALAS) website, www.aalaslearninglibrary.org or the Collaborative Institutional Training Initiative (CITI) website, www.citiprogram.org.

All IACUC members will visit the OLAW website at least semi-annually and will complete the IACUC tutorial modules (initial visit) and will familiarize themselves with the other pertinent modules and information, e.g., OLAW FAQs, Policies and Laws, Guidance, Educational and other resources. Attendance at an IACUC 101, 102, IACUC advanced, PRIM&R/ARENA IACUC meeting, or similar coursework may be substituted for any required IACUC training sessions.

Animal Care and Use Personnel – The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows: All personnel performing procedures using animals must be identified in an animal project protocol. A description of each individual's qualifications, experience and/or training with the specific animal species, model and procedures must be provided for IACUC review. Any person needing additional

protocol-specific training will be identified during the review process and such required training will be a condition of approval of the protocol.

All persons involved in animal care and use will be required to complete the CITI Training modules for animal care and use prior to the approval of the protocol. Once these trainings have been completed, the personnel will receive the hands-on training by the Animal Care Facility Manager, IACUC Chair, or Program Veterinarian. This training covers laws and regulations with an emphasis on the contents of the NRC and the 3Rs. The trainings include training or instruction on research or testing methods that minimize the number of animals required to obtain valid results and limit animal pain or distress as well as other requirements delineated in 9 CFR, Part 2, Subpart C, Section 2.32(c). Specifically, training and instruction of personnel must include guidance in at least the following areas:

- A. Humane methods of animal maintenance and experimentation include:
 - a. The basic needs of each species of animal;
 - b. Proper handling and care for the various species of animals used by the facility;
 - c. Proper pre-procedural and post-procedural care of animals; and
 - d. Aseptic surgical methods and procedures;
- B. The concept, availability, and use of research or testing methods that limit the use of animals or minimize animal distress;
- C. Proper use of anesthetics, analgesics, and tranquilizers for any species of animals used by the facility.
- D. Methods whereby deficiencies in animal care and treatment are reported including deficiencies in animal care and treatment reported by any employee of the facility. No facility employee, Committee member, or laboratory personnel shall be discriminated against or be subject to any reprisals for reporting violations of any regulation or standards under the Act;
- E. Utilization of services (e.g., National Agricultural Library, National Library of Medicine) available to provide information:
 - a. On appropriate methods of animal care and use;
 - b. On alternatives to the use of live animals in research;
 - c. That could prevent unintended and unnecessary duplication of research involving animals; and
 - d. Regarding the intent and requirements of the Animal Welfare Act and USDA-APHIS Regulations
- F. Occupational Health and Safety: Training will address occupational health and safety considerations while working with laboratory animals. The issues addressed will be
 - a. Personnel hygiene
 - b. Personnel Protection
 - c. Hazardous materials (chemical, biological, radioactive)
 - d. Immunization
 - e. Bites, scratches and allergies
 - f. Zoonosis

Any use of online training to fulfill training requirements must be approved by the IACUC. Approval and completion of online training will be documented.

Specialized Training: Training in experimental methods, i.e., specific animal manipulations and techniques and in the care of new and nontraditional laboratory animal species, will be conducted based on the types of research being conducted and the species being used at the institution.

Note: For researchers transferring from other facilities at which they have received similar training, verification of previous training may be accepted in lieu of some Institutional required training. Acceptance of previous training in lieu of the Institution's training is solely at the IACUC's discretion.

All researchers involved in the care and use of animals shall have access to a copy of the "Animal Care Facility Training Manual". Researchers will be required to keep a copy of the manual in their laboratories for the use of all personnel. Researchers are expected to review the manual prior to completing an Animal Protocol Form and to ensure that all staff and students under their supervision are also familiar with the policies outlined in the manual.

Mandatory hands-on training will be presented at a minimum of once a semester. All attendees will sign a statement of attendance which will be kept on file in the Animal Care Facility Manager's office.

IV. Institutional Program Evaluation and Accreditation

All of A-State'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 A-State'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 A-State and made available to the OLAW upon request.

A-State 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. A-State will maintain for at least 3 years:
 - 1. A copy of this Assurance and any modifications made to it, as approved by the PHS
 - 2. Minutes of IACUC meetings, including records of attendance, activities of the committee, and committee deliberations
 - 3. Records of applications, proposals, and proposed significant changes in the care and use of animals and whether IACUC approval was granted or withheld
 - 4. Records of semiannual IACUC reports and recommendations (including minority views) as forwarded to the Institutional Official, Dr. Thomas Risch, Interim Associate Vice Chancellor of Research, Chief Research Officer
 - 5. Records of accrediting body determinations
- B. A-State 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, Dr. Thomas Risch
 5. Any minority views filed by members of the IACUC
- 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	
Name:	Thomas Risch, Ph.D.
Title:	Interim Associate Vice Chancellor of Research, Chief Research Officer
Name of Institution:	Arkansas State University - Jonesboro
Address: (street, city, state, country, postal code)	
322 University Loop Circle, 6 th Floor, (b) (4) P.O. Box 2760 State University, AR 72467	
Phone: (b) (6)	Fax: (b) (6)
E-mail: trisch@astate.edu	
Acting officially in an authorized capacity on behalf of A-State and with an understanding of the Institution's responsibilities under this Assurance, I assure the humane care and use of animals as specified above.	
Signature: (b) (6)	Date: 06/19/2018

B. PHS Approving Official (to be completed by OLAW)	
Neera Gopee, D.V.M., Ph.D., DACLAM, DABT Veterinary Medical Officer Office of Laboratory Animal Welfare (OLAW) 6705 Rockledge Drive RKL1, Suite 360, MSC 7982 Bethesda, Maryland 20892-7982 gopeenv@od.nih.gov	
Signature: (b) (6)	Date: 06-19-2018
Assurance Number: D16-00758 (A4506-01)	
Effective Date: 06-19-2018	Expiration Date: 05-31-2022

VIII. Membership of the IACUC

Date: March 7, 2018			
Name of Institution: Arkansas State University - Jonesboro			
Assurance Number: D16-00758 (A4506-01)			
IACUC Chairperson			
Name*: Kris Biondolillo			
Title*: Chair of Psychology and Counseling, Professor of Psychology		Degree/Credentials*: Ph.D./Experimental Psychology	
Address*: (street, city, state, zip code) 330 University Loop West, (b) (4) State University, AR 72467			
E-mail*: kdbiondo@astate.edu			
Phone*: (b) (6)		Fax*: (b) (6)	
IACUC Roster			
Name of Member/ Code **	Degree/ Credentials	Position Title ***	PHS Policy Membership Requirements ****
Archie Ryan	D.V.M./Large and Small Animal	Veterinarian, Southwest Drive Animal Clinic	Veterinarian
(b) (6)			Alternate Veterinarian
			Scientist
			Scientist
			Scientist
			Scientist
			Scientist
Robert Clark	B.S. Biological Sciences; Certified Safety Professional; Certified Hazardous Materials Manager	Director of Environmental Health and Safety	Member
(b) (6)			Nonscientist
			Nonaffiliated

* 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:

<i>Veterinarian</i>	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.
<i>Scientist</i>	practicing scientist experienced in research involving animals.
<i>Nonscientist</i>	member whose primary concerns are in a nonscientific area (e.g., ethicist, lawyer, member of the clergy).
<i>Nonaffiliated</i>	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.

Contact #1	
Name: Jenny Estes	
Title: Director of Research Compliance	
Phone: (b) (6)	E-mail: IACUC@astate.edu
Contact #2	
Name:	
Title:	
Phone:	E-mail:

X. Facility and Species Inventory

[illegible]

* 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.