



## **SYRACUSE UNIVERSITY**

### **ASSURANCE OF COMPLIANCE WITH PUBLIC HEALTH SERVICE POLICY ON HUMANE CARE AND USE OF LABORATORY ANIMALS**

Assurance number: A 3687-01

I, Gina Lee-Glauser, Vice President for Research, as named Institutional Official for animal care and use at Syracuse University, provide assurance that this Institution will comply with the Public Health Service Policy (PHS) 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. This Assurance covers only those facilities and components of Syracuse University.

There are no additional branches, components or other institutions covered by this assurance. If the proposed activities involving vertebrate animals will take place at another institution, that site is considered a contract facility. If a contract facility is utilized, a copy of the contract facility’s Institutional Animal Care and Use Committee (IACUC) approval letter from the institution is forwarded to the SU IACUC. The SU IACUC will review the approval letter and may request a copy of that institutions approved protocol. Projects will not commence unless reviewed and approved by the SU IACUC.

#### **II. INSTITUTIONAL COMMITMENT**

- A. This institution will comply with all applicable provisions of the Animal Welfare Act and other Federal and New York State statutes and regulations relating to animal use.
- 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 make a reasonable effort to ensure that all individuals involved in the care and use of laboratory animals understand their individual and collective responsibilities for compliance with this Assurance as well as all other applicable laws and regulations pertaining to animal care and use.

This PHS Assurance of Compliance is distributed to the research community through the Office of Research Integrity and Protections website: <http://orip.syr.edu/animal-research/Animal-Research-IACUC.html>.

- D. This institution has established and will maintain a program for activities involving animals in accordance with *The Guide for the Care and Use of Laboratory Animals (The 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 this Policy are presented in Appendix I.
- B. The qualifications, authority, and percent of time contributed by the veterinarian who will participate in the program are as follows:

**Name:** Dr. William F. Stack, D.V.M., Attending Veterinarian

**Qualifications:** Dr. Stack received his DVM at Cornell University in 1953. He completed his internship and residency at that institution. His experience includes ownership of 5 veterinary hospitals, ten years in Public Health and a member of numerous IACUCs including Bristol Meyers Squibb.

Dr. Stack was the Consultant in Laboratory Animal Medicine to the SUNY Health Science Center in Syracuse where he held the rank of Associate Clinical Professor. He also served as the Veterinary Medical Officer at the Veteran's Administration Hospital in Syracuse (33 years), and served as Veterinarian to the Rosamond Gifford Zoo in Syracuse for 12 years. In 1989, he was appointed Director of the Bureau of Animal Disease Control for Onondaga County. He was also the attending veterinarian at a division of the University of Florida at Ordway Research Institute in Albany, NY.

Dr. Stack is currently the Veterinary consultant to the Stratton VA Medical Center in Albany, NY and to the State University of New York College of Environmental Science and Forestry in Syracuse, NY.

His continuing education activities include participation in monthly teleconferences, video and written communication on diseases of laboratory animals through the Colleges of Veterinary Medicine at the University of Florida and Cornell University, as well as

completion of the Charles River Short Course in 1992 and 2007 (Boston, MA). He also completes the IACUC training through the US Department of Veterans Affairs on an annual basis plus numerous webinars sponsored by the Association of Laboratory Animal Science, National Association for Biomedical Research, and AAALAC.

Dr. Stack is a member of the American Society of Laboratory Animal Practitioners.

**Authority:** Dr. William Stack has direct program authority and responsibility for the Institute's animal care and use program including access to all animals.

**Service:** Dr. Stack serves this Institution under the terms of an attending veterinarian contract, which provides for regular visits, inspections and IACUC meetings (minimum of two visits per month), and consultation with the Laboratory Animal Resources (LAR) staff. He is available "on call" as needed. He provides initial PI consultation in the IACUC pre-review process. He averages approximately 10 hours per month, 100% of this time is dedicated to the animal care and use program.

**Alternate Support:** In the event that Dr. Stack is not immediately available, alternative support staff available to LAR is Dr. Robert Quinn at SUNY Upstate in Syracuse, NY.

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 five members, and its membership meets the composition requirements set forth in the PHS Policy at 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 (see Section VIII).

D. The IACUC will:

1. 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 semiannual program reviews are as follows:

The IACUC evaluates the animal care and use program at least every six months. All IACUC members are notified and invited to attend the semiannual program review at IACUC meetings and are reminded of the review date via email. The review is conducted by a subcommittee of IACUC members using OLAW's Semiannual Program Review Checklist. The findings of the review with corrective actions and dates are then reported at the next scheduled convened meeting of the IACUC.

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:

All IACUC members are notified and invited to attend the semiannual facilities inspection at IACUC meetings and are reminded of the inspection date via email. A subcommittee of the IACUC and the Veterinarian shall inspect all facilities, including all research and teaching laboratories housing vertebrates using OLAW's Semiannual Facility Inspection Checklist.

3. Prepare reports of the IACUC evaluations as set forth in the PHS Policy at IV.B.3. and submit the reports to the Institutional Official.

The IACUC process for developing reports and submitting them to the Institutional Official is as follows:

Checklists, deficiency and correction timetables are completed and included in the report packet for the IACUC and Institutional Official. Reports are signed by a majority of the IACUC members and minority views are also included. The resulting evaluation is reported to the Institutional Official for his/her review and signature.

Reports of all IACUC evaluations of the Animal Care and Use Program are submitted to the Institutional Official. Reports include: a description of the nature and extent of the institution's adherence to the Guide; any IACUC approved departures from the *Guide* with reason given for any departure; any specific deficiency(s) from the provisions of the Guide, PHS Policy, or the Animal Welfare Act Regulations (AWAR) and Institutional policy stating the deficiency and recommendations for a corrective action plan and schedule for correction. Deficiencies are characterized as either minor or significant (see § III.D.7 for definitions). Some minor deficiencies are corrected immediately based on the Committee's findings. The IACUC Administrator/Animal Facilities Manager and the Director of ORIP follow up to ensure that all minor and significant deficiencies are corrected by the determined date. The corrections are reported at subsequent IACUC meetings and reported in the minutes. The Institution has had no departures from the PHS Policy, Guide or AWAR. If a departure was proposed by an Investigator, the departure would be reviewed and approved by the IACUC prior to implementation as well as be reviewed at least annually or more often if required by the AWAR.

4. Review concerns involving the care and use of animals at the institution.

The IACUC procedures for reviewing concerns are as follows:

The IACUC Chair receives and the Committee acts on any concerns that anyone may have about the care and use of animals. Concerns may be raised through direct or anonymous communications with the Chair or from other institutional personnel to the Chair. Contact information is posted within the animal facilities as well as outside the LAR offices along with other information regarding animal care and use.

The IACUC will investigate any concerns relating to the care of animal and determine if the concern stems from procedures that differ from the approved protocol, or procedures that have been reviewed upon protocol submission. In any case, the situation will be reviewed and discussed by the IACUC; the person that reported the concern will be advised of the actions taken by the IACUC regarding their concerns and that absolutely no reprisals against them will be taken.

Any action taken by the IACUC will be reported to the Institutional Official, who will formally notify OLAW if a reportable incident is identified.

Individuals using animals are instructed through the institution's mandatory training policy on how to report concerns about misuse, mistreatment and noncompliance. The Office of Research Integrity and Protections facilitates the training through the Collaborative Institutional Training Initiative Web-based Training Program.

5. Make written recommendations to the Vice President for Research 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:

In addition to the semiannual reports, other written recommendations determined by the IACUC at a convened meeting regarding aspects of the animal care program are sent to the Institutional Official in either memo form or via e-mail from the IACUC Chair.

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

*Meeting Schedule:* The IACUC meets monthly during the academic year (August –June) to review protocols submitted, requests for significant emendation of approved protocols, and to address any concerns raised by LAR staff, the Environmental Health Office or others. Members receive meeting materials at least a week in advance of the scheduled meeting.

In the event that a protocol/significant amendment is submitted and circumstances are such that to delay review until the next scheduled meeting is inappropriate, a special meeting of the IACUC may be called. In such an event, all members will receive the materials in advance (3-7 days depending on the circumstances) before formally convening the full committee.

*Protocol Preparation:* The Office of Research Integrity and Protections (ORIP) and the LAR/IACUC manager assist all principal investigators (PIs) in protocol preparation and ensure that all research and teaching activities are consistent with applicable federal and local law/regulations. This includes facilitating protocol and investigator compliance within regulations pertaining to Environmental Health and Safety, etc. as required. The protocol forms and guidance information for completion are available on the ORIP website.

*Protocol Processing and Pre-review:* All protocols are received in the Office of Research Integrity and Protections Office (ORIP) and assigned an IACUC accession number. Protocols are pre-reviewed by the IACUC Chair, Veterinarian, ORIP Director, Scientist member and the EHO member as well as others as appropriate to assure readiness for consideration by the IACUC. They may request appropriate revisions from the Principal Investigator in advance of the next scheduled IACUC meeting. The committee will not approve protocols that are inadequately prepared.

Protocols involving substances or procedures that fall under the jurisdiction of the Environmental Health Office and/or the Safety Department and applicable

OSHA/EPA or State regulations are provided to the appropriate office for pre-review. Such protocols are not acted upon by the IACUC until protocol reviews and comments are received and implemented in the protocols as appropriate.

*IACUC review:* A quorum of IACUC members (>50% of voting members) must be present at the convened meeting to conduct business. IACUC members are provided copies of new or renewed protocols, amendments requesting significant changes (See § III.D.7), and other relevant documents in advance of the meeting for their review. For protocols utilizing live animals, the IACUC may take the following four actions after discussion at a convened meeting with a quorum present:

- Vote to approve protocol, which is then signed and dated by the Chair;
- Affirm that the adequacy and appropriateness of the protocol's humane animal use aspects, but require modifications (to secure approval) when it is determined that no major revisions or clarifications are required.

The proposal then undergoes “designated member review” (DMR) which is as follows:

- The IACUC administrator notifies all committee members regarding the proposal's DMR designation and includes the list of requested revisions and/or clarifications with the revised protocol or amendment.
- Members have the opportunity to ask questions and request further revisions by sending requests to the IACUC administrator.
- The IACUC administrator will be the point person for relaying information from the investigator to the Committee.
- Any member can make the decision to send the protocol to full-committee review (FCR) within 5 business days following transmission of the revised protocol to the IACUC members. A member requesting FCR should notify the Director of ORIP. The Director will maintain the anonymity of the committee member.
- If a member calls for FCR, the committee must be notified by email, ORIP will add it to the agenda for the next meeting and include the protocol in the committee meeting packet.
- If no member calls for (FCR) or further revisions, then the Chair can refer the protocol to a designated reviewer (one or more members, including the Chair).
- The designated reviewer(s) acting on behalf of the IACUC can approve the protocol or request additional information from the PI in order to secure approval.

- If a protocol is assigned to 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 reviewers must be aware of and agree to the modifications.
- Upon approval of the protocol ORIP/LAR must be notified. The IACUC administrator will process the approval letter and notify the PI.
- If the designated reviewer defers approval of the protocol, the committee must be notified by email, ORIP will add it to the agenda for the next meeting and include the protocol in the committee meeting packet.
- The PI must meet all conditions arising from the IACUC's review before final approval can be granted; or
  - Table the protocol with a request for additional substantive information or significant revision of the protocol. When a protocol is tabled, FCR is required before further action can be taken.
  - Withhold approval.

The designated review process is utilized for animal products protocols. Animal products protocols (as opposed to live animal protocols) are those protocols dealing with fresh, frozen or fixed vertebrate animal tissues such as blood, organs, muscle, or carcasses, not live animals. All other protocols utilizing live animals are reviewed by the full committee at a convened meeting with a quorum present.

- The designated review procedure for reviewing animal products protocols is as follows: Animal products protocols submitted to the OLAR or ORIP office will be forwarded to the IACUC's Environmental Health Office (EHO) representative for a Health and Safety Review.
- The EHO representative will forward the review to the Director of ORIP.
- The products protocol and Health and Safety Review will be disseminated by the Director of ORIP to all IACUC members electronically.

The proposal then undergoes "designated member review" (DMR) which is as follows:

- Members have the opportunity to ask questions and request revisions by sending requests to the IACUC administrator.
- The IACUC administrator will be the point person for relaying

information from the investigator to the Committee.

- Any member can make the decision to send the protocol to full-committee review (FCR) within 5 business days following transmission of the revised protocol to the IACUC members.
- A member requesting FCR should notify the Director of ORIP. The Director will maintain the anonymity of the committee member.
- If a member calls for FCR, the committee must be notified by email, ORIP will add it to the agenda for the next meeting and include the protocol in the committee meeting packet.
- If no member calls for (FCR) or further revisions, then the Chair can refer the protocol to a designated reviewer (one or more members, including the Chair).
- The designated reviewer(s) acting on behalf of the IACUC can approve the protocol or request additional information from the PI in order to secure approval.
- Upon approval of the protocol ORIP/LAR must be notified. The IACUC administrator will process the approval letter and notify the PI. If the designated reviewer defers approval of the protocol, the committee must be notified by email, ORIP will add it to the agenda for the next meeting and include the protocol in the committee meeting packet.

IACUC members who have a conflict of interest with a protocol are recused from deliberating and voting on that item. Such members are not counted as part of the quorum, which must still be present to conduct business.

*Review of sponsored-research protocols.* All protocols, regardless of the source of support for the activity, must be reviewed and approved by the IACUC before that activity may be initiated or external funds to support activities using animals are approved by the Office of Sponsored Programs. That office requires certification of IACUC protocol approval before the grant application can be approved, or certification within any grace period that the sponsor permits. See also §III.E.

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 as set forth in the PHS Policy at IV.C.

The IACUC procedures for reviewing proposed significant changes in ongoing research projects are as follows:

The IACUC considers proposed significant changes to ongoing approved activities to be those that have the potential to impact substantially and directly on the health and well being of the experimental animals and include, but are not limited to the following:

- change in study objectives;



- changes that may involve an increase in levels of pain, distress, and/or discomfort;
- a change from non-surgery to surgery, from minor to major surgery, from non-survival to survival surgery, or from single to multiple survival surgery;
- an increase of 5% or more in the approximate number of animals (rats and mice only ) used;
- a change in the genus or species of animals used;
- a change in the principal investigator.

The IACUC considers major changes to be those that have modest potential to significantly and directly impact the health and well being of the experimental animals whereas minor changes refer primarily to additions or deletions of comparably trained personnel performing animal activities.

The IACUC Chair, the Veterinarian, and the LAR/IACUC manager pre-review requests for approval of changes to on-going protocols. The IACUC Chair and/or the Veterinarian are designated to approve minor changes. The PI will be notified in writing of the approval. If approval is not granted the request will be deferred to the next convened meeting.

Requests for significant changes to on-going activities, as determined by the IACUC Chair, are reviewed at a convened meeting of the IACUC following the procedures described in § III.D.6.

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 as set forth in the PHS Policy at IV.C.4.

The IACUC procedures to notify investigators and the institution of its decisions regarding protocol review are as follows:

Following review of new or resubmitted protocols and amendments to on-going activities by the IACUC, investigators are notified in writing of the IACUC's determination by majority vote to approve, modify, withhold or table approval of protocols related to the care and use of animals. Copies of correspondence are maintained in protocol files. If modifications are required, or if approval is withheld or tabled, the specific required modifications are provided (in writing) to the investigator as to why the IACUC disapproved the protocol. The investigator is encouraged to respond either in writing or by appearing in person at the next scheduled (or emergency) IACUC meeting.

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 three years according to PHS Policy IV.C.1-5.

The IACUC procedures for conducting continuing review are as follows:

The committee monitors the management and maintenance of all facilities housing animals on a continuing basis. Any issue arising that does not require

immediate action is addressed at the next scheduled meeting of the IACUC. If immediate action is needed, the Chair and/or Veterinarian take all appropriate steps, report to the Institutional Official, then make a formal report to the IACUC at its next meeting. If IACUC action is required in the month of July (when regular meetings are not scheduled), an emergency meeting is called.

Approved protocols are continuously reviewed, renewed annually and must be resubmitted every three (3) years. PIs are notified one month in advance of the expiration date for Annual renewals and two months in advance for three-year submissions. Renewal assessment requires assurance that the animal activity has not deviated from the current IACUC approved protocol. Resubmissions are reviewed by the IACUC (FCR) and either approved or sent back for further modification. The signed (by the PI) annual renewal notices are reviewed and approved by the LAR/IACUC manager (authorized IACUC member) if no significant changes have occurred. Renewals with significant changes are referred to the IACUC for further review. The triennial review is a complete de novo review using all the criteria in the PHS Policy at Part IV. C. 1. 1-5. and using the procedures for protocol review as described in Part. III. D. 6. of this document.

10. Be authorized to suspend an activity involving animals as set forth in the PHS Policy at 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 and with the suspension vote of a majority of the quorum present if the activity is not being conducted in accordance with the Animal Welfare Act, *The Guide*, Syracuse University's assurance, or § IV.C.1.a.-g. of the PHS policy.

If an activity is suspended, the Institutional Official along with the IACUC shall review the specific reasons for suspension and take appropriate corrective action. This action will be reported to OLAW with a full explanation.

- E. The risk-based occupational health and safety program for personnel who work in laboratory animal facilities and personnel who have frequent contact with animals is a collaborative effort involving the IACUC, ORIP office, Laboratory Animal Resources staff, the Environmental Health Office, the Safety Department and faculty, students and other staff. The program endeavors to adapt responsively and responsibly to changing research activities and animal models used by University faculty and students. The approach is grounded in evaluations of potential workplace hazards and risks to individuals working with animals as performed in the initial protocol review and protocol revisions. Our goal is to minimize the occurrence of injury and illness through effective hazard identification, avoiding or controlling exposure, education and training, implementation of appropriate rules and guidelines and effective monitoring and record keeping. It is designed to avoid accidents and injuries through primary prevention efforts - by understanding potential risks and avoiding contamination through good personal hygiene, methods of avoidance and decontamination.

### *1. Hazard Identification and Risk Assessment/Control and Prevention Strategies*

Physical and environment hazards (e.g., housekeeping, waste disposal, noise, hazardous chemical use and storage, etc.) are assessed by the IACUC during its semi-annual facilities inspections and program reviews. The Safety Office will assess for ergonomic hazards to animal care personnel. The Animal Care Manager is responsible for assuring that physical and environmental hazards in the animal facilities are monitored and any deficiencies or areas requiring correction are reported to the appropriate supervisor (e.g., physical plant, principal investigator, IACUC Chair, ORIP Director, etc.). Principal investigators are responsible for informing and securing the approval of the IACUC and other committees appropriate to the (e.g., Environmental Health Office for use of hazardous agents (e.g., chemical agents, infectious agents or recombinant DNA, or radioactive materials) prior to the onset of a research protocol using animals (see §F.5 for details). PI's are also responsible for ensuring that their students and staff are informed of potential hazards associated with their research and implementing effective strategies to minimize risk and exposure. A tetanus vaccine (or booster) is required for animal users.

In addition, the Industrial Hygiene Manager from the Environmental Health Office (IACUC member) reviews protocols and provides the IACUC with written Health and Safety Reviews outlining requirements/recommendations for each listed hazard. The animal users' supervisor (PI, instructor, LAR facilities manager) maintains a copy and posts each written Health and Safety Review provided by IACUC for all active protocols.

Hazards associated with experimental protocols are discussed in §E.5.

#### *a) Personnel Information- Assessment of individuals with high frequency/high intensity exposures or low frequency/high intensity exposures.*

See §E.7 for information on medical screening for new animal care employees to assess their potential susceptibility for animal-related allergies or other conditions that may impact risk assessment (e.g., pregnancy, immunosuppression, etc). Personnel involved in animal research protocols (e.g., PI's, students, fellows, technical staff) are asked to report on the training certification that they have been made aware of any specific pathogens or allergens they might encounter with the species of animals with which they will be working. If they have not, they will be asked by the IACUC to contact ORIP for specific information/training. The attending veterinarian, Environmental Health Office, and the SU Health Services will work collaboratively to provide appropriate training to ensure that each person is informed of relevant research risks and trained in appropriate risk control procedures.

Individuals who have infrequent/low intensity exposure to the animal facilities are not formally assessed at this time. These individuals (e.g., physical plant staff, guests) are informed of potential risks associated with animals (allergens or pathogens) through signage placed on or near doors of rooms housing animals. Signs state the specific precautions individuals should take if they have a problem being or working in that area and also provide relevant contact information.

### *2. Personnel Training*

The LAR staff is trained in the special qualifications or mandated precautions required in specific protocols by both the PI and EHO, distinct from standard training described in §G. The LAR offices have MSDS (Material Safety Data Sheets) for all chemicals used for routine

animal care. Chemicals are also registered with the Environmental Health Office.

The Environmental Health Office regularly conducts mandatory training sessions (Hazardous Communication Training; Chemical Hygiene Plan Training; Hazardous Waste Management, and Radiation safety) for all personnel (faculty, staff, and students) working in University laboratories. Detailed procedures for use of hazardous chemical agents in animal research, as well as documentation of associated training requirements for personnel received from EHO and incorporated into the animal use protocol, will be reviewed and approved by IACUC.

Principal Investigators are responsible for ensuring their research staff is properly trained in relevant animal research procedures, including use of hazardous materials. Such training is in addition to Chemical Hygiene Plan (CHP) mandatory training sessions for personnel (faculty and staff) working in University laboratories. Additionally, the LAR provides training on allergy prevention to investigators, staff and students.

### *3. Personal Hygiene*

Recognizing the singular importance of staff hand washing to the prevention of disease transmission, all animal care staff and workers are informed of proper hand washing techniques. Hands should be washed before and after handling animals and whenever protective gloves are removed.

Eating, drinking, smoking, application of cosmetics or other activities that may increase the risk of ingesting hazardous materials or contaminate mucous membranes are prohibited in animal care and use areas.

### *4. Facilities, Equipment and Monitoring*

Sinks with sanitizing cleanser are available in animal washrooms as well as the public restrooms. Emergency showers and eye wash stations are located in the support areas and adjacent to the animal facilities. The LAR staff is responsible for housekeeping in animal facilities as well as assuring that University waste management procedures are followed in these areas. They monitor animal facilities daily for temperature, humidity and ventilation. Staff are also trained in the safe use of cage washing and other equipment and maintain appropriate maintenance records.

The LAR offices have Material Safety Data Sheets (MSDS) for all hazardous substances used, stored or handled in conjunction with animal care. Injury reports are maintained at the Office of Risk Management.

### *5. Animal Experimentation Involving Hazards*

Principal investigators identify potential hazards (e.g., infectious agents; radioactive materials; or chemical hazards such as mutagens, dermatogens, carcinogens, or high acute toxicity substances, or other physical hazards) in the animal research protocol. They must attach the approval of any relevant University oversight committee to the animal protocol.

When hazardous chemical agents will be used, the Chemical Hygiene Officer (CHO) will review the toxicity of the substance as utilized in the protocol. Syracuse University has instituted a chemical hygiene plan. Prudent written procedures, such as a substance-specific standard operating procedure (SOP), are prepared by the PI and are reviewed by the CHO.

The SOP describes appropriate containment and handling, personal protective equipment, ventilation, waste management, and decontamination. This procedure is filed by the EHO, the PI, and in the LAR files to insure that any personnel in contact with the hazardous chemical or contaminated animals have the pertinent information on required health and safety procedures. The CHO must review and comment on the protocol when a hazardous agent is used; the CHO and PI will provide information for the LAR Emergency Data file. The CHO will provide special training upon request of the PI or IACUC, and will work with the PI and all related personnel involved in the research to insure that required proper chemical hygiene protocols and related hazards are communicated.

Similar procedures are followed if infectious agents or recombinant DNA (Microbiological Safety Committee/Biosafety Officer) or radioactive materials (Radiation Safety Committee/Radiation Safety Officer) were used in animal research.

#### *6. Personal Protection*

All individuals who enter animal facilities are required to don protective covering for their street clothes. Laboratory coats (cloth and disposable) are available. All animal care personnel are provided laboratory coats and have access to dust masks, shoe covers and surgical gloves for use when appropriate. If a dust respirator is recommended for use by EHO, wearers will be required to participate in the University's Respiratory Protection Program. Disposable laboratory coats are utilized. Name labels are in each coat. Masks and surgical gloves and shoe covers are disposable and are discarded post use. Rubber gloves are supplied and are required when cleaning and disinfecting animal facilities. Leather gloves are used when necessary to provide protection against animal scratches or bites when handling larger animals. Safety glasses or chemical splash goggles are required to be worn to prevent injury during activities that may involve projectiles, chemical splashes or contact with contaminated hands. Ear muffs are available for use around cage washers.

The personal protective equipment (PPE) most commonly used (e.g., laboratory coats, gloves, safety goggles, and masks) are adequate protection for almost all our active protocols. When agents presenting exceptional hazards are identified and reviewed through the process described above, additional PPE may be required. This will be handled on a case-by-case basis in consultation with the EHO and listed on the Chemical Hygiene Plan SOPs.

#### *7. Medical Evaluation and Preventive Medicine for Personnel*

##### *a) Health Screening:*

All personnel who have direct or indirect animal contact must complete an Animal Users Health and Safety Questionnaire. The individual is to submit the completed form via hard copy through campus mail in a confidential envelope, to the appropriate health care professional for evaluation. University staff and faculty submit the form to the Industrial Medical Associates group (IMA) while students submit to The Syracuse University Health Services (SUHS). Individuals who require additional follow-up (e.g., physical examination, consultation, etc.) will be advised to seek the advice of their private health care provider. Completed AUHS Questionnaires and evaluation information will be filed with SUHS or the IMA group.

The IMA group or SUHS will inform LAR when evaluation of the risk assessment form is complete and if any work restrictions or personal protective equipment is recommended. Entry to the animal facilities will be on hold until the Animal Facilities Manager confirms that unrestricted access is allowed and/or any recommended PPE is provided.

b) Animal Bites and scratches:

All personnel in contact with animals shall be instructed by LAR staff and/or P.I.s on how to avoid animal bites by using proper techniques and, when necessary, protective gloves. Personnel are instructed to take the following steps in the event of an animal bite:

1. Scrub the area with a proven and recommended antibacterial soap within five minutes of the exposure.
2. Isolate the animal.
3. Have the bite or scratch examined immediately by the University Health Services Center, Industrial Medical Associates or medical practitioner of their choice. All employee injury or illness caused by occupational factors *must* be reported to Worker's Compensation in Risk Management (3-4011) regardless of individual's choice for treatment.
4. Advise the LAR Office of the situation so that the animal can be examined by the consulting veterinarian if warranted.
5. If the approved protocol involves the presence of hazardous materials in the animal, the MSDS sheets will be examined by the SU EHO for information on toxicity and treatment.

Antibacterial soap and bandages are contained in LAR facility first aid kits. Copies of the first aid procedure are posted in the facility. Faculty with approved protocols allowing animals in their laboratories are responsible for providing appropriate first aid materials and posting instructions.

c) Injuries and Illness:

In the event of a serious accident, personnel are to call the Department of Public Safety using the University's primary emergency response number: #711.

Minor injuries such as cuts and scrapes are to be treated immediately with disinfectant and bandaged to minimize the chance of infection. First aid supplies are available in the LAR facility's administrative offices. Student personnel are required to have all injuries promptly evaluated during university business hours by the campus Health Services Center that will recommend appropriate treatment. They are also recommended to have instances of suspected occupational illness, including dermatitis and respiratory irritation, evaluated by the Health Center. Non students should be seen by Industrial Medical Associates or their private health care providers.

If an injury or illness requires treatment, the individual may elect to receive primary medical care from either the campus Health Center or from another institution or physician of the individual's choice.

d) Zoonoses:

**TOXOPLASMOSIS:**

Toxoplasmosis is a disease transmitted by oocysts in the feces of cats. Severe manifestations (brain, eye, muscle, liver and lung damage) occur mainly in immunocompromised patients and in fetuses infected as a result of maternal infection. In order to minimize the health risk to all faculty, staff and students, the University strongly recommends that pregnant females and immunocompromised individuals avoid all contact with cats, their housing facilities and soiled bedding.

**RABIES:**

Rabies is a neurotropic virus disease that is almost 100% fatal. It is the most lethal and insidious disease known to man. All warm-blooded animals are susceptible to the virus. The clinical signs of rabies in animals are variable, but behavioral changes are always present. Aggression is quite common, and in the later stages paralysis appears. In case of a bite by a laboratory animal, follow standard operating procedures, as stated above. All warm blooded animals entering the SU animal facilities are from licensed vendors.

**GIARDIA:**

Giardia is a single celled animal, which causes non-bacterial diarrhea in humans and has been isolated from dogs and cats. A related but morphologically distinct organism infects rodents. Gloves should always be worn when handling animals in order to minimize the chances of contracting this disease.

F. The total gross number of square feet in each animal facility (including each satellite facility), the species of animals housed therein and the average daily inventory of animals, by species, in each facility is provided in Section X.

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

**Technician Training:** The Institution is committed to facilitating American Association of Laboratory Animal Science (AALAS) certification for all regularly employed animal care technicians. The LAR Manager and Head Technician are AALAS certified; new animal care staff are encouraged to complete the appropriate AALAS certification exam within a reasonable period of time. LAR staff must complete the online training (see below) and have relevant experience and/or education in animal care and on-the-job-training by professional animal technologists.

**Scientist, Faculty and Other Investigator Training:** Prior to September 2003, Syracuse University Policy required that all persons handling animals be certified by participation in a two-hour Training Seminar. In September 2003, all persons handling animals not previously certified through the training seminar were required to complete *Working With the IACUC at Syracuse University* ([www.researchtraining.org](http://www.researchtraining.org)). Currently, as of January 1, 2008 all persons

handling animals must complete the online training program through the Collaborative Institutional Training Initiative (CITI) Web-based Training Program. The CITI Web-based training program includes the required information on research or testing methods that minimize the number of animals required to obtain valid results and limit animal pain and distress. In addition, all persons who carry out invasive or other experimental procedures must be certified as trained in that procedure(s) by the Principal Investigator as defined on the IACUC approved protocol. Training documentation and certificates are reviewed by the Animal Manager; records are maintained at Laboratory Animal Resources offices.

**IACUC training:** Potential IACUC members attend one IACUC meeting as an observer. If the potential member agrees to join the committee, the IACUC votes to recommend the potential member to the Vice President for Research. New IACUC members are provided a copy of The Guide for the Care and Use of Laboratory Animals, a copy of the approved Animal Welfare Assurance, as well as the PHS Policy and the OLAW/ARENA IACUC Guidebook. All new IACUC members are required to complete online training at the Collaborative Institutional Training Initiative (CITI) website. The IACUC Chair, Veterinarian, ORIP Director, and IACUC Administrator have attended IACUC 101 and 102. IACUC members are encouraged to attend local seminars and workshops (all expenses paid by Syracuse University). PRIM&R webinars (as available) are offered to members. For example, the webinars on interpreting the new Eighth Edition of The Guide were attended by IACUC members and administrators. Training and information are also available at IACUC meetings, for example, the review and discussion of items on the semiannual facilities and program review checklists during the semiannual reviews.

**Anesthesia:** Anesthesia is performed by investigators, laboratory technicians, students and LAR staff. Training and information on procedures are supplied by the principal investigator(s), attending veterinarian and the LAR staff.

**Aseptic Surgery:** The personnel performing surgery must have adequate training from the PI and/or have had prior experience. As part of the training program, the attending veterinarian, as he/she deems necessary, will oversee the first surgical procedure on each protocol. Books and videos (from the LAR library and AALAS) are made available to personnel performing surgical procedures.

Humane methods of animal maintenance and experimentation are ultimately the responsibility of the principal investigator training the individuals that will work with them in animal experimentation and/or teaching in the instructions for the care, handling, and proper techniques involved with the specific species they are using in their protocol.

The IACUC formally approves the staff through the Animal Use Protocol Training Form. Forms documenting training must be submitted with each protocol or as an amendment to protocols. All training documentation forms must be certified by the LAR/IACUC manager prior to anyone being allowed to handle animals at the University. Documentation of training for all personnel working with animals is included in all active protocol files.

The LAR personnel and resources are available to all University teaching and research personnel for training and/or education pertaining to the humane and ethical use of animals in research and teaching.



#### **IV. INSTITUTIONAL PROGRAM EVALUATION AND ACCREDITATION**

All of this institution's programs and facilities (including satellite facilities) for activities involving animals have also been evaluated by the IACUC within the past six months and will be re-evaluated by the IACUC at least once every six months, in accord with IV.B.1. and 2. of the PHS Policy, and reports 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.

As specified in the PHS Policy at IV.A.2. as Category 1, all of this institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated and 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.

#### **V. RECORD KEEPING REQUIREMENTS**

A. This institution will maintain for at least three years:

1. A copy of this Assurance and any modifications thereto, as approved by 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 given or withheld.
4. Records of semiannual IACUC reports and recommendations (including minority views) as forwarded to the IO (Vice President for Research).
5. 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 three 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. This Institution's reporting period is January 1-December 31. The IACUC, through the Institutional Official, will submit an annual report to OLAW by January 31 of each year. The report will include:
1. Any change in the accreditation status of the institution (*e.g., if 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 IO (V.P. for Research).
  5. Any minority views filed by members of the IACUC.
- B. The IACUC, through the Institutional Official, will 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 shall include any minority views filed by members of the IACUC.

**VII. Institutional Endorsement and PHS Approval**

<b>A. Authorized Institutional Official</b>	
Name: Gina Lee Glauser, Ph.D.	
Title: Vice President for Research	
Name of Institution: Syracuse University	
Address: (street, city, state, country, postal code) 207 Bowne Hall Syracuse, New York, 13244	
Phone: (315) 443-2492	Fax: (315) 443-1889
E-mail: leeglaug@syr.edu	
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.	
Signature: 	Date: 11/14/12

<b>B. PHS Approving Official (to be completed by OLAW)</b>	
<p>Barton Weick, Ph.D., D.V.M.          Animal Welfare Program Specialist          Office of Laboratory Animal Welfare (OLAW)          6705 Rockledge Drive          RKL1, Suite 360, MSC 7982          Bethesda, Maryland 20892-7982          bweick@mail.nih.gov</p>	
Signature: 	Date: November 15, 2012
Assurance Number: A3687-01	
Effective Date: November 15, 2012	Expiration Date: October 31, 2016

### VIII. Membership of the IACUC

Date: July 1, 2012			
Name of Institution: Syracuse University			
Assurance Number: A3687-01			
<b>IACUC Chairperson</b>			
Name*: Melissa Pepling, Ph.D.			
Title*: Chair Person/Associate Professor of Biology/Scientist			Degree/Credentials*: Ph.D.
Address*: (street, city, state, zip code) 348 Life Science Complex Syracuse, NY 13244			
E-mail*: mepeplin@syr.edu			
Phone*: (315) 443-4541		Fax*: 315-443-2012	
<b>IACUC Roster</b>			
Name of Member/ Code**	Degree/ Credentials	Position Title ***	PHS Policy Membership Requirements ****
Timothy Coughlin	B.S	Industrial Hygiene Manager, EHO	Non-Scientist
Tracy Crompt	M.S.W	Director, Research Integrity and Protections	Non-Scientist
Clifford Forstadt	J.D.	Attorney	Non-Affiliated/Non- Scientist
Michael Henn	B.S., LATG	Manager	Scientist
Robin Jones	M.S.	Graduate Research Assistant Biology	Scientist
David Potter	Ed.M.	Retired Associate Dean of Arts and Sciences	Non-Scientist
Suresh Santanum	Sc.D.	Deputy Executive Director, Center of Excellence	Scientist
William F. Stack	D.V.M.	Veterinarian	Veterinarian

\* 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.

<b>Contact #1</b>	
Name: Tracy Crompt	
Title: Director, Office of Research Integrity and Protections	
Phone: (315) 443-2855	E-mail: tjcrompt@syr.edu
<b>Contact #2</b>	
Name: Michael Henn	
Title: IACUC Administrator/Lab Animal Resources Facilities Manager	
Phone: (315)443-1690	E-mail: mphenn@syr.edu



# Appendix I

## Lines of Authority and Responsibility for Syracuse University's Animal Welfare Program

