

Animal Welfare Assurance

I, Timothy O'Connor, as named Institutional Official for animal care and use at **The Rockefeller University**, hereinafter referred to as Institution, by means of this document, provide assurance that this Institution will comply with the Public Health Service Policy on Humane Care and Use of Laboratory Animals, hereinafter referred to as PHS Policy.

I. Applicability of Assurance

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

- A. The following are branches and components over which this Institution has legal authority, included are those that operate under a different name: The Rockefeller University
- B. The following are other institution(s), or branches and components of another institution: None

II. Institutional Commitment

- A. This Institution will comply with all applicable provisions of the Animal Welfare Act and other Federal statutes and regulations relating to animals.
- B. This Institution is guided by the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training."
- C. This Institution acknowledges and accepts responsibility for the care and use of animals involved in activities covered by this Assurance. As partial fulfillment of this responsibility, this Institution will ensure that all individuals involved in the care and use of laboratory animals understand their individual and collective responsibilities for compliance with this Assurance, and other applicable laws and regulations pertaining to animal care and use.
- D. This Institution has established and will maintain a program for activities involving animals according to the *Guide for the Care and Use of Laboratory Animals (Guide)*.
- E. This Institution agrees to ensure that all performance sites engaged in activities involving live vertebrate animals under consortium (subaward) or subcontract agreements have an Animal Welfare Assurance and that the activities have Institutional Animal Care and Use Committee (IACUC) approval.

III. Institutional Program for Animal Care and Use

- A. The lines of authority and responsibility for administering the program and ensuring compliance with the PHS Policy are as follows:

The Executive Vice President serves as the Institutional Official.

Direct administrative responsibility for assuring the quality of care and use of laboratory animals, diagnostic, health care, facility maintenance and other components of the animal care and use program at The Rockefeller University, in accord with policies outlined in Section II, are vested in the Associate Vice President of the Comparative Bioscience Center (CBC) and his staff.

The Institutional Animal Care and Use Committee (IACUC) is appointed by the IO and 1) reviews every six months the institution's animal care and use program and facilities, 2) reviews concerns involving use of laboratory animals, 3) make recommendations to the IO, and 4) reviews and approves, requires modifications, or withholds approval of activities related to care and use of animals.

B. The qualifications, authority, and percent of time contributed by the veterinarian(s) who will participate in the program are as follows:

1) Name: Ravi Tolwani

Qualifications

- Degrees:
DVM, PhD, Diplomate ACLAM
- Training or experience in laboratory animal medicine or in the use of the species at the institution:

Dr. Tolwani oversees the animal care activities for the Comparative Bioscience Center. Dr Tolwani has 28 years of experience in the clinical care of animals and is devoted full-time to supporting the institutions animal care and use program. He serves as the Attending Veterinarian and a voting member of the Institutional Animal Care and Use Committee (IACUC). Dr. Tolwani oversees the program for Animal Care which is designed to fulfill the animals' nutritional, health and environmental requirements, in compliance with the Animal Welfare Act and other Federal and State regulations, and according to the guidelines and recommendations of the National Institutes of Health (NIH), Office of Laboratory Animal welfare (OLAW), and the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC). Dr Tolwani has the authority to temporarily stop an activity if he determines it is not in compliance with the applicable policies and standards of animal welfare, he has direct program authority and responsibility for the Institution's animal care and use program including access to all animals. He is also responsible for veterinary care of the laboratory animals, seeking and obtaining adequate and appropriate continuing education for himself and for Center staff, ensuring adequate and appropriate training of research personnel in animal care and handling, and maintaining animal care departmental policies and procedures. Dr Tolwani routinely participates in continuing education courses, and he attends at least one national laboratory animal science meeting per year. Dr. Tolwani received his DVM degree from Auburn University.

(b) (6)



C. The IACUC at this Institution is properly appointed according to PHS Policy IV.A.3.a. and is qualified through the experience and expertise of its members to oversee the Institution's animal care and use program and facilities. The IACUC consists of at least 5 members, and its membership meets the composition requirements of PHS Policy IV.A.3.b. Please find below a list of the chairperson and members of the IACUC and their names, degrees, profession, titles or specialties, and institutional affiliations. The IACUC members consist of seven scientists, three non-scientists (AVP of Research Support and two nonaffiliate members), two nonaffiliate members and three veterinarians. The AVP Research Support has not conducted research and serves in as an administrator for the University. Both nonaffiliated members are retired and have non-research (administrator and English teacher) backgrounds.

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 Committee members review the IACUC functions, training, occupational health, biosafety, veterinary care, exceptions to the *Guide*, disaster and emergency plans for the CBC. Comments and suggestions regarding the program are discussed at a convened meeting. The semiannual reports reflect changes that have occurred during the previous six month period.

- 2) Inspect at least once every 6 months all of the Institution's animal facilities, including satellite facilities and laboratories where in vivo procedures are conducted, using the *Guide* as a basis for evaluation. The IACUC procedures for conducting semiannual facility inspections are as follows:

The IACUC committee reviews all animal housing areas, support space and research laboratories where animal procedures are conducted. Housing conditions, environmental parameters, ongoing procedures and practices are among topics reviewed. A sub-committee consists of at least two members review all sites. In areas where USDA species are used at least two voting members review these areas semiannually. No member wishing to participate is excluded from the facility inspection and every effort is made to include the non-affiliated member as well as all IACUC members. Facility checklists are used during 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:

The report to the IO includes a description of the nature and extent of this institution's adherence to the *Guide for the Care and Use of Laboratory Animals*. Any departures from the Guide are identified specifically and the reasons for the departure will also be stated and reported to the IO. Reports of evaluations are reviewed and signed by a majority of the IACUC members. The reports distinguish significant deficiencies from minor deficiencies, and each deficiency is assigned a reasonable and specific plan and schedule for correction. Reports include any minority opinions that have been presented.

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

The IACUC is the appropriate body for resolving concerns involving the care and use of animals brought to the attention of the committee by veterinarians, researchers, animal caretakers, veterinary

technicians, other members of the RU community or the community-at-large. A mechanism for anonymously reporting animal welfare concerns is described during orientation of personnel and other training provided by the CBC. The institution specifically protects any individual reporting a concern against reprisal.

This information for reporting is posted in the animal facility. All complaints and concerns that are brought to the attention of the IACUC are discussed, investigated and evaluated. In the event that serious, valid concerns were registered on animals covered by OLAW, the Institutional Official or the Attending Veterinarian would notify 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:

Semiannually, reports prepared by the IACUC chair and signed by the majority of IACUC members are submitted to the IO for review. Recommendations to improve the program can be made by the IACUC chair, on behalf of the IACUC, to the IO at anytime including the semiannual program review.

- 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:

No member of the IACUC can participate in the review and approval of a research project in which that member has a conflicting interest other than to provide information requested by the IACUC. No business can be conducted without a quorum, including in the event that one member has to recuse themselves due to conflicting interest. The IACUC reviews and approves all protocol proposals for research involving animals to ensure that:

- Every research project is justified;
- There are no alternatives to the use of animals
- There is no appropriate animal model of a "lower" species;
- There is no alternate to a procedure which may cause pain or distress and that adequate anesthesia and analgesia is used for any such procedure;
- The minimum but adequate number of animals is used to achieve statistical significance. To minimize the numbers of animals used, the investigator's justification of the numbers of animals to be used is evaluated critically in the IACUC protocol review;
- Personnel are adequately trained to perform proposed procedures;
- Proposed method of euthanasia is consistent with the recommendations of the AVMA Guidelines for the Euthanasia of Animals: 2013 edition.
- A description of any proposed animal research activity is submitted to the Research Compliance Specialist to be reviewed by the IACUC. The veterinarians frequently conduct a prereview to provide input to investigators. Completed protocol forms will be reviewed by the IACUC by either Full Committee Review (FCR) or Designated Member Review (DMR).

For FCR the protocol can be considered at a convened meeting of at least a majority of the full membership of the IACUC and must be approved by a majority of the full membership. The FCR can approve the protocol, withhold approval or require modifications to secure approval. If the outcome of the quorum vote is modifications are required to secure approval the committee will request clarifications and return the protocol for FCR a convened meeting or employ DMR. If DMR is chosen, all members, including the members not present at the meeting, will be provided the revised research protocol and will have the opportunity to call for FCR. A DMR will be conducted only if all members of the committee have had the opportunity to request FCR and none have done so.

Designated Member Review is also used to review protocols. All members are provided a copy of the protocol and are able to call for a full committee review. If there is no request for a full committee review, the chairman via the Research Compliance Specialist assigns at least two reviewers who can approve the protocol, approve with clarifications, or bring it to a FCR. One DMR is usually a veterinarian unless there is a conflict of interest. All DMRs will review identical copies of the protocol, questions from the designated reviewers are shared between the designated reviewers (in the a-tune protocol management system). Designated members can only approve the protocol after they are reviewed all responses and the reviewers are unanimous in their decision.

- 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:

Any modification of an “active” protocol must be submitted to the IACUC as an “amendment”. The modifications must be described and justified fully. Minor changes (such as changes in research personnel but not a change in PI) may be given approval by a designated member of the IACUC. These changes are presented at the next convened meeting. Significant changes in a proposal must be reviewed and approved by FCR or DMR as described in III.D.6. Examples include change in procedures or a request to increase the numbers of animals and changes in procedures on a protocol.

- 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:

The Research Compliance Specialist provides a written approval or reason for withholding approval letter to the principal investigators at the institution regarding the outcome of the protocol review. If a protocol requires modifications (to secure approval), the PI has the opportunity to respond in writing to the IACUC questions for its decision, addressing the modifications required to secure approval. The modifications are added into the protocol for the IACUC’s further consideration. If the vote of the IACUC is to withhold approval of a protocol, the PI also has the opportunity to respond in writing as well as in person. Protocol copies are maintained on a secure web-based lab animal management software. The IO is notified of decisions regarding protocol review monthly. A copy of the IACUC meeting minutes is sent to the IO.

- 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 approved protocols are reviewed annually to monitor progress and problems. Every three years, the entire protocol is rewritten and resubmitted to the IACUC for complete de novo review, completed by FCR or DMR. The de novo review is completed prior to the expiration of the previous protocol.

Post approval monitoring is conducted by the IACUC and CBC veterinarians. IACUC members question investigators on procedures during their semiannual facility review. The CBC veterinarians and veterinary technicians are continuously reviewing protocols and evaluation outcomes. CBC veterinary team monitors and conducts post approval monitoring on surgical procedures conducted on USDA covered species and provides mandatory training for all research staff conducting surgery on

any species. Postoperative animals are identified by special cage cards and monitored collaboratively by the veterinary team and the investigators. Veterinarians are also proactively guiding investigators on humane endpoints and collaboratively observe animals with investigators on certain protocols.

The CBC veterinarians are also members of the IACUC. They verbally report to the IACUC during a convened meeting whenever a post-approval monitoring incident was noted in CBC. If adverse events are noted, the veterinarians work with the investigator to improve outcome. If corrective action is required, the IACUC is actively involved in making these decisions.

- 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 a research activity whenever it is determined that the activity is not in compliance with the policies of animal welfare, after convened meeting of the quorum and majority vote of that quorum. The veterinarian has the authority to temporarily stop a research activity when determined not in compliance until corrected or further reviewed by the entire IACUC. The IACUC has the responsibility to terminate the research activity if it determines that the activity cannot be brought into compliance with these supported research policies. In accordance with PHS policy relevant to PHS-conducted or supported research projects, if the IACUC suspends a PHS supported activity involving animals, the institutional official in consultation with the IACUC shall review the reasons for suspension, take appropriate corrective measures, and report the suspension with a full explanation to the OLAW. For non-PHS supported activity involving animals, the institutional official in consultation with the IACUC shall review the reasons for suspension and take appropriate corrective measures.

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

The CBC, Occupational Health Services (OHS), and Environmental Health and Safety (EH&S) of The Rockefeller University have developed a medical surveillance program to protect the health and promote the safety of personnel who have contact with laboratory animals or animal tissues. This program emphasizes prevention of illness related to laboratory animal exposures through regular health exams, monitoring of exposure history, offering appropriate vaccinations, and encouraging avoidance of unnecessary animal contact.

The University's Occupational Health Services (OHS) is responsible for monitoring the occupational health program. The OHS conducts post-employment and periodic health evaluations. All personnel with animal contact are required to complete the OHS risk questionnaire at least yearly. Higher risk group personnel (ABL2, higher risk animals) are evaluated more frequently.

The occupational health and safety program is based upon risk assessment and hazard identification for the commonly occurring diseases (e.g., allergies and zoonoses) and hazardous agents used. As allergy is the most common cause of human disease related to the use of animals in research. The CBC staff strongly encourages the appropriate use of personal protective equipment (PPE). CBC recognizes that allergies to animals can be reduced through scrupulous handling techniques and the appropriate use of PPE. As inhalation of small particles into the respiratory system constitutes the bulk of sensitizing exposure, wearing a face-mask is an important preventative measure. Other personal protective measures, mandated for all animal users, include using gloves and wearing a gown or lab coat in the animal rooms or while working with animals. All personnel should wash their hands thoroughly after working with animals, discard used gowns and disposable lab coats after use. Handling garments after leaving the animal rooms or taking lab coats back to the laboratory unnecessarily exposes others to allergens. Thorough references on zoonoses, including source, mode of transmission, symptoms, and treatment, are available in Occupational Health Services and the CBC. Researchers and other laboratory workers who

learn they will be working with animals must discuss specific risks with the personnel of the CBC, the Laboratory Safety & Environmental Health office, and Occupational Health Services. CBC staff are responsible for the purchase of all laboratory animals. Every attempt is made to purchase only animals free of zoonotic disease. Repeated testing of animals is conducted to ensure they remain free of disease. Should an infection be introduced into the animal colony, investigators are notified immediately.

All staff who plan to work with laboratory animals initially get a post-employment physical exam by OHS. Additionally, individuals working in the CBC and investigators using nonhuman primates or certain biohazardous agents receive annual physical examinations by OHS. The evaluations include assessment of predisposing illnesses or risk factors such as immune system compromise and tendency to allergic reactions. Regularly scheduled TB testing is required for researchers, technicians, and all others working in the nonhuman primate area. All CBC employees are also routinely screened for TB. Employees who become pregnant are encouraged to identify themselves and may request additional screening from Occupational Health Services and information about potential hazards in the work environment from Laboratory Safety & Environmental Health.

RU takes education about risks and safety seriously as proper procedures for animal handling and exposure help to prevent injuries and illness. CBC strongly recommends the purchase of only purpose-bred, certified disease-free animals for research. Training is provided on restraint and other techniques by the CBC. All animal, biological, and other hazardous waste, such as used needles, are disposed of using techniques approved by the Laboratory Safety & Environmental Health Office.

Personal Hygiene Program: Personal protective measures include the use of personal protective equipment (PPE). Donning a disposable gown, or lab coat, gloves, hair bonnet, facemask, protective eyewear in certain areas, and shoe covers in certain areas are mandatory in the CBC. A full-face respirator is recommended for those at high risk and can be obtained from the Laboratory Safety & Environmental Health Office. Orientation to the CBC is mandatory for all animal users and is offered twice a month.

Employees using nonhuman primates (NHP) or hazardous compounds receive additional training and medical oversight. All those working with NHP receive semi-annual evaluations which include a TB skin test or chest X-ray and Quantiferon Gold Testing, and brief medical history. Several nonhuman primate diseases are transmissible to humans. Airborne transmission of tuberculosis between nonhuman primates and man does occur. Common human viruses such as measles also pose particular risks in a number of primate species. Herpes virus B, carried by rhesus, cynomolgus, and other members of the genus *Macaca*, can cause fatal encephalitis in man, and wounds from these species or from objects contaminated with their body fluids require immediate medical attention. *Shigella*, *Campylobacter*, and *Salmonella* are enteric gastrointestinal pathogens that may be harbored by primate species, and precautions, including handwashing, are taken to prevent enteric cross contamination. Protective clothing such as disposable gown, double gloves, masks, shoe covers, hair bonnet, and protective eyewear are used when handling nonhuman primates.

Any employee who is bitten or scratched by an animal, cut or scratched by an instrument that has been exposed to an animal or its body fluids, or splashed with an animal's body fluids to the mucous membranes must wash the exposed area for a minimum of 15 minutes and then contact Occupational Health Services immediately. The OHS office has standard procedures for managing both trauma and potential transmission of infection. These include updated treatment protocols for injuries occurring from primates or related equipment (example: SOP's for wound cleansing and appropriate medical follow-up).

Occupational Health Services provide and document immunizations against work-related hazards. The following are the most common immunizations available and recommended for laboratory animal users: Tetanus: It is strongly recommended that all personnel using animals be immunized with tetanus-diphtheria toxoid (Td) at least every ten years. Hepatitis B: Researchers working with human serum should receive hepatitis B vaccine. Other vaccines may be administered depending on the nature of the research being conducted.

- F. The total gross number of square feet in the animal facility, the species of animals housed there and the average daily inventory of animals, by species, in each facility is provided below in the Facility and Species Inventory table.
- G. The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows:

IACUC Members: are provided copies of the PHS Policy, *The Guide of the Care and Use of Laboratory Animals*, the Animal Welfare Act and Animal Welfare Act Regulations and a copy of the approved Animal Welfare Assurance. New IACUC members receive a 30 minute orientation on the functions and responsibilities of the IACUC by a veterinarian.

Research and CBC Staff: Principal investigators must describe the responsibilities and qualifications of all individuals who work with animals in the IACUC protocol proposal form. Before they are permitted to perform procedures on animals, all individuals who propose to work with animals must attend and animal facility orientation given by the CBC training coordinator.

All research and CBC staff are granted access into the CBC facilities after they complete a two-part orientation program taught by the Training Coordinator. The first session highlights federal and state laws and regulations pertaining to research, and animal care and use. It familiarizes each employee with CBC standard operating procedures and informs users of potential hazards with laboratory animal work. It includes a facility tour and demonstrations in appropriate PPE, mouse handling, mouse cage populations, and euthanasia. The training emphasizes the concept of reduction, refinement and replacement. Instruction is provided to minimize the use of animals and minimize pain and distress. The second hands on session covers restraint, breeding procedures, identification, euthanasia and other commonly used techniques. All practice is done until proficiency is demonstrated to the training coordinator. Members must attend orientation and sign Statements of Understanding and Responsibility for the following guidelines: Personal Protective Equipment, Weaning Mice and Acceptable Mouse Cage Populations, CO2 Euthanasia in Rodents and Responsibilities for the Care and Use of Laboratory Animals at The Rockefeller University.

Documentation of training is filed and kept by the CBC. Individuals can only get card key access upon completion of required orientation and training. Investigators are aware that procedures are monitored periodically by the veterinarians to assure the use of appropriate surgical techniques and handling to minimize pain and distress.


In addition, all research staff using ABSL-2/3 agents or non-human primates must attend an additional training session held by the Training Coordinator / LS&EH staff. This training covers appropriate biohazard practices, working with non-human primates, best practices and zoonosis. An annual NHP refresher training, with accompanying quiz, is required thereafter.

New investigators with surgical programs receive mandatory surgical training in aseptic techniques, surgical preparation, record keeping, postoperative monitoring and pain management.

IV. Institutional Program Evaluation and Accreditation

All of this Institution's programs and facilities (including satellite facilities) for activities involving animals have been evaluated by the IACUC within the past 6 months and will be reevaluated by the IACUC at least once every 6 months according to PHS Policy IV.B.1.-2. Reports have been and will continue to be prepared according to PHS Policy IV.B.3. All IACUC semiannual reports will include a description of the nature and extent of this Institution's adherence to the PHS Policy and the *Guide*. Any departures from the *Guide* will be identified

specifically and reasons for each departure will be stated. Reports will distinguish significant deficiencies from minor deficiencies. Where program or facility deficiencies are noted, reports will contain a reasonable and specific plan and schedule for correcting each deficiency. Semiannual reports of the IACUC's evaluations will be submitted to the Institutional Official. Semiannual reports of IACUC evaluations will be maintained by this Institution and made available to the OLAW upon request.

- (1) This Institution is Category 1 — 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. Recordkeeping Requirements

- A. This Institution 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, Timothy O'Connor.
 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 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, Timothy O'Connor
 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: Timothy O'Connor, Ph.D.	
Title: Executive Vice President	
Name of Institution: The Rockefeller University	
Address: (street, city, state, country, postal code) 1230 York Avenue, Box 257 New York, NY 10065	
Phone: (b) (6)	Fax: (b) (6)
E-mail: toconnor@rockefeller.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: (b) (6)	Date: 05-09-2018

B. PHS Approving Official (to be completed by OLAW)	
<p>Dr. Venita B. Thornton-Veterinary Medical Officer Office of Laboratory Animal Welfare National Institutes of Health RKL1, Suite 360-MSC 7982 6705 Rockledge Drive Bethesda, MD 20892-7982</p>	
Signature: (b) (6)	Date: May 9, 2018
Assurance Number: D16-00047 (A3081-01)	
Effective Date: May 9, 2018	Expiration Date: Feb. 28, 2022

VIII. Membership of the IACUC

Date: 8/4/2017			
Name of Institution: The Rockefeller University			
Assurance Number: A-3081-01			
IACUC Chairperson			
Name*: Charles Gilbert (Scientist 1)			
Title*: Professor		Degree/Credentials*: MD, PhD	
Address*: (street, city, state, zip code) 1230 York Avenue New York, NY 10065			
E-mail*: gilbert@rockefeller.edu			
Phone*: (b) (6)		Fax*: (b) (6)	
IACUC Roster			
Name of Member/ Code**	Degree/ Credentials	Position Title***	PHS Policy Membership Requirements****
(b) (6)			Scientist
			Nonaffiliated, Nonscientist
			Scientist
			Nonaffiliated, Nonscientist
			Veterinarian
			Nonscientist
			Scientist
Ravi Tolwani	DVM, PhD	Associate VP, CBC	Veterinarian
(b) (6)			Scientist
			Scientist
			Veterinarian
			Scientist

* 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: Ravi Tolwani	
Title: Associate VP, Comparative Bioscience Center	
Phone: (b) (6)	E-mail: rtolwani@rockefeller.edu
Contact #2	
(b) (6)	

X. Facility and Species Inventory

Date: 8/4/2017			
Name of Institution: The Rockefeller University			
Assurance Number: A3081-01			
Laboratory, Unit, or Building*	Gross Square Feet [include service areas]	Species Housed [use common names, e.g., mouse, rat, rhesus, baboon, zebrafish, African clawed frog]	Approximate Average Daily Inventory
(b) (4)		Mice	69,476
		Rat	240
		Birds	545
		NHP	59
		Hamsters	2
		Frog	649
		Zebra fish	200
		Rat	22
		Birds	800
		Mice	1000
		Xenopus leavis	200
		Zebra fish	12,000
		NHP	7
		Mice	30
		Birds	120
		Xenopus leavis	45

*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.