

Name: New York University - Washington Square [A151]

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Code

A151

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
LABORATORY ANIMAL WELFARE PROGRAM
EMPIRE STATE PLAZA, P.O. BOX 509
ALBANY, NEW YORK 12201-0509

2019 RENEWAL APPLICATION
FOR APPROVAL FOR USE OF LIVING ANIMALS

SECTION I - GENERAL LABORATORY/INSTITUTION INFORMATION

CURRENT DATA	INDICATE CHANGES HERE
Laboratory/Institution Name: New York University - Washington Square	
Address 1: 70 Washington Square South - Rm. 1224	Rm. 1228
Address 2:	
City, State, Zipcode: New York, NY 10012	
County: New York	
Telephone Number: 212-998-3228	212-995-3153
Fax Number: 212-995-4104	
E-mail Address: paul.horn@nyu.edu	blooms03@nyu.edu

SECTION I - GENERAL LABORATORY/INSTITUTION INFORMATION

Ownership:

- ☐ Corporation ☐ Government ☐ Individual ☒ Not For Profit ☐ Partnership
☐ Other: _____

Facility Type:

- ☐ 2 Year College ☒ 4 Year College ☐ Clinical or Environmental Lab
☐ Hospital ☐ Medical School ☐ Product Testing Lab
☐ Public Health Lab ☐ Research & Development Lab ☐ Veterinary School
☐ Other: _____

SECTION II - PROGRAM INFORMATION

Animals (Check all that apply):

- | | | | |
|---|--------------------------------------|--|--------------------------------------|
| <input checked="" type="checkbox"/> Mice (genus mus) | <input type="checkbox"/> Hamsters | <input checked="" type="checkbox"/> Fish | <input type="checkbox"/> Sheep/Goats |
| <input type="checkbox"/> Mice (wild or other) | <input type="checkbox"/> Guinea Pigs | <input type="checkbox"/> Cats | <input type="checkbox"/> Cattle |
| <input checked="" type="checkbox"/> Rats (genus rattus) | <input type="checkbox"/> Rabbits | <input type="checkbox"/> Dogs | <input type="checkbox"/> Swine |
| <input type="checkbox"/> Rats (wild or other) | <input type="checkbox"/> Small Birds | <input checked="" type="checkbox"/> Non-Human Primates | <input type="checkbox"/> Poultry |
| <input checked="" type="checkbox"/> Other: <u>Gerbils & Aplysia</u> | | | |

Are you currently housing live animals at your institution? ☒ Yes ☐ No

If you are not currently housing live animals, do you anticipate having live animals in your facility during the next 12 months?* ☐ Yes ☐ No

*LAWP permits are issued to those institutions that maintain living animals for teaching and/or research and have the appropriate programs and facilities to properly and humanely care for those animals.

Does your laboratory/institution have an Animal Care Committee? ☒ Yes ☐ No
(If Yes, attach a copy of the Committee members)

Since your last application, have there been any changes in your animal care and use procedures (i.e. feeding programs, disease control, environmental management, humane care, euthanasia)? ☐ Yes ☒ No
(If Yes, please explain)

Note: Any procedures that require the withholding of feed and water or exposing the animals to adverse or unusual conditions should be documented in your animal use protocols and approved by your IACUC.

Living animals are used for (Check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Diagnostic Procedures | <input checked="" type="checkbox"/> Education/Teaching Demonstrations |
| <input checked="" type="checkbox"/> Experimentation | <input type="checkbox"/> Farm Production |
| <input type="checkbox"/> Public Display | <input type="checkbox"/> Public Health/Disease Surveillance |
| <input type="checkbox"/> Other: _____ | |

Are animals used in studies with human infectious agents? ☒ Yes ☐ No
(If Yes, attach a copy of your procedures for processing medical waste generated by the animals)

See Sop 100-D15-00A attached

Registration/Accreditation Type:

- | | | |
|---|---|-------------------------------|
| <input checked="" type="checkbox"/> AAALAC Accredited | <input checked="" type="checkbox"/> USDA Registered | <input type="checkbox"/> None |
| <input checked="" type="checkbox"/> Other: <u>PHS Assured</u> | | |

SECTION III - PERSONNEL INFORMATION

CURRENT DATA	INDICATE CHANGES HERE
Laboratory/Institution Person In Charge (Name): Horn, Paul M	<i>Stacie Bloom</i>
Title: Sr. Vice Provost for Research	<i>Vice Provost for Research</i>
Telephone Number: 212-998-3228	<i>212-995-3153</i>
Work Hours: MON: 8:30 am to 5:00 pm TUE: 8:30 am to 5:00 pm WED: 8:30 am to 5:00 pm THU: 8:30 am to 5:00 pm FRI: 8:30 am to 5:00 pm	Work Hours: Mon: to Tue: to Wed: to Thu: to Fri: to Sat: to Sun: to

CURRENT DATA	INDICATE CHANGES HERE
Veterinarian in Charge (Name): Klinger, Mark	
Title: Attending Veterinarian	
Telephone Number: 212-998-2114	
Work Name/Address (if different from laboratory/institution): Office of Veterinary Resources 665 Broadway, Suite 804 New York, NY 10012	
Work Hours: MON: 8:30 am to 5:00 pm TUE: 8:30 am to 5:00 pm WED: 8:30 am to 5:00 pm THU: 8:30 am to 5:00 pm FRI: 8:30 am to 5:00 pm	Work Hours: Mon: to Tue: to Wed: to Thu: to Fri: to Sat: to Sun: to

* Attending Veterinarian is on site 2 days weekly and is available by various means of communication 7 days weekly.

SECTION III - PERSONNEL INFORMATION

CURRENT DATA	INDICATE CHANGES HERE
Contact Person (Name): Grappone, Andrea	
Title: Veterinarian Technical Manager	
Telephone Number: 212-998-8168	
Work Hours: MON: 7:30 am to 4:00 pm TUE: 7:30 am to 4:00 pm WED: 7:30 am to 4:00 pm THU: 7:30 am to 4:00 pm FRI: 7:30 am to 4:00 pm to to	Work Hours: Mon: to Tue: to Wed: to Thu: to Fri: to Sat: to Sun: to

☒ Attach a list of all full-time and part-time animal care staff which includes the following information:
Name, Full-Time or Part-Time, Title and Education Level (Highest).

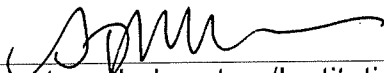
☐ No additional staff.

SECTION IV - ATTESTATION

I have read the Administrative Rules and Regulations concerning the use of living animals and understand that I am fully responsible for all work involving the use of living animals. I understand that the Certificate of Approval is not transferable and the New York State Department of Health (the Department) shall be advised promptly if the individual, in whose name approval has been granted, ceases to be in charge. The facility(ies) will be operated according to all applicable laws, rules and regulations.

I understand that by signing this application form I agree to cooperate with any investigations conducted by the Department to verify or confirm information given or any other investigation conducted in connection with animal welfare in any facility identified in this application. If additional information is requested, I will provide it.

In signing this application, I hereby certify that the information I have given the Department as a basis for obtaining or retaining a certificate of approval is true and correct. As information changes, I will promptly notify the Department. Further, I understand that filing a false instrument constitutes a crime under the Penal Law of the State of New York.


Signature, Laboratory/Institutional Officer

Vice Provost for Research
Title

11/12/18
Date

SECTION V - ADDITIONAL SITES WHERE LIVING ANIMALS ARE LOCATED

CURRENT DATA	INDICATE CHANGES HERE
Site [015] Name: NYU Meyer Facility	
Address 1: 2-6 Washington Place - Meyer Bldg.	
Address 2: 11th floor and basement	
City, State, Zipcode: New York, NY 10003	
Site Telephone Number: 212-998-7891	
Site Fax Number:	
Site E-mail Address:	
Contact Person (Name): Grappone, Andrea	

CURRENT DATA	INDICATE CHANGES HERE
Site [016] Name: NYU Silver Center Facility	
Address 1: 100 Washington Sq. E.-Main Bldg.,11th Fl	
Address 2:	
City, State, Zipcode: New York, NY 10003	
Site Telephone Number: 212-998-8239	
Site Fax Number:	
Site E-mail Address:	
Contact Person (Name): Grappone, Andrea	

SECTION V - ADDITIONAL SITES WHERE LIVING ANIMALS ARE LOCATED

CURRENT DATA	INDICATE CHANGES HERE
Site [017] Name: NYU Polytechnic Institute	
Address 1: 6 Metro Tech Center	
Address 2:	
City, State, Zipcode: Brooklyn, NY 11201	
Site Telephone Number: 212-998-2112	
Site Fax Number: 212-995-4104	
Site E-mail Address: mark.klinger@nyu.edu	
Contact Person (Name): Klinger, Mark	

CURRENT DATA	INDICATE CHANGES HERE
Site [018] Name: Barton's West End Farms	
Address 1: 161 Janes Chapel Rd.	
Address 2:	
City, State, Zipcode: Oxford Township, NJ 07863	
Site Telephone Number: 908-637-4427	
Site Fax Number: 908-637-4268	
Site E-mail Address: jvlazny@bwefinc.com	
Contact Person (Name): Barton, John	

IACUC Membership Roster

Chairperson Name, Title, and Degree/Credentials		Business Address, Phone, Fax, and Email of Chairperson		
Name: Chiye Aoki		Address: Center for Neural Science/Meyer, 2-4 Washington Place # New York, NY 10003		
Title: Professor				
Degree/Credential: Ph.D.	Phone: (212) 998-3929	Fax: (212) 995-4011	Email: ca3@nyu.edu	
Name of Member/Code*	Degree/Credentials	Position Title	PHS Policy Membership Requirements**	
Mark Klinger	D.V.M.	Attending Veterinarian	Veterinarian	
Lee-Ronn Paluch	BVSc	Associate Director, OVR	Veterinarian	
Alex Reyes	Ph.D.	Professor, Neural Science	Scientist	
Tony Movshon	Ph.D.	Professor, Neural Science	Scientist	
Dorothy Sobol	Ph.D.	Professor, Economics (Retired - Johns Hopkins University)	Non-Affiliated Member	
Ilene Jacobs	B.A.	Senior Projects Officer	Non-Scientist	

Kechia Hester	M.Sc	Senior Environmental Biosafety Specialist	Voting Member
Blair Lieberman	M.S.W	Associate Director, UAWC	Non-Scientist (Alternate for Ilene Jacobs)
Beatrix Gyetvai	D.V.M.	Veterinarian	Member (Alternate for Mark Klinger or Lee-Ronn Paluch)
Adrienne Winn	D.V.M.	Veterinarian	Member (Alternate for Mark Klinger or Lee-Ronn Paluch)
Colleen Thurman	D.V.M.	Veterinarian	Member (Alternate for Mark Klinger or Lee-Ronn Paluch)

Animal Care Staff List

Name	Title	FT or PT	Education Level
Lee-Ronn Paluch	Associate Director	FT	DVM
Beatrix Gyetvai	Staff Veterinarian	PT	DVM
Colleen Thurman	Resident Veterinarian	PT	DVM
Adrienne Winn	Resident Veterinarian	PT	DVM
Molly Klores	Resident Veterinarian	PT	DVM
Andrea Grappone	Facility Manager	FT	AAS, LAT, ILAM
Frank Mercogliano	Assistant Manager	FT	BS, RLATG
Gerardo Moreno	Anesthesia Technician	FT	Professional Veterinary Technician (Cuban Trained)
Jennifer Goodwin	Enrichment Specialist	FT	BS, LVT, LAT
Carlos Zapata	Material Management	FT	HS Diploma
Kaarina Stearns	Lab Animal Technician	FT	BS
Ismael Quinones	Anesthesia Technician	FT	AAS, LVT
Cesar Borja	Lab Animal Technician	FT	AAS expected 2016
Camille Anderson	Lab Animal Technician	FT	HS Diploma
Luis Sanchez	Lab Animal Technician	FT	BS, ALAT

Priscilla Rivera	Lab Animal Technician	FT	AAS
Sin May Loke	Lab Animal Technician	FT	HS Diploma

SOP 100-015-00A

Procedure Name: Biosafety Procedures for Administration of BSL 1-2 Viral Agents.

Introduction:

Viruses applicable to use under this description are Biosafety level 1 and 2 attenuated, replication-deficient viruses to be used as a vector for protein manipulation in the mammalian brain. The use of attenuated viral vectors to manipulate protein levels in the mammalian brain has become increasingly adopted, as it appears to circumvent many of the problems associated with other in vivo genetic manipulations, such as the use of antisense. Each of these vectors is a deletion mutant making them replication-defective yet they are capable of infecting cells, making them an ideal carrier. Transmission of live, unattenuated viruses requires contact between two wet surfaces, and thus the virus cannot be transmitted via an airborne route. Further the viral vector is readily killed by ethanol, bleach and cage wash chemicals. Finally none of the genes to be introduced via viral vectors are associated with known diseases and insertion of the proposed genes will not alter the pathogenicity of the attenuated virus.

The procedure is to avoid contamination with the recombinant virus, which spreads through liquid or aerosol. Therefore, all the work should be contained within the same room(s). Viral work will be conducted in a designated room which includes appropriate BSL hood(s) and containment procedures, in a designated lab using appropriate containment, or in the OVR basement surgical suite B72A, under the responsibility of the Director of OVR, the Principal Investigator, and the Department of Environmental Health and Safety (EHS). Manipulation of viral vector transfer will be completed under a dedicated Biosafety Cabinet appropriate to the agent in a restricted access designated room where the virus will be appropriately contained.

SPECIFIC INSTRUCTIONS:

Handling of Virus and Responsible Personnel

1. Specific personnel must be identified to be solely responsible for receipt, maintenance, and use of the vector(s).
2. All handling procedures must follow all practices as stated in the latest edition CDC-NIH Biosafety in Microbiological and Biomedical laboratories publication biosafety level 1 and 2 criteria.
3. The use of the vector must be in conjunction with a UAWC approved protocol.

Procedures during surgery:

---The vector is introduced into discrete nuclei of the brain using aseptic surgical technique.

1. Access to the laboratory is limited or restricted at the discretion of the laboratory director when experiments or work with cultures and specimens are in progress.
2. Persons wash their hands after they handle viable materials, after removing gloves, and before leaving the laboratory.
3. Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human use are not permitted in the work areas. Persons who wear contact lenses in laboratories should also wear goggles or a face shield. Food is stored outside the work area in cabinets or refrigerators designated and used for this purpose only.
4. Mouth pipetting is prohibited; mechanical pipetting devices are used.
5. Policies for the safe handling of sharps are instituted.
6. All procedures are performed carefully to minimize the creation of splashes or aerosols.
7. Work surfaces are decontaminated at least once a day and after any spill of viable material.
8. All cultures, stocks, and other regulated wastes are decontaminated before disposal by an approved decontamination method such as autoclaving. Materials to be decontaminated outside of the immediate laboratory are to be placed in a durable, leak proof container and closed for transport from the laboratory. materials to be decontaminated outside of the immediate laboratory are packaged in accordance with applicable local, state, and federal regulations before removal from the facility.
9. A biohazard sign may be posted at the entrance to the laboratory whenever infectious agents are present. The sign includes the name of the agent(s) in use and the name and phone number of the investigator.
10. An insect and rodent control program is in effect.

BSL-1 Safety Equipment (Primary Barriers)

1. Special containment devices or equipment such as biological safety cabinets are generally not required for manipulations of agents assigned to Biosafety Level 1.
2. It is recommended that t laboratory coats, gowns, or uniforms be worn to prevent contamination or soiling of street clothes.
3. Gloves should be worn if the skin on the hands is broken or if a rash is present. Alternatives to powdered latex gloves should be available.
4. Protective eyewear should be worn for conduct of procedures in which splashes of microorganisms or other hazardous materials is anticipated.

Animal Biosafety Level 1 (ABSL-1)

presence of the hazard. Laboratory coats remain in the animal room. PPE is discarded before leaving the facility.

C. Facilities (Secondary Barriers):

1. The animal facility is separated from areas that are open to unrestricted personnel traffic within the building.
2. External facility doors are self-closing and self-locking . Doors to animal rooms open inward, are self-closing, and are kept closed when experimental animals are present.
3. The animal facility is designed, constructed, and maintained to facilitate cleaning and housekeeping. The interior surfaces (walls, floors, and ceilings) are water resistant.
4. Internal facility appliances, such as light fixtures, air ducts, and utility pipes, are arranged to minimize horizontal surface areas.
6. If floor drains are provided, the traps are always filled with water and/or an appropriate disinfectant.
7. Ventilation should be provided in accordance with the Guide for Care and Use of Laboratory Animals, latest edition. No recirculation of exhaust air should occur. Animal rooms maintain negative pressure compared to adjoining hallways.
8. The facility has a hand washing sink.
9. Cages are washed in a cage washer. The mechanical cage washer should have a final rinse temperature of at least 180°F.
10. Illumination is adequate for all activities, avoiding reflections and glare that could impede vision.

Biosafety Level 2 (BSL-2) Laboratory Biosafety Level Criteria

Biosafety Level 2 is similar to Biosafety Level 1 and is suitable for work involving agents of moderate potential hazard to personnel and the environment. It differs from BSL-1 in that:

1. Laboratory personnel have specific training in handling pathogenic agents and are directed by competent scientists;
2. Access to the laboratory is limited when work is being conducted;
3. Extreme precautions are taken with contaminated sharp items;
4. Certain procedures in which infectious aerosols or splashes may be created are conducted in biological safety cabinets or other physical containment equipment.

The following standard and special practices, safety equipment, and facilities apply to agents assigned to Biosafety Level 2:

4. Laboratory personnel receive appropriate immunizations or tests for the agents handled or potentially present in the laboratory (e.g., hepatitis B vaccine or TB skin testing).
5. When appropriate, considering the agent(s) handled baseline serum samples for laboratory and other at-risk personnel are collected and stored. Additional serum specimens may be collected periodically, depending on the agents handled or the function of the facility.
6. Biosafety procedures are incorporated into standard operating procedures or in a Biosafety manual adopted or prepared specifically for the laboratory by the laboratory director. Personnel are advised of special hazards and are required to read and follow instructions on practices and procedures.
7. The laboratory director ensures that laboratory and support personnel receive appropriate training on the potential hazards associated with the work involved, the necessary precautions to prevent exposures and the exposure evaluation procedures. Personnel receive annual updates or additional training as necessary for procedural or policy changes.
8. A high degree of precaution must always be taken with any contaminated sharp items; including needles and syringes, slides, pipettes, capillary tubes, and scalpels.
 - 8.a. Needles and syringes or there sharp instruments should be restricted in the laboratory for use only when there is no alternative, such as parenteral injection, phlebotomy, or aspiration of fluids from laboratory animals and diaphragm bottles. Plastic ware should be substituted for glassware whenever possible.
 - 8.b. Only needle-locking syringes or disposable syringe needle units (i.e., needle is integral to the syringe) are used for injection or aspiration of infectious materials Used disposable needles must not be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by before disposal; rather, they must be carefully placed in conveniently located puncture-resistant containers used for sharps disposal. Non-disposable sharps must be placed in a hard-walled container for transport to a processing area for decontamination, preferably by autoclaving.
 - 8.c. Syringes which re-sheathe the needle, needle less systems, and other safety devices are used when appropriate.
 - 8.d. Broken glassware must not be handled directly by hand, but must be removed by mechanical means such as a brush and dustpan, tongs, or forceps. Containers of contaminated needles, sharp equipment, and broken glass are decontaminated before disposal, according to any local, state, or federal regulations.
9. Cultures, tissues, specimens of body fluid s, or potentially infectious wastes are placed in a container with a cover that prevents leakage during collection, handling, processing, storage, transport, or shipping.

outside the lab. Alternatives to powdered latex gloves should be available. Hands are washed following removal of gloves.

BSL-2 Laboratory Facilities (Secondary Barriers):

1. Provide lockable doors for facilities that house restricted agents (as defined in 42 CFR 72.6).
2. Consider locating new laboratories away from public areas.
3. Each laboratory contains a sink for hand washing.
4. The laboratory is designed so that it can be easily cleaned. Carpets and rugs in laboratories are inappropriate.
5. Bench tops are impervious to water and are resistant to moderate heat and the organic solvents, acids, alkalis, and chemicals used to decontaminate the work surfaces and equipment.
6. Laboratory furniture is capable of supporting anticipated loading and uses. Spaces between benches, cabinets, and equipment are accessible for cleaning. Chairs and other furniture used in laboratory work should be covered with a non-fabric material that can be easily decontaminated.
7. Install biological safety cabinets in such a manner that fluctuations of the room supply and exhaust air do not cause the biological safety cabinets to operate outside their parameters for containment. Locate biological safety cabinets away from doors, from windows that can be opened, from heavily traveled laboratory areas, and from other potentially disruptive equipment so as to maintain the biological safety cabinets' air flow parameters for containment.
8. An eyewash station is readily available.
9. Illumination is adequate for all activities, avoiding reflections and glare that could impede vision.
10. There are no specific ventilation requirements. However, planning of new facilities should consider mechanical ventilation systems that provide an inward flow of air without recirculation to spaces outside of the laboratory. If the laboratory has windows that open to the exterior, they are fitted with fly screens.

Animal Biosafety Level 2 (ABSL-2):

Animal Biosafety Level 2 involves practices for work with those agents associated with human disease. It addresses hazards from ingestion as well as from percutaneous and mucous membrane exposure. ABSL-2 builds upon the practices, procedures, containment equipment, and facility requirements of ABSL-1.

A. Standard Practices

responsible person(s), and indicates the special requirements (e.g., the need for immunizations and respirators) for entering the animal room.

12. An insect and rodent control program is in effect.

B. Special Practices

1. Animal care laboratory and support personnel receive appropriate training on the potential hazards associated with the work involved, the necessary precautions to prevent exposures, and the exposure evaluation procedures. Personnel receive annual updates, or additional training as necessary for procedural or policy changes. Records of all training provided are maintained. In general, persons who may be at increased risk of acquiring infection, or for whom infection might be unusually hazardous, are not allowed in the animal facility unless special procedures can eliminate the extra risk.

3. All equipment must be appropriately decontaminated prior to removal from the room.

4. Only animals involved in exposure to the hazard are allowed in the animal room unless specific procedures prevent non involved animals from exposure to the hazard.

4. Spills and accidents which result in overt exposures to infectious materials must be immediately reported to the facility director. Medical evaluation, surveillance, and treatment are provided as appropriate and written records are maintained.

C. Safety Equipment (Primary Barriers)

1. Disposable PPE(Gowns, shoe covers, head covers, mask, eye shield, and gloves) are worn while in the animal room. Disposable PPE are removed upon leaving the animal room.

2. Biological safety cabinets, other physical containment devices, and/or personal protective equipment (e.g., respirators, face shields) are used whenever conducting procedures with a high potential for creating aerosols. These include necropsy of infected animals, harvesting of tissues or fluids from infected animals or inoculation of animals.

4. When needed, animals are housed in primary biosafety containment equipment appropriate for the animal species.

D. Facilities (Secondary Barriers)

1. The animal facility is separated from areas that are open to unrestricted personnel traffic within the building.

- Turn on biosafety cabinet and run for at least 5 minutes before conducting any work.
- Spray the biosafety cabinet with an appropriate disinfectant before you load vector into syringe.
- Place all necessary materials inside the BSC before beginning work.
- Make sure your gloved hands are frequently dipped into an appropriate disinfectant.
- Pay special attention not to create aerosols and splashes.
- Prepare two autoclavable RMW bags (one inside the other) that will be used for the infectious waste (if you cannot avoid using sharps, prepare also a separate container for sharps disposal).
- Do not touch anything out of the hood with your gloves.
- Spray the hood with appropriate disinfectant upon completion of its use.
- Remove PPE upon leaving the virus work area.
- After removing gloves, wash hands with soap and water.
- Put on disposable gown, shoe covers, head cover, face shield, mask, and gloves, for transport of virus to the surgery area.
- If appropriate secure elevator for only those individuals involved with transport of the virus.
- OVR or designated lab personnel will decontaminate equipment and room/elevator surfaces.
- OVR or designated lab personnel will place all soiled items used to decontaminate room into autoclavable RMW bags and autoclave in cage wash.

6. Procedure for manipulation in Meyer B72A.

A preliminary physical examination is made for the selected animal in consultation with OVR staff and the veterinarian. Animals have food withdrawn for approx. 12 hours before surgery but have full access to water. Before surgery the animal's cage is checked to confirm no food was made available and the animal is induced, transferred to the Meyer surgery suite, anesthetized and prepped for surgery according to OVR SOPs. The animal is placed sternally in a stereotaxic instrument. Aseptic technique is used at all times and a surgical field is generated isolating the skull for exposure and injection of the virus. The skin of the dorsal scalp is incised and muscle and fascia in the targeted area bluntly dissected to expose the skull. A craniotomy is performed and the dura exposed. A microsyringe will be advanced trans-durally to an appropriate depth and a quantity of viral vector (up to ~1ul) injected. The microsyringe is carefully removed and the site covered with bone wax and sutured. The scalp is then sutured closed, and the animal recovered from anesthesia.

- Don proper PPE.
- Pay attention not to create aerosols and splashes.

-ATPase readings are taken in the room on all surfaces before initiation of sanitation procedures.

-Sanitation procedures are initiated by saturation spraying down of rack, cart, work surfaces all surfaces in the room with an appropriate Chlorine or quaternary ammonia based disinfectant. Wall, floor, and ceiling surfaces are sanitized by initial use of a quaternary ammonia detergent disinfectant (do not mix or overlap use of ammonia and chlorine disinfectants due to potential release of chlorine gas) followed by adequate contact time of at least 20 minutes, followed by rinse/wet mop or sponge removal of the initial application. The room is left to dry for 24 hours. ATP readings are taken in the room the following morning.

10. Backup Power

Under normal operating conditions, animal rooms are supplied with 100% non-re-circulated air exhausted to the outside without recirculation to other corridors. The BSL2 hood present in a room cannot be directly vented to the exhaust. There is an exhaust fan that will come on within 30 seconds of a power failure. There are dedicated emergency light provisions in place for loss of lighting. Surgical Suites are supplied with 100% non re-circulated air to the outside without recirculation to other areas. Redundancy is in effect for both HVAC and electrical loss. The basement animal facility is served by two separate air handlers in the case of failure of one. Electricity is protected by an emergency generator that will come on within 30 seconds of a power failure.

11. Animal Housing

-After recovery, the subject will be returned to an appropriate housing room in a cage that allows separation from other cages. The designated cage will be isolated for 48 hours. Water will be supplied using a disposable bottle.

-OVR and Research staff will attend to this animal last. PPE will be changed during this 48 hour period. Signage will be placed on door stating the time of the BSL2 injection and 48 hours past that. Specify viral agent. List contact numbers.

-The cage will not be sanitized during the 48 hour period after virus injection.

-At the end of the 48 hour period the animal subject will be returned to the normal housing configuration.

-Cage will be decontaminated with bleach before being placed in the mechanical cage washer.

-Any spills or waste escaping the primary cage will be decontaminated by wash and rinse using soap and water and or other appropriate disinfectant.

-Animals that expire during the 48 hour period after viral injection will be handled using appropriate PPE, double bagged using biohazard bags and placed in a designated BSL2 cabinet with appropriate hazard signage as stated or on the down draft table in the necropsy room for the remaining 48 hours. If placed in the necropsy room a sign will be placed on the exterior door identifying the hazard and restricting access only to those related to the study. A postmortem



NEW YORK UNIVERSITY

A private university in the public service

University Animal Welfare Committee
15 Washington Place #1-H
New York, NY 10003
Phone 212-998-4256, Fax 212-995-4029

Frank Blaisdell, DVM, Director
Laboratory Animal Welfare Program
D. Marriner-Cortese, Rm E335
Empire State Plaza, P-1 South Dock, J3
Albany, NY 12237

November 13, 2018

Re: Renewal application

Dear Dr. Blaisdell,

Enclosed is the 2018 renewal application for approval for the use of living animals at New York University, Washington Square Campus. Requested attachments are also enclosed. Please contact me if any further information is required.

Sincerely,

A handwritten signature in black ink, appearing to read "Blair Lieberman".

Blair Lieberman
Associate Director, UAWC
Office of Research & Compliance