Boston University
Institutional Biosafety Committee (IBC)
June 18, 2024 Meeting Minutes
Location: Zoom and/or by phone
Start time: 12:00 PM End time: 12:34 PM

Members Present:	R. Ingalls, E. Muhlberger, R. Davey, X. Brown, W. Lu, T. Winters, N. Dey, C Thurman, J. Keeney, R. Timmerman, S. Ghosh
Guests Present:	A. Ellis, A. Ahmad, J. Wood, M. Fitzgerald, C. Fernald
Staff Present:	C. McGoff, L. Campbell

I. Review of May 21, 2024 IBC Meeting Minutes
No concerns were voiced.
Motion: Approved
For: 11 Against: 0; Abstain: 0; Absent: 0

II. Chair's Report: Nothing to report

III. New Business:
A. IBC Office Updates: Members were informed that once the IBC office has updated the DURC/P3CO policy it will be reviewed early this Fall with the DURC subcommittee and be ready to present to the IBC committee.
B. Research Occupational Health Program (ROHP) and Environmental Health and Safety (EHS) Report:
- There were no incidents for review.
- ROHP staff announced that medical clearance is no longer required for IBC BSL1 protocols; ROHP will continue to be available for consultation on this work.

IV. Protocol Review

1. Bhz – Annual Renewal

BUA	(PI)	Title	BSL	ABSL	Campus
2606	[redacted]	Storage of specimens from filovirus-infected NHP	4	N/A	BUMC

Primary Reviewer: Elke Muhlberger	Secondary Reviewer: Rob Davey
Applicable NIH Guidelines: N/A	

Meeting Comments: This is a storage protocol where samples are collected from animals infected with filoviruses such as Ebolavirus and Marburgvirus. When needed, the animal specimens will be used in research by the PI's laboratory or distributed to other investigators with appropriate IBC clearance and training. The project will also preserve samples from NHP studies that were conducted to support clinical study regulatory approval. In this annual renewal only personnel training records and biosafety cabinet certification dates were updated. Also RG4 virus names have been modified to make them aligned with current nomenclature standard. The following will be communicated to the PI:

- In future the PI may wish to combine this protocol with their protocol covering BSL4 NHP work.
- It is indicated that the lab space is being shared with Dr. [redacted]. Since Dr. [redacted] is leaving at the end of June, the lab sharing information should be updated.
- Additional questions in the DURC/P3CO section must be completed.
- It is not clear what is meant by the section "Effluent from the zinc and oder drains in the lab are collected in an EDA system that heat sterilizes the effluent before releasing it into the city sewage." In the liquid waste management section. Please correct the sentence as appropriate.
- For the description of storage of materials, please remove the statement on proximity cards. Access to the BSL4 is made through iris scan. Proximity cards are not used within BSL4. They only provide access to the suit rooms.
- Vero cell must be listed under Section A, Hazardous Biological Agents.

Motion: Conditional Approval (Admin Review)	For: 11	Recuse: 0	Against: 0	Abstain: 0	Absent: 0

2. rDNA/Bhz – Three-Year Renewal

BUA	(PI)	Title	BSL	ABSL	Campus
936	[redacted]	Mechanisms, diagnostics, and therapeutics for Neurodegenerative diseases	2	1	BUMC

Primary Reviewer: Robin Ingalls | Secondary Reviewer: Colleen Thurman

Applicable NIH Guidelines: Section III -D-1 Appendix B-V, B-II, Appendix G II B

Meeting Comments: The goal of this protocol is to develop a system where Amyloid-beta and alpha-synuclein proteins are expressed under variety of experimental conditions and in variable concentration. As these two proteins tend to form clumps in Alzheimer's or Parkinson's disease, creation of an in vitro model for development of these clumps will provide an experimental set up where small molecules could be tested for their potential for preventing clump formation. In this three-year renewal they only updated biosafety cabinet certification dates and training dates of the listed members. The following will be communicated to the PI:

- Please clarify what is the animal work in this protocol. Is any rDNA work being done in the animals, or they just being injected with one chemical (Cerium Oxide)? What follow-up will be done that is consistent with the protocol objective. Please provide little more detail about what is being done with the animals?
- Please indicate if the animal injection work is being done in the biosafety cabinet.
- VIII. 1. Since submission describes live animal work (intracranial injections, euthanasia), check animal handling, cage changing
- VIII. 4. Remove Shoe Cover from the Animal PPE.
- IX. A. do monkey stromal cells in table 2 need to be listed as "cause human disease"?
- IX. H. Eukaryotic Experiments, please answer "Is any recombinant virus being created and/or used in this protocol?" with a Yes/No.
- A response to the replication competence question is required.
- IACUC: 201800095 lapsed, 201800154 approved through 2/21/2025. Please update

BUA Site Assessment: Add PPE: Goggles. Remove shoe cover from animal PPE section. Section VIII, point # 8-Fresh 10% bleach should be mentioned as a disinfectant. Section VIII, point # 7-Fresh 10% bleach contact time with liquid waste should be at least 30 min instead of 1h as mentioned. Lab # [redacted] and [redacted] can be added to the protocol as work is also conducted in these spaces, although these spaces are all connected to the main lab space.

Motion: Conditional Approval (Admin Review)	For: 11	Recuse: 0	Against: 0	Abstain: 0	Absent: 0

3. rDNA/Bhz – Amendment

BUA	(PI)	Title	BSL	ABSL	Campus
2386	[redacted]	High-level control of low-level motor circuits	2	2	CRC

Primary Reviewer: Rob Davey | Secondary Reviewer: Colleen Thurman
Additional Reviewer: Sajal Ghosh

Applicable NIH Guidelines: Sections III-E-1, III-D-4-a; Appendix B-I, B-II-D.

Meeting Comments: IBC Program Manager gave a short introduction on molecular basis of rabies virus vector and advances on the development of newer generations of this vector. This project investigates how the motor cortex controls voluntary movements by measuring the activity of neurons in the cortex and other motor centers in the brain. Previously, the work involved expression of genes thought to be involved in motor cortex function using adeno associated vectors. In this amendment, work is proposed using neurotropic recombinant rabies virus vector which has its L gene (virus polymerase) deleted. This change would render the virus incompetent for replication. The

defective virus will be inoculated into mice. It is indicated that the L protein will not be supplied in trans, so there is low risk associated with this work. The pseudotyped virus will be obtained from Dr. Wickersham at MIT and used as is. The risks are similar to that for AAV, which the PI and personnel already work with in this protocol. Work will now be performed at higher containment level (BSL2) with standard PPE (lab coat, eye protection, gloves). At ABSL2, the same PPE is used and overall appropriate precautions appear to be used. The following will be communicated to the PI:

- Please clarify if the rabies virus vector inoculation work will be done in a biosafety cabinet (BSC). If not, clarify why it cannot be done in a BSC.
- IBC recommends that if you must do the rabies virus vector work outside of the BSC, you must wear lab coat, gloves and facial protection all the time.
- If stereotactic injection must be done using microscope, when use of safety glasses could be difficult, please provide clear description of what safeguard are in place for eye protection and exposure to mucosal surfaces.
- Update IACUC approval information in the IBC application (IACUC 201900030 approved through 5/11/2025. Amendment in review).
- Add section III-E-1 to the applicable NIH Guidelines section.

Motion: Conditional Approval (Admin Review)	For: 11	Recuse: 0	Against: 0	Abstain: 0	Absent: 0

V. List of Protocols reviewed by DMR (not discussed in the meeting

A list of protocols that were reviewed by DMR was displayed in the meeting