



Boston University
Institutional Biosafety Committee (IBC)
October 21, 2025 Meeting Minutes
Location: Zoom and/or by phone
Start time: 12:00 PM End time: 12:36 PM

Members Present: R. Ingalls, R. Davey, E. Muhlberger, P. Liu (joined 12:19 PM), W. Lu, C. Thurman, M. Mazur, J. Keeney, V. Britton, T. Winters, R. Morales, S. Ghosh
Guests Present: A. Henderson, A. Ahmad, A. Broos-Caldwell, C. Fernald, J. Wood, P. Richmond, M. Fitzgerald, B. McKinney, T. Killeen
Staff Present: C. McGoff, L. Campbell

I. Review of September 16, 2025 IBC Meeting Minutes

No concerns were voiced.

Motion: Approved

For: 9; Against: 0; Abstain: 2; Absent: 1

II. New Business:

- A. IBC Office Updates: Members were informed that several new members have joined the committee, including Dr. A. Henderson, as an alternate.
- B. Review of Research Occupational Health Program (ROHP) Report and Environmental Health and Safety (EHS) Report: No incidents to report.

III. Protocol Review

1. rDNA/Bhz – Annual Renewal

BUA	(PI)	Title	BSL	ABSL	Campus
2446	John Connor	SARS-CoV-2 and MPOX research. Diagnostic development and evaluation, antiviral testing, host response evaluation, and in vitro model development	3	N/A	BUMC
Primary Reviewer: Elke Muhlberger			Secondary Reviewer: Andy Henderson Additional Reviewer: Jim Keeney		
Applicable NIH Guidelines: Section III-D-I-a					
Meeting Comments: The goal of this protocol is to study host cell responses to the infection with SARS-CoV-2 and Mpox infections. Based on this knowledge, they also plan to enhance current diagnostic approaches. Biohazard materials to be handled in the protocol include SARS-CoV-2 stock from BEI resources and clinical samples from BMC clinic as well as Mpox samples through Mass General Hospital via appropriate IRB approval. Cultivation of both SARS-CoV-2 and Mpox will be done in BSL3 containment. At times, culture samples in BSL3 suite will be inactivated before bringing them into BSL2 laboratories for further downstream work. Virus cultivation from the clinical samples, nucleic acid isolation from the samples, and other procedures are described. Freshly prepared 10% bleach or 5% Microchem will be used for liquid waste disposal; autoclaving for solid wastes. The following will be communicated to the PI: • Since NIH has downgraded the containment requirement for SARS-CoV-2, the PI should consider moving SARS-CoV-2 work from BSL-3 to BSL-2. • Please clarify if the stated BSL-2 work with inactivated material is covered by a different IBC protocol. If this is not the case, the BSL-2 rooms, in which the work will be performed, must be listed. • Dr. [REDACTED]'s name needs to be removed from the lab sharing information and also in the research description, as he has retired. • It has been published for RNA viruses that the emulsion breaking step does not lead to virus inactivation. Therefore, this statement should be removed from the description of single cell RNA-Seq)is protocol. Inactivation is solely based on heat. • Expand the acronym "VTM".					

- Please update the BSC certification date.
- Hazardous Biological Agents list: SARS-CoV-2 is now classified as BSL2. Also Vero cells should be BSL2. Please update in the list.
- Is the influenza virus actually part of this protocol or something left over (it's not in the title or the summaries of the science)?
- Update IRB expiration dates.
- The recombinant Mpox viruses should be described in the "Recombinant viruses" section. They are not vector packaging systems. Also, it is not clear why the PI checked "less than 2/3 of the viral genome" as the recombinant viruses contain the entire viral genomes. Importantly, the only modification is the insertion of fluorescent marker genes.

Motion: Conditional Approval (Admin Review)	For: 11	Recuse: 0	Against: 0	Abstain: 0	Absent: 1
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2. rDNA/Bhz – New Application

BUA	(PI)	Title	BSL	ABSL	Campus
2704	Morgan Gilman	Molecular mechanisms of bacterial cell wall synthesis and maintenance	2	N/A	BUMC
Primary Reviewer: Robin Ingalls			Secondary Reviewer: Sajal Ghosh		
Applicable NIH Guidelines: Section III-D-1-a, Section III-D-2-a, Section III-F-8, and Appendix C					
Meeting Comments: This new application from a new PI will examine how bacteria synthesize and assemble the peptidoglycan layer in the outer cell wall, which is a common feature in both gram-negative and gram-positive bacteria. Core facilities will also be used for the BSL1/rDNA bacteria. <i>E coli</i> K-12 and <i>Bacillus subtilis</i> strains will be the bacteria utilized, these are BSL1 agents. Non-pathogenic bacteria will be grown, mutants engineered by rDNA techniques, and fixed organisms and cell wall extractions will be studied. The project will also utilize camelid antibodies engineered in <i>Saccharomyces</i> (yeast) cells. The mammalian cell line HEK293, the only BSL2 agent in the protocol, will be used for protein purification of synthetic antibody sequences. The rDNA section uses standard commercial vectors. Nonpathogenic bacteria, including rDNA engineered bacteria, will be transported to/from core facilities in covered tubes in Styrofoam containers. All methodologies, disinfection and waste disposal (such as treatment with bleach at a 10% final concentration for 30 minutes, discarding solid waste in red biohazard box), storage of hazardous materials in locked space and transportation in appropriate primary and secondary containers, are described in detail. The following will be communicated to the PI: • Please add other shared rooms in the facility information list. • The protocol states that tissue culture work will be done in laminar flow hood in [REDACTED]. It should be biosafety cabinet. • Please complete the biosafety cabinet information section. BUA Site Assessment: This is a new lab still in the process of initial set up. The lab needs to add a few more shared locations in the protocol. The lab has BSCs in a shared space instead of laminar flow hood as mentioned in the protocol. 4 BSCs certified till 10/25, 01/26 and 06/26. Fume hood certified till 03/26. Sharps containers and spill kit are available.					
Motion: Conditional Approval (Admin Review)			For: 11	Recuse: 0	Against: 0
			Abstain: 0	Absent: 1	

3. rDNA/Bhz – New Application

BUA	(PI)	Title	BSL	ABSL	Campus
2705	Travis Rotterman	1) Overexpression of NMNAT2 rescues axon degeneration in peripheral neuropathy.	2	2	BUMC

		2) Plasticity of spinal neural networks directly impacts motor control following peripheral nerve injury.			
Primary Reviewer: Xin Brown			Secondary Reviewer: Colleen Thurman		
Applicable NIH Guidelines: Risk Group I agent (RGI), Appendix B-I					
Meeting Comments: The aim of the project is to rescue peripheral neuropathy with gene therapy using AAV vectors that express specific enzymes involved in axonal degeneration. The custom made AAV will be synthesized commercially. Rotterman lab will inject the AAV into neonatal mice, then study its effects. The protocol does not mention how the effects of gene therapy will be studied. From the current description of the protocol, it does not appear to need BSL2 and ABSL2 containment. The following will be communicated to the PI:					
The following will be communicated to the PI:					
• Please use simple text in the body of the RIMS application, as it does not accept Greek or Symbol fonts. NAD⁺ should be written as NAD⁺. • Please include information about replication competency of the AAV vectors to be used in the protocol. • Provide more information on the downstream experimental procedures on how the effect of NAD⁺ or NMNAT2 overexpression in animals will be evaluated such as mouse tissue collection, staining, microscopy, or other analytical procedures. • Protocol involves injection of AAV vector in animals, but no animal PPE has been checked in. Please first check Animal Handling and Cage changing first. Then check appropriate animal PPEs in Section VIII.4. • How will the surgical equipment be cleaned? (using soapy water, ethanol?) • Surface needs to be disinfection needs to be done with 10% bleach, not 0.5%. • If only AAV vectors will be injected into the animals, highest animal biosafety level should be ABSL1. For ABSL2 work, lab coat and double gloves are normally worn. During surgery, head cover, face mask and shoe cover should also be worn, so if AAVs are being administered via a surgical approach, those PPE should be checked. But if it is an IP injection or other non-surgical administration, only lab coat and double gloves are fine (Injection is described in VII 2, but not the route). • The secondary container needs to be leak proof and shatter proof. • Check “Yes” for the question ‘Are viral vectors in the study defective’. • Response to the relevant Section of NIH guidelines should be Section III-D-4-1a. Appendix B-I.					
BUA Site Assessment: PI needs to list the appropriate Personal Protective Equipment (PPE) required in the animal containment area, include centrifugation steps in the protocol, specify the percentage of alcohol (e.g., 70%) to be used for decontamination. BSC (Biological Safety Cabinet) will not be utilized for this protocol. PI must provide details on downstream experimental processes, such as mouse tissue collection, staining, microscopy, or other analytical procedures. Ensure the use of leakproof, shatterproof containers for transporting biological materials from ACS to the lab.					
Motion: Conditional Approval (Admin Review)			For: 12	Recuse: 0	Against: 0
			Abstain: 0	Absent: 0	

IV. 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.

No opinions were voiced.