This meeting is open to the public.

Present:


Guests: M. Auerbach, G. Madico, R. Corley (left 12:55), N. Bhadelia (left 1:00).

Staff: S. Ghosh, A. Gibson, C. Williams, J. Hutchinson.

Absent:

Members: D. Stearns-Kurosawa (Chair), K. Tuohey.

Confidentiality: Members are required to maintain the confidentiality of all non-public information entrusted to them. Members may not disclose any confidential information except as authorized by an appropriate institutional officer or as required by law. They may not use any confidential information except to carry out their obligations as committee members. No information may be used by committee members for their own benefit.

Conflict of Interest: The NIH Guidelines state that no IBC member may “be involved (except to provide information requested by the Institutional Biosafety Committee) in the review or approval of a project in which he/she has been or expects to be engaged or has a direct financial interest.” The Chair must be notified of the conflict and the member must recuse themselves from the review and vote on the protocol.

I. Review of December 2017 Meeting Minutes
Motion: Approve
For: 11
Against: 0
Abstain: 2

II. New Business
A. Training Session: Pathogenesis of Oropouche virus (N. Bhadelia)
Dr. Bhadelia, Chair of the Laboratory Acquired Infection (LAI) subcommittee, presented on Oropouche Fever/Virus covering: the epidemiology and history; mode of transmission; biology; biosafety considerations; and diagnosis, treatment and occupational health considerations for Oropouche Fever. She also indicated that Oropouche will be recommended for inclusion on the LAI list.

B. Biosafety Containment Level for Oropouche virus (a Bunyavirus) (M. Auerbach)
The IBC discussed whether Oropouche (OROV) should be handled per BSL 3 containment and practices as the 5th edition of the BMBL currently recommends or if it should be handled per BSL2 containment and practices per the Department of Health & Human Services letter to the University of Michigan. There was consensus that while it may make sense to handle OROV at BSL2 from a scientific standpoint, the committee questioned why an addendum has not been issued to the BMBL. It was reported that the NIH and CDC still recommend handling the virus at BSL3 on their websites. The committee felt that it would be prudent for BU to write to the NIH/CDC to request
clarification on their position with respect to the recommended biosafety level for OROV.

Motion: To keep and store OROV at BSL3 for now and that the IBC sends a letter to CDC and NIH requesting clarification.
For: 13
Against: 0
Abstain: 0

C. LAI Subcommittee Recommendations for List of Biological Agents with Potential to Cause LAI (N. Bhadelia)
Per the LAI Subcommittee’s 2017 annual meeting, and as discussed at the December IBC meeting, a recommendation was made to the IBC to remove Bordetella pertussis and Clostridium Difficile from the LAI list as they are no longer in use.

Motion: To remove Bordetella pertussis and Clostridium Difficile from the list as they are no longer in use.
For: 13
Against: 0
Abstain: 0

D. Safety Committees Report:
Approved Applications/Amendments (S. Ghosh)
Since the December IBC meeting, 1 new application, 4 three-year renewals, 5 amendments and 13 annual renewals have been approved.

Temporary Moratorium and Unapproved Receipt of Oropouche Virus (M. Auerbach)
Per the administration, a temporary moratorium has been put in place on receiving BSL4 materials until the BSL4 Biological Safety Officer position has been filled. The search is underway.

Oropouche virus was received by the NEIDL without an IBC approved protocol in place. The Boston Public Health Commission was consulted at the time and the virus is currently being stored under BSL 3 containment. An amendment to Dr. Corley’s IBC protocol (1823) to add Oropouche is on the meeting agenda. A Standard Operating Procedure is being drafted on the review process for executing MTA’s for BSL3 and BSL4 materials to prevent the possibility of recurrence. The committee discussed the processes in place for when materials arrive at the NEIDL for BSL 2, 3, and 4 materials and the importance of PI education around the need to have IBC approval in place prior to receipt.

E. Biosafety Report:
1. Research Occupational Health Program Incident Report
Five incidents were reported to the ROHP since the last IBC meeting on 12/12/17:

1. On 12/13/17, a PhD graduate student was bitten by a non-transgenic rat on her right 5th finger as she turned on a “tetrode” (an electrical probe) on the microarray apparatus.
2. On 12/18/17 a research resident cut his left index finger with a diamond disk when he was sectioning an extracted natural de-identified human tooth. The tooth had been exposed to 5-10% sodium hypochlorite in a jar for several weeks before this incident occurred.

3. On 1/6/18, a 2nd year medical student/teaching assistant sustained a laceration from a scalpel used for dissecting a human corpse in the anatomy lab. The corpse had been prepared in formalin and had not been exposed to any other known human pathogen or other potential hazard.

4. On 1/11/18, a veterinary research technician was struck by a malfunctioning freight elevator door while transporting biological materials on a rolling cart.

5. On 1/11/18, a graduate student sustained a splash on his gloved hands from a container of E. faecium, which was being decontaminated with bleach overnight in the laboratory sink. There was no exposure but the student believed that he should report the incident to ROHP.

2. Environmental Health & Safety Report

Dr. Dey, Senior Research Safety Specialist provided additional information regarding EHS’s investigation into two of the above incidents including the steps taken to prevent recurrence.

1. For the 12/13/2017 incident, the root cause was lack of personal protective equipment, the graduate student reported she was not wearing gloves. The following steps have been taken to prevent recurrence: EHS recommended that researchers take their time to complete these tasks and to keep unengaged fingers away from the rat’s face. Gloves should be worn at all times while working with animals.

2. For the 12/18/2017 incident, the root cause was not conscientious and lack of SOP. The following steps have been taken to prevent recurrence: EHS suggested that resin blocks should be used to encase the tooth and then it should be sectioned and that students should wear cut resistant gloves.

III. Protocol Review:

A. Amendments & Annual Renewals for Committee Review

1. Biohazard (Bhz)

   Principal Investigator (PI):
   Biological Use Authorization (BUA) Tracking ID #: 1823
   Title: Storage, Propagation and Distribution of Francisella tularensis
   Storage, Propagation and Distribution of Yersinia pestis
   Storage of Zika virus from clinical samples
   Storage of BSL-3 viruses
   Type of Submission: Amendment
   Modification(s): Oropouche virus (Bunyavirus) is being added to the protocol.
   Primary Reviewer: Robin Ingalls
   Secondary Reviewer: Elke Muhlberger
   (Additional reviewer: Guillermo Madico, Debbie Stearns-Kurosawa, Jim Keeney and Bob Timmerman)
   Biosafety Level: BSL3
   Animal Biosafety Level: N/A
Meeting Comments: This protocol is for the storage of multiple risk group 3 (RG3) agents and biological samples that may contain RG3 agents. The primary purpose of this protocol is to provide these agents to other investigators who want to embark on research with these RG3 agents and have the appropriate approvals in place for working in BSL3 containment. In this amendment, the PI wants to add a member of bunyavirus (Oropouche virus) to the protocol which is currently listed in BMBL 5th edition as a RG3 agent. The PI provided supporting documents indicating that Oropouche virus may be handled at a lower containment level (BSL2). Based on the discussion at the beginning of today’s meeting, the committee recommended storage of the virus in a BSL3 laboratory until BU receives clarification from the NIH/CDC on the recommended biosafety level.

Changes/Clarifications Required
None required.

Biosafety Training: All members are current with all training requirements.
BUA Site Assessment: Not required.

Motion: Approve
For: 13
Against: 0
Abstain: 0

B. New Applications

2. Bhz  
PI:  
BUA Tracking ID #: 2284
Title: Arbovirus pathogenesis and cellular interactions
Primary Reviewer: Elke Muhlberger
Secondary Reviewer: Robin Ingalls (comments from Bob Timmerman & Jim Keeney)
Biosafety Level: BSL3
Animal Biosafety Level: N/A
Campus: BUMC/NEIDL
Applicable NIH Guidelines: N/A
Protocol Expires: New application
Layman’s Description: We will be infecting cell culture with arboviruses. We will then isolate the RNA and proteins after the cell has been infected. The goals of the project are to investigate the effects arbovirus infection has on cells and the cellular environment and examine the virus-cell interactions.

Meeting Comments: In this new protocol the PI proposes to study how arthropod-borne viruses (arboviruses) interact with their host cells. Their working hypothesis is that identification of the cellular targets for these viruses will provide information toward the development of preventive measures and treatment against arbovirus infection of mosquitos and subsequent transmission to humans. The project will study West Nile Virus (WNV), which causes human disease ranging from asymptomatic to flu-like illness...
to encephalitis. WNV has been shown to aerosolize under certain conditions, requiring BSL3 containment. The PI provided a clear description of the objectives and associated laboratory procedures. Biosafety concerns, safety measures to be implemented during the work, and waste management plans are adequately described. The protocol also provides information regarding the PI’s previous experience working in BSL3 containment. The PI specified that she has no plans to infect mosquitos with WNV and all procedures are strictly in vitro molecular biological studies. The PI made a few pre-meeting modifications based on reviewer’s pre-meeting comments which addressed a few major issues with the original submission. The protocol still needs additional modifications on the validity of virus inactivation processes and agent-specific training.

**Changes/Clarifications Required:**
Personnel Information: Please coordinate with ROHP to get agent-specific training for West Nile virus (WNV).
Research Project Description: Q3- Please add evidence (e.g. publications, data from labs working with West Nile virus or own data) showing that the described inactivation procedures are effective for WNV. Are there inactivation SOPs in place?
It is not clear what is being done with the blood samples from South America and elsewhere. Source of the blood samples has been mentioned in Section B of the application but not in the laboratory procedure section or anywhere else.
PPE and SE: Q3- When using N95 respirators, a face shield or goggles should be used.
Q5- Please complete all information related to the Biosafety Cabinet.
Q7A- Please add incubation time for the liquid wastes with disinfectants.

**Biosafety Training:** PI is current with required trainings. Agent-specific training will be provided by ROHP.
**BUA Site Assessment:** Approved.
**Motion:** Conditional Approval (Primary and Secondary Member Review).
For: 15
Against: 0
Abstain: 0

C. **Three-Year Renewal Applications**

3. **rDNA/Bhz**

Title: Migration of human tumors in xenografted mice; Role of the AHR in mammary tumorigenesis; Role of the AHR in blood cell development
Primary Reviewer: Edward Loechler
Secondary Reviewer: Erin Sawyer
Biosafety Level: BSL2
Animal Biosafety Level: ABSL-2
Campus: BUMC
Applicable NIH Guidelines: Section III-E-1
Protocol Expires: 2/4/2018

Layman’s Description: The goal of these experiments is to determine what controls breast, oral and brain cancer cell metastases. Human cancer cells have been genetically modified such that they can easily be tracked in mouse or zebrafish recipients. In addition, some of the cells express a gene which is postulated to suppress tumor metastasis. To perform these studies, the human cancer cells are injected into orthotopic tissue (mammary fat pad, tongue, brain) of anesthetized mice. At various
time points thereafter metastases are assayed by live animal imaging or by pathology sections after euthanized. In addition, we study the growth of these cells in tissue culture.

**Meeting Comments:** This three-year renewal continues to focus on determining how metastasis is controlled in breast, oral and brain cancer cells. The lab has a long-standing interest in identifying the role of a cytoplasmic aromatic hydrocarbon-activated receptor (AHR) in cell metabolism. When cells are exposed to potent mutagens/carcinogens (such as DMBA, dioxin and others), these compounds bind to the AHR, which then signals the cell to alter gene expression in order to minimize DNA damage and mutagenesis. The PI has evidence that AHR expression suppresses tumor metastasis. In this protocol the PI wants to extend his investigation on mechanism of action of AHR to understand its role in the migration of human tumor cells and their invasion into other tissue compartments. To perform these studies, AHR activity in human cancer cells is manipulated by transfection or viral vector-mediated transduction of siRNA, or by the treatment of inhibitors or agonists followed by measuring their effect on cellular behavior. Manipulated cells are also injected into orthotopic tissue (mammary fat pad, tongue, brain) of immunodeficient NOD/SCID mice. At various times thereafter, metastases are assayed by live animal imaging or by histological/immunohistochemical staining of tumor tissue sections (after euthanization). A few high hazard chemicals are also used in this study as AHR ligands. Description of these chemicals, and safety protocols for their use and disposal are clearly stated. The committee would like clarification on whether lentivirus or lentivirus-transduced cells are being injected into animals and if so, completion of the appropriate boxes in the recombinant DNA section of the application, as appropriate, is required.

**Changes/Clarifications Required:**
**PI Comments:** Please delete old comments or put a date on them, so that IBC office can find the change in the current submission.

**Overview and Grant Funding Information:** Please remove text from the summarize changes box. This is only for amendments and annual renewals.

**Research Project Description:** Q3- If any plasmid preparation (for example for transfection work) or cloning work is being done, the laboratory procedure section must contain a brief statement of such activity.

Please clarify if lentiviruses or lentivirus-transduced cells are being injected into the animals.

**PPE and SE:** Q7A- Please remove the description of solid wastes from Q7A (Should go to Q7B).

**Recombinant DNA (Section H):** If plasmids are being prepared or any cloning work is being done in the laboratory, the prokaryotic experiments section must be completed. Is the reference “393T cells” in the vector packaging system information a typo? If any gene-manipulated or transduced cells are being injected into the animals for xenograft assays, the animal experiments section here also needs to be completed.

**Q19-** If you are transfecting human cell lines with plasmids, Section III-D-2-a should be added as well.

**Biosafety Training:** All members are current with their biosafety training requirements.

**BUA Site Assessment:** Approve.

**Motion:** Conditional Approval (Administrative Review).

**For:** 15
**Meeting Comments:** This three-year renewal is a continuation of the study of how synaptic neurotransmission is regulated at a molecular level. Neuronal cells are required to respond to rapid excitation and inactivation for a variety of physiological activities. Neurons are also capable of regulating their own excitability through a phenomenon known as homeostatic plasticity. The working hypothesis is that the homeostatic plasticity at the synapses is controlled by the availability of synaptic receptors (such as the AMPA receptors or NMDA receptors). The PI will study a) the signals utilized to trigger homeostatic plasticity, b) molecular machineries that are implicated in the delivery of glutamate receptors during homeostatic regulation, c) the identity and role of miRNAs in homeostatic plasticity, and d) the involvement of homeostatic dysregulation in neurological disorders, including Alzheimer's disease and epilepsy. Experiments will be performed using cultured rat hippocampal and cortical neurons that are transfected with GFP-tagged AMPA receptor subunits via lentiviral or adenoviral vector-mediated transduction of tissue culture cells as well as by injection in commercially available transgenic mice, and imaged live when neuron activity is either suppressed or stimulated. To examine the signaling pathways, replication-deficient viral vector constructs will be introduced into neurons to overexpress proteins of interest. Changes in receptor localization at synapses will be measured and analyzed. Although this was a well written protocol, it was not clear if lentiviral vectors are being injected to the animals.

**Changes/Clarifications Required:**

**PI Comments:** Please delete old comments or put a date on them, so that IBC office can find the change in the current submission.

**Overview and Grant Funding Information:** Please remove text from the summarize changes box. This is only for amendments and annual renewals.

**Research Project Description:** Q2- Please add a note about the function of the gene KIAA2022.
Q3- In the table in Section A, it states that lentiviral vectors will not be used with live animals, but under Lab Procedures, it is stated that lentiviral or AAV vectors will be injected into postnatal rat brains. Please clarify.

Please describe briefly the procedures and safety precautions that will be followed when injecting live animals with viral vectors.

Please provide a brief description of the experimental procedures and safety precautions to be followed when handling human brain tissue.

PPE and SE: Q1- Check animal handling and cage changing and also the animal inoculation boxes.

Q3- Please clarify the purpose of using face shield and surgical masks in the laboratory.

Q4- Please complete the animal PPE section.

Q5- Update BSC certification date.

Q6- Surgical instruments should be autoclaved after cleaning and disinfecting. Treatment with 70% ethanol alone is inadequate.

Q7A- Please remove the description of solid wastes from Q7A (Should go to Q7B).

Q7B- Please remove reference to disposing fungi (you do not have fungi in your protocol).

Materials Used in Research: The protocol indicates that live animals will be injected with lentivirus; ABSL2 should be checked at the bottom of the table.

Hazardous Biological Agent (Section A): BSL for AAV vector should be 1.

Recombinant DNA (Section H): Please specify in the prokaryotic experiments section which strain of E. coli will be used (non-pathogenic K12?).

Q19- Please add NIH guidelines Section III-E-1 for the use of viral vectors.

Agreement Policy: Please check the last box regarding ROHP clearance requirement.

Biosafety Training: All members are current with their biosafety training requirements.

BUA Site Assessment: Approved.

Motion: Conditional Approval (Administrative Review).

For: 14

Against: 0

Abstain: 1

5. Bhz   PI:   BUA Tracking ID: 1488

Title: Orangutan Juvenile Development, Digestive Physiology and Selection for a Slow Life History

Primary Reviewer: Rosina Georgiadis

Secondary Reviewer: Rao Varada

Biosafety Level: BSL2

Animal Biosafety Level: ABSL-1

Campus: CRC

Applicable NIH Guidelines: N/A

Protocol Expires: 2/27/2018

Layman’s Description: This study of wild orangutans in Borneo investigates questions related to nutrition, growth, reproduction and development of this endangered species. Urine samples are later measured for hormones. Fecal samples are analyzed for digestibility, paternity, and for the presence of parasites. Food samples are processed to determine nutrient and caloric content and thus nutritional intake. The animals are not touched in any way.
Meeting Comments: In this three-year renewal the PI continues to investigate the factors that influence evolution of primates by analyzing the growth of juvenile orangutans in their natural habitat in Gunung Palung National Park, Indonesia. It is speculated that a very slow reproduction process and extreme fluctuations in their food supply play a significant role in making this species endangered. To test their hypothesis, they are interested in examining nutritional intake and metabolism, maternal behavior and physiology, overall energy expenditure and multiple health related issues in orangutans in the field. With the help of Indonesian field assistants, the PI and her research fellows closely observe individual animals without physical contact. Urine and stool samples are collected by placing plastic sheets on the ground underneath the animal. Samples are subsequently analyzed by ELISA or a variety of other biochemical assays, either locally or after their transportation to the PI’s laboratory for markers of nutrition, growth, development and reproduction. The experience of personnel in collecting samples in the field is described in detail. The committee requested clarification on shipping requirements for biological samples, including completion of training as required.

Changes/Clarifications Required:
Overview and Grant Funding Information: Please remove text from the summarize changes box. This is only for amendments and annual renewals.
Personnel Information: The protocol involves shipping of biological materials from orangutans in Borneo. No IATA training records for any personnel listed the protocol could be found. Please clarify international shipping requirements for biological materials and how these requirements are being fulfilled. Please contact Research Safety Director Ron Morales (rmorales@bu.edu or 617-638-8838) to clarify.

Biosafety Training: All members are current with their biosafety training requirements.
BUA Site Assessment: Approved
Motion: Conditional Approval (Administrative Review).
For: 15
Against: 0
Abstain: 0

6. Bhz PI: BUA Tracking ID: 1798
Title: The energetic cost of immune function and consequences associated with white-nose syndrome on little brown myotis (Myotis lucifugus) in New England.
Primary Reviewer: Inna Afasizheva
Secondary Reviewer: Bob Timmerman
Biosafety Level: BSL2
Animal Biosafety Level: ABSL-2
Campus: CRC
Applicable NIH Guidelines: N/A
Protocol Expires: 2/23/2018
Layman’s Description: The ecological welfare of several North American bat species is affected by the complex interplay between factors such as social bat behavior, environmental conditions, colony seasonal dynamics, energy expenditure, and immune function. The ultimate goal of this research is to inform methods of surveillance and control strategies for fungal pathogens of bat species. Bats are critical to the ecological system in North America and additionally provide continued inspiration for studies of flight mechanisms and patterns and other unique bat behaviors.
Meeting Comments: This three-year renewal focuses on population ecology of several species of North American bats, especially insect-eating bats, that are part of the ecosystem involved in the control of native insect populations and helping farmers to minimize the use of pesticides. In 2007-2008, the population of bats was significantly reduced in the United States and Canada due to white-nose syndrome caused by fungus Pseudogymnoascus destructans. The protocol examines the energy cost of immune function in bats threatened by white-nose syndrome. The research goal is to manage disease in the habitat and help bats to survive. The project involves field work and laboratory procedures that include capturing bats using harp trap and mist nets, measuring vital statistics, collection of wing swabs and fecal samples. Additionally, wing biopsies will be done for DNA isolation and next-generation sequencing for genotyping and blood samples will be collected for measuring immune function. The PI and post-doctoral fellow are both experienced and all procedures are described in great detail.

Changes/Clarifications Required: None.

Biosafety Training: All members are current with their biosafety training requirements.
BUA Site Assessment: Approved.
Motion: Approve
For: 15
Against: 0
Abstain: 0

A. Amendments & Annual Renewals for Committee Review

7. rDNA/Bhz
Title: iPS Cell generation from somatic cells
Primary Reviewer: Robin Ingalls
Secondary Reviewer: Debbie Stearns-Kurosawa
Biosafety Level: BSL2
Animal Biosafety Level: ABSL-2
Campus: BUMC
Applicable NIH Guidelines: Section III-D-2, Appendix B-II-D, G-II-B
Type of Submission: Amendment
Modification(s): PI is adding expression of human prion protein (both wild type and mutant) in to induced pluripotent stem cells (iPSC).
Protocol Expires: 5/8/2018
Layman’s Description: Pluripotent stem cells are capable of originating all the cells in the body. A recently developed stem cell called induced Pluripotent Stem cell or iPSC cell promised to revolutionize the stem cell field and its applications in regenerative medicine. We would like to use iPSC cells to study organ development in vitro as well as developing new models for human diseases. These studies would enable development of better diagnosis and therapies for human diseases.

Meeting Comments: The PI is heavily invested in developing strategies to make induced pluripotent stem (iPS) cells from normal somatic cells of a donor by inducing coordinated expression of specific sets of genes in them. In contrast to the differentiation of embryonic stem cells, iPSC cells are genetically identical to the individual from whom they are derived, raising the prospect of utilizing iPSC cells for
autologous cell-based therapies without the risk of rejection. The ultimate goal of this study is to develop in vitro models that recapitulate the in vivo developmental programs responsible for different lineage specification including liver, gut, blood and lung. They also utilize patient-specific iPS cells to model several diseases by inducing differentiation into tissues relevant to the disease being studied. In this amendment the PI wants to extend his studies to the therapies for ebolavirus diseases and prion diseases. He proposes to express different forms of prion protein in the iPS cell-derived neuronal cells with the hope of providing healthy neuronal cells in the treatment of prion-related diseases. Initial review of the protocol determined that the protocol was not clear on the prion work-specific laboratory procedures or the nature of prion protein to be expressed. Further, the nature of ebola virus disease-related work was unclear. In a revised submission PI clarified that there will be lentivirus-mediated expression of both wild type and mutant prion proteins. The committee expressed serious concerns that the protocol still lacks information on the laboratory spaces to be used for this purpose, whether or not USDA approval has been secured, and specifics of decontamination of prion work-related wastes. Committee recommended thorough revision of the amendment to address the below changes/clarifications prior to further review at a future meeting.

**Changes/Clarifications Required:**

Research Project Description: As a dedicated room (with USDA approval) is necessary for prion work, description of such arrangement needs to be included in the Research Facility information (section IV) and in the laboratory procedure section (section VII.3). PI is advised to work with Research Safety Director Ron Morales (rmorales@bu.edu; 617-638-8838) on these issues.

There is some reference to ebola virus diseases without clarification on what such work entails (in section VII.2). Please remove this statement if no such work is being done.

Further clarification is necessary on disinfection via treatment with household bleach and autoclave sterilization protocols as described in the last paragraph of laboratory procedure section.

PI is requested to consider following BMBL suggestions for disinfection.

Surfaces or heat-sensitive instruments can be treated with 2N NaOH or sodium hypochlorite (20,000 ppm) for 1 hour. Ensure surfaces remain wet for entire period, then rinse well with water. Before chemical treatment, it is strongly recommended that gross contamination of surfaces be reduced because the presence of excess organic material will reduce the strength of either NaOH or sodium hypochlorite solutions.

20,000 ppm sodium hypochlorite equals a 2% solution. Most commercial household bleach contains 5.25% sodium hypochlorite, therefore, make a 1:2.5 dilution (1 part 5.25% bleach plus 1.5 parts water) to produce a 20,000 ppm solution. This ratio can also be stated as two parts 5.25% bleach to three parts water. Working solutions should be prepared daily.

Environ LpH (EPA Reg. No. 1043-118) may be used on washable, hard, non-porous surfaces (such as floors, tables, equipment, and counters), items (such as non-disposable instruments, sharps, and sharp containers), and/or laboratory waste solutions (such as formalin or other liquids). This product is currently being used under FIFRA Section 18 exemptions in a number of states. Users should consult with the state environmental protection office prior to use.
PPE and SE:
Q7- Please provide a statement on the treatment of prion contaminated wastes (separate statement for liquid (Q7A) and solid wastes (Q7B).

Biosafety Training: All members are current with their biosafety training requirements.
BUA Site Assessment: EHS will communicate with the PI about the USDA requirements for prion work.
Motion: Defer
For: 15
Against: 0
Abstain: 0

IV. Approved Amendments & Annual Renewals

A. Amendments

1. BUA Tracking ID: 2172
   Title: Storage, Propagation and Distribution of BSL-2 Emerging Pathogens
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To add insect viruses Gouleako, Herbert and Kibale

2. BUA Tracking ID: 1643
   Title: Mechanisms of Autoimmune Disease
   Biosafety Level: BSL2
   Animal Biosafety Level: ABSL2
   Method of Review: Expedited, Administrative Review
   Modification: To add one personnel

3. BUA Tracking ID: 2247
   Title: Mechanisms of Extinction Memory Enhancement for Cocaine Addiction Treatment
   Biosafety Level: BSL2
   Animal Biosafety Level: ABSL2
   Method of Review: Expedited, Administrative Review
   Modification: To add one personnel

4. BUA Tracking ID: 1409
   Title: Replication and Transcription of Filoviruses Early Host Immune Response in Protection against Filovirus Infection
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To delete seven NEIDL 2nd floor rooms

5. BUA Tracking ID: 1000
   Title: Molecular basis of cancer metastasis and the elucidation of genetic and epigenetic markers for diagnosis and therapy of cancer and psychiatric disorders
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To add cholera toxin
B. Annual Renewals

1. BUA Tracking ID: 2148
   Title: PtdIns-5-P role in cell function and signaling
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To add one personnel

2. BUA Tracking ID: 1689
   Title: Role of Chlamydia Species in Preterm Birth and Placental Dysfunction
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To delete two personnel and update biosafety cabinet expiration date.

3. BUA Tracking ID: 1701
   Title: Unraveling the Structural and Biomechanical Roles of Proteoglycans in Human Arteries
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To add new funding source

4. BUA Tracking ID: 2088
   Title: A bioassay for antimicrobial drug identification
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: No changes

5. BUA Tracking ID: 776
   Title: Metabolic regulation of insulin secretion
   Biosafety Level: BSL2
   Animal Biosafety Level: ABSL1
   Method of Review: Expedited, Administrative Review
   Modification: To add two and delete two personnel and address DURC question

6. BUA Tracking ID: 2056
   Title: Anticancer properties of natural products and analogues
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: No changes

7. BUA Tracking ID: 679
   Title: Development of Klotho enhancers as novel therapeutics for AD. 2. Development of novel APP dimerization inhibitors that lower A-beta levels
   Biosafety Level: BSL2
   Animal Biosafety Level: N/A
   Method of Review: Expedited, Administrative Review
   Modification: To add one personnel, to add HK2 cell line, and add dCas9 and gRNA plasmids.

8. BUA Tracking ID: 1892
Title: HISTONE DEACETYLASE INHIBITION IN MOUSE MODELS OF ACUTE LUNG INJURY
Biosafety Level: BSL2
Animal Biosafety Level: ABSL2
Method of Review: Expedited, Administrative Review
Modification: To add microscopy, update BSC certification date, and add siRNA to animal studies

9. BUA Tracking ID: 2172
Title: Storage, Propagation and Distribution of BSL-2 Emerging Pathogens
Biosafety Level: BSL2
Animal Biosafety Level: N/A
Method of Review: Expedited, Administrative Review
Modification: No changes

10. BUA Tracking ID: 610
Title: Saliva and Asthma
Biosafety Level: BSL2
Animal Biosafety Level: N/A
Method of Review: Expedited, Administrative Review
Modification: No changes

11. BUA Tracking ID: 964
Title: Molecular Systematics and Population Genetics of Birds
Biosafety Level: BSL2
Animal Biosafety Level: N/A
Method of Review: Expedited, Administrative Review
Modification: No changes

12. BUA Tracking ID: 1825
Title: Molecular Systematics and Population Genetics of Birds
Biosafety Level: BSL2
Animal Biosafety Level: N/A
Method of Review: Expedited, Administrative Review
Modification: No changes

13. BUA Tracking ID: 1171
Title: An In Vitro Model of Cell-Associated HIV-1 Transmission
Biosafety Level: BSL2
Animal Biosafety Level: N/A
Method of Review: Expedited, Administrative Review
Modification: To add two personnel