



INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY *of* WASHINGTON

Meeting Minutes

Date: Wednesday, February 21, 2018

Time: 10:00 AM – 12:00 PM

Location: Foegen N-130A

- Members Present:**
1. Thea Brabb, Comparative Medicine (*Animal Containment Expert*)
 2. H.D. "Toby" Bradshaw, Biology (*Plant Expert*)
 3. Richard Grant, Washington National Primate Research Center
 4. Garry Hamilton (*Community Member*)
 5. David Koelle, Allergy and Infectious Diseases
 6. Stephen Libby, Laboratory Medicine (*IBC Chair*)
 7. Matthew R. Parsek, Microbiology
 8. Jason Smith, Microbiology (*IBC Vice Chair*)
 9. Eric Stefansson, Environmental Health & Safety (*Biosafety Officer, Animal Containment Expert*)
 10. Paul Swenson, Seattle-King Co. Dept. of Public Health (*Community Member*)

Commonly Used Abbreviations

IBC: Institutional Biosafety Committee

BSO: Biological Safety Officer

BUA: Biological Use Authorization

BSL: biosafety level

PI: Principal Investigator

IACUC: Institutional Animal Care and Use Committee

NIH: National Institutes of Health

DURC: Dual Use Research of Concern

SOP: standard operating procedure

1. **CALL TO ORDER:** The Institutional Biosafety Committee (IBC) Chair called the meeting to order at 10:02 am. A quorum was present.
2. **REMINDER:** The IBC Chair reminded attendees that any notes that they retain are subject to public disclosure. A statement was also made about conflict of interest and voting on research proposals as described in the IBC Charter. This includes sharing a grant or a familial relationship.
3. **APPROVAL OF MINUTES:**
 - The IBC Chair sought a motion to approve the minutes from the January 17, 2017 meeting.
 - A member made a motion to approve the January 17, 2017 minutes. Another member seconded the motion.
 - The committee voted unanimously, with three abstentions, to approve the January 17, 2017 meeting minutes.
4. **BIOSAFETY OFFICER (BSO) REPORT:** The Biosafety Officer Report includes (1) projects involving recombinant or synthetic nucleic acids covered under section III-E and III-F of the *NIH Guidelines*, (2) proposals involving non-recombinant biohazardous agents requiring BSL-1 and BSL-2 containment, and (3) administrative updates, such as room additions.
 - a. Biosafety Officer Report
 - Dr. Simpson renewed a BUA involving human source material.
 - Dr. Hyde added non-recombinant encephalomyocarditis virus to her BUA letter.
 - Dr. Hull-Meichle received a new BUA letter for human cells used in vitro.
 - Dr. Neumaier added a new room to his BUA letter.
 - Dr. Liu renewed a BUA involving human cells used in vitro.
 - Dr. Polyak updated the rooms on his BUA letter and added a non-recombinant hepatitis B virus.
 - Dr. de Boer renewed a BUA involving human cells.
 - Dr. Hague renewed a BUA involving human source material.
 - Dr. Lin renewed a BUA involving human source material.
 - Dr. Wiggins renewed a BUA involving exempt E. coli strains.
 - Dr. Barker-Haliski added the ARCF vivarium to her approval, and showed documentation that Comparative Medicine approves ABSL-1 containment for the Theiler's murine encephalomyelitis (TMEV) virus.
 - The IBC Chair sought a motion to approve this month's Biosafety Officer Report.
 - A member made a motion to approve this month's Biosafety Officer Report. Another member seconded the motion.
 - The Committee unanimously voted to approve this month's Biosafety Officer Report.

5. INDIVIDUAL PROJECT REVIEWS

1. Altemeier, William, renewal, *Inflammatory Response Modulation by Mechanical Ventilation*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The overall goal of the research is to determine mechanisms by which lung injury and extrapulmonary organ injury occur in mouse models of mechanical ventilation, high oxygen, and exposure to infectious agents and/or toxins.
 - A non-recombinant mouse-adapted influenza virus, recombinant *Pseudomonas aeruginosa*, and recombinant *Staphylococcus aureus* are used in a mouse model.

- The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Altemeier.
 - The Committee voted unanimously to approve the draft BUA for Dr. Altemeier.
2. Gerner, Michael, change, *Organization of Immunity*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This is a change. The investigator wants to add a *Listeria monocytogenes* strain and a recombinant vesicular stomatitis virus strain that express ovalbumin. These strains will be used both in vitro and in mice.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Gerner.
 - The Committee voted unanimously to approve the draft BUA for Dr. Gerner.
3. Mefford, Heather, renewal, *Genomic Approach to Epilepsy*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The research focuses on discovering genetic causes of childhood disorders, primarily epilepsy.
 - Human induced pluripotent stem cells (iPS cells) and lentiviral vectors are used in vitro. No oncogenic inserts are used.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Mefford.
 - The Committee voted unanimously to approve the draft BUA for Dr. Mefford.
4. Mulligan, Michael, renewal, *Mediators Involved in Direct Lung Ischemia Reperfusion Injury of Lung*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies impairment of lung function caused by inflammatory responses that occur during lung transplantation. Small interfering RNA (siRNA) are administered to mice.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Mulligan.
 - The Committee voted unanimously to approve the draft BUA for Dr. Mulligan.
5. Spain, William, new, *Pilot Collaboration with Neurophysiology of Vision*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This is a new BUA from an established investigator. Dr. Spain will be acquiring fresh and cultured non-human primate neuronal tissue from the Horwitz lab.

- The Spain lab will not be making or manipulating recombinant vectors, but the non-human primates in the Horwitz lab were previously administered AAV and lentiviral vectors. The vectors are not replication competent.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Spain.
 - The Committee voted unanimously to approve the draft BUA for Dr. Spain.
6. Thomas, Wendy, renewal, *Biological Adhesion in Flow and under Force*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The overall goal of the research is to understand the function of biomolecules that promote adhesion of cells to tissues, with the goals of modifying binding characteristics to treat disease, and developing new adhesives.
 - Recombinant *Streptococcus* species and non-recombinant pathogenic strains of *E. coli* are used in vitro.
 - A discussion occurred about the microscope. The microscope is contained within a cabinet.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Thomas.
 - The Committee voted unanimously to approve the draft BUA for Dr. Thomas.
7. Wong, Rachel, renewal, *Development of the retina (fish)*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab seeks to understand the mechanisms that control the assembly of neural circuits in the retina during development and during regeneration after damage.
 - Transgenic zebrafish are bred and used. There is no creation of new zebrafish lines.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Wong.
 - The Committee voted unanimously to approve the draft BUA for Dr. Wong.
8. Wong, Rachel, renewal, *Development of the retina (mouse)*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - Mice will be injected with diphtheria toxin and plasmid DNA.
 - The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Wong.
 - The Committee voted unanimously to approve the draft BUA for Dr. Wong.
9. Ladiges, Warren, renewal, *Aging Intervention*
- The assigned IBC Primary Reviewer presented the Primary Review.

- The overall goal of the research is to investigate the mechanisms of aging & age-related diseases and to determine how intervention and treatment strategies can be developed and amplified.
- AAV and recombinant DNA are administered to mice. The work is conducted at ABSL-1.
- The lab was inspected with no deficiencies remaining. All of the required trainings have been completed.
- The draft BUA letter was shown.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Ladiges.
- The Committee voted unanimously to approve the draft BUA for Dr. Ladiges.

SUBCOMMITTEE REPORTS:

10. Gale, Michael, change, *The Host Response to Virus Infection*

- Three members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
- This is a change request to add recombinant influenza A viruses for in vitro use.
- For each recombinant virus, the HA segment is from an H5 strain (A/Barn swallow/Hong Kong/D10-1161/2010, A/Egypt/N03072/2010, A/Hubei/2010, A/Indonesia/05/2005, or A/Vietnam/1203/2004) while the remaining segments are from PR8.
- Importantly, the multibasic cleavage site in HA from these highly pathogenic avian strains has been removed. In short, HA needs to be cleaved for an infectious virus to be produced. If this cleavage requires trypsin, then influenza tissue tropism is restricted because trypsin is only found in the airway and the GI tract.
- The subcommittee decided that BSL-2 containment was appropriate for these virus strains.
- An inspection was not required for this change. All of the required trainings have been completed.
- The draft BUA letter was shown.
- A member made a motion to approve the draft BUA letter for Dr. Gale. Another member seconded the motion.
- The Committee voted unanimously to approve the draft BUA for Dr. Gale.

OTHER VOTING ITEMS:

- UW Biosafety Manual Revisions
 - The 2018 edition of the UW Biosafety Manual is available. The biosafety officer who worked on it presented the changes. Links were changed throughout the document, and contact information was added. Clarifications about liquid disinfectant traps for vacuum line protection at BSL-2 were added.

FOR YOUR INFORMATION:

- NIH Reportable Incident
 - An NIH reportable incident occurred on February 8th. An employee at the University of Washington (UW) experienced a non-human primate bite on the right hand third finger on February 8th in a BSL-2 animal vivarium room. The employee was placing an enrichment device, a toy, in the animal's cage. The employee placed the toy in the cage and the animal bit the employee's hand.

- The animal had been infected with SHIV in 2015 and maintains low, but persistent plasma viral levels of the virus.
 - The employee was wearing the appropriate PPE at the time of the injury and followed proper post-exposure protocols by washing for 15 minutes with a herpes B scrub kit and going to the emergency room. The employee was also seen for follow-up care by the Employee Health Center. Additional hands-on training for work with macaques was provided by the supervisor and veterinarian.
 - The incident was reported to NIH.
- NIH Reportable Incident
 - During the course of investigating the incident that occurred on February 8th, another reportable incident that happened in December was discovered. On December 28th, 2017, an employee experienced a 1-inch cut on his finger while changing out an animal cage. The employee was not sure if the cut was from the clean or the dirty cage. The animal that was in the dirty cage had been infected with SHIV in 2015 and maintains a low, but persistent plasma viral levels of the virus. The employee was wearing the proper PPE and followed proper post-exposure protocols.
 - The root cause of the accident was that the employee felt rushed to complete all the tasks during that work shift. The employee and the supervisor discussed the procedures for animal cage changes, the workload and asking for assistance, and reviewed how to handle the cages.
 - The incident was reported to NIH.
- NIH Response to Reportable Incident
 - The NIH responded to our report of the incident where an employee sustained a needlestick injury while cleaning a laboratory where research is conducted with recombinant cell lines. The NIH stated that our response to the incident was appropriate and no further action is required at this time.
- New EH&S website
 - The EH&S website has been redesigned. The biosafety officer who serves on the Web Team showed the committee some of the site's new features.
- IBC metrics
 - Some metrics about 2017 IBC reviews were presented. The IBC reviewed 368 projects last year. There were twice as many subcommittee reviews (24) in 2017 compared to 2016 (11).

ISSUES FROM THE FLOOR & PUBLIC COMMENTS:

There were no issues from the floor, and no public comments.

MEETING ADJOURNED AT APPROXIMATELY 11:27 a.m.