INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY of WASHINGTON

Meeting Minutes

Date: Wednesday, September 21, 2016
Time: 10:00 AM – 12:00 PM

Location: Foege N-130A

Members Present:
1. Lesley Colby, Comparative Medicine *(Animal Containment Expert)*
2. Richard Grant, Washington National Primate Research Center
3. Garry Hamilton (*Community Member*)
4. Kevin Hybiske, Allergy and Infectious Diseases
5. David Koelle, Allergy and Infectious Diseases
6. Stephen Libby, Laboratory Medicine (*IBC Chair*)
7. Scott Meschke, Environmental & Occupational Health Sciences
8. Jason Smith, Microbiology
9. Eric Stefansson, Environmental Health & Safety (*Biosafety Officer*)
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 August 17, 2016 meeting.
   - A member made a motion to approve the August 17, 2016 minutes. Another member seconded the motion.
   - The committee voted unanimously, with three abstentions, to approve the August 17, 2016 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
      - The PI of the project "Gene Expression Analysis of Virus Infection" changed from Dr. Katze to Dr. Gale.
      - Dr. Wang renewed a project involving human source material and plasmid DNA.
      - Dr. Chen, Dr. Brentnall, and Dr. Pan each added two new rooms to their respective BUA letters.
      - Dr. Grady and Dr. Ho each renewed a BUA involving human source material.
      - Dr. Seelig renewed a BUA involving plasmid DNA and human source material.
      - Dr. Limaye received a new BUA approval for human source material.
      - Dr. Horwitz added a new imaging facility to his BUA letter.
      - Dr. King renewed a BUA involving wild-type Epstein-Barr virus and human cells
      - Dr. Fuller, Dr. Murry, Dr. Frevert, Dr. Jones-Engel, Dr. Pun, and Dr. Gale each added a new room to their respective BUA letters.
      - Dr. Herr renewed a BUA involving plasmid DNA.
      - Dr. Isoherranen renewed a BUA involving human cells, baculovirus, and non-pathogenic strains of E. coli.
      - Dr. Fuller added non-recombinant Zika virus to her BUA letter.
      - Dr. Klatt added primate lentivirus used in macaques to her BUA #0619-006. She is already approved for this work on BUA #0619-004.
      - Dr. Lood received a new BUA letter for work with human source material and plasmid DNA.
      - Dr. Gale added non-recombinant human rhinovirus strains to his BUA letter.
      - 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. **CATEGORY III-D AMENDMENTS**

1. Doulatov, Sergei, change, *Hematopoiesis from cord blood and pluripotent stem cells*

- The biosafety officer presented the project.
- The IBC reviewed and approved a BUA application submitted last month by Dr. Doulatov involving gammaretroviral vectors and lentiviral vectors. This is a change to add mouse experiments with lentiviral vectors.
- The assigned IBC member endorsed the biosafety officer's review.
- The draft BUA letter was shown.
- The assigned IBC member made a motion to approve the draft BUA for Dr. Doulatov. A second is not needed since he endorsed the review.
- The Committee voted unanimously to approve the draft BUA for Dr. Doulatov.

6. INDIVIDUAL PROJECT REVIEWS

2. Kublin, James, new, *Role of the microbiome in HIV vaccine induced heterogeneity*

- The assigned IBC Primary Reviewer presented the Primary Review.
- The investigator wants to study how bacterial flora influence immune responses to vaccines. Various Risk Group 1 bacteria are used on this project. *Bacteroides fragilis* is the only Risk Group 2 bacteria used on the project. The mice will be colonized by mouth with bacteria and then administered an ALVAC (canary pox) vaccine, which is replication competent in bird cells only. No bird cells are used on the project.
- The research will be conducted at the UW Gnotobiotic Facility and then samples are transported to Fred Hutch Cancer Research Center.
- 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. Kublin. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Kublin.

3. Chen, Eleanor, renewal, *Druggable pathways in rhabdomyosarcoma*

- The assigned IBC Primary Reviewer presented the Primary Review.
- The overall goal of the project is to identify potential drug targets to improve the survival of patients with rhabdomyosarcoma, a pediatric cancer.
- Transgenic zebrafish and mice are used on the project. Lentiviral vectors are used in zebrafish and mice. Adeno-associated viral vectors (AAV) is used in mice.
- The lab has been inspected and there are no remaining deficiencies. 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. Chen. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Chen.

4. Darveau, Richard, renewal, *P. gingivalis LPS*

- The assigned IBC Primary Reviewer presented the Primary Review.
- This is a renewal. The overall goal of the project is to determine the bacterial mechanisms involved in promoting the development of periodontal disease.

- Various strains of dental bacteria are used, including recombinant *Porphyromonas gingivalis*. All of the work involving bacteria is conducted in vitro. Human cell lines are also used on the project.
- The draft BUA letter was shown.
- The lab has been inspected and there are no remaining deficiencies. The required trainings have been completed.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Darveau. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Darveau.

5. Hofstetter, Christoph, new, *Viral Neuronal Tracing in Rodents with Spinal Cord Injury*

- The assigned IBC Primary Reviewer presented the Primary Review.
- This is a new BUA application from an established investigator. The lab studies spinal cord injury and repair in a rat model. AAV will be used.
- The IBC reviewer noted that the BUA application states that AAV may cause harm to a developing fetus. The IBC reviewer researched the issue and said that there is one published paper suggesting this but it seems unlikely to be a confirmed reproductive hazard.
- There was a discussion that employers are not permitted to restrict personnel from working with reproductive hazards based on gender or pregnancy status. Employers communicate the potential hazards and safe work practices to mitigate exposure. Personnel with questions or personal health concerns are encouraged to contact Employee Health or their personal health care providers. A health care provider can formally request a workplace disability accommodation if an employee is pregnant. EH&S provides a guidance document on reproductive hazards as part of the Occupational Health Review. EH&S will follow-up with this PI to provide guidance about this.
- The draft BUA letter was shown.
- The IACUC protocol has not yet been submitted. The approval will be pending biosafety officer review of the IACUC protocol.
- The lab has been inspected and there are no remaining deficiencies. The required trainings have been completed.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Hofstetter, pending the IACUC protocol. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Hofstetter, pending submission and review of the IACUC protocol.

6. Kean, Leslie, renewal, *Transplant Tolerance in Non-Human Primates*

- The assigned IBC Primary Reviewer presented the Primary Review.
- Third generation lentiviral vectors are used in macaques.
- Only the animal portion of this study is conducted at UW. The PI's lab at Seattle Children's will produce the vector stocks and transduce the non-human primate cells.
- The PI still needs to complete the biosafety training. The training has already been completed by the other lab members.
- The draft BUA letter was shown.

- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Kean, pending completion of the biosafety training. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Kean, pending completion of the biosafety training.

7. Kean, Leslie, renewal, *New Biologic Therapies for Graft Versus Host Disease (GVHD) Prevention and Treatment During Hematopoietic Cell Transplantation*

- The assigned IBC Primary Reviewer presented the Primary Review.
- Dr. Kean has two BUA approvals because there are separate IACUC protocols for these projects. Only the animal portion of this study is conducted at UW. The PI's lab at Seattle Children's will produce the vector stocks and transduce the non-human primate cells.
- Third-generation lentiviral vectors and SHIV are used on this project.
- The PI still needs to complete the biosafety training. The training has already been completed by the other lab members.
- The draft BUA letter was shown.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Kean, pending completion of the biosafety training. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Kean, pending completion of the biosafety training.

8. Kiem, Hans-Peter, renewal, *Strategies to Improve Hematopoietic Stem Cell Transduction; Co-Infusion of endothelial cells during hematopoietic stem cell transplantation*

- The assigned IBC Primary Reviewer presented the Primary Review.
- Several types of viral vectors are used on the project: AAV, foamyviral vectors, lentiviral vectors, and alpharetroviral vectors. SHIV is also used.
- The draft BUA letter was shown.
- The lab has been inspected and there are no remaining deficiencies. The required trainings have been completed.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Kiem. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Kiem.

9. Lee, Kelly, change, *Influenza Virus Structural Biology; Envelope recombinant protein expression*

- The assigned IBC Primary Reviewer presented the Primary Review.
- This is a change request. The investigator wants to add vesicular stomatitis virus, including a recombinant strain. The strains are provided by a collaborator.
- The Lee lab has obtained the required USDA permits.
- A committee member asked about disinfectants. The biosafety officer responded that they are using bleach as a disinfectant.
- The draft BUA letter was shown.
- The lab has been inspected and there are no remaining deficiencies. The required trainings have been completed.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Lee. A second is not needed since he is the Primary Reviewer.

- The Committee voted unanimously to approve the draft BUA for Dr. Lee.

10. Shendure, Jay, renewal, *Shendure: General Research*
- The assigned IBC Primary Reviewer presented the Primary Review.
- The overall goal of the research is to advance the capabilities of next generation sequencing.
- Human and mouse cell lines are used on the project. Lentiviral vectors are also created and used.
- The lab has been inspected and there are no remaining deficiencies. 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. Shendure. A second is not needed since she is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Shendure.

11. Totten, Patricia, renewal, *Multiple projects involving sexually transmitted bacterial pathogens*
- The assigned IBC Primary Reviewer presented the Primary Review.
- This is a renewal. The goal of the project is to study the disease associations, risk factors, treatment efficacies, and pathogenesis of *Mycoplasma genitalium*, *Ureaplasma urealyticum*, and other reproductive tract pathogens.
- Recombinant strains of *Mycoplasma genitalium* are used on the project. Human blood and genital tract specimens are also used.
- The lab has been inspected and there are no remaining deficiencies. 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. Totten. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Totten.

12. Zhang, Jing, renewal, *Jing Zhang's Laboratory Animal Use & Zhang Post Mortem Tissue Research 02-3978-E/A05*
- The assigned IBC Primary Reviewer presented the Primary Review.
- The lab studies the cellular and molecular mechanisms that contribute to neurodegeneration, especially Parkinson's disease.
- Adeno-associated viral vectors, lentiviral vectors, and human cells are used on the project. MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) in mice is also used. This is a hazardous chemical. Injection of MPTP causes Parkinsonian-like symptoms. EH&S industrial hygienists have consulted with the lab about safe practices when working with this chemical.
- The draft BUA letter was shown.
- The lab has been inspected and there are no remaining deficiencies. The required trainings have been completed.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Zhang. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Zhang.

SUBCOMMITTEE REPORTS:

13. Hawn, Thomas, renewal, *Innate Immunity and Susceptibility to Infectious Disease*

- Two members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
- This is a three-year renewal. The focus of the Hawn lab is to study innate immunity. *Mycobacterium tuberculosis*, a Risk Group 3 bacterium, is used on the project. BSL-3 containment is used. Lentiviral vectors and risk group 2 bacteria are also used on the project.
- The draft BUA letter was shown.
- The lab still needs to be inspected. This is scheduled to occur next week.
- A member made a motion to approve the draft BUA letter for Dr. Hawn, pending completion of the lab inspection. Another member seconded the motion.
- <u>The Committee voted unanimously to approve the draft BUA for Dr. Hawn, pending completion of the lab inspection.</u>

ADMINISTRATIVE UPDATES:

- A new member, Kevin Hybiske, has joined the committee.

FOR YOUR INFORMATION:

- Four patients hospitalized in the Cascade Tower at University of Washington Medical Center (UWMC) have been diagnosed with *Legionella pneumonia*. The exact source of their exposure has not yet been determined.
    - *Legionella*, the bacteria that causes Legionnaire's disease, was detected in water sources in the Cascade Tower recently.
    - *Legionella* does not cause illness by ingestion of drinking water.
    - The plumbing system serving the UW Medical Center's Cascade Tower does not cross-connect to other plumbing systems in the UW Medical Center or Health Sciences Building. The UW receives its water from the City of Seattle, and after arrival in the Cascade Tower, backflow prevention and other devices prevent cross-connection to water systems in other areas.
    - The UW Medical Center will treat water in the Cascade Tower with a chlorine solution that is circulated through the water system and then flushed. Up-to-date information is being maintained on the EH&S website and the UWMC website.

ISSUES FROM THE FLOOR & PUBLIC COMMENTS:

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

MEETING ADJOURNED AT APPROXIMATELY 11:34 a.m.