Date: Wednesday, September 15, 2021
Time: 10:00 AM – 12:00 PM
Location: Zoom

Members Present:
1. Jim Boonyaratankornkit, Allergy and Infectious Diseases
2. Jason Cantera (Community Member)
3. Lesley Colby, Comparative Medicine (Animal Containment Expert)
4. Lesley Decker, Environmental Health & Safety (Biosafety Officer)
5. Richard Grant, Washington National Primate Research Center
6. Kevin Hybiske, Allergy and Infectious Diseases
7. David Koelle, Allergy and Infectious Diseases
8. Steve Libby, Laboratory Medicine (IBC Chair)
9. Scott Meschke, Environmental & Occupational Health Sciences
10. Susan Parazzoli (Community Member)
11. Jason Smith, Microbiology (IBC Vice Chair)
12. 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 10:01 a.m. 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 18, 2021 meeting.
   - A member made a motion to approve the August 18, 2021 minutes. Another member seconded the motion.
   - The committee voted unanimously to approve the August 18, 2021 meeting minutes.

4. **OLD BUSINESS:**
   - At the June 16, 2021 meeting, Dr. Baker’s BUA was approved pending completion of a successful lab inspection. This BUA has been sent out.
   - At the July 21, 2021 meeting, Dr. Rasmussen’s BUA was approved pending BUAA edits. This BUA has been sent out.
   - At the July 21, 2021 meeting, Dr. Wills’s BUA was approved pending training completion. This BUA has been sent out.
   - At the August 18, 2021 meeting, Dr. Brenowitz’s BUA was approved pending completion of a successful lab inspection. This BUA has been sent out.
   - At the August 18, 2021 meeting, Dr. de la Igelisia’s BUA was approved pending completion of training and a successful lab inspection. This BUA is still pending.
   - At the August 18, 2021 meeting, Dr. del Alamo’s BUA was approved pending completion of a successful lab inspection. This BUA has been sent out.
   - At the August 18, 2021 meeting, Dr. Papayannopoulou’s BUA was approved pending completion of a successful lab inspection and edits to the IACUC protocol. This BUA is still pending.
   - At the August 18, 2021 meeting, Dr. Oberst’s BUA was approved pending completion of a successful lab inspection and edits to the IACUC protocol. This BUA is still pending.

5. **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. Allbritton added in vitro use of non-recombinant *Staphylococcus aureus* to the BUA *Tissue culture in Allbritton Lab*.
      - Dr. Hotchkiss’s BUA *Operation of WaNPRC Animal Housing and Support Facilities* now covers the use of non-human primates and their tissue, blood, body fluids, and cell lines in the WaNPRC facilities.
      - Dr. Greninger was approved for work with clinical samples from patients suspected to be infected with SARS-CoV-2 on the BUA *Laboratory Tests in Support of HIV and SARS-CoV-2 Research and Diagnostics*.
      - Dr. Ratner added non-recombinant *Staphylococcus aureus* grown in vitro and administered to Yucatan minipigs to the BUA *Ratner Biomaterials*.
      - Dr. Wang added non-recombinant *Staphylococcus aureus* (previously approved for in vitro use) for use in pigs to the BUA *Ultrasound treatment of Abscesses*.
• Dr. Mulligan renewed the BUA _Mediators Involved in Direct Lung Ischemia Reperfusion Injury of Lung_. Work includes use of recombinant or synthetic DNA/RNA (non-viral) and enhanced gene delivery methods.
• Dr. Carothers added several risk group 1 microorganisms to the BUA _RNA Synthetic Biology_.
• Dr. Swanson renewed the BUA _An evolutionary and proteomic search for human gamete recognition proteins that mediate zona pellucida dissolution_. Work includes in vitro use of Pichia pastoris and non-pathogenic strains of Escherichia coli.
• Dr. Lingappa renewed the BUA _International Clinical Research Center, Repository_. Work includes in vitro work with clinical samples from patients suspected to be infected with SARS-CoV-2.
• Dr. Hawn added mycobacterial phage to the BUA _Innate Immunity and Susceptibility to Infectious Disease_.
• Dr. King added use of human cells in mice to the BUA _Neil King Lab Biological Use Authorization_.
• Dr. Landis moved location for work with previously approved agents to the BUA _HCV_.
• Dr. West moved location for work with previously approved agents to the BUA _Host genetics and response to infection_.
• Dr. Bulger renewed the BUA _Sample Processing for Clinical Research Studies_ and also moved location. Work includes use of human blood, tissue, body fluids, and cell lines in vitro.
• Dr. Johnson was approved for work with clinical samples from patients suspected to be infected with SARS-CoV-2 on the BUA _Crystalloid Liberal or Vasopressors Early Resuscitation in Sepsis (CLOVERS)_.
• The IBC Chair 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.

6. **BSL-3 INACTIVATION REPORT**
   - There were no applications to review this month.

7. **DURC REPORT**
   - The Dual Use Research of Concern Institutional Review Entity (DURC IRE) did not meet this month because there were no applications to review.

8. **INDIVIDUAL PROJECT REVIEWS**
   a. Gale, Michael, change, _The Host Response to Virus Infection_
      - The assigned IBC Primary Reviewer presented the Primary Review.
      - Overall research goal of the lab is to study the innate immune response to viral infection and to investigate virus-host interactions.
      - This change adds in vitro use of Chikungunya virus vaccine strain, Mayaro virus, and Venezuelan Equine Encephalitis (TC-83) vaccine strain.
      - The lab was recently inspected. This change does not require additional inspection.
      - All of the required trainings have been completed.
• Medical management review is still pending.
• The draft BUA letter was shown.
• The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Gale pending medical management review.
• The Committee voted unanimously to approve the draft BUA for Dr. Gale pending medical management review.

b. Greninger, Alex, renewal, Discovery and Characterization of Virus-Host Interactions and Determination of Antiviral Drug Resistance
• The assigned IBC Primary Reviewer presented the Primary Review.
• This lab is interested in identifying and characterizing novel interactions between host and viral proteins that facilitate viral replication. They are also interested in mechanisms of viral resistance to small molecule antivirals.
• Work includes in vitro use of Human Immunodeficiency Virus, Human T-lymphotropic virus types 1 and 2, and Simian Immunodeficiency Virus at BSL-2 w/3 practices. In vitro use of lentiviral vectors and various other viruses at BSL-2 are also a part of this study.
• A successful lab inspection has been completed.
• 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. Greninger pending clarification from the PI, BUA edits, and any necessary BUA letter edits.
• The Committee voted to approve the draft BUA for Dr. Greninger pending the items stated above. There was one voting abstention.

c. Hallstrand, Teal, renewal, Asthma and Translational Research Core
• The assigned IBC Primary Reviewer presented the Primary Review.
• This lab studies the underlying basis of asthma using patient samples and cell culture model systems. They focus on the airway epithelium and the manner in which it interacts with immune cells to regulate inflammation.
• Work includes use of clinical samples from patients suspected to be infected with SARS-CoV-2 as well as use of lentiviral vectors, non-HIV pseudotyped, replication deficient.
• A lab inspection has not yet been completed for all locations. Pending inspections are scheduled.
• 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. Hallstrand pending completion of successful lab inspections.
• The Committee voted unanimously to approve the draft BUA for Dr. Hallstrand pending completion of successful lab inspections.

d. Hyde, Jennifer, change, Contribution of virus-host interactions to viral pathogenesis
• The assigned IBC Primary Reviewer presented the Primary Review.
• This change application is to add BAC systems to construct and generate recombinant SARS-CoV-2 and to utilize a SARS-CoV-2-based replicon.
• The lab was recently inspected. This change does not require additional inspection.
• 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. Hyde.
• The Committee voted unanimously to approve the draft BUA for Dr. Hyde.

e. Miao, Carol, renewal, *Non-viral Gene Transfer to Canine Liver*
• The assigned IBC Primary Reviewer presented the Primary Review.
• This lab’s long-term goal is to develop a less invasive way to have a patient affected with Hemophilia A make their own functional FVIII clotting protein using non-viral gene therapy.
• Work includes use of recombinant or synthetic DNA/RNA (non-viral) in dogs.
• A lab inspection is not required since work is taking place at Fred Hutch Cancer Research Center.
• 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. Miao.
• The Committee voted unanimously to approve the draft BUA for Dr. Miao.

f. Najafian, Behzad, renewal, *Non-invasive biomarkers and models of kidney disease*
• The assigned IBC Primary Reviewer presented the Primary Review.
• This project aims to understand mechanisms of development and progression of kidney diseases and identify biomarkers for diagnosis or monitoring of kidney diseases.
• Work includes in vitro use of lentiviral vectors, non-HIV pseudotyped, replication deficient.
• A successful lab inspection has been completed.
• 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. Najafian.
• The Committee voted unanimously to approve the draft BUA for Dr. Najafian.

g. Paredez, Alexander, renewal, *Study of the Cytoskeleton and Development in Giardia lamblia*
• The assigned IBC Primary Reviewer presented the Primary Review.
• This lab studies Giardia lamblia cell biology, with a focus on cytoskeletal regulation and Giardial developmental switching.
• A successful lab inspection has been completed.
• 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. Paredez.
• The Committee voted unanimously to approve the draft BUA for Dr. Paredez.

h. Seelig, Georg, change, *Seelig lab for synthetic biology*
• The assigned IBC Primary Reviewer presented the Primary Review.
• This change adds in vitro use of lentiviral vector, HIV pseudotyped, replication deficient and adeno-associated viral vectors (adenovirus free).
• The lab was recently inspected. This change does not require additional inspection.
• 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. Seelig.
• The Committee voted unanimously to approve the draft BUA for Dr. Seelig.

i. Stuber, Garret, renewal, *Neural Circuits for Motivation and Reward*
• The assigned IBC Primary Reviewer presented the Primary Review.
• This project studies neural circuits as they relate to psychiatric illnesses and substance abuse.
• Work includes use of adeno-associated viral vectors (adenovirus free) and canine adenoviral vectors in mice and in vitro.
• A lab inspection has not yet been completed.
• 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. Stuber pending completion of a successful lab inspection.
• The Committee voted unanimously to approve the draft BUA for Dr. Stuber pending completion of a successful lab inspection.

j. Tang, Chongren, renewal, *Cholesterol Transporters, Inflammation, Atherosclerosis, and Insulin Resistance*
• The assigned IBC Primary Reviewer presented the Primary Review.
• The goal of this research is to understand how cholesterol metabolism affects cardiovascular disease and insulin resistance.
• Work includes in vitro use of lentiviral vectors, non-HIV pseudotyped, replication deficient.
• A lab inspection has not yet been completed.
• 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. Tang pending a successful lab inspection.
• The Committee voted unanimously to approve the draft BUA for Dr. Tang pending a successful lab inspection.

k. Thomas, Wendy, change, *Biological Adhesion in Flow and under Force*
• The assigned IBC Primary Reviewer presented the Primary Review.
• This change adds in vitro use of replication deficient Vesicular stomatitis virus (VSV)-based pseudovirus.
• The lab was recently inspected. This change does not require additional inspection.
• 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.

9. **SUBCOMMITTEE REPORTS:**

l. Gale, Michael, change, *The Host Response to BSL-3 Pathogens*
• Three members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
• This change adds in vitro use of Chikungunya virus, Powassan virus, Yellow fever virus, and Venezuelan equine encephalitis virus, subtype IE (exempt from Select Agent regulations).
• The lab was recently inspected. This change does not require additional inspection.
• All of the required trainings have been completed.
• A medical management plan is still required for work with Powassan Virus.
• 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.

m. Polyak, Stephen, renewal, Virus-Host Interactions in Cell Culture
• Three members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
• This lab studies how viruses interact with host cells.
• Work includes in vitro use of SARS-CoV-2, Hepatitis C virus, and Human immunodeficiency virus (HIV).
• A lab inspection was conducted and items were found that need to be addressed.
• 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. Polyak pending BUA edits and completion of a successful lab inspection. Another member seconded the motion.
• The Committee voted unanimously to approve the draft BUA for Dr. Polyak pending the items stated above.

10. FOR YOUR INFORMATION
• An update was provided regarding several CDC and USDA regulatory inspections that took place at UW this week.

11. ISSUES FROM THE FLOOR & PUBLIC COMMENTS: There were no issues from the floor, and no public comments.

12. MEETING ADJOURNED AT APPROXIMATELY 11:47 A.M.