



# INSTITUTIONAL BIOSAFETY COMMITTEE

---

UNIVERSITY *of* WASHINGTON

## Meeting Minutes

**Date:** Wednesday, July 21, 2021

**Time:** 10:00 AM – 12:00 PM

**Location:** Zoom

- Members Present:**
1. Jim Boonyaratanakornkit, Allergy and Infectious Diseases
  2. Thea Brabb, Comparative Medicine (Animal Containment Expert)
  3. Jason Cantera (Community Member)
  4. Lesley Colby, Comparative Medicine (Animal Containment Expert)
  5. Lesley Decker, Environmental Health & Safety (Biosafety Officer)
  6. Richard Grant, Washington National Primate Research Center
  7. Kevin Hybiske, Allergy and Infectious Diseases
  8. David Koelle, Allergy and Infectious Diseases
  9. Steve Libby, Laboratory Medicine (IBC Chair)
  10. Scott Meschke, Environmental & Occupational Health Sciences
  11. Susan Parazzoli (Community Member)
  12. Jason Smith, Microbiology (IBC Vice Chair)
  13. 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 10:03 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 June 16, 2021 meeting.
  - A member made a motion to approve the June 16, 2021 minutes. Another member seconded the motion.
  - The committee voted to approve the June 16, 2021 meeting minutes. There was one voting abstention.
4. **OLD BUSINESS:**
  - At the June 16, 2021 meeting, Dr. Baker's BUA was approved pending completion of a successful lab inspection. This BUA is still pending.
  - At the June 16, 2021 meeting, Dr. Lee's BUA was approved pending completion of a successful lab inspection. This BUA is still pending.
  - At the June 16, 2021 meeting, Dr. Murphy's BUA was approved pending completion of a successful lab inspection. This BUA has been sent out.
  - At the June 16, 2021 meeting, Dr. Raskind's BUA was approved pending completion of a successful lab inspection, IACUC review, and a revised application to include clarification of oncogene use. This BUA has been sent out.
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. Winer renewed the BUA *HPV Research Group Specimen Repository* working with human blood, tissue, body fluids, and cell lines.
    - Dr. Kaeberlein renewed the BUA *Modulators of cellular senescence*. Work includes use of human blood, tissue, body fluids, and cell lines.
    - Dr. MacCoss renewed the BUA *AD Proteomics*. Work includes use of human blood, tissue, body fluids, and cell lines.
    - Dr. Sniadecki added in vitro use of human cells, non-human cells, and human induced pluripotent stem (iPS) cells to the BUA *Cell therapy in mice and rats*.
    - Dr. Sniadecki added in vitro use of adeno-associated viral vectors (adenovirus free) to the BUA *Swine Model of Heart Disease and Novel Therapies*.
    - Dr. Nickerson added the use of SARS-CoV-2 nucleic acid to the BUA *Northwest Genomics Center*.
    - The BUA *Predicting Therapy Response* was transferred from Dr. Ning Cao to Dr. Dani Johnson Erickson.
    - Dr. Fujise added a room to the BUA *Study of Fortilin*.
    - Dr. Chung added agents from another BUA so that all his biohazardous work is now capture on a single BUA.

- Dr. Doherty added previously approved agents to a core facility on the BUA *Joubert Syndrome and related disorders*.
- Dr. Gordon added SARS-CoV-2 nucleic acid to the BUA *Mechanisms of TRP Channel Modulation*.
- Dr. Levy added several non-recombinant risk group 2 microorganisms to the BUA *Levy Research Group: ChEEP ChEEP, EcoMiD, EcoZUR, PAASIM*.
- Dr. Giacani added new labs and vivarium spaces to the BUA *Studies on the pathogenesis of syphilis and human treponematoses*.
- Dr. Wurfel added new labs to the BUA *Human Innate Immune Variation*.
- Dr. Maier renewed the BUA *Sample Processing for Clinical Research Studies* working with human blood, tissue, body fluids, and cell lines.
- Dr. Pham added new labs to the BUA *Sample Processing for Clinical Research Studies*.
- Dr. O'Keefe added new labs to the BUA *Sample Processing for Clinical Research Studies*.
- Dr. Arbabi added new labs to the BUA *Sample Processing for Clinical Research Studies*.
- Dr. Temkin was approved for the new BUA *Clinical Evaluation of the i-STAT TBI Test*. Work includes in vitro use of human blood, tissue, body fluids, and cell lines.
- Dr. Lutz added use of additional pathogens to the BUA *AscencioDx - In vitro diagnostic development and quality control*.
- Dr. Shi added new labs to the BUA *The Shi Laboratory Animal Use and Other Research*.
- Dr. Henning was approved for the new BUA *Sepsis and AKI*. Work includes use of human blood, tissue, body fluids, and cell lines.
- 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

- Dr. Oberst requested removal of SARS-CoV-2 samples that have been treated with 100% Methanol, UV, TRIzol, RNA Lysis Buffer, RIPA Lysis Buffer, and 4% Paraformaldehyde.
- The subcommittee reviewed procedure and inactivation data provided by the lab and approved the request.
- The IBC Chair a motion to approve this month's BSL-3 Inactivation Report.
- A member made a motion to approve this month's BSL-3 Inactivation Report. Another member seconded the motion.
- The Committee unanimously voted to approve this month's BSL-3 Inactivation Report.

## 7. DURC REPORT

- Dr. Rasmussen received approval for use of Botulinum neurotoxin. This work does not meet the DURC definition.
- The IBC Chair sought a motion to approve this month's DURC Report.
- A member made a motion to approve this month's DURC Report. Another member seconded the motion.
- The Committee unanimously voted to approve this month's DURC Report.

## 8. INDIVIDUAL PROJECT REVIEWS

- a. Alaei, Sarah, new, *UWT Oral Microbiology Lab*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - This project aims to better understand how bacteria export proteins and other substances into the environment and how the shape of multicellular communities formed by oral bacteria are responsible for periodontal disease.
  - Work includes use of *Porphyromonas gingivalis* in vitro.
  - The lab has been inspected and no deficiencies were found.
  - 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. Alaei.
  - The Committee voted unanimously to approve the draft BUA for Dr. Alaei.
- b. Cirulli, Vincenzo, renewal, *Role of cell adhesion molecules in islet biology*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - This lab works on generating insulin-producing cells from either hESC or iPSC as a potential cell-based therapy for diabetes.
  - Work includes use of lentiviral vectors, non-HIV pseudotyped, replication deficient and adeno-associated viral vectors (adenovirus free) in mice. Feline immunodeficiency virus (FIV) vector is also used in vitro.
  - A lab inspection is still required.
  - 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. Cirulli pending BUAA edits and a successful lab inspection.
  - The Committee voted unanimously to approve the draft BUA for Dr. Cirulli pending the conditions above.
- c. Davis, Jennifer, change, *The Cellulare and molecular mechanism of cardiac wound healing and fibrotic remodeling*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - The goal of this change is to add amphotropic gammaretroviral vectors anticipated to rescue myofibroblast formation and scarring in an infarcted heart as a potential gene therapy approach to myocardial infarction.
  - This change adds use of amphotropic, replication deficient, gammaretroviral vectors in mice.
  - The lab has been inspected and no deficiencies were found.
  - 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. Davis with increased BSL-2 w/3 practices (modification to BUAL required). The biosafety officer will follow up with the lab to provide the options available to downgrade BSL containment requirements.
  - The Committee voted unanimously to approve the draft BUA for Dr. Davis with the increased BSL-2 w/3 practices modification.

- d. Duthie, Malcolm, change, *Novel immunization strategies to protect against infectious diseases*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - The goal of the project is to develop an RNA vaccine against enterovirus D68 (EV-D68).
  - Only the in vivo portion of this study will be conducted at UW.
  - This change adds use of enterovirus D in mice.
  - A lab inspection was not required due to work only taking place in a vivarium.
  - 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. Duthie without the mouse adapted strain. More information on the mouse-adapted strain is needed in order to determine the appropriate animal biosafety level to protect the mouse colony.
  - The Committee voted unanimously to approve the draft BUA for Dr. Duthie.
- e. Freedman, Malcolm, renewal, *Differentiation of Human Pluripotent Stem Cells into Kidney Cells*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - The goal of this research is to create laboratory models of human kidney disease and regeneration using pluripotent stem cells.
  - Work includes in vitro use of several viral vectors. Human cells transduced with lentiviral vectors, non-HIV pseudotyped, replication deficient, oncogenic inserts (tested negative for RCV) and human cells transduced with Sendai virus vectors, replication deficient, oncogenic inserts are also used in mice.
  - A lab inspection is still required.
  - 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. Freedman pending a successful lab inspection.
  - The Committee voted unanimously to approve the draft BUA for Dr. Freedman pending a successful lab inspection.
- f. Moritz, Chet, change, *Combined Stem Cell Transplantation and Targeted Microstimulation to Direct the Formation of Functional Connections and Neural Repair in Rats*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - This change adds use of lentiviral vectors, non-HIV pseudotyped, replication deficient in rats.
  - The lab recently passed a successful lab inspection, so no additional inspection is required for this change.
  - 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. Moritz.
  - The Committee voted unanimously to approve the draft BUA for Dr. Moritz.
- g. Perkel, David, renewal, *Neural Circuits for Auditory and Vocal Processing*
- The assigned IBC Primary Reviewer presented the Primary Review.

- The overall research goal is to better understand neural mechanisms of auditory processing and motor skill learning and variability generation through the study of neural circuits in songbirds.
  - Work includes use of adeno-associated viral vectors (adenovirus free) and lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient in vitro and in the Zebra finch.
  - The lab has been inspected and no deficiencies were found
  - 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. Perkel.
  - The Committee voted unanimously to approve the draft BUA for Dr. Perkel.
- h. Rasmussen, Jeff, renewal, *Interplay between skin and axons*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - This lab uses zebrafish to understand the cellular and molecular mechanisms involved in somatosensory axon development, repair, and regeneration.
  - Work includes use of
  - The lab has been inspected and no deficiencies were found
  - 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. Rasmussen pending BUAA edits.
  - The Committee voted unanimously to approve the draft BUA for Dr. Rasmussen pending BUAA edits.
- i. Starita, Lea, renewal, *Brotman Baty Advanced Technology Lab: General Research*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - This lab tests samples from patients suspected to be infected with SARS-CoV-2 or other respiratory pathogens.
  - Work includes use of lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient.
  - No viral isolation or culturing is permitted.
  - The lab has been inspected and no deficiencies were found.
  - 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. Starita.
  - The Committee voted unanimously to approve the draft BUA for Dr. Starita.
- j. Wills, Andrea, renewal, *Molecular mechanisms of regeneration in Xenopus tropicalis*
- The assigned IBC Primary Reviewer presented the Primary Review.
  - The lab studies the molecular mechanisms of tissue regeneration in Xenopus (tadpoles).
  - The lab has been inspected and no deficiencies were found.
  - 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. Wills pending training completion.

- The Committee voted unanimously to approve the draft BUA for Dr. Wills pending training completion.

#### 9. SUBCOMMITTEE REPORTS:

- k. Kreuzer, Helen, change, *Evaluation of multi-omics data in SARS-CoV-2-infected cells*
  - Three members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
  - The lab wants to add the use of SARS-CoV-2 derived from an infectious clone (WASH/China), a recombinant luciferase expressing SARS-CoV-2, and a recombinant GFP expressing SARS-CoV-2 strain. The latter will be used to infect primary human airway epithelial cells and sort infected and uninfected cells on a FACS for multi-omics analysis.
  - Aside from general work with in vitro work with SARS-CoV-2 strains, the biggest biosafety risks arises from aerosol generated during the use of the FACS system. Proper containment will be installed and certified for the FACS prior to commencement of that work.
  - Use of the FACS system by any lab is on hold until the equipment is properly installed and certified, and the lab team receives training.
  - The draft BUA letter was shown.
  - A member made a motion to approve the draft BUA letter for Dr. Kreuzer. Another member seconded the motion.
  - The Committee voted unanimously to approve the draft BUA for Dr. Kreuzer.

#### 10. FOR YOUR INFORMATION:

- **EH&S Biosafety Manager New Hire**
- **Member Appreciation**

**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.**