



INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY *of* WASHINGTON

Meeting Minutes

Date: Wednesday, November 16, 2022

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. Erin Heiniger, Department of Bioengineering (*Laboratory Specialist*)
 8. Kevin Hybiske, Allergy and Infectious Diseases (*IBC Vice Chair*)
 9. David Koelle, Allergy and Infectious Diseases
 10. Stephen Libby, Laboratory Medicine (*Animal Containment Expert*)
 11. Scott Meschke, Environmental & Occupational Health Sciences
 12. Jennifer Nemhauser, Department of Biology (*Plant Expert*)
 13. Susan Parazzoli (*Community Member*)
 14. Jason Smith, Microbiology (*IBC Chair*)
 15. Paul Swenson, Seattle-King Co. Dept. of Public Health (*Community Member*)
 16. Elyse Verstelle, Department of Immunology (*Laboratory Specialist*)

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

NHP: Non-Human Primates

NIH: National Institutes of Health

DURC: Dual Use Research of Concern

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 October 19, 2022, meeting.
 - A member made a motion to approve the October 19, 2022, minutes. Another member seconded the motion.
 - The committee voted unanimously to approve the October 19, 2022, meeting minutes.
4. **OLD BUSINESS:**
 - At the October 19, 2022, meeting, Dr. Cabernard's BUA was approved pending completion of a successful lab inspection. This BUA has been sent.
 - At the October 19, 2022, meeting, Dr. Derdeyn's BUA was approved pending completion of a successful lab inspection. This BUA has been sent.
 - At the October 19, 2022, meeting, Maly's BUA was approved pending completion of a successful lab inspection. This BUA has been sent.
 - At the October 19, 2022, meeting, Dr. Shendure's BUA was approved pending completion of a successful lab inspection. This BUA has been sent.
 - At the October 19, 2022, meeting, Dr. Stayton's BUA was approved pending completion of a successful lab inspection. This BUA has been sent.
 - At the October 19, 2022, meeting, Dr. Tykodi's BUA was approved pending completion of a successful lab inspection. This BUA has been sent.
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. Arnold added the use of *Shigella* species and human material in mice within new SLU laboratory spaces to the BUA *iNPG-pDox efficacy (NIH Guidelines Section N/A)*.
 - Dr. Lee registered a new project *Building the Union Bay Natural Area into a laboratory for interdisciplinary investigation of group-foraging bats working with bats in the field (NIH Guidelines Section N/A)*.
 - Dr. Levy added a room to the BUA *Levy Research Group: ChEEP ChEEP, EcoMiD, EcoZUR, PAASIM* previously approved PCR and sequencing activities (*NIH Guidelines Section III-F*).
 - Dr. Raftery renewed the BUA *Cell Metabolomics* working with human blood, tissue, body fluids, and cell lines in vitro at BSL-2 (*NIH Guidelines Section N/A*).
 - Dr. Dodd renewed the BUA (*Development and characterization of novel and existing advanced disinfection and oxidation processes for inactivation of chlorine-resistant pathogens, and elimination of antibiotic resistance genes and antibiotic resistant bacteria, in (waste)water and on surfaces*) working with Risk Group 2 agents

(bacterium and pathogenic strains of E. coli), and Risk Group-1 non-pathogenic E. coli strains in vitro (*NIH Guidelines* Section III-F and N/A).

- Dr. Khaledi added new rooms working with previously approved agents to the BUA *Analysis of Human and Mammalian Tissue and Blood Samples for Lysosomal Storage Diseases* (*NIH Guidelines* Section N/A)
- Dr. Arbabi renewed the BUA *Sample Processing for Clinical Research Studies* working with human blood, tissue, body fluids, and cell lines in vitro at BSL-2 (*NIH Guidelines* Section N/A).
- Dr. Ligabue added new rooms working with previously approved agents in vitro to the BUA *Development of new methods to purify/enrich sub population of human cells* (*NIH Guidelines* Sections III-D, III-E, and III-F).
- Dr. Kennedy added work with human blood, tissue, and body fluids at BSL-2 to a previously approved space to the BUA *Somatic mutagenesis in aging and diseases* (*NIH Guidelines* Sections III-F and N/A).
- Dr. Andrews renewed the BUA *SHAPE - Sarcopenia as a predictor of Hospital-Associated ADL Disability in Older Adults* working with human blood, tissue, body fluids, and cell lines in vitro at BSL-2 (*NIH Guidelines* Section N/A).
- Dr. Starita removed previously approved work with an agent requiring BSL-2 with 3 practices from the BUA *Brotman Baty Advanced Technology Lab: General Research* (*NIH Guidelines* Section N/A).
- Dr. Pravetoni registered work adding the use of humanized mice to their previously approved BUA *Expression of recombinant monoclonal antibodies* (*NIH Guidelines* Section N/A).
- Dr. Giachelli added in vitro work with human cells transduced with third generation lentiviral vectors with oncogenes at BSL-2 to the BUA *Inflammation and Ectopic Calcification* (*NIH Guidelines* Section III-E).
- 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, pending removal of the Dodd project for further review.

6. BSL-3 INACTIVATION REPORT

- Dr. Fuller requested heat inactivation of serum from SARS-CoV-2 infected mice.
- Dr. Fuller requested UV inactivation of SARS-CoV-2 virus stock.
- 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 voted to approve this month's BSL-3 Inactivation Report.

7. DURC REPORT

- One project received renewal approval for use of botulinum neurotoxin. It 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. Fujise, Ken, renewal, *Study of Fortilin*

- *NIH Guidelines* Sections III-D, III-E, and III-F apply.
- The assigned IBC Primary Reviewer presented the Primary Review.
- The Fujise lab aims to determine the function of fortilin in atherosclerosis and heart failure.
- This lab works with adeno-associated viral vectors in vivo in mice and adeno-associated viral vectors and gammaretroviral vectors in vitro.
- The lab was inspected, and no deficiencies were noted.
- All required trainings are complete.
- The IACUC protocol is still pending.
- The draft BUA letter was shown.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Fujise.
- The Committee voted unanimously to approve the draft BUA for Dr. Fujise pending edits to the BUA.

b. Green, Damian, renewal, *Alpha-Emitter Targeting HIV Infected Cells*

- *NIH Guidelines* Section III-D applies.
- The assigned IBC Primary Reviewer presented the Primary Review.
- The goal of the Green lab is to determine the safety and feasibility of treatment with radiolabeled monoclonal antibodies in SHIV-infected NHPs treated with antiretroviral therapies and uninfected NHPs.
- This lab administers third generation lentiviral vectors, SHIV and NHP monoclonal antibodies to NHPs.
- A lab inspection was not required as all work takes place inside a vivarium.
- All required trainings are complete.
- The IACUC protocol is still pending.
- The draft BUA letter was shown.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Green.
- The Committee voted unanimously to approve the draft BUA for Dr. Green pending clarification of vector administration to NHPs.

c. Heath, James, renewal, *Sorting the antigen specific T-cells for TCR sequencing*

- *NIH Guidelines* Section III-D applies.
- The assigned IBC Primary Reviewer presented the Primary Review.
- The Heath lab aims to sort antigen specific T-cells from donor peripheral blood mononuclear cells (PBMCs).
- This research involves work with human cell samples that may contain bloodborne pathogens.
- A lab inspection was not required as all work takes place inside a UW core facility.
- All required trainings are complete.
- The draft BUA letter was shown.
- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Heath.
- The Committee voted unanimously to approve the draft BUA for Dr. Heath.

- d. Koelle, David, change, *Koelle Laboratory at UW*
- *NIH Guidelines* Sections III-D applies.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Koelle lab is adding the use of recombinant and wildtype *Chlamydia trachomatis* strains for in vitro work at BSL-2.
 - The lab was inspected, and no deficiencies were noted.
 - All required trainings are complete.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Koelle.
 - The Committee voted unanimously to approve the draft BUA for Dr. Koelle.
- e. Lieber, Andre, renewal, *In vivo HSC gene therapy in NHPs*
- *NIH Guidelines* Section III-D applies.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Lieber lab aims to deliver therapeutic genes in vitro or in vivo to NHPs using gutless adenoviral vectors.
 - Research in this lab includes working with tissues, blood, and cells from NHPs that were challenged with SIV or SHIV.
 - The lab was inspected, and all deficiencies have been corrected.
 - All required trainings are complete.
 - This project has an IACUC protocol in review.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Lieber.
 - The Committee voted unanimously to approve the draft BUA for Dr. Lieber.
- f. Liu, Qinghang, renewal, *Liu Lab Research Program*
- *NIH Guidelines* Sections III-D, III-E, and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Liu lab aims to understand molecular mechanisms of cardiac cell death and heart failure.
 - Research in this lab includes working with administering adenoviral vectors, adeno-associated viral vectors, and third generation lentiviral vectors in vivo in mice and in vitro.
 - The lab was inspected, and no deficiencies were noted.
 - All required trainings are complete.
 - The IACUC protocol is still pending.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Liu.
 - The Committee voted unanimously to approve the draft BUA for Dr. Liu.
- g. Ratner, Buddy, change, *Ratner Biomaterials*
- *NIH Guidelines* Section III-D applies.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Ratner lab is adding a Risk Group 2 *E. coli* variant expressing GFP and BV-2 cells that were transduced with an ecotropic gammaretroviral vector with oncogenes for in vitro work.
 - The lab was inspected, and no deficiencies were noted.
 - All required trainings are complete.

- The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Ratner.
 - The Committee voted unanimously to approve the draft BUA for Dr. Ratner.
- h. Reh, Tom, renewal, *Photoreceptor Survival Factors in Mouse Cell cultures*
- *NIH Guidelines* Sections III-D, III-E and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Reh lab aims to understand retinal development to develop methods for repair of retinal damage.
 - The lab works with adeno-associated viral vectors in vitro and in vivo in mice and transduces cells with third generation lentiviral vectors.
 - The lab was inspected, and all deficiencies have been corrected.
 - All required trainings are complete.
 - The IACUC protocol is still pending.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Reh.
 - The Committee voted unanimously to approve the draft BUA for Dr. Reh.
- i. Schwartz (001), Michael, renewal, *Neuroendocrine Control of Energy Balance (Rats)*
- *NIH Guidelines* Sections III-D, III-E, and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Schwartz lab focuses on glucose metabolism in the brain and how it might contribute to obesity and diabetes.
 - The research in this lab includes administering adeno-associated viral vectors, adenoviral vectors, and lentiviral vectors in vivo to rats.
 - The lab was inspected, and no deficiencies were noted.
 - All required trainings are complete.
 - This project has an IACUC protocol in review.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Schwartz.
 - The Committee voted unanimously to approve the draft BUA for Dr. Schwartz pending an edit to the BUA letter and clarification of vivarium locations used.
- j. Schwartz (002), Michael, renewal, *Neuroendocrine Control of Energy Balance (Mice)*
- *NIH Guidelines* Sections III-D, III-E, and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Schwartz lab focuses on glucose metabolism in the brain and how it might contribute to obesity and diabetes.
 - The research in this lab includes administering adeno-associated viral vectors, adenoviral vectors, and lentiviral vectors in vivo to mice as well as in vitro. They also administer rabies virus vector, avian pseudotyped (RVdeltaG-EnvA) to mice.
 - A discussion occurred regarding if there are occupational health requirements for working with this strain of LCMV. The biosafety officer and occupational health nurse noted that there are no specific requirements for this strain of LCMV.
 - The lab was inspected, and all deficiencies have been corrected.
 - All required trainings are complete.
 - The IACUC protocol is still pending.

- The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Schwartz.
 - The Committee voted unanimously to approve the draft BUA for Dr. Schwartz pending addition of ABSL-2 vivarium locations on letter.
- k. Sniadecki (002), Nathan, renewal, *Cell therapy in mice and rats*
- *NIH Guidelines* Sections III-D and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Sniadecki lab aims to use human pluripotent stem cells and their derivatives to study engraftment in mouse and rat hearts.
 - The work includes administering cell lines transduced with adeno-associated and lentiviral vectors to mice and rats.
 - The lab was inspected, and no deficiencies were noted.
 - All required trainings are complete.
 - This project has an IACUC protocol in review.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Sniadecki.
 - The Committee voted unanimously to approve the draft BUA for Dr. Sniadecki pending successful completion of the lab inspection.
- l. Sniadecki (003), Nathan, renewal, *Cell therapy in NHPs*
- *NIH Guidelines* Sections III-D and III-F.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Sniadecki lab aims to develop a novel cell therapy for cardiovascular diseases using cardiomyocytes derived from pluripotent stem cells.
 - Research in this lab includes administering human cell lines transfected with recDNA to NHPs.
 - A lab inspection has been performed and is still pending a response.
 - All required trainings are complete.
 - The IACUC protocol is still pending.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Sniadecki.
 - The Committee voted unanimously to approve the draft BUA for Dr. Sniadecki pending successful completion of the lab inspection.
- m. Thaler, Josh, renewal, *Glial Control of Energy Balance*
- *NIH Guidelines* Sections III-D, III-E, and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Thaler lab studies glucose metabolism in the brain and how it might contribute to obesity and diabetes.
 - Research in this lab includes administering adeno-associated viral vectors and lentiviral vectors in vivo to mice and rats and in vitro to cell lines.
 - The lab was inspected, and all deficiencies have been corrected.
 - All required trainings are complete.
 - The IACUC protocol is still pending.
 - The draft BUA letter was shown.

- The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Thaler.
 - The Committee voted unanimously to approve the draft BUA for Dr. Thaler.
- n. Veesler, David, change, *Expression of recombinant proteins using mammalian cell lines*
- *NIH Guidelines* Sections are N/A to this change.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Veesler lab is adding heat-inactivated sera from Monkeypox and/or vaccinia-infected humans and NHPs.
 - A lab inspection was not required as the lab was recently inspected during their renewal.
 - All required trainings are complete.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Veesler.
 - The Committee voted unanimously to approve the draft BUA for Dr. Veesler.
- o. Woodrow, Kim, renewal, *Drug Delivery for Developing Microbicides and Mucosal Immunity*
- *NIH Guidelines* Sections III-E and III-F apply.
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The Woodrow lab aims to develop new pre-exposure prophylactic microbicide and vaccine delivery system for treating and preventing sexually transmitted infections such as HIV.
 - This research includes administering plasmids in vivo to mice.
 - The lab was inspected, and no deficiencies were noted.
 - All required trainings are complete.
 - The IACUC protocol is still pending.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Woodrow.
 - The Committee voted unanimously to approve the draft BUA for Dr. Woodrow

10. FOR YOUR INFORMATION:

- **NIH Incident Reports:**
 - A PI and assistant research scientist were working in an animal procedure room in the ABSL-3 lab weighing mice that had previously been exposed to a recombinant strain of Venezuelan equine encephalitis virus (VEEV) when a mouse escaped containment. While returning the mouse to its cage following weighing, the mouse jumped out of the biosafety cabinet onto a chair and then to the floor. The mouse was ultimately captured and did not escape the dedicated procedure room. All areas that the mouse contacted was decontaminated appropriately. The root cause was the behavior of the mouse due to the VEEV infection. Procedures for handling and weighing mice are under review.
 - A research technologist was delivering an injection of an immunosuppressive drug to a non-human primate that had previously been exposed to gutless adenoviral vectors three weeks prior when they had a needle stick exposure. The NHP flinched at the injection causing the needle to bend and resulted in a needlestick to the technologist. EH&S is investigating the incident and conducting root cause analysis.

- An animal technician was conducting routine weekly cage changes for ABSL-1 rats when they were bitten by a rat that had previously been exposed to an adeno-associated viral vector intracranially. EH&S is investigating the incident and conducting root cause analysis.

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

12. MEETING ADJOURNED AT APPROXIMATELY 11:41 A.M.