



INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY *of* WASHINGTON

Meeting Minutes

Date: Wednesday, March 17, 2021

Time: 10:00 AM – 12:00 PM

Location: Zoom

Members Present:

1. Thea Brabb, Comparative Medicine (*Animal Containment Expert*)
2. Lesley Decker, Environmental Health & Safety (*Biosafety Officer*)
3. Garry Hamilton (*Community Member*)
4. Kevin Hybiske, Allergy and Infectious Diseases
5. Stephen Libby, Laboratory Medicine (*IBC Chair*)
6. Scott Meschke, Environmental & Occupational Health Sciences
7. Susan Parazzoli (*Community Member*)
8. Jason Smith, Microbiology (*IBC Vice Chair*)
9. 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 a.m. A quorum was present. A future committee member was introduced to the committee.
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. **EXPORT CONTROLS PRESENTATION**
 - The Assistant Vice Provost for Export Controls in the Office of Research gave a presentation to the committee regarding export controls at the University of Washington.
4. **APPROVAL OF MINUTES:**
 - February 17, 2021
 - The IBC Chair sought a motion to approve the minutes from the February 17, 2021 meeting.
 - A member made a motion to approve the February 17, 2021 minutes. Another member seconded the motion.
 - The committee voted to approve the February 17, 2021 meeting minutes.
 - March 3, 2021
 - The IBC Chair sought a motion to approve the minutes from the March 3, 2021 meeting.
 - A member made a motion to approve the March 3, 2021 minutes. Another member seconded the motion.
 - The committee voted to approve the March 3, 2021 meeting minutes.
5. **OLD BUSINESS:**
 - At the March 18, 2020 meeting, Dr. Lagunoff's BUA was approved pending training. This BUA is still pending.
 - At the December 16, 2020 meeting, Dr. Ceze's BUA was approved pending a successful lab inspection. This BUA is still pending.
 - At the February 17, 2021 meeting, Dr. Dhaka's BUA was approved pending a successful lab inspection. This BUA is still pending.
 - At the February 17, 2021 meeting, Dr. Hofstetter's BUA was approved pending review of the IACUC protocol. This BUA has been sent out.
 - At the February 17, 2021 meeting, Dr. Ladiges's BUA was approved pending a successful lab inspection and clarification of replication competence. This BUA is still pending.
 - At the February 17, 2021 meeting, Dr. Meeske's BUA was approved pending a successful lab inspection. This BUA has been sent out.
 - At the February 17, 2021 meeting, Dr. Paik's BUA was approved pending an edit to the BUA application. This BUA has been sent out.
 - At the February 17, 2021 meeting, Dr. Thomas's BUA was approved pending a successful lab inspection. This BUA is still pending.
 - At the February 17, 2021 meeting, Dr. Altemeier's BUA was approved pending a successful lab inspection. This BUA has been sent out.
 - At the March 3, 2021 meeting, Dr. Englund's BUA was approved pending an edit to the BUA letter. This BUA has been sent out.
6. **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. Swisher renewed the BUA *Cancer Risks Associated with Inherited Mutations in Ovarian Cancer Susceptibility Genes Beyond BRCA1 and BRCA2*. Work includes use of non-viral recombinant or synthetic DNA/RNA in vitro.
- Dr. Simpson renewed the BUA *Biomarkers of exposure to chemicals in the workplace and the environment*. Work includes in vitro use of human blood, tissue, body fluids, and cell lines.
- Dr. Meschke added new BSL-1 lab spaces to the BUA *Detection and Characterization of Pathogens in Environmental Media*.
- Dr. Murphy added use of Plasmodium vivax in mosquitos and in vitro, as well as ABSL-2 rooms, to the BUA *Immunity to malaria infection*.
- Dr. Fuller added use of Hepatitis B virus in vitro to the BUA *Enhanced Hepatitis B Vaccine for Immunocompromised Animals*.
- 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.

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.
- This BUA changes adds recombinant mouse hepatitis virus, specifies Risk Group 2 human coronavirus strains, and gives approval to use two pieces of equipment (aerosol chamber and light rig) inside a biosafety cabinet with these viruses.
- This change does not require a full lab inspection because of one that was recently completed for this project. A biosafety officer will be visiting the lab to assess the set up of the equipment in the biosafety cabinet.
- 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. Gale.
- The Committee voted unanimously to approve the draft BUA for Dr. Gale.

b. Gu, Liangcai, renewal, *Study of small molecule-controlled CAR-T cell activation in mice*

- The assigned IBC Primary Reviewer presented the Primary Review.
- The overall research goals are to engineer small-molecule drug-controlled protein biosensors to improve efficacy and safety of chimeric antigen receptor (CAR) T-cell-based cancer immunotherapy, and to understand SARS-CoV-2 pathology.

- Work includes use of lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient in vitro as well as human cells transduced with lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient in mice.
 - 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. Gu.
 - The Committee voted unanimously to approve the draft BUA for Dr. Gu.
- c. Hladik, Florian, renewal, *Mechanisms of HIV-1 Transmission in Genital Mucosa of Women and the Role of Exosomes in Semen for HIV Infection in the Genital Mucosa of Women*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This lab studies HIV-1 transmission at mucosal surfaces and mucosal immunity.
 - Work includes use of human immunodeficiency virus (HIV), human cells infected with HIV, and replication deficient HIV pseudotyped and non-HIV pseudotyped lentiviral vectors in vitro.
 - 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. Hladik.
 - The Committee voted unanimously to approve the draft BUA for Dr. Hladik.
- d. Kerr, Benjamin, renewal, *Plasmid Maintenance*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This lab is looking at how evolution effects the relationship between bacterial hosts and plasmids. Specifically, the researchers are interested in whether evolution of a host/plasmid pairing reduces the metabolic and physiological costs of maintaining plasmids.
 - Work includes in vitro use of *Klebsiella pneumoniae* and *Salmonella enterica*.
 - 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. Kerr.
 - The Committee voted unanimously to approve the draft BUA for Dr. Kerr.
- e. Shechner, David, renewal, *Nuclear Architecture and the Noncoding Transcriptome*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This lab investigates the mechanisms by which mammalian cells build the structures within their nuclei, how non-coding RNAs (ncRNAs) contribute to these processes, and the ways in which these pathways are modulated among different cell types and diseased states.
 - Work includes in vitro use of lentiviral vectors, non-HIV pseudotyped, replication deficient and human cells transduced with lentiviral vectors, non-HIV pseudotyped, replication deficient.
 - A successful lab inspection has been completed, but may be required again if the containment level changes.
 - 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. Shechner pending that either the lab work with lentiviral vectors at BSL-2 w/3 or provide documentation for use of third generation lentiviral vectors in order to obtain approval at BSL-2.
 - The Committee voted unanimously to approve the draft BUA for Dr. Shechner pending the conditions stated above.
- f. Tang, Gale, renewal, Mechanisms of Arteriogenesis in Mice and Rats
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This project is aimed at understanding the molecules that stimulate the collateral arteries to grow as well as what stops their growth. Specifically, they are trying to understand why human saphenous vein grafts fail.
 - Work includes in vitro use of adeno-associated viral vectors (adenovirus free), recombinant or synthetic DNA/RNA (non-viral) in mice, and human cells transduced with adeno-associated viral vectors (adenovirus free) in rats.
 - A successful lab inspection has been completed.
 - All of the required trainings have been completed.
 - The IACUC protocol has not yet been submitted.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Tang pending review of the IACUC protocol.
 - The Committee voted unanimously to approve the draft BUA for Dr. Tang pending review of the IACUC protocol.
- g. Theriot, Julie, change, Advances in cellular motility
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This change adds the use of Staphylococcus aureus for in vitro work.
 - 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. Theriot.
 - The Committee voted unanimously to approve the draft BUA for Dr. Theriot.
- h. Xin, Li, renewal, *Studies on prostate homeostasis and prostate-related diseases*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This lab studies prostate development and prostate cancer.
 - Work includes use of gammaretroviral vectors (amphotropic and ecotropic), third generation lentiviral vectors (both with and without oncogenes), adenoviral vectors, and the transfer of transduced cells into mice.
 - 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. Xin.
 - The Committee voted unanimously to approve the draft BUA for Dr. Xin.
- i. Xu, Libin, renewal, *The roles of lipids in human diseases*
- The assigned IBC Primary Reviewer presented the Primary Review.

- The goal of this project is to elucidate the roles of lipids in various human diseases, including the human metabolic disorder Smith-Lemli-Opitz syndrome, and antibiotic resistance in bacteria.
 - Work includes in vitro use of Enterococcus faecalis, human induced pluripotent stem (iPS) cells, Lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient (both with and without oncogenic inserts), and Staphylococcus aureus.
 - 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. Xu.
 - The Committee voted unanimously to approve the draft BUA for Dr. Xu.
- j. Yazdan-Shahmorad, Azadeh, renewal, *Novel neural technologies for neurorehabilitation*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The focus of the lab is to develop novel neural interfaces and investigate the plasticity mechanisms of the brain in order to reveal underlying mechanisms that lead to functional recovery from stroke. The goal of this project is to optimize viral vector infection techniques in non-human primates for ultimate manipulation of electrical activity in the brain.
 - Work includes use of adeno-associated viral vectors (adenovirus free) and lentiviral vectors, non-HIV pseudotyped, replication deficient in macaques and in vitro.
 - A successful 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. Yazdan-Shahmorad pending completion of a successful lab inspection.
 - The Committee voted unanimously to approve the draft BUA for Dr. Yazdan-Shahmorad pending completion of a successful lab inspection.

10. FOR YOUR INFORMATION

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

12. MEETING ADJOURNED AT APPROXIMATELY 11:45 A.M.