



INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY *of* WASHINGTON

Meeting Minutes

Date: Wednesday, April 21, 2021

Time: 10:00 AM – 12:00 PM

Location: Zoom

Members Present:

1. Lesley Colby, Comparative Medicine (*Animal Containment Expert*)
2. Lesley Decker, Environmental Health & Safety (*Biosafety Officer*)
3. Richard Grant, Washington National Primate Research Center
4. Garry Hamilton (*Community Member*)
5. Kevin Hybiske, Allergy and Infectious Diseases
6. David Koelle, Allergy and Infectious Diseases
7. Stephen Libby, Laboratory Medicine (*IBC Chair*)
8. Scott Meschke, Environmental & Occupational Health Sciences
9. Susan Parazzoli (*Community Member*)
10. Jason Smith, Microbiology (*IBC Vice Chair*)
11. 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:**
 - March 17, 2021
 - The IBC Chair sought a motion to approve the minutes from the March 17, 2021 meeting.
 - A member made a motion to approve the March 17, 2021 minutes. Another member seconded the motion.
 - The committee voted to approve the March 17, 2021 meeting minutes.
 - April 14, 2021
 - The IBC Chair sought a motion to approve the minutes from the April 14, 2021 meeting.
 - A member made a motion to approve the April 14, 2021 minutes. Another member seconded the motion.
 - The committee voted to approve the April 14, 2021 meeting minutes. There were two voting abstentions.
4. **OLD BUSINESS:**
 - At the March 18, 2020 meeting, Dr. Lagunoff's BUA was approved pending completion of training. This BUA is still pending.
 - At the February 17, 2021 meeting, Dr. Thomas's BUA was approved pending a successful lab inspection. This BUA is still pending.
 - At the March 17, 2021 meeting, Dr. Shechner's BUA was approved 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. This BUA has been sent out.
 - At the March 17, 2021 meeting, Dr. Tang's BUA was approved pending review of the IACUC protocol. This BUA has been sent out.
 - At the March 17, 2021 meeting, Dr. Yazdan-Shahmorad's BUA was approved pending completion of a successful lab inspection. 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. Buckner added a room to the BUA *Buckner antiparasitic and antibacterial drug discovery*.
 - Dr. Thummel added a room to the BUA *CYP3A Regulation*.
 - Dr. Maxwell as approved for work with human blood, tissue, body fluids, and cell lines in the BUA *Ultrasound of calcified vascular plaque for angioplasty*.
 - Dr. Casper was named new PI to the BUA *Immunogenecity and efficacy testing of an RNA virus against yellow fever*.

- Dr. Sen added use of *Pseudomonas aeruginosa* to the BUA *Identification and characterization of E. coli, Campylobacter and Salmonella present in wetland water and crow feces within the Bothell Campus.*
- Dr. Bendich renewed the BUA *Organellar DNA damage due to various stressors.* Work includes use of *Agrobacterium tumefaciens* and *Arabidopsis thaliana* (cress plants, seeds) in plants.
- Dr. Tian added use of human blood, tissue, body fluids, and cell lines to the BUA *Energetics and Metabolism of the Heart.*
- Dr. Winkler added use of SARS-CoV-2 RNA to the BUA *Winkler Lab - S. aureus and waste water SARS-CoV-2 testing.*
- Dr. Lutz added inactivated HIV-1 to the BUA *Point-of-Care Diagnostic Device.*
- 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 voted to approve this month's Biosafety Officer Report. There was one voting abstention.

6. 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.

7. INDIVIDUAL PROJECT REVIEWS

a. Bengtsson, Niclas, new, *Muscle gene therapy*

- The assigned IBC Primary Reviewer presented the Primary Review.
- The goal of this research is to develop novel ways to correct genetic mutations causing muscular dystrophies.
- Work includes use of adeno-associated viral vectors (adenovirus free) and mouse cells transduced with adeno-associated viral vectors (adenovirus free) in mice and in vitro.
- Completion of a successful lab inspection is still pending.
- 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. Bengtsson pending completion of a successful lab inspection.
- The Committee voted unanimously to approve the draft BUA for Dr. Bengtsson pending completion of a successful lab inspection.

b. Disis, Mary, new, *Evaluation of Multi-Antigen, Multi-Epitope Th1 Selective Vaccine Against Ovarian Cancer*

- The assigned IBC Primary Reviewer presented the Primary Review.
- The goals of the work are to: Identify optimal clinical candidate of our multi-antigen, multi-epitope Th1 selective vaccine; define the mechanisms by which the vaccine mediates an anti-tumor response; determine whether combination therapy-particularly with an immune checkpoint inhibitor (ICI)-significantly improves the clinical efficacy of vaccination; and, determine any potential toxicities of the approach.

- Work includes use of: mouse cells transduced with lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient in mice; recombinant or synthetic DNA/RNA (non-viral) in mice; and, lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient 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. Disis.
 - The Committee voted unanimously to approve the draft BUA for Dr. Disis.
- c. Froehner, Stanley, renewal, *Froehner Muscular Dystrophy Projects*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The research goal is to understand the causes of muscle disease and to develop therapies.
 - Work includes use of adeno-associated viral vectors (adenovirus free) and recombinant or synthetic DNA/RNA (non-viral) - enhanced gene delivery methods 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. Froehner.
 - The Committee voted unanimously to approve the draft BUA for Dr. Froehner.
- d. Fuller, Deborah, change, *Evaluation of SIV Co-Infection on ZIKV Pathogenesis in Pigtail Macaques*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab has been using SIVmac239M, which they recently realized is a recombinant virus. Because it was previously categorized as wild-type, it now falls under Section III-D and requires IBC review.
 - This change does not require a lab 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. Fuller.
 - The Committee voted unanimously to approve the draft BUA for Dr. Fuller.
- e. Kim, Jeansok, renewal, *Using molecular biological approaches to understand fear related behavior in predatory prey interactions*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The overall research goal is to investigate fear-related behaviors in ecological settings using molecular biological techniques to inhibit and stimulate neurons in specific brain fear circuits.
 - Work includes use of adeno-associated viral vectors (adenovirus free) and canine adenoviral vector 2 in rats and 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. Kim.
 - The Committee voted unanimously to approve the draft BUA for Dr. Kim.

- f. Ladiges, Warren, renewal, *Xenograft Program*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The goal of this project renewal is to provide a paradigm for investigation of human xenografts in mice, representing a variety of tissues.
 - Work includes use of lentiviral vectors, third generation, non-HIV pseudotyped, replication deficient 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. Ladiges.
 - The Committee voted unanimously to approve the draft BUA for Dr. Ladiges.
- g. Ladiges, Warren, new, *Gene Variant*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This research aims to generate mice with longevity associated gene variants and to perform functional assessments and cognitive, behavioral, and physiological assays.
 - Work includes use of adeno-associated viral vectors (adenovirus free), replication deficient foamy viral vectors, and recombinant or synthetic DNA/RNA (non-viral) in mice.
 - A successful lab inspection has been completed.
 - All of the required trainings have been completed.
 - The IACUC protocol has yet to be submitted and will require review.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Ladiges pending IACUC review.
 - The Committee voted unanimously to approve the draft BUA for Dr. Ladiges pending IACUC review.
- h. Pepper, Marion, new, *Understanding Mosquito Host-seeking behavior and Malaria Transmission*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This project seeks to understand how microbes, including symbiotic skin microbes and mosquito-borne pathogens, influence mosquito host-seeking behavior. The goal is to better understand how mosquito-borne diseases are transmitted, which could offer insight useful for the development of mosquito repellents and lures.
 - Work includes use of *Lasmodium berghei*, *Plasmodium chabaudii*, and *Plasmodium yoelii* in vitro and in mice.
 - A successful 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. Pepper pending completion of a successful lab inspection.
 - The Committee voted unanimously to approve the draft BUA for Dr. Pepper pending completion of a successful lab inspection.
- i. Scatena, Marta, renewal, *Endothelial cells for tissue engineering and osteoprotegerin in atherosclerosis*

- The assigned IBC Primary Reviewer presented the Primary Review.
 - The overall research goal is to create a cell therapeutic aimed at improving inflammatory and fibrotic response that characterizes a variety of inflammatory/fibrotic diseases.
 - Work includes use of mouse cells transduced with lentiviral vectors, third generation, non-HIV pseudotyped in mice and gammaretroviral vectors, replication deficient, ecotropic in vitro.
 - A successful lab inspection has been completed.
 - All of the required trainings have been completed.
 - The IACUC protocol has yet to be submitted and will require review.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Scatena pending IACUC review.
 - The Committee voted unanimously to approve the draft BUA for Dr. Scatena pending IACUC review.
- j. Theriot, Julie, renewal, *Advances in cellular motility*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies cell motility and determinants of cell shape, including the mechanisms of pathogen manipulation of these processes.
 - Work includes breeding, creation, and/or use of transgenic Zebrafish as well as use of *Listeria monocytogenes*, *Candida albicans*, and *Staphylococcus aureus* 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. Theriot.
 - The Committee voted unanimously to approve the draft BUA for Dr. Theriot.
- k. Van Gelder, Russell, renewal, *Biome Representational in Silico Karyotyping (BRISK), Immune responses to mycobacterial antigens in Uveitis (ELISPOT), cell and tissue culture, characterization of rabbit model of intraocular inflammation and retinal degeneration, the study of circadian properties of mouse retinal and SCN, NDC of the optical control of biological function*
- The assigned IBC Primary Reviewer presented the Primary Review.
 - This laboratory is interested in the mechanisms of eye inflammation (Uveitis) including novel pathogens and how eyes see light to study ways to treat blindness. They use transgenic rabbits and mice as well as human and NHP eye tissues to study specific vision-related genes.
 - 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. Van Gelder.
 - The Committee voted unanimously to approve the draft BUA for Dr. Van Gelder.
- l. Wong, Rachel, renewal, *Development of the retina (fish)*
- The assigned IBC Primary Reviewer presented the Primary Review.

- This lab studies the mechanisms of neural circuits in the retina. The research focus is to understand the mechanisms underlying the assembly of neural circuits in the retina during normal development and in regeneration after damage.
- Work includes use of transgenic Zebrafish. No additional fish will be constructed. Only transgenic fish that are currently in the colony will be utilized.
- A successful 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. Wong pending completion of a successful lab inspection.
- The Committee voted unanimously to approve the draft BUA for Dr. Wong pending completion of a successful lab inspection.

8. SUBCOMMITTEE REPORTS:

- m. Ladiges, Warren, change, *Alzheimer's Disease Intervention*
- Five members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
 - This BUA change adds work with SARS-CoV-2 in mice in the SLU 3.1 BSL3/ABSL3 Facility.
 - The draft BUA letter was shown.
 - A member made a motion to approve the draft BUA letter for Dr. Ladiges. Another member seconded the motion.
 - The Committee voted unanimously to approve the draft BUA for Dr. Ladiges.
- n. Wald, Anna, change, *A Phase 1 Trial to Evaluate the Safety, Immunogenicity, and Reactogenicity of Heterologous and Homologous Chimpanzee Adenovirus and Self-Amplifying mRNA Prime-Boost Prophylactic Vaccines Against SARS-CoV-2 in Healthy Adults*
- Two members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
 - This is an amended version of the BUA application approved on April 21, 2021 reflecting addition of Investigator's Brochures for two vaccine compositions of materials called GRT-909 and GRT-910.
 - The draft BUA letter was shown.
 - A member made a motion to approve the draft BUA letter for Dr. Wald. Another member seconded the motion.
 - The Committee voted to approve the draft BUA for Dr. Wald. There was one voting abstention.
- o. Biosafety Manual Updates
- Biosafety Manual updates were presented to the committee. Before changes are voted on and incorporated into the document there will be further subcommittee review.

10. FOR YOUR INFORMATION:

- **NIH Incident Reports:**
 - A veterinary technician had a splash of macaque blood in the eye after a seroma on the macaque's head burst against a squeeze bar. The macaque had been inoculated with adeno-associated viral vector, adenovirus free and replication

incompetent. The virus carries fluorescent reporters, BSL-1. The tech flushed the eyes for fifteen minutes and contacted the veterinarian on call. The tech went to the Emergency Department as required by protocol for follow-up for potential exposure to macaque body fluids which could carry Macacine alphaherpevirus 1(B virus). This incident has been reported and is awaiting response from NIH.

- A student cutting duodenum tissue from a wild type Zika virus and recombinant SIV-infected macaque cut their finger when the scalpel blade slipped across the tissue. The student immediately washed and scrubbed the site of the exposure for 15 minutes with a NHP scrub kit, which contains a surgical scrub brush with disinfectant. The student went to the Emergency Department as required by the protocol for follow up, was prescribed post exposure prophylaxis, and is being monitored by the University Employee Health Center. This incident has been reported and is awaiting response from NIH.
- **Amplicon Contamination:** A lab staff working with PCR product from COVID-19 tests ended up testing positive as a result of amplicon contamination from their work. EH&S provided recommendations to the lab and will provide guidance to all labs regarding workflow, PPE changes, decontamination, etc.
- **CDC Inspection:** The committee was briefed on a successful CDC inspection that recently took place of UW's BSL-3 facility and work.

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

12. MEETING ADJOURNED AT APPROXIMATELY 12:11 P.M.