



INSTITUTIONAL BIOSAFETY COMMITTEE

UNIVERSITY *of* WASHINGTON

Meeting Minutes

Date: Wednesday, July 15, 2015

Time: 10:00 AM – 12:00 PM

Location: Foegen N 130A

- Members Present:**
1. Lesley Colby, Comparative Medicine (*Animal Containment Expert*)
 2. Elizabeth Corwin (*Human Gene Transfer Expert; IBC Vice Chair*)
 3. William Glover, Washington State Public Health Laboratories (*Community Member*)
 4. Jean Haulman, UW Travel Clinic
 5. David Koelle, Allergy and Infectious Diseases
 6. Stephen Libby, Laboratory Medicine (*IBC Chair*)
 7. Scott Meschke, Environmental & Occupational Health Sciences
 8. Jeanot Muster, Pharmacology
 9. Matthew R. Parsek, Microbiology
 10. Eric Stefansson, Environmental Health & Safety (*Biosafety Officer*)
 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 10:05 am. 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. **MEMBERSHIP UPDATES**
 - Two members have left the committee. One person retired from the university and one person elected not to renew her membership term.
 - Recruiting efforts are underway. It is likely that one person from the Microbiology department and one person associated with the Washington National Primate Research Center will be joining the committee.
4. **APPROVAL OF MINUTES:**
 - The IBC Chair sought a motion to approve the minutes from the June 17, 2015 minutes meeting.
 - A member made a motion to approve the June 17, 2015 minutes. Another member seconded the motion.
 - The committee voted unanimously to approve the June 17, 2015 meeting minutes.
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. Clark, an established investigator, received a new BUA letter for work with human cells and human blood.
 - Dr. Coombs added human papillomavirus to his approval.
 - Dr. Thummel and Dr. Gale each added a new room.
 - Dr. Montine added human and non-human primate source material in two new rooms.
 - Dr. Katze added new sterile RNA to his approval.
 - Dr. Bamshad renewed a BUA involving human source material.
 - Dr. Patton received a new BUA involving *Staphylococcus aureus* used in macaques.
 - Dr. Maggio-Price added the use of lab-adapted attenuated rhesus rotavirus both in-vitro and in mice.
 - Dr. Stamatoyannopoulos added new non-oncogenic gene inserts for use in previously approved third generation lentiviral vectors.
 - Dr. Brayman received a new BUA involving risk group 2 agents, including *Pseudomonas aeruginosa* and *Staphylococcus aureus*, for use in vitro and in rabbits.
 - Dr. Klevit added the use of human source material and a new room.
 - Dr. Dunham renewed a BUA involving many risk group 1 organisms, including *Bacillus subtilis* and *Burkholderia thailandensis*, used in vitro.
 - The IBC Chair sought 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, with one abstention, voted to approve this month's Biosafety Officer Report.

6. INDIVIDUAL PROJECT REVIEWS

1. Crisa, Laura, renewal, *Immunobiology of bone marrow-derived endothelia and inflammatory cells in tissue repair*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies the cellular and molecular mechanisms by which vascular endothelial cells of different origin influence immune responses as well as regenerative events.
 - Biohazardous agents used on this project include lentiviral vectors, gammaretroviral vectors, and adeno-associated viral vectors.
 - The draft BUA letter was shown.
 - The training has been completed, and the lab has recently been inspected.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Crisa.
 - The Committee voted unanimously to approve the draft BUA for Dr. Crisa.
2. Gale, Michael, change, *The Host Response to Virus Infection*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The investigator wants to add Enterovirus A for use in transgenic mice. He is already approved to use this agent in vitro.
 - The draft BUA letter was shown.
 - A discussion occurred regarding the containment level and the wording on the front page of the BUA letter. Enterovirus A requires a minimum of BSL-2 containment, but Dr. Gale prefers to perform the work in his existing BSL-2 with BSL-3 practices lab suite. A member commented that the wording on the front page of the BUA letter may imply that BSL-2 with BSL-3 practices containment is required. The biosafety officer will revise the wording.
 - The training has been completed, and the lab has recently been inspected.
 - 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, contingent upon revising the wording on the front page of the BUA letter.
3. Gale, Michael, change, *The Host Response to Virus Infection*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The investigator wishes to start working with a new influenza virus. This is one of the same influenza viruses that was approved on the Fuller protocol several months ago. The committee decided to require ABSL-3 containment for the Fuller influenza work, but this project differs in that no serial passaging of virus in mice will occur. ABSL-2 with ABSL-3 practices containment will be used.
 - A discussion occurred regarding occupational health and vaccination requirements. A member wondered if animal husbandry staff should be offered an influenza vaccine. EH&S will consult with the Employee Health Center and report back next month.
 - The training has been completed, and the lab has recently been inspected.
 - 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, contingent upon verifying occupational health and vaccination requirements.
4. Hu, Shiu-Lok, change, *Glycan modification, CD4 independence, and Env Immunogenicity*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The investigator wants to add simian retrovirus (SRV) and vaccinia virus expressing SRV envelope proteins, for use both in vitro and in macaques.
 - The biosafety officer clarified that vaccinia virus has already been approved, but vaccinia virus expressing SRV envelope proteins is new.
 - The training has been completed, and the lab has recently been inspected.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Hu.
 - The Committee voted unanimously to approve the draft BUA for Dr. Hu.
 5. Maizels, Nancy, renewal, *Targeted Gene Correction and Sensitivity*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - This is a renewal. The overall goal of the research is to understand more about how nicks in DNA are repaired, and to modulate repair pathways to enhance sensitivity to chemotherapeutic drugs.
 - Biohazardous agents used on the project include third-generation lentiviral vectors and human cell lines.
 - The draft BUA letter was shown.
 - The training has been completed, but some lab inspection issues still need to be resolved.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Maizels.
 - The Committee voted unanimously to approve the draft BUA for Dr. Maizels, pending resolution of the lab inspection deficiencies.
 6. Mougous, Joseph, change, *Type VI secretion-dependent interbacterial interactions*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The investigator wants to add *Bacillus anthracis* strain Sterne 34F2.
 - The draft BUA letter was shown.
 - Section III-D and III-E should be checked on the BUA application.
 - The training has been completed, and the lab has recently been inspected.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Mougous.
 - The Committee voted unanimously to approve the draft BUA for Dr. Mougous.
 - A member pointed out that this strain of *Bacillus anthracis* (Sterne 34F2, an attenuated strain) has a plasmid that could potentially be mobilized into *Bacillus cereus*, which is also a species of bacteria approved in the Mougous lab. This mobilization event could influence the pathogenicity of *Bacillus cereus*, and cause an anthrax-like disease. The committee discussed this issue. The chances of this happening would be extremely low under normal laboratory settings in which the bacteria would be grown separately. The committee decided that EH&S should discuss the mobilization possibility with the Mougous lab and ensure that they do not work with *Bacillus anthracis* and *Bacillus cereus* at the same time. It is particularly important that they do not conduct competition experiments with *B. anthracis* and *B. cereus*.

- Post-Meeting Update: The Mougous lab has agreed to not perform any experiments where *B. cereus* and *B. anthracis* are cultured together.
7. Parrish, Jay, renewal, *Extrinsic signals required for maintenance of dendrite coverage*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies growth control of neurons in the model organism *drosophila*. Specifically, the lab investigates how growth of sensory neurons is coordinated with overall growth of the animal as a whole.
 - This is a renewal. Transgenic *drosophila* (fruit flies) are created and used.
 - The draft BUA letter was shown.
 - The training has been completed, and the lab has recently been inspected.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Parrish.
 - The Committee voted unanimously to approve the draft BUA for Dr. Parrish.
 8. Perkel, David, renewal, *Neural circuits for auditory and vocal processing*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - The lab studies neural circuits in songbirds to better understand neural mechanisms of auditory processing and motor skill learning.
 - Adeno-associated viral vectors and lentiviral vectors are used in zebra finches (a species of bird).
 - A discussion occurred regarding the biocontainment level. The vectors have been RCV (replication-competent virus) tested and the results were negative.
 - Tetanus toxin and diphtheria toxin are also used on this project.
 - The draft BUA letter was shown.
 - The lab inspection will occur tomorrow. Training has already been completed.
 - 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, pending the lab inspection.
 9. Strand, Stuart, renewal, *Phytoremediation: Transformation of Plants with Genes that are Capable to Degrade Pollutants*
 - The assigned IBC Primary Reviewer presented the Primary Review.
 - This is a renewal. The goal of the project is to genetically engineer several plant species to degrade various toxic soil contaminants, such as benzene and formaldehyde.
 - Various species of transgenic plants are used, such as *Arabidopsis thaliana* and *Nicotiana tabacum*. All of the plants used on this project are kept at BSL-1P containment. None of the target plant species are native to Washington, and none are invasive or noxious weeds. No field work occurs on this project.
 - Training has been completed. The lab has been inspected and some deficiencies are still in the process of being corrected.
 - The draft BUA letter was shown.
 - The IBC Primary Reviewer made a motion to approve the draft BUA for Dr. Strand.
 - The Committee voted unanimously to approve the draft BUA for Dr. Strand, pending resolution of the lab inspection deficiencies.

SUBCOMMITTEE REPORTS:

10. Becker, Pamela, renewal, *Gene Transfer for Patients with Fanconi Anemia Complementation Group A (FANCA)*
 - Three members of the IBC served as the Subcommittee Reviewers. One of the Subcommittee Reviewers presented the Subcommittee Report.
 - This is a renewal of a clinical trial. The objective is to develop hematopoietic stem cell gene therapy for patients with Fanconi anemia (FA). A lentiviral vector is used.
 - The study has been extended to pediatric populations. Previously participants were older than 18 years. Now, the study includes participants older than 4 years.
 - The draft BUA letter was shown.
 - The training has been completed.
 - A member made a motion to approve the draft BUA letter for Dr. Becker. Another member seconded the motion.
 - The Committee voted unanimously to approve the draft BUA for Dr. Becker.

11. Frevert, Charles, new, *Emerging Diseases/Q-fever: Detection and Transmission Risk*
 - Dr. Frevert has responded to the memo that was sent last month.
 - The SOP needs to be updated again. The biosafety officer will review the SOPs.
 - The committee asked for an estimate of how many samples are planned to be analyzed. Dr. Frevert estimates that 3,000 samples over four years will be used. After use, the samples will be discarded.
 - The draft BUA letter was shown.
 - *Coxiella burnetii* is listed at BSL-3, and *Coxiella burnetii* phase II (an avirulent strain) is listed at BSL-2.
 - Some members of the lab still need to complete the online biosafety training.
 - The draft BUA letter has been updated.
 - The Committee voted unanimously, with three abstentions, to approve the draft BUA for Dr. Frevert, contingent upon completion of training and revising the SOP.

ISSUES FROM THE FLOOR & PUBLIC COMMENTS:

There were no issues from the floor, and no public comments.

MEETING ADJOURNED AT APPROXIMATELY 11:35 a.m.