

## INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

December 7, 2016

3 PM, 410 Plant Biotechnology Building

MEMBERS PRESENT: Chair, Jun Lin; Vice Chair, Patti Coan; David Bemis, Tamara Chavez-Lindell, Al Iannacone, Doris D'Souza, Elizabeth Fozo, Reggie Millwood, Deidra Mountain, Jae Park

Ex-Officio –Linda Hamilton, Scott Moser, Brian Ranger, Jessica Woofter

MEMBERS ABSENT: Seung Baek, Paul Dalhaimer, Reza Hajimorad, Brittany Isabell, Melissa Kennedy, Ling Zhao

OTHERS PRESENT:

### Opening:

The meeting was called to order by the Chair, Jun Lin at 3:04 PM. The minutes of November 2, 2016 were reviewed and approved as written with two abstentions.

### IBC Applications:

#### #447 (Kania) Recombinant DNA Registration, III-E, New Registration

Dr. Kania's research involves the development of a new vaccine to prevent skin infections and other diseases caused by *Staphylococcal pseudintermedius*. The aim of this study is to produce inactive forms of the proteins and determine their immunogenicity and ability to produce a protective immune response in a mouse model. The genes in this study will be derived from clinical isolates of *Staphylococcus pseudintermedius* by PCR and/or synthetic genes will be obtained commercially. The later will be based on sequences from this organism and optimized for expression in *E. coli*. Genes from both sources are to be used. The genes will be cloned in and expressed in *E. coli* BL21 under control of the lac promoter. Recombinant protein will be isolated using HIS (nickel resin) affinity chromatography. Procedures will be conducted at Biosafety Level 2. The committee reviewed and approved the registration pending the addition of the IACUC number and confirmation that all insert genes have been listed. There was one abstention.

### Old Business:

#### Administrative Report

##### *i. Administrative Approvals*

Brian Ranger provided the Committee with the administrative report. Following up on November 2, 2016, IBC meeting, Dr. Nitin Jain's registration (#411-16) was correct administratively for minor typographical errors. Dr. Richard Gerhold's amendment to registration (#397-16) was approved administratively by the IBC Chair to include the addition of *Giardia lamblia*. The additional agent does not change the containment level of the CVM molecular parasitology lab (BSL-2). The agent will be used as a negative control for the ongoing studies with *Tritrichomonas foetus*. Dr. Barry Rouse's registration (#280-15) was updated administratively to include the transport of herpes simplex virus-infected mice to UTMCK GSM for FDG labeling and imaging (Dr. Jon Wall). The following provisions were applied:

- Animals are transported in closed primary caging with clean bedding (changed after the

7-day shedding period). Primary cages are to be labeled according to the hazcom policy. Cages are to be placed in a closed secondary container (capable of being cleaned/disinfected) for transport according to the IACUC transport SOP.

- Bedding management and carcass disposal are to follow Dr. Wall's FDG protocols (packaging as biowaste, freezer storage/decay as indicated by Radiation Safety, then submitted for incineration).

Dr. Bhavya Sharma's registration (#440) was administratively approved by the Biosafety Office for the use of brain tissues and CF from the NIH NeuroBioBank. The specimens will be subjected to Raman spectroscopy to try to determine the molecular basis of neurodegenerative diseases, particularly chronic traumatic encephalopathy (CTE).

*ii. Administrative Terminations*

There were no administrative terminations for this month.

*iii. Accidents, Injuries/Exposures:*

There was an environmental release of recombinant raccoon pox virus expressing rabies glycoprotein G. The release was reported to NIH and USDA Center for Veterinary Biologics and remedial actions have been established.

There was also one reported injury at the FAC Anthropology Research Facility. A student volunteer scraped stomach on wire caging used to cover decomposition sites while moving it. The caging was associated with soil near remains so individual followed appropriate BBP/injury response protocols and received first aid at UTMCK (tetanus and hepB vaccines up-to-date). BBP testing protocol was initiated per physician's discretion and antibiotics were prescribed as prophylaxis. This was a repeat incident by the same individual. Additional training and awareness was provided after prior incident. During the investigation, opportunities for eliminating the hazard were discussed. The following recommendations were made:

- Plan work to restrict the number of individuals in proximity to the area of the cage.
- If there are adjacent work sites that will potentially place others in danger of contact with the sharp edges of the cage, the cage must be moved to a remote location that eliminates the risk of contact.
- Re-engineer the cages to eliminate the presence of sharp edges and loose wires that present a puncture, scratch or abrasion hazard (e.g. tape edges, fold over to create a blunt edge, etc.).

*iv. Laboratory Report*

Linda Hamilton reported that 98 audits have been completed since April.

iMedRIS Update

Jessica Woofter notified the committee that the iMedRiS form had some minor changes. The first few training videos are complete and currently under review by the Memphis iMedRiS team. All active registrations are in the process of being loaded into the system and should be ready for review by early next week. Jessica will continue meeting with Patricia Paige from UT Memphis on a weekly basis to work on the routing procedures for the Biosafety Office and IBC Reviewers.

Refresher Training Updates

Linda reported that the training content is completed and is in the process of being loaded into Qualtrics.

### CDC Inspection for Jonsson Laboratories (December 13<sup>th</sup>)

Brian reminded the committee that the CDC will be onsite Tuesday, December 13<sup>th</sup> to inspect the BSL-3 laboratory per the CDC Import Permit Program. Preliminary information on the laboratory, biosafety plan, and proposed procedures have already been sent to the CDC field inspectors. An Introductory Meeting is scheduled for 9 am in the Plant Biotechnology Bldg., Room 410, and committee members were encouraged to attend. Brian will be doing smoke testing, and MicroClean will be conducting HEPA exhaust leak tests and BSC certifications on the Friday prior to the inspection. Reverification and testing of the lab space is scheduled to be completed soon (while lab is cold).

### **New Business:**

#### Incident Report: Environmental Release of Recombinant Raccoon Pox Virus-Vectored Vaccine

Brian notified the committee that he sent a letter to the NIH Office and USDA APHIS reporting the noncompliance issue relating to the environmental release of recombinant raccoon pox virus-vectored vaccine that was reported at last month's meeting (see above).

#### Joint IBC/IACUC Policy on Recombinant DNA Use in Veterinary Clinical Trials

Brian notified the committee that he will be working Dr. Lori Cole and the IACUC to establish a joint IBC/IACUC Policy concerning the use of rDNA in veterinary clinical trials. A draft will be submitted to the IBC for review and comment.

#### Mandatory Glove Use in BSL-2 Laboratories?

Brian notified the committee that there have been some issues regarding glove usage in Biosafety Level 2 labs. The committee decided that in BSL-2 labs, (at a minimum) gloves must be worn when: 1) there are obvious abrasion/wounds on the hand; 2) cleaning up spills ; and 3) there is lack of secondary containment for leaking specimens. All other applications should be at the discretion of the principal investigator. A draft will be submitted to the IBC for review and comment at next month's meeting.

#### Biosafety Training Program-Future Directions

Brian addressed the committee on suggestions for the Biosafety training program. Electronic training options were briefly discussed. The committee suggested continuing monthly class-based biosafety trainings for faculty, staff, and students, and a Fall (perhaps Spring) orientation training for incoming students and recent hires.

The meeting was adjourned at 4:25 PM. The next meeting is tentatively scheduled for January 18, 2017 starting at 3 pm.