

INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

December 20, 2017

3 PM, Plant Biotechnology Building, Room 410

MEMBERS PRESENT: Chair, David White; Vice Chair, Elizabeth Fozo; Marc Caldwell, Tamara Chavez-Lindell, Paul Dalhaimer, George Dizikes, Melissa Kennedy, Jun Lin, Jae Park, Ling Zhao

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

MEMBERS ABSENT: Lori Cole, Doris D'Souza, Reza Hajimorad, Brittany Isabell, Reggie Millwood, Deidra Mountain

OTHERS PRESENT: None

Opening:

The meeting was called to order by the Chair, Dr. David White at 3:06 PM. The minutes of November 15, 2017, were reviewed and approved as written. There were 4 abstentions.

IBC Applications:

#IBC-17-504-2 (Jun Lin) Recombinant DNA, Infectious Agent, III-D-2-a, New Registration

Dr. Lin discussed his proposed experiments involving colistin-resistant *E. coli* strains isolated from agricultural animals (swine). Studies will involve both *in vitro* and *in vivo* experiments to examine transmission, persistence and ecological fitness of *mcr-1* gene in response to non-colistin factors that present in agricultural ecosystems. Briefly, the gene will be subcloned into *E. coli* K-12 derivatives (e.g. DH5-alpha, MG1655, etc.) as well as BL-21 for molecular characterization. Conjugation experiments to determine natural exchange/transmissibility of the gene will also be conducted using *E. coli* MG1655 as a putative recipient strain. The committee approved the registration pending clarification of animal challenge procedures (oral gavage) and correction of typographical errors.

#IBC-17-505-2 (Becker, Jeffrey) Infectious Agents, New Registration

Dr. Becker's will be culturing several common gram-negative bacteria (*Pseudomonas aeruginosa*, *Proteus vulgaris*, and *Klebsiella pneumoniae*) to determine if they produce serine proteases. Briefly, bacteria will be grown on agar plates or in small-volume broth culture and harvested by bead beating (in a biosafety cabinet). Proteins will be extracted by standard protein separation methods, and serum proteases will be detected using specific antibodies (e.g. Western blot or ELISA). The committee approved the registration pending minor revisions of the technical and nontechnical summaries and the addition of an immune-compromised procedural statement to the Occupational Health surveillance section.

Old Business:

Administrative Report

i. Contingencies

Following up on November 15, 2017, IBC meeting, Dr. Jun Lin's registration (#05-265-2) was edited to remove the colistin-resistant *E. coli* and recombinant work with *mcr-1* gene. Dr. Steve Ripp's registration (#06-274-2) was edited to include human genes in the nontechnical summary and updates to the biosafety cabinet certification date. Dr. Eric Boder's registration (#10-330-2) was edited to remove Dougherty 103 for CEB415 teaching lab, which will now be managed under the Biosafety Office Teaching Lab framework. His registration was also updated to include autoclave validation and biosafety cabinet certification dates. Dr. Gladys Alexandre's registration (#08-334-1) was updated to include aims in the nontechnical summary, indicate culture volumes not exceeding 10 ml, and the autoclave validation dates.

ii. Administrative Approvals

Dr. Vermont Dia's registration (#15-429-2) 3-year renewal covering the use of human cell lines for assessing cellular responses to various nutritional compounds was administratively approved by the Biosafety Officer. Dr. Subimal Datta's amendment to registration #17-503-1 to include filter sterilization of the tetrodotoxin solution (1-2 ml filtered through syringe filter; syringe/filter soaked in bleach solution and discarded as routine waste) was administratively approved by the IBC Chair (no change in review category or laboratory biosafety level).

iii. Administrative Terminations

Dr. Mei-Zhen Cui's registration (#05-256-2) was administratively terminated on 12/13/2017 (all materials have been discarded as biowaste as per CVM procedures).

iv. Administrative Exemptions:

None.

v. Accidents, Injuries/Exposures:

None.

vi. Laboratory Report (Hamilton)

Linda Hamilton reported to the committee that she followed up with the Teaching lab in Dougherty 103 that the committee had asked to be removed from Dr. Boder's registration. That space will now be reviewed under the teaching lab framework. Relevant organisms supplied by Dr. Boder's lab will be included in the teaching lab documentation.

vii. iMedRIS Update, Manual Reviews, & System Orientation (Woofter)

Jessica Woofter gave the committee a brief refresher training on reviewing IBC registrations in iMedRIS.

Charter Revision Update

Brian notified the committee that charter by-laws and responsibilities have been submitted to Dr. Nobles and is pending guidance from UT General Counsel relative to committee non-disclosure agreements and member indemnification. Once General Counsel has advised, the core section of the charter will be completed. Linda has completed an SOP for escalation procedures and Brian is currently working on reporting procedures. Brian notified the committee that the charter and primary SOPs should be completed by March or April 2018.

Abandoned Equipment in WLS-Freezer Remediation

Brian notified the committee that he has been working with the department heads from Microbiology and Biochemistry & Cellular and Molecular Biology on cleaning/disposal of mold-contaminated freezers in the basement of Walters Life Sciences. Belfor, Inc., the state-contracted environmental remediation company, was used to remediate the contaminated equipment. The company set up isolation tents under negative pressure (HEPA-filtered) to protect the surrounding space. The remediation was completed in a day, and the equipment can now be sent to surplus. UTK Environmental Health & Safety collected pre- and post-remediation air samples to ensure that mold contamination was properly contained (results pending).

Mandatory Training Concern

Brian notified the committee that the principal investigator that initially refused to complete training has completed the training. The committee recommended sending a letter of concern to the department head so that he is aware of this and other previous infractions.

Peer Review with Clemson University - Findings

Brian provided a brief summary of the peer exchange findings for Clemson University.

New Business:

BSL-3 Closeout

Brian notified the committee that all BSL-3 viral stocks have been transferred or destroyed and all equipment has been cleaned and disinfected. Although the laboratory is vacant, the biosafety cabinets and HEPA exhaust filters were recertified in early December.

SEBSA Symposium in Knoxville

Brian notified the committee that SEBSA will be holding a symposium on May 3-4, 2018 in Knoxville.

The meeting was adjourned at 4:16 pm. The next meeting has been tentatively scheduled for January 17, 2018, at 3 pm in the Plant Biotechnology Building, Room 410.