

INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

March 26, 2020

2:30 PM, Zoom Meeting

MEMBERS PRESENT: IBC Chair - David White, Vice-Chair - Elizabeth Fozo, Lori Cole, Doris D'Souza, Reza Hajimorad, Melissa Kennedy, Jun Lin, Reggie Millwood, Deidra Mountain, Jae Park, Ling Zhao

Ex-Officio – Linda Hamilton, Ahmad Mitoubssi, Scott Moser, Sandra Prior, Brian Ranger, Jessica Woofter

MEMBERS ABSENT: Marc Caldwell, Paul Dalhaimer, George Dizikes, Brittany Isabell,

OTHERS PRESENT: None

Opening:

The IBC Vice-Chair called the meeting to order at 2:32 PM. The minutes of February 19, 2020, were reviewed and approved as written. There three abstentions.

Full Member Review IBC Registrations:

#IBC-05-207-1 (Reza Hajimorad) Infectious Agents & Recombinant DNA Registration, III-E-2-b-(2), 3- year rewrite

Dr. Hajimorad's research focuses on the molecular basis of the soybean mosaic virus (SMV) in a soybean model. Specifically, Dr. Hajimorad is investigating phenotypes of soybean plants infected with recombinant and/or chimeric SMV, how the virus induces natural plant defenses and movement of the virus within plant tissues. The latter is performed using β -glucuronidase-expressing SMV or clover yellow vein virus modified to express SMV genes transiently in soybean plants. Containment was set at BSL-1. The committee approved the registration pending clarification for the use of *Shewanella oneidensis* and Clover yellow virus vectors; the correction of typographical errors; and the addition of further clarification in the technical summary. There was one abstention.

#IBC-05-232-2 (Chunlei Su) Infectious Agents & Human Derived Materials Registration, 3-year rewrite

Dr. Chunlei Su's research covers the epidemiology and population genetics of *Toxoplasma gondii*. Procedures aim to identify gene expression networks that influence host resistances; determine the efficacy of *T. gondii* strains in acute and chronic infected mice, and investigate the consequences of co-infection and sequential infection of different genotypes of *T. gondii*. Containment was set at (A)BSL-2. The committee approved the registration pending the inclusion of the human foreskin cell line in the technical summary.

#IBC-14-416-2 (Qixin Zhong) Infectious Agent Registration, 3-year rewrite

Dr. Zhong's research involves determining the minimum inhibitory and minimum bactericidal concentrations of natural antimicrobials (essential oils, lysozyme, nisin, etc.) necessary to inhibit

or inactivate foodborne pathogens. The study will also cover the time-kill growth kinetics of pathogens in microbiological growth media and/or in food matrices such as fruit juices, milk, cheeses, and fresh produce containing antimicrobial compounds. Procedures involve growing small-scale cultures of *Escherichia coli*, *Salmonella enterica* (non-typhi), *Listeria monocytogenes*, *Staphylococcus aureus*, and *Bacillus subtilis*, exposure to natural antimicrobial compounds, and standard plating for enumeration. Containment and safety practices were set at BSL-2. The committee approved the registration pending clarification about whether nonpathogenic or pathogenic strains are being used (in particular whether or not MRSA is being used for *Staphylococcus aureus* and what strains are being used for *Escherichia coli*); clarification of volumes and procedures used in the technical summary; updates to the biosafety cabinet certification date; and clarification of whether signage will be posted outside the lab entry indicating risks to pregnant staff.

Designated Member Review IBC Registrations:

#IBC-20-541-2 (Deb Miller) Infectious Agents, New registration

Dr. Miller's research covers the study of the global amphibian population declines concerning fungal skin pathogens. Her research will challenge Eastern newts (*Notophthalmus viridescens*) with *Batrachochytrium salamandrivorans* (*Bsal*) and additional pathogenic bacteria such as *Aeromonas hydrophila* and the probiotic *Pseudomonas fluorescens*. Containment was set at BSL-2. The committee voted to approve the amended registration via designated review and was approved on 3/13/2020.

Old Business:

Administrative Report

i. Contingencies

Following up on February 19, 2020, IBC Meeting, Dr. McKee's registration (#16-443-1) was corrected to include an update to the biosafety cabinet certification date; indicating safety glasses will be used in Question 8.4; an update to the spill response; and an update to the medical waste contractor in Question 10.2. Dr. Kania's registration (#16-447-2) was corrected to include an additional entry indicating the use of *S. pseudintermedius* under hosts; an update of the most current IACUC protocols as well as clarification about animal work indicated in the Technical Summary; and an update to the spill response. Dr. Miller's registration (#20-541-2) was corrected to include clarification of which strains are pathogenic and probiotic in Question 5.1 and the Technical Summary; addition of background information regarding listed organisms in Question 6.1; clarification about pathogen preparation in regards to centrifugation and small volume resuspension in Question 6.3; correction of grammatical errors in Technical Summary; clarification of dosage and concentration of the fungal and bacterial organisms used in the Technical Summary; clarification about Ranavirus usage in the Technical Summary; addition of research lab location for benchwork in Question 8.1; and the addition of goggles for PPE in Question 8.4. Her registration was approved by DMR on 3/13/2020.

- ii. *Administrative Approvals*
Dr. Tessa Burch-Smith's registration (#12-375-1) was amended to include updates to personnel and grant information; addition of Dexamethasone inducible promoters; addition of the following insert genes: PA-GFP, TMV MP-GFP, Remorin-GFP, STM-GFP, GPI8-GFP, CMV3a, PVXMP, PSbMVMP, MP17-GFP, TGG1-GFP, Tobacco etch virus (TEV) Protease; addition of Potato virus Y, East African cassava mosaic Cameroon virus, and African cassava mosaic virus; and the addition of Hesler Biology Bldg., Room 217. The amendment was approved by the IBC Vice-Chair on 3/16/2020.
- iii. *Administrative Terminations*
Dr. Neal Stewart terminated his registration #14-419-1 on 3/23/2020. All recombinant constructs and transgenic plant stocks associated with the project will remain in secure storage in case they are needed in the future.
- iv. *Administrative Exemptions:*
None.
- v. *Accidents, Injuries/Exposures:*
None.
- vi. *Laboratory Report (Hamilton)*
None.
- vii. *iMedRIS Update, Manual Reviews, & System Orientation (Woofter)*
None

Mossman LAF Update

Dr. Cole gave the committee a brief update on the Mossman Lab Animal Facility move scheduled originally for April 1st. The IACUC noted several minor issues at their last inspection. The biosafety cabinets were certified by a company recommended by Brian from Chattanooga called Safety Plus. Dr. Tim Sparer arranged the appointment with Safety Plus and compared prices with Steris. The facility temperatures have leveled out and Terry Ledford, Director of Energy Management for Facilities Services, put forth every effort to correcting issues with Mossman. The current coronavirus pandemic is delaying the move in. However, a new facility manager was hired and will start on April 15th. The new hire, Rick Marble, is from Ferris State University in Michigan. When the university opens back up, the facility will have a manager in place for the move.

New Business:

Biosafety Cabinet Contractor

Brian notified the committee that they are still working with Procurement Services for a Request of Qualified Suppliers, which is a list of approved vendors that can be used at UT departmental discretion. He optimistically projects having a completed list by the next fiscal year.

Contingency Plans / EHS Safety Update

Linda provided the committee with a brief summary about the EOC's contingency plan for research laboratories on campus during the COVID-19 crisis. The EOC sent out a survey to the various campus research areas where they received 500 responses that created an initial contingency plan for going to curtailed or partial and/or complete cessation of research operations. Out of those responses, 180 research labs that indicated there was essential activities that needed to continue. The rest the responses indicated that they could cease research operations if called upon to do so. The EOC is currently refining that information that deems them essential. Nothing has currently changed for research operations. No long term projects can be currently started. The EOC will review the information next week and decide on further action at that time.

Onsite Systems Web Form

Jessica briefly showed the committee how the web form through Onsite Systems would work for Principal Investigators. The committee asked where we were in the process and Jessica notified the committee that EHS has not put in a formal RFP but are asking for pricing.

The meeting was adjourned at 3:42 PM. The next meeting scheduled for April 15, 2020 via Zoom.