

INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

September 22, 2017

2 PM, Plant Biotechnology Building, Room 410

MEMBERS PRESENT: Chair, David White; Vice Chair, Elizabeth Fozo; Marc Caldwell, Tamara Chavez-Lindell, Lori Cole, Doris D'Souza, George Dizikes, Reza Hajimorad, Brittany Isabell, Reginald Millwood, Jae Park, Ling Zhao

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

MEMBERS ABSENT: Paul Dalhaimer, Melissa Kennedy, Jun Lin, Deidra Mountain

OTHERS PRESENT:

Opening:

The meeting was called to order by the Chair, Dr. David White at 2:01 PM. The minutes of July 26, 2017 were reviewed and approved as written.

IBC Applications:

#IBC-17-503-1 (Datta Subimal) Acute Biological Toxin, New registration

Dr. Datta's research covers the study of the physiological and molecular mechanisms of stress induced sleep disorders. The central hypothesis of this proposal is that during non-rapid eye movement (NREM) sleep, activation of the preoptic area (POA) decreases anxiety by reducing activity in the amygdala. The ventrolateral preoptic area (VLPO) have the highest density of sleep active neurons. To fulfill this goal, Dr. Datta will temporarily as well as permanently lesion small areas within the preoptic area (POA). To create a temporary lesion, we are requesting the use of tetrodotoxin (TTX). The committee voted to table the registration pending clarifications of the LD50 section; total concentration and dilution amounts; disposal of excess; and PPE disinfection. The committee also asked for the revision of calculations listed in both summaries and the correction of typographical errors.

#IBC-17-450-2 (Cong Trinh) Recombinant DNA & Infectious Agents, III-D-1-a, New registration (revisit)

Dr. Trinh's registration proposes the development of a virulent pathogen resistance (ViPaRe) technology to inactivate pathogens using CRISPR genome editing. Briefly, the ViPaRe system expressing guide RNAs and heterologous Cas nuclease (especially when a target pathogen does not possess it) will be designed to specifically disrupt vital machinery of the pathogen (e.g. *Staphylococcus aureus*). The committee voted to accept as written pending minor clarification of needle recapping.

Old Business:

Administrative Report

i. Contingencies

Following up on July 26, 2017, IBC meeting, Dr. Albrecht von Arnim's registration (#05-240-1) was corrected to include minor clarifications of storage of transgenic seeds. Dr. Cong Trinh's registration (#11-364-1) was corrected to include a clarification of recombinant culture volumes and an update to Biosafety Cabinet certification dates. Dr. Trinh also confirmed that

the gene will be synthetic or obtained from purchased genetic constructs; viable *S. pyogenes* will not be handled in the lab.

ii. *Administrative Approvals*

Dr. Marc Caldwell's registration (#17-449-2) was administratively approved to move the culture location from VTH D118 to VTH A315. Zika virus will be propagated on tissue culture in a certified BSC in this location. Dr. Paul Dalhaimer's registration (#17-502-2) was administratively approved for the use of human cell lines and exempt recombinant constructs used exclusively *in vitro* (III-F-8/Appendix C-I) including a doxycycline-inducible lentiviral shRNA vector (neo-pLKO-Tet; procured from AddGene).

iii. *Administrative Terminations*

Dr. Shanfeng Wang's registration (13-407-2) was administratively terminated as he will no longer be with UT. All materials have been autoclaved.

iv. *Administrative Exemptions:*

None.

v. *Accidents, Injuries/Exposures:*

None.

vi. *Laboratory Report (Hamilton)*

None.

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

None.

Charter Revision Update

Dr. Liz Fozo addressed the committee with an update on the charter revisions. First stage draft of charter portion and second stage will involve SOPs and procedures. Committee will be asked to participate for relevant sections. Projects involving undergraduates are at the discretion of the IBC and should be addressed early on.

Zika Trial Update

Dr. Caldwell updated the committee about the status of his zika project. Currently, trial dates to move sheep are set for October 2, 2017 to identify sheep that are pregnant within the appropriate range. Dr. Cole will need to inspect the surgery prior to the start of the study. The committee recommended holding a town hall meeting and inviting Sandra Harbison with the legal office into the discussion.

FY17 Biosafety Program Annual Report

Brian notified the committee that the final version of the Biosafety Program Annual Report is available on the website.

Peer Review with Clemson-tentative Schedule

Brian updated the committee about the initiative to do a peer review with Clemson. They plan to go to Clemson in late October and then Clemson will be here in the spring of 2018. The goal of the peer review is to analyze program management elements and perform a best practices review.

New Business:

Necropsy Risk Reduction Strategies – Bob Donnell (Tentative)

Dr. Donnell was present to discuss the initiative to reduce risks within the necropsy department. Training for proper blade removal and change is currently in place. The committee suggested that Pam Jefferies should be included in the policy discussion to add additional features to the risk management form.

Proposed Undergraduate Project Involving High-risk Human Blood Samples

Brian notified the committee of a request for clinical samples from the regional health department for an undergraduate project. The project would include epidemiological diagnostic study of the samples obtained from the health department. The samples can be used for a wide range of studies beyond diagnostic testing, but would require IRB and IBC approval. The committee recommended that the sample request was not appropriate for an undergraduate level project.

2017 Refresher Training

Brian notified that the committee the Refresher training would be launched by the end of October.

The meeting was adjourned at 3:54 PM. The next meeting is tentatively scheduled for 3 pm on October 18, 2017 in the Plant Biotechnology Building, Room 410.