

INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

February 21, 2018

3 PM, Brehm Animal Science Bldg., Room 260

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, Melissa Kennedy, Reggie Millwood, Deidra Mountain, Ling Zhao

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

MEMBERS ABSENT: Paul Dalhaimer, Jun Lin, Jae H Park

OTHERS PRESENT: None

Opening:

The meeting was called to order by the Chair, Dr. David White at 3:01 PM. The minutes of December 20, 2017, were reviewed and approved as written with 6 abstentions.

IBC Applications:

#IBC-06-298-2 (D'Souza, Doris) Infectious Agents, 3-year rewrite

Dr. D'Souza was present to discuss her registration which covers methodologies for the detection and inactivation of multiple foodborne pathogen isolates, development of mitigation strategies to control microbes in ready-to-eat products, and methods to study stress responses and gene expression of various Risk Group 2 bacterial (e.g. EHEC, *Salmonella spp.*, *Listeria spp.*, *Shigella spp.*) and viral (e.g. noroviruses, caliciviruses, hepatitis A virus) pathogens. Containment was set at BSL-2. The committee approved the registration pending clarification of training dates for students; information about fecal samples collected from patients; autoclavable PPE; biosafety cabinet location; commercial transport of samples; and changing the classification of *E. coli* MG1655 to BSL1.

#IBC-12-375-1 (Burch-Smith, Tessa) Recombinant DNA, Infectious Agents, III-E-2-a, 3-year Rewrite

Dr. Tessa Burch-Smith's registration covers the study of plasmodesmata in plant cells. The study involves the Agrobacterium-mediated transformation of plants (*Nicotiana benthamiana* and *Arabidopsis thaliana*) with chloroplast genes involved in plasmodesmata formation/function tagged. The chloroplast genes will be fused to genes encoding various fluorescent markers (e.g. GFP, YFP) or affinity purification tags. Additionally, the lab is investigating how viral infection is affected by changes to chloroplast functions. Tobacco rattle virus (TRV) and/or Tobacco mosaic virus (TMV; wild-type and GFP-labeled recombinant) will be applied to wild-type or transgenic *N. benthamiana* plants. The movement of the TMV-GFP in infected leaves will then be monitored by UV light from a handheld light source. The committee approved the registration pending

clarification of two chloroplast-associated genes and revision of the spill response plan to remove biosafety cabinet spill management (N/A). Containment was set at BL-1 to include adherence to provisions set by the USDA APHIS BRS for transgenic TMV containment. The committee approved the registration pending clarification of whether Turnip Mosaic Virus (TuMV) is wild-type or an infectious clone; the addition of vector plasmids; clarification of host and insert genes; the addition of all viruses to section 7.1; and corrections to the Technical Summary information.

#IBC-16-447-2 (Kania, Stephen) Recombinant DNA, Infectious Agents, III-D-1-a, Amendment

Dr. Kania's research involves the development of a new vaccine to prevent skin infections and other diseases caused by *Staphylococcal pseudintermedius*. Dr. Kania's amendment included the addition of *Staphylococcal aureus* strains that are methylation deficient to facilitate the transfer and/or proliferation of the *S. pseudintermedius* for the purpose of inactivating and complementing genes that naturally occur in *S. pseudintermedius*. The committee approved the amendment as written pending correction of typographical errors.

#IBC-18-513-1 (Krishnan, Keerthi) Recombinant DNA, III-D-4-a, New Registration

Dr. Krishnan's research involves the study of brain plasticity in development and adulthood, in health and disease. She will be focusing on the Rett Syndrome, an Autism-associated disorder, using a mouse model to identify regions that are connected to each other by labeling the neurons with fluorescent reporters and manipulating the expression of molecules important for those connections using pharmacological agents or RNA knockdown constructs (shRNA). The committee tabled the registration pending clarification of AAV/CAV constructs as well as transgenic mouse lines.

Old Business:

Administrative Report

i. Contingencies

Following up on December 20, 2017, IBC meeting, Dr. Jun Lin's registration (#17-504-2) was edited to clarify that challenges would be by oral gavage. Dr. Jeffrey Becker's registration (#17-505-2) was revised to include study purpose and outcome measures (procedural details deferred to the technical summary).

ii. Administrative Approvals

Dr. Elizabeth Lennon's amendment to registration (#16-436-2) included the addition of human-derived materials (cell line from ATCC) and was administratively approved by the Biosafety Officer. Dr. Jeffrey Becker's amendment to registration (#17-505-2) included the addition of Use of human blood/plasma (source: Medic or Red Cross) to screen for serine proteases and was administratively approved by the Biosafety Officer. Dr. Heidi Goodrich-Blair's amendment to registration (#16-442-2) included the addition of *E. faecalis* injections into *M. sexta* and *G. mellonella* via Hamilton syringe. There were no changes in the review category or containment level and was administratively approved by the Biosafety Officer. Dr. Jun Lin's amendment to registration (#05-265-2) included the

addition of *Escherichia albertii*. There were no changes in review category or containment level and was administratively approved by the IBC Chair. Dr. Thomas Denes' amendment to registration (#16-444-2) included the addition of *Mannheimia haemolytica*, *Pasteurella multocida*, and *Haemophilus somnus*. There were no changes in review category or containment level and was administratively approved by the IBC Chair.

iii. *Administrative Terminations*

Dr. Rebecca Prosser's registration (#06-286-1) was administratively terminated 1/22/2018 (all materials destroyed as per toxin inactivation SOPs). Dr. Mei-Zhen Cui's registration (#07-309-2) was administratively terminated on 2/13/2018 (all materials either transferred to a new institution or have been destroyed).

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

Brian notified the committee that the SOPs are still being reviewed.

Biosafety Office Relocation

Brian notified the committee that the Biosafety Office has officially relocated to the UT Drive Services Bldg. A Room 134.

New Business:

Coverage of all labs working with recombinant and synthetic nucleic acids – building a condensed form of exempt materials

Brian notified the committee that the Biosafety Office is working on a form for tracking projects that are exempted from IBC review that would be maintained administratively.

The meeting was adjourned at 3:56 PM. The next meeting has been tentatively scheduled for March 21, 2018, at 3 pm in the Plant Biotechnology Building, Room 410.