

INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

October 20, 2021

3:00 PM, Zoom Meeting

MEMBERS PRESENT: Chair - Elizabeth Fozo, Vice Chair-Stephen Kania, Marc Caldwell, Feng Chen, Lori Cole, Lezlee Dice, George Dizikes, Doris D'Souza, Reza Hajimorad, Brittany Isabell, Jun Lin, Deidra Mountain, Ling Zhao

Ex-Officio – Bryan Cranmore, Ahmad Mitoubssi, Sandra Prior, Brian Ranger, Jessica Woofter

MEMBERS ABSENT: Paul Dalhaimer, Jae Park

OTHERS PRESENT: Sreekumari Rajeev, Yang Zhao

Opening:

The IBC Vice-Chair called the meeting to order at 3:00 PM. The minutes of August 18, 2021, were reviewed and approved as written.

Full Member Review IBC Registrations:

#IBC-05-265-2 (Jun Lin) Recombinant DNA (rDNA) & Infectious Agents, III-D-1-a; 4-b, Amendment

Dr. Lin was present to discuss the amendment of their registration to include four colistin-resistant strains of *Escherichia coli* provided by the CDC and ARBank. The registration mainly focuses on molecular mechanisms of bacterial pathogenesis and drug resistance, which would reveal potential targets for developing novel intervention strategies and diagnostic tools against the pathogens important in animal health, food safety, and public health. The Biosafety containment is set at BSL-2. The committee voted to approve the amendment pending updating the biosafety cabinet certification dates, goggle disinfection procedures, and clarification about procedures for inactivating the target gene in *E. coli* listed in item # 1 in the technical summary.

#IBC-21-571-2 (Sreekumari Rajeev) Infectious Agents & Nanoparticles, New registration

Dr. Rajeev was present to discuss their registration covering the study of Leptospirosis in a hamster model. The laboratory will study the various aspects of the bacteria, including epidemiology, biology, and disease, for diagnostic and vaccine development. The committee tabled the registration pending the addition of all research support staff; checking the "collecting environmental samples" box for Question 6.9; additional information about biosafety containment procedures and precautions for all three aims described in the Technical Summary; include biosafety cabinet certification dates and room numbers for the second biosafety cabinet listed; indicate how reusable PPE (lab coats, goggles, etc.) will be cleaned and disinfected after use; and the addition of the bleach dilution in Question 9.7.

#IBC-21-572-2 (Yang Zhao) Infectious Agents, New registration

Dr. Yang Zhao was present to discuss their registration covering the study of environmental microorganisms at commercial poultry farms and their transmission risk to ambient environments and other poultry farms. The study will focus on microorganisms of concern that include *E. coli*, *Campylobacter*, and *Salmonella*. The samples will be collected from the air inside poultry houses, litter and fresh manure, and surfaces (feeders, drinkers, fan cones, inlets, downwind road surfaces, etc.) in and out of poultry houses. Genetic methodology, e.g., PCR, may be applied to validate the microbial species. The Biosafety containment is set at BSL-2. The committee voted to approve the registration pending checking the "off-campus" box for Question 6.1, clarification under agent characteristics that these agents are not sampled directly from animals and the type of collected item, checking the "collecting environmental samples" box in Question 6.9, clarification of the concentration techniques under analysis, verifying that transported samples are not being collected outside of Tennessee and transported in a double enclosure, and the addition of gloves and disposable lab coats in the PPE list as well as the disinfection protocol for safety glasses/goggles.

Old Business:

Administrative Report

i. Contingencies

Following up on September 15, 2021, IBC Meeting, Dr. Ling Zhao's registration (#09-344-2) was amended to include a title change to "Fighting obesity and breast cancer with natural products and diet"; correction of a typographical error in non-technical summary; the addition of clarification about what is done with the breast cancer cell lines versus the obesity cell lines; and correction of a typographical error in the laundering procedures. Dr. Marc Caldwell's registration (#14-418-2) was amended to include an updated biosafety cabinet certification date and the last approved Animal Hazard Control Form (AHCF). Dr. Oudessa Kerro DeGo's registration (#15-430-2) was amended to include all students involved in the study; the addition of strains (i.e., *S. dysgalactiae*, *T. pyogenes*); checking question 7.1 to "Yes" to indicate IACUC work; clarification about challenge models listed; clarification about *Mycoplasma bovis* use; clarification about how samples are being processed; clarification about plating and high-risk procedures that could involve aerosol generation; identification of disinfectants used in the spill response; and the attachment of AHCFs for IACUC protocols and approval letter from the State Vet. Dr. Deidra Mountain's registration (#18-527-2) was amended to include the description of how listed human-derived materials are used; correction of typographical errors in the technical summary; clarification of saRNA; and the removal of the old autoclave date in the solid/non-sharp waste section.

ii. Administrative Approvals

Dr. Steven Ripp's registration (#06-274-2) was amended to include updates to grant information and the addition of vectors (rAAVOTp_NPY-phluorino with WRE) and approved by the Biosafety Officer on 10/27/2021. Dr. Madhu Dhar's 3rd-year renewal of their registration (#18-532-2) was approved by the Biosafety Officer on 10/15/2021 for the use of human fat-derived mesenchymal stem cells (MSCs) and immortalized commercially obtained cell lines (human embryonic kidney cells). The IBC Chair approved Dr. Rajan Lamichhane's

registration (#18-20-546-1) on 10/27/2021 to include an update to grant information, the addition of mammalian host, vectors psDNA3.1, promoters T7, insert genes Glucagon Receptor and Adenosine Receptor, the addition of HEK293 cell lines and an update to facility information.

iii. Administrative Terminations

Dr. Zong-Ming Cheng's registration (#06-296-1) was terminated on 10/20/2021. Dr. Stephen Kania's registration (#20-553-2) was terminated on 9/21/2021.

iv. Administrative Exemptions:

None.

v. Accidents, Injuries/Exposures:

None.

vi. Laboratory Report (Hamilton)

None.

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

None.

New Business:

Revised Protocols

The IBC Chair proposed the following: To help expedite approvals, the IBC member assigned a proposal, upon revision of that proposal, will be asked to examine corrections and recommend further changes or approval. This procedure enables the person most familiar with the proposal to weigh whether the requests are fully met. Also, if any questions arise as to what items need correcting (on the administrative side), the assigned reviewer will be requested to provide clarification. The committee established the following motions: "Approve as written"; "Approve pending administrative corrections"; "Approve pending designated member review (DMR)"; "Table"; "Defer"; and "Abstain." All registrations approved pending DMR will be referred to the assigned IBC member for further review and clarification. If the reviewer agrees with the changes, the registration will proceed with the normal approval process. Registration requiring only minor corrections can be approved pending administrative corrections.

IBC Form & Workflow

The IBC Chair notified the committee that the committee should expect iMedRIS to continue as the current registration management system and a replacement are not actively pursued. Brian Ranger suggested reworking the current IBC form to make expectations clearer to principal investigators. The IBC Chair will reach out to Sarah Pruett about the issues concerning iMedRIS.

The meeting adjourned at 4:38 PM. The next meeting scheduled is for November 17, 2021, via Zoom.