

INSTITUTIONAL BIOSAFETY COMMITTEE
IBC MEETING MINUTES
08-19-2025

MEMBERS PRESENT: JoEllyn McMillan - Chair, Pete Iwen – Vice Chair, Jim Kee, Jenna McKenzie, Jim Talmadge, Noel Johnson, Paul Davis, Jared Evans, Micah Scott, Vinai Thomas, and Sandipan Brahma.

NON-VOTING ALTERNATE MEMBERS PRESENT: Mackenzie Conrin, and Makayla Walker.

ADMINISTRATIVE STAFF PRESENT: Jackie Hollinger

GUESTS PRESENT: Stephen Asante-Adde, Deron Anderson

Dr. McMillan opened the meeting at 2:31pm.

A. Review and Acceptance of IBC Minutes

The IBC voted (11 in favor, 0 against, 0 abstention) to accept July 10, 2025 minutes.

B. Information, Education and Policy Items

- New IBC Protocol Form: Please send comments and suggestions for making changes.

C. Special Notification/Review

none

D. Incident and Event Reports Special Notification and/or Review Approved

none

E. IBC Initial Research Proposals and/or Previously Tabled

1) **IBC#:** 25-07-017-ABL2

PI: Liu, Zhenguo

Title: Studies on Inflammation and Diseases

Biohazardous Agents: *Escherichia coli* K-12, *Helicobacter pylori*, Human cell line/cells/tissues, Murine cell line, Murine primary cells, Lentiviral Vector, miRNA micro, Plasmid, siRNA

Applicable NIH Guidelines: III-D-1-a; III-D-2-a

Summary: This protocol describes studies to study various inflammatory responses in disease. *Helicobacter pylori* infection is used in a mouse model to induce inflammation. Lipopolysaccharide is used to induce inflammatory responses in cell culture systems.

Studies on mesenchymal stem cells and their response to inflammatory stimuli are also described. Genes involved in the inflammatory response are studied using lentiviral expression systems, plasmids, siRNA and miRNA expression.

Training: All training is complete.

Committee Recommendations: A lab inspection is needed before approval. The HGT section should not be included. Asked to select 'no' for question 9 in Section I.

Motion: Conditionally Approved

Vote Counts: 11-0-0

2) **IBC#:** 25-07-018-BL2

PI: Brinkworth, Amanda

Title: Establishment of *Treponema pallidum* colonization of organotypic skin and ectocervical tissues to investigate outer membrane proteins as potential vaccine targets

Biohazardous Agents: Human cell line/cells/tissues, *Oryctolagus cuniculus* (Rabbit) cells/tissues/cell lines, *Treponema pallidum*

Applicable NIH Guidelines: Exempt

Summary: This protocol is studying the infectivity of *Treponema pallidum* (TPA) using 3D organotypic skin and ectocervical models. The ability of recombinant proteins or TPA outer membrane protein blocking antibodies to prevent TPA binding to Sf1ep cells and prevent tissue colonization will be tested.

Training: All training is complete.

Committee Recommendations: Section II.2.A.2 for *Oryctolagus cuniculus* (Rabbit) Cells/Tissues/Cell Lines: The explanation provided for who is at additional risk is for TPA, not for the rabbit cells. Provide additional explanation or remove the current statement.

Motion: Conditionally Approved

Vote Counts: 11-0-0

F. IBC Change in Protocol

none

G. IBC Continuing Review Active Research

1) **IBC#:** 23-10-027-ABL2

PI: Al-Sadi, Rana

Title: Modulation of Intestinal Tight Junction Barrier

Biohazardous Agents: *Bifidobacterium bifidum*, Human cell line/cells/tissues, *Lactobacillus acidophilus*, *Lactobacillus plantarum*, *Lactobacillus rhamnosus* GG, CRISPR-Cas9, miRNA micro, siRNA

Applicable NIH Guidelines: Exempt

Summary: This protocol is studying intestinal epithelial cell tight junctions in health and disease states. The studies use Caco-2 cells as an in vitro model for the intestinal epithelium. Genes of interest in regulating the integrity of the tight junctions are modulated by siRNA, miRNA and CRISPR-Cas9 techniques. Pro-biotic bacteria are used to assess the integrity of the tight junctions in Caco-2 cells and in a mouse model.

Training: All training is complete.

Committee Recommendations: None

Motion: Approved

Vote Counts: 11-0-0

2) **IBC#:** 11-01-002-BL2

PI: Shcherbakova, Polina

Title: Lentiviral delivery of vectors for the purpose of expressing transgenes and shRNA in human cell lines.

Biohazardous Agents: Human cell line, Human cell line/cells/tissues, Lentiviral Vector

Applicable NIH Guidelines: III-D-1-a

Summary: This protocol is studying the impact of mutations in DNA polymerase on the rate of mutations in human cells/cell lines. Mutant DNA polymerases will be expressed or knocked down using lentiviral expression systems in human cell lines.

Training: All training is complete.

Committee Recommendations: A laboratory inspection is required. All human cells/cell lines should be designated as RG2. Remove references for RG1 human cell lines and add those cells to the human cell line/cells/tissues RG2 descriptions.

Motion: Conditionally approved

Vote Counts: 11-0-0

3) **IBC#:** 19-09-022-BL2

PI: Carabeo, Rey

Title: Investigating the cellular and molecular bases of *Chlamydia* invasion, intracellular growth, and regulatory responses to nutritional stress

Biohazardous Agents:, *Chlamydia trachomatis*, *Escherichia coli*, *Escherichia coli* K-12, Human cell line/cells/tissues, Murine cell line, Primary Human Cell Line, Vero cells (African Green Monkey kidney), *Yersinia pseudotuberculosis*, CRISPR-Cas9, Plasmid, siRNA

Applicable NIH Guidelines: Exempt

Summary: The primary biohazard in this protocol is the obligate intracellular pathogen *Chlamydia trachomatis*. Secondary biohazards include the various cell lines and tissue explants used to cultivate the pathogen, as well as *Yersinia pseudotuberculosis* for determining type III secretion effectors. CRISPR-Cas9 and siRNA are used to modulate host proteins of interest. The only change requested in the continuing review is in personnel.

Training: Training is complete.

Committee Recommendations: A laboratory inspection is required.

Motion: Approved

Vote Counts: 11-0-0

4) **IBC#:** 08-08-018-BL2

PI: Fletcher, Courtney

Title: AIDS Clinical Trials Group Network-Pharmacology Support Laboratory (IRB # 348-08-NH)

Biohazardous Agents: Human cell line/cells/tissues, Human immunodeficiency virus types 1 and 2 (not concentrated), *Mycobacterium tuberculosis*, SARS-CoV-2

Applicable NIH Guidelines: Exempt

Summary: This protocol describes the processing of blood and tissue specimens from HIV, TB or SARS-CoV-2--infected patients for analysis of therapeutic drug content

Training: All training is complete.

Committee Recommendations: A laboratory inspection is required. In the description of work, it is stated that "The organic layer may then be dried down in a fume hood." Add information about the methods/materials used to perform this, such that it is clear the biohazardous agents are no longer viable and are safe to handle in a fume hood.

Motion: Conditionally Approved
Vote Counts: 11-0-0

5) **IBC#:** 18-08-017-BL2

PI: Yelamanchili, Sowmya

Title: Drugs of abuse in Neurodegenerative disorders and Neurodevelopment disorders

Biohazardous Agents: Human cell line, Human cell line/cells/tissues, Human immunodeficiency virus types 1 and 2 (highly concentrated), Human immunodeficiency virus types 1 and 2 (not concentrated), Murine cell line, Primary Human Cell Line, miRNA micro, Plasmid

Applicable NIH Guidelines: III-D-1-a

Summary: This protocol is looking at HIV-associated neurodegenerative disorders and substance abuse drug interaction. Agents include multiple human and murine cells/tissues, plasmid based lentiviral vector, miRNA, and HIV.

Training: All training is complete.

Committee Recommendations: The protocol is on the old form, which is not a major concern, but a protocol re-write should occur when the new form becomes available. All Human cells and cell lines are RG2. Remove human cell lines RG1 and descriptions of RG1 cell lines; add these lines to the human cell/cell line/tissues RG2 descriptions. In one section hESCs are mentioned and in another section, fetal brain tissue microglial cells are mentioned. Need clarification if this refers to the same materials or if there are other hESCs in use. Identify all cell types in use, where they're sourced from, and what they're used for.

Motion: Conditionally Approved

Vote Counts: 11-0-0

6) **IBC#:** 17-02-004-ABL2

PI: Black, Jennifer

Title: Signal transduction in epithelial tissues and cancer

Biohazardous Agents: Adenoviral vectors, *Escherichia coli* K-12, Human cell line/cells/tissues, Murine cell line, Lentiviral Vector, oncogene, Plasmid, shRNA short hairpin, siRNA

Applicable NIH Guidelines: III-D-1-a, III-D-3-a

Summary: This protocol is studying the factors that regulate epithelial cell growth and homeostasis. Lentiviral and adenoviral vector expression systems, shRNA and plasmid expression systems are used to regulate expression of protein kinase C isoforms and examine PKC signaling in established cell lines and primary human cells.

Training: All training is complete.

Committee Recommendations: A laboratory inspection is required. In section I.3 – cross check with personnel on IACUC. Anyone handling these cells should be listed on this IBC. All human cells/cell lines are RG2 and should be handled using BSL2 practices. Remove references to established human cell lines being RG1 (Sections II.2.B and II.2.C). Change established human cell lines designation in section II.2.D for storage. Indicate that human cells are used in animals and answer the questions populated in Section III.

Motion: Conditionally Approved

Vote Counts: 11-0-0

There being no further business, Dr. McMillan adjourned the meeting at 3:35pm

Respectfully Submitted,



JoEllyn McMillan, PhD
Chair, IBC
JM

ADDENDUM
August 14, 2025
IBC REVIEW LETTER/EMAIL TO INVESTIGATORS

| <u>IBC #</u> | <u>Date of Letter/Email</u> |
|---------------------|------------------------------------|
| 25-07-017-ABL2 | 08/15/2025 |
| 25-07-018-BL2 | 08/15/2025 |
| 23-10-027-ABL2 | 08/15/2025 |
| 11-01-002-BL2 | 08/15/2025 |
| 19-09-022-BL2 | 08/15/2025 |
| 08-08-018-BL2 | 08/15/2025 |
| 18-08-017-BL2 | 08/15/2025 |
| 17-02-004-ABL2 | 08/15/2025 |