

**INSTITUTIONAL BIOSAFETY COMMITTEE
IBC MEETING MINUTES
June 11, 2026**

MEMBERS PRESENT: JoEllyn McMillan - Chair, Pete Iwen – Vice Chair, Jim Kee, Jenna McKenzie, Ryan Duden, Micah Scott, Mimi McCann, Jared Evans, Noel Johnson, and Paul Denton

NON-VOTING ALTERNATE MEMBERS PRESENT: Mackenzie Conrin, Patrick Wheeler

ADMINISTRATIVE STAFF PRESENT: Jackie Hollinger

GUESTS PRESENT: Stephen Asante-Adde

Dr. McMillan opened the meeting at 2:35pm.

A. Review and Acceptance of IBC Minutes

The IBC voted (10 in favor, 0 against, 0 abstention) to accept May 14, 2026 minutes.

B. Information, Education and Policy Items

- Demonstrated new ways to review and comment on protocols

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#: 26-05-010-Pending

PI: Fernando, Rohan

Title: Use of Epstein-Barr virus to immortalize human lymphocyte cells

Biohazardous Agents: Epstein Barr virus, Human cell line/cells/tissues

Applicable NIH Guidelines: Exempt

Summary: This protocol describes studies to isolate lymphocytes from blood of patients with chromosomal abnormalities and transform the cells into cell lines using Epstein Bar virus for use as a source of genetic material for positive controls. In addition, extracellular vesicles (EVs) will be isolated from blood collected from healthy volunteers to provide a baseline reference standard for EVs miRNA and mRNA. White blood cells will also be

isolated from blood collected from patients with Usher syndrome to develop Next Generation DNA sequencing methods for determining pathological variants of the disease.

Committee Recommendation: Schedule a laboratory safety inspection. In Section II, add a statement about how the viral stock is prepared. More information is needed on source/samples of human cells that are collected. Add information on the source of the EBV. Deselect "Risk Group 3 Agents: Minimum Safety Practices, BL2 practices, PLUS" and "Additional Safety Practices Risk Group 3."

Training: All training is complete and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

2) **IBC#:** 26-05-011-Pending

PI: Schober, Jared

Title: ResQ132EX-NMIBC: Expanded Access Use of Recombinant Bacillus Calmette-Guerin in Nonmuscle Invasive Bladder Cancer

Biohazardous Agents: *Mycobacterium bovis* (BCG vaccine strain)

Applicable NIH Guidelines: III-C-1

Summary: This protocol describes a clinical expanded access study to provide patients with non-muscle invasive bladder cancer with recombinant mycobacterium BCG (rMBCG).

Committee Recommendation: Section 1.9 - Upon further investigation, the IBC has determined that this study qualifies as human gene transfer per Section I-A-1-a of the NIH Guidelines for research involving recombinant or synthetic nucleic acid molecules. The genetic material within the rMBCG fits the NIH's definition of recombinant and synthetic nucleic acid per Section I-B of the guidelines.

Training: All training is complete and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

3) **IBC#:** 26-06-012-Pending

PI: Roy, Hemant

Title: 1) The Role of Environmental Toxicants and Colorectal Cancer: Unravelling the Genetic/Epigenetic Effects of Arsenic in Colon Carcinogenesis. 2) Stromal Antigen 1 Regulation of Programmed Death Ligand 1 (PD-L1): Putative Marker Immunotherapeutic Efficacy.

Biohazardous Agents: *Escherichia coli* K-12, Plasmid

Applicable NIH Guidelines: III-D-1-a

Summary: This protocol describes studies to investigate the mechanisms between arsenic exposure and risk of colon cancer. Specifically, the role of SA-1 will be studied by generating a stable knockdown/knockout cell model. shRNA directed against SA-1 will be introduced into human cells using a plasmid.

Committee Recommendation: Contact EHS to update chemical inventory and to specify locations. Confirm that an induced biosafety cabinet will be used.

Training: Two individuals need to complete training.

Motion: Conditionally Approved

Vote Counts: 10-0-0

4) **IBC#:** 26-06-013-Pending

PI: Zhang, Sicong

Title: Transcriptional and Epigenetic Mechanisms in Cancer Biology

Biohazardous Agents: *Escherichia coli* K-12, Human cell line/cells/tissues, Insect cell line, Murine cell line, CRISPR-Cas9, Lentiviral Vector, mRNA, Plasmid, Retroviral vector, shRNA short hairpin, siRNA

Applicable NIH Guidelines: III-D-1-a; III-D-2-a; III-D-4-a

Summary: This protocol describes studies to investigate and define the molecular mechanisms involved in oncogene transcription and cancer resistance to therapeutic agents. Human cancer cell lines and other mammalian cell lines are manipulated using various techniques including CRISPR/Cas9, lentiviral vectors, retroviral vectors, shRNA and siRNA.

Committee Recommendation: Schedule a laboratory inspection. Provide details on target genes and pathways.

Training: All training is complete and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

F. IBC Change in Protocol

5) IBC#: 26-04-009-ABL2

PI: Martin, Thomas

Title: Molecular Regulation of Physiological and Pathological Cardiac Remodeling

Biohazardous Agents: Adeno-associated virus, Adenoviral vectors, *Escherichia coli* K-12, Human cell line/cells/tissues, Murine cell line, Nonhuman Primate Cells (COS-7 African Green Monkey), Plasmid, siRNA

Applicable NIH Guidelines: III-D-1-A, III-D-3-A, II-D-4-A

Summary: This protocol describes studies to investigate the molecular mechanisms underlying cardiac remodeling. AAV, AV, siRNA and plasmids are used to modulate genes and proteins that can regulate this remodeling. Studies are conducted in human, monkey and mouse cells and in mice in vivo. This study was previously tabled at the May 2026 IBC meeting.

Committee Recommendation: Schedule a laboratory inspection. Section III.7, select “additional PPE” and note that personnel performing tail vein injections will use a face shield / goggles.

Training: All training is complete and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

6) IBC#: 10-09-025-ABL2

PI: Davis, Paul

Title: In vitro and in vivo evaluation of novel anti-parasitic compounds. Investigating Novel Chemotherapeutics Against the Parasite *Toxoplasma gondii*. Exploring the Antimicrobial Potential of Novel Neutrophil-enhancing Compounds NSRI-UNO-HHM402-004. Investigation of Novel Di-Aryl Urea Compounds Against the Parasite *Naegleria fowleri*. Evaluating Effects of Immune Components Against *Naegleria Fowleri* In Vitro. Investigating Marinopyrrole Derivatives Against the Parasite *Toxoplasma gondii*. Evaluating anti-parasitic agents in vivo

Biohazardous Agents: *Escherichia coli* K-12, Human cell line/cells/tissues, *Leishmania* species, Murine cell line, *Naegleria fowleri*, *Naegleria lovaniensis*, Primary Human Cell Line, *Toxoplasma gondii*, Plasmid

Applicable NIH Guidelines: Exempt

Summary: This is a protocol that involves evaluating interventions for *Naegleria fowleri* (RG2) and *Naegleria lovaniensis* (RG1). infection as well as for other parasitic infections. One aspect of the project is to develop an animal model of the human brain disease associated with *Naegleria sp.* infections. This protocol includes animal use which is a major part of the change request. Previously, the animals to be used were mice only. In the revised protocol, "Marmosets will be infected intranasally under anesthesia, with face shield and N95 respirator (or PAPR) added to standard PPE."

Committee Recommendation: Include details on shedding and urine analysis after infection. Add additional personnel involved in this project.

Training: All training is completed and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

G. IBC Continuing Review Active Research

7) IBC#: 23-05-013-BL2

PI: Brinkworth, Amanda

Title: Propagation and purification of *Rickettsial* species for use in cell culture and tick transmission assays

Biohazardous Agents: Human cell line/cells/tissues, primary human cell line, *Rickettsia montanensis*, *Rickettsia parkerii*, Vero cells (African Green Monkey kidney)

Applicable NIH Guidelines: Exempt

Summary: This protocol uses nonpathogenic (*R. montanensis*) and low virulence (*R. parkerii*) rickettsial species that have infected nymph ticks that then feed on a 3D organotypic human skin model to screen antibiotics and antibiotic delivery methods. How to maintain cultures of the Rickettsia species, how to infect, and to handle ticks is described in IBC #21-09-2025-BL2.

Committee Recommendation: In section II.2, Specify HUVEC, HaCat, Dermal fibroblasts, and human RBCs instead of generic "human cell" In section II.2.D, Add storage sites for Vero Cells and for ticks.

Training: All training is completed and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

8) IBC#: 07-12-029-ABL2

PI: Band, Hamid

Title: 1) Tyrosine kinase regulation via protein degradation 2) Role of EHD proteins in endocytic recycling 3) Effects of Cbl/Cbl-b Deletion on Tumor Killing 4) Role of EHD 1 and 2 in Cancer 5) Targeting a novel EHD2-SOCE pro-metastatic axis in TNBC

Biohazardous Agents: Adenoviral vectors, *Escherichia coli* K-12, Human cell line/cells/tissues, Murine cell line, Lentiviral Vector

Applicable NIH Guidelines: III-D-1-a, III-D-2-a, III-D-3-a

Summary: Study involves use of lenti- and adenoviral vectors to express various genes and shRNA in *E. coli*, human and murine cells. Change Request included personnel, IACUC numbers, and animal inoculation methods (intra-tibial).

Committee Recommendation: Schedule a laboratory inspection before December 2026. In Section II, specify the isolated cell types from the murine cells. Include a brief purpose of study in the description of work. Update cell line lists to include any new cell lines being used. Update Section II.2.C on adenoviral vectors. Update Section II.4.A if other disinfectants are used aside from iodine. Add cell line MDA-MB-157.

Training: All training is completed and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

9) **IBC#:** 23-11-029-BL2

PI: Viswanathan, Saraswathi

Title: Application of Viral Vectors in Metabolic and Alcohol Use Disorder Studies

Biohazardous Agents: Murine cell line, Human cell line/cells/tissues, Lentiviral vector

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

Summary: This protocol describes studies to investigate the role of genes such as Txa2r (encoding for thromboxane-prostanoid receptor or TPR). Solute Carrier Family 15, Member 3 (Slc15a3), and Superoxide dismutase 1 (Sod1) in altering metabolism, inflammation, and oxidative stress. Culture mouse, human, and other mammalian species cells are used. These genes will be overexpressed and silenced in cultured human cells using lentiviral expression vectors.

Committee Recommendation: Provide additional details about the particles sourced from Origene. Provide information about the other mammalian cells mentioned in the description of work. Add rat cells to the list of biohazardous agents. Describe the collection and source of frozen human plasma and tissues being shipped. Contact EHS and Export control to ensure all necessary shipping agreements are in place.

Training: All training is completed and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

10) **IBC#:** 15-08-019-ABL2

PI: Bhakat, Kishor

Title: Role of APE1 Acetylation in Tumorigenesis and Development

Biohazardous Agents: Human cell line/cells/tissues, Lentiviral Vector, Plasmid, shRNA short hairpin

Applicable NIH Guidelines: III-D-1-a, III-D-3-a, III-D-4-a

Summary: This study investigates the role of the DNA repair protein APE1 in the growth and metastasis of triple-negative breast cancer. Lentiviral vectors will be used to create breast cancer cell lines with reduced APE1 expression and luciferase labeling, allowing tumor growth to be monitored in mouse models.

Committee Recommendation: Section II.1, In the description of work, update so that the current work is clear. Please clarify the experiment numbers mentioned (1a, 1b, 1b.1, 1b.2, etc). Update Section III, animal use section, as needed.

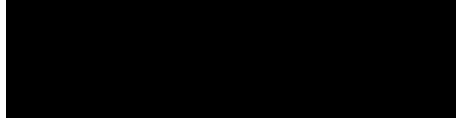
Training: All training is completed and up to date.

Motion: Conditionally Approved

Vote Counts: 10-0-0

There being no further business, Dr. McMillan adjourned the meeting at 3:15pm

Respectfully Submitted,



JoEllyn McMillan, PhD
Chair, IBC
JM

ADDENDUM
June 11, 2026
IBC REVIEW LETTER/EMAIL TO INVESTIGATORS

<u>IBC #</u>	<u>Date of Letter/Email</u>
26-05-010-Pending	06/12/2026
26-05-011-Pending	06/12/2026
26-06-012-Pending	06/12/2026
26-06-013-Pending	06/12/2026
26-04-009-ABL2	06/12/2026
26-04-009-ABL2	06/12/2026
10-09-025-ABL2	06/12/2026
23-05-013-BL2	06/12/2026
07-12-029-ABL2	06/12/2026
23-11-029-BL2	06/12/2026
15-09-019-ABL2	06/12/2026