

**INSTITUTIONAL BIOSAFETY COMMITTEE
IBC MEETING MINUTES
September 11, 2025**

MEMBERS PRESENT: JoEllyn McMillan - Chair, Pete Iwen – Vice Chair, Jim Kee, Jenna McKenzie, Noel Johnson, Micah Schott, Vinai Thomas, and Paul Denton

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

ADMINISTRATIVE STAFF PRESENT: Jackie Hollinger

GUESTS PRESENT: Stephen Asante-Adde, Desmond Amponsah, Eric Bradley

Dr. McMillan opened the meeting at 2:30pm.

A. Review and Acceptance of IBC Minutes

The IBC voted (8 in favor, 0 against, 0 abstention) to accept August 14, 2025 minutes.

B. Information, Education and Policy Items

- New member: Eric Bradley (Douglas County Health Department)
- PI Signature. IBC agreed to keep the policy that only the PI may sign the IBC form. (Not contacts or secondary investigators)
- Closing approval expired protocols: Two reminder emails after expiration, then send an email to the PI's chair notifying of protocol closure (10 days to respond).

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

none

F. IBC Change in Protocol

1) IBC#: 24-04-009-ABL2

PI: da Silva Augusto, Leonardo

Title: Cell Biology of host-pathogen interactions of *Toxoplasma gondii*

Biohazardous Agents: *Coxiella burnetii* Nine Mile Phase II (avirulent), CRISPR System Lentivirus-based, *Escherichia coli* K-12, Human cell line/cells/tissues, Murine cell line, *Toxoplasma gondii*, Vero cells (African Green Monkey kidney), CRISPR-Cas9, Lentiviral vector, Plasmid, shRNA short hairpin, siRNA, siRNA small interfering

Applicable NIH Guidelines: III-D-1-a

Summary: Amending the current approved protocol to include the use of *Plasmodium berghei* and *P. yoelii* in mice. Under the existing protocol, all experiments involve in vitro and in vivo infection models using *Toxoplasma gondii*. New work will not involve culture.

Committee Recommendation: *Plasmodium yoelii* is listed in this IBC protocol as being used in animals in IACUC 21-064, however- this species of *Plasmodium* is not accounted for in that IACUC. Please amend either the IBC or IACUC protocol so that the use of *Plasmodium yoelii* is accurately described.

Training: All training is completed and up-to-date.

Motion: Conditionally approved

Vote Counts: 8-0-0

G. IBC Continuing Review Active Research

1) IBC#: 12-05-008-BL2

PI: Fletcher, Courtney

Title: Measurement of HIV drugs and metabolites in non-human primate samples

Biohazardous Agents: Macaque NHP cells/tissue, Simian/Human Immunodeficiency Virus (SHIV)

Applicable NIH Guidelines: Exempt

Summary: This is an ongoing protocol to measure concentrations of anti-HIV drugs and drug metabolites in plasma and tissue samples from non-human primates (NHP). Cell lysates/frozen tissues are obtained from external collaboration – AIDS Program at NCI Frederick, MD, and the Oregon Health Sciences Center.

Committee Recommendation: A BSL2 laboratory inspection is due.

Training: Two personnel need to complete training before approval.

Motion: Conditionally Approved

Vote Counts: 8-0-0

2) IBC#: 18-11-024-ABL2

PI: Mammen, Joshua

Title: Development and Application of a Porcine Model of Pancreatic Cancer

Biohazardous Agents: Adenoviral vectors, Human cell line/cells/tissues, Porcine cells/tissues, CRISPR-Cas9, Lentiviral Vector

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

Summary: Carlson protocol being moved under Mammen and Hollingsworth. Protocol does not have general laboratory spaces listed, only animal locations. Description of work indicates work happens at the VA.

Committee Recommendation: The information within this protocol does not appear to reflect what work that may be occurring. This protocol will be terminated in 60 days from the time of this notice. PI is requested to submit a new IBC protocol with up-to-date information on what work is occurring. Concerns noted: The IBC understands that this animal work no longer occurs at the VA, but the VA is mentioned several times in Section II. Laboratory locations include animal rooms but no general laboratory locations. It is unclear where lab work is being performed. The IACUC protocols that are referenced are either terminated or do not cover swine.

Training: Training is completed and up-to-date.

Motion: Tabled

Vote Counts: 8-0-0

3) **IBC#:** 22-03-008-BL2

PI: Broadhurst, Jana

Title: Emerging Pathogens Laboratory; Use of the BioFire FilmArray Warrior, Sentinel, and Global Fever panels

Biohazardous Agents: *Bacillus anthracis* avirulent; *Coxiella burnetii* Nine Mile Phase II (avirulent); Ebola virus RNA, extracted genomic; *Francisella tularensis* DNA, extracted genomic; Marburg virus, gamma irradiated; *Yersinia pestis*.

Applicable NIH Guidelines: Exempt

Summary: This protocol is to verify the BioFire Warrior Panel diagnostic test, a nucleic acid-based test for *Bacillus anthracis*, *Yersinia pestis*, *Francisella tularensis*, *Coxiella burnetii*, Ebola, and Marburg virus directly from human whole blood or sputum samples.

Committee Recommendation: No recommendations, approve.

Training: Training is completed and up-to-date.

Motion: Approved

Vote Counts: 8-0-0

4) **IBC#:** 22-03-007-ABL2

PI: Schott, Micah

Title: Generation of stable mammalian cells using viral-based gene delivery.

Biohazardous Agents: CRISPR System Lentivirus-based, 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: The group is making stable expressing cell lines using lentiviral expression and CRISPR-Cas9 lentiviral systems to investigate autophagic, cell signaling, and endosomal trafficking pathways that regulate the breakdown of lipid droplets in hepatocytes. HEK293T cells are used for lentiviral expression of plasmids. HepG2 cells are used as surrogates for hepatocytes.

Committee Recommendation: Asked to schedule a BSL2 laboratory inspection. Review personnel on this protocol and IACUC protocol. Any personnel performing hydrodynamic tail vein injections should be added to this IBC. Based on the description in Section II, it appears that viral cultures will be used for transduction of cell lines. Please indicate the highest expected viral titers and briefly describe steps that will be taken to reduce aerosol generation during culture and handling. This is especially important if the viral vectors are designed to express oncogenes.

Training: All training is completed and up-to-date.

Motion: Conditionally Approved

Vote Counts: 7-0-0

5) **IBC#:** 10-09-025-ABL2

PI: Davis, Paul

Title: (1) In vitro and in vivo evaluation of novel anti-parasitic compounds, (2) Investigating Novel Chemotherapeutics Against the Parasite *Toxoplasma gondii*, (3) Exploring the Antimicrobial Potential of Novel Neutrophil-enhancing Compounds, (4) NSRI-UNO-HHM402-004.

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: III-D-2-a

Summary: This is a continuing review of a long-standing protocol. The only changes requested with the continuing review are to the personnel. International shipping of biohazards is included - with an appropriate plan in place to ensure compliance with regulations.

Committee Recommendation: Contact and work with Mimi McCann and Dr. Rick Starlin to review exposure response information.

Training: Training is completed and up-to-date.

Motion: Conditionally approved

Vote Counts: 8-0-0

6) **IBC#:** 24-09-030-ABL2

PI: Dash, Prasanta

Title: Exploring the Molecular, neuro-immune and behavioral and cellular changes during HIV-1 associated aging.

Biohazardous Agents: Human immunodeficiency virus types 1 and 2 (not concentrated)

Applicable NIH Guidelines: Exempt

Summary: This group would like to identify brain metabolic and axonal changes associated with accelerated aging of the CNS in the context of HIV infection. Studies are conducted using HIV-infected mice that have been humanized with human hematopoietic stem cells at birth (NSG-humanized mice)

Committee Recommendation: Asked to schedule a BSL2 and ABSL2 laboratory inspection. Otherwise identify the IACUC protocol that covers this animal work.

Training: All training is completed and up-to-date

Motion: Conditionally Approved

Vote Counts: 8-0-0

7) **IBC#:** 16-11-023-BL3

PI: Reid, Saint Patrick

Title: Molecular genetic biochemical proteomic metabolomic and lipidomic analysis of viral pathogens.

Biohazardous Agents: Chikungunya virus, Chikungunya virus avirulent strain, Human cell line/cells/tissues, Japanese encephalitis virus avirulent strain, Mayaro virus, o'nyong-nyong virus, Ross River virus, Semliki Forest Virus, Sindbis virus, Venezuelan equine encephalomyelitis virus, avirulent, Vero cells (African Green Monkey kidney), West Nile virus, Western equine encephalomyelitis virus, culture or specimen, Yellow fever virus, wild type, Zika virus, CRISPR-Cas9, Plasmid, siRNA, siRNA small interfering

Applicable NIH Guidelines: III-D-1-a

Summary: This protocol describes studies to investigate the molecular mechanisms that are involved in pathogenesis of emerging and re-emerging viruses carried by

arthropods.. Novel inhibitors of infection are identified using in silico drug prediction platforms and tested in cell culture systems.

Committee Recommendation: None

Training: Training is completed and up-to-date.

Motion: Approved

Vote Counts: 8-0-0

8) **IBC#:** 04-12-055-BL3-SA

PI: Iwen, Peter

Title: United States National Domestic Preparedness Program

Biohazardous Agents: Infectious agent / RG3-SA – Select agents, diagnostic testing

Applicable NIH Guidelines: 42 CFR Part 73

Summary: This protocol describes the BSL3 laboratory diagnostic testing for bioterrorism agents and other agents of public health concern. Testing is conducted by the Nebraska Public Health Laboratory at the UNMC.

Committee Recommendation: In section II, description of work, add a note about the use of sealed roto/safety cup centrifuges. In section IV, reconcile two comments. Update the DOJ ID number termination date of approval for Amanda Bartling.

Training: All training is completed and up-to-date.

Motion: Conditionally Approved

Vote Counts: 7-0-0

There being no further business, Dr. McMillan adjourned the meeting at 3:33pm

Respectfully Submitted,



JoEllyn McMillan, PhD
Chair, IBC
JM

ADDENDUM
September 11, 2025
IBC REVIEW LETTER/EMAIL TO INVESTIGATORS

<u>IBC #</u>	<u>Date of Letter/Email</u>
24-04-008-ABL2	09/12/2025
12-05-008-BL2	09/12/2025
18-11-024-ABL2	09/12/2025
22-03-008-BL2	09/12/2025
22-03-007-ABL2	09/12/2025
10-09-025-ABL2	09/12/2025
24-09-030-ABL2	09/12/2025
16-11-023-BL3	09/12/2025
04-12-055-BL3-SA	09/12/2025