INSTITUTIONAL BIOSAFETY COMMITTEE
11:59 a.m.
President's Conference Room
Meeting Minutes
September 10, 2025

Members Present:
Jovanka Voyich-Kane, Microbiology & Cell Biology, chair
Amy Robison, Biosafety Officer
Alyssa Evans, Microbiology & Cell Biology
Jerod Skyberg, Microbiology & Cell Biology
Kristen Connolly, Center for Biofilm Engineering
Mike Giroux, Plant Sciences & Plant Pathology
Matt Taylor, Microbiology & Cell Biology, IACUC Chair
Kim Hilmer, Chemistry/Biochemistry
Blake Wiedenheft, Microbiology & Cell Biology
Josh Charles, Bozeman Fire Department, Community Member

Members Absent:
Jennifer DuBois, Chemistry/Biochemistry

Ex-Officio Members Present:
Tammy Lynn, Safety & Risk Management
Nicole Soll, Research Integrity & Compliance
Kirk Lubick, Research Integrity & Compliance
Jaspur Kolar, Bridger Occupational Health & Urgent Care

Guests:
Mark DeWald, Research Integrity & Compliance
Ryan Brickman, Safety & Risk Management

I. Review and approval of IBC Meeting Minutes from August 20, 2025.

The minutes were approved as written. Approved 10, Abstained 0, Nays 0

II. Announcements from the Chair:

Departure of member, Kim Center, resigned August 2025

III. Protocols/Amendments/Renewals/Interim Reviews Approved since August Meeting:

Protocol #	Referen...	Versio...	Principal Investigator	Title	Protocol Type...	Approval Date	Expiration Date
2023-11-IBC	11	23	Rynda-Apple, Agnieszka	Influenza viruses for use in research projects in the Apple lab	Amendment	8/20/2025	1/31/2026
2023-22-IBC	22	26	James, Garth	Evaluation of Treatment on Medical Biofilms	Amendment	8/26/2025	4/30/2026
2023-444-IBC	444	11	Evans, Alyssa	Characterizing the viral and immune factors that mediate orthobunyavirus n...	Amendment	8/26/2025	2/28/2026
2023-49-IBC	49	9	Stowers, Steve	Functional role of dual neurotransmitter usage in aggression	Amendment	8/27/2025	5/31/2026
2024-540 -IBC	540	7	Secor, Patrick	Biosafety in the Bacteriophage Pathobiology Laboratory	Amendment	8/20/2025	10/31/2027
2024-541-IBC	541	4	Jennings, Laura	Biosafety Protocol for Pseudomonas aeruginosa Pathogenesis Research	Amendment	8/20/2025	10/31/2027
2025-115-IBC	115	14	Peyton, Brent	Naegleria fowleri and other pathogenic Free-living Amoeba's in Geothermal ...	Amendment	8/29/2025	7/31/2028
2025-123-IBC	123	8	Cuervo, Wilmer	Exploring Rumen Specimens and Microbial Isolates for Beneficial Activities	Amendment	8/20/2025	6/30/2028
2023-69-IBC	69	7	Gerlach, Robin	Kidney stone project	Interim Review	8/27/2025	8/31/2026
2024-537-IBC	537	2	Kunze, Anja	Neuromapping in Space-related Altered Gravity Environments Using Human...	Interim Review	8/26/2025	8/31/2027
2024-80-IBC	80	7	Kominsky, Douglas	Metabolism of mucosal inflammation	Interim Review	8/27/2025	8/31/2027
2025-106-IBC	106	8	Dlakic, Mensur	New technology for Determining the Abundance and Ratios of Biologically I...	Renewal	8/22/2025	8/31/2028

Amendments

2023-11: update tissues collected from influenza-infected bats
2023-22: added microorganisms
2023-444: added personnel
2023-49: added plasmid
2024-540: added plasmid, added personnel
2024-541: added personnel
2025-115: changed PI, updated building and lab location, updated protocol objectives, updated with new lab manual, removed BSC and updated lab self-inspection date

2025-123: changed PI and added new co-PI and personnel

New Business

A. Review of Protocols

Originals

581 Evans "Detection of orthobunyaviruses in Montana mosquitoes."
Overview: To determine the presence of select orthobunyaviruses in mosquitoes across Montana. The orthobunyaviruses are enveloped and vector-born, primarily through mosquitoes of the Aedes genus.

Biohazardous Agents: La Crosse orthobunyavirus
Strains: human 1978 **Biosafety Level:** 2
Biohazardous Agents: Jamestown Canyon orthobunyavirus
Strains: 61V2235 **Biosafety Level:** 2
Biohazardous Agents: Snowshoe Hare orthobunyavirus
Strains: CA 1976 **Biosafety Level:** 2
Biohazardous Agents: Trivittatus orthobunyavirus
Strains: 1968 **Biosafety Level:** 2
Biohazardous Agents: California Encephalitis orthobunyavirus
Strains: 85-1489 **Biosafety Level:** 2
Biohazardous Agents: Cache Valley orthobunyavirus
Strains: 6V633 **Biosafety Level:** 2

Recombinant/Synthetic Nucleic Acid Molecules: n/a

Motion to return for modification and BSO approval upon submission.
Approved 9, Abstention 1, Nays 0
Approved items to be addressed include:

Personnel:

- Have personnel complete BSL2 Risk Assessment Baseline

Vaccination:

- Change to No

Renewals

399 Bothner "Investigating the health benefits of diet and exercise interventions in human and animal models"
Overview: The overall goal of the work covered by these protocols is to understand the impact of dietary changes on metabolism, inflammation, and the gut microbiome. Participants consume diets augments with a variety of common vegetables (such as pulse crops), cooking oils, and fruits (such as aronia and haskap berries).

Biohazardous Agents: n/a
Recombinant/Synthetic Nucleic Acid Molecules: n/a

Motion to return for modification and DMR review approval upon submission.
Approved 10, Abstention 0, Nays 0
Approved items to be addressed include:

Protocol Objectives:

- Remove Dr. Yeoman, as he is no longer in a research role at MSU.
- Expand paragraph 3 to: include what, if any, of the procedures are performed in a BSC versus the bench top.
- Human derived samples must be inactivated prior to going to the mass spec facility. Explain how the samples are inactivated (include chemical, concentration and contact time if applicable) and ensure the exterior of the sample containers are disinfected.
- If the personnel listed on this protocol are handling the human stool, either this protocol

needs to include Hep A vaccination recommendation, or the Bothner lab personnel need to be listed on the associated protocol.
- Amend the answer to Question 11.20, and please remove the statement "and the MSU Transporting Biological Agents policy will be followed".
- What happens to the remainder of the sample that is not processed for analysis on the mass spec?
- There is mention of humanized mouse stool samples, but no related IACUC protocol. Please align.

Funding Sources
- Please update

Disinfection Procedures
- If you are using 10% bleach to decontaminate human blood, other materials, MSU Policy is a 30 minute contact time.

Date of Lab Self-Inspection
- Update with most current lab self-inspection date

Transportation and Shipment of Biological Agents
- Per the Protocol Objectives, samples are being transported between campus labs, please change check box choice to: "Transporting biological agents between laboratories or buildings on MSU campus."

Vaccines
- Hepatitis A should also be marked in this section

Interim Reviews
None

Amendments
377 Loveday "Virus and mammalian cell studies using drop-based microfluidics"
Overview: Single cell models will be analyzed in a variety of means using standard molecular biology techniques, including fluorescent microscopy, qRT-PCR, regular PCR, titering for infectious virus released, and both sanger and Next generation sequencing. This amendment is adding the capacity to work on domestic (non-asian lineage) Low path avian influenza (LPAI) strains to the protocol. Isolated domestic LPAI strains will be received from other BSL2 laboratories or BEI. We will acquire new stocks and will not remove any virus stocks from the JRL. An approved USDA APHIS VS permit is attached to the protocol for this work.

Biohazardous Agents: Influenza A
Strains: A/Perth/16/2009/H3N2 **Biosafety Level:** 2
Biohazardous Agents: Escheriachia coli cloning
Strains: DH5alpha **Biosafety Level:** 1
Biohazardous Agents: Influenza A
Strains: A/PuertoRico/8/1934/H1N1/mNeon **Biosafety Level:** 2
Biohazardous Agents: Influenza A
Strains: A/California/07/2009/H1N1 **Biosafety Level:** 2
Biohazardous Agents: Influenza A
Strains: A/PuertoRico/8/1934/H1N1 **Biosafety Level:** 2
Biohazardous Agents: Herpes Simplex Virus
Strains: Type 1 (various strains) **Biosafety Level:** 2
Biohazardous Agents: Entevirus D68
Strains: Fermon D68 **Biosafety Level:** 2
Biohazardous Agents: Influenza A
Strains: seasonal H1N1/2022 John Hopkins **Biosafety Level:** 2
Biohazardous Agents: Influenza A
Strains: seasonal H3N2/2022 John Hopkins **Biosafety Level:** 2
Biohazardous Agents: Influenza A
Strains: A/shorebird/Delaware Bay/127/2003 (H9N2) **Biosafety Level:** 2
Biohazardous Agents: Influenza A

Strains: A/guinea fowl/Hong Kong/WF10/1999 (H9N2) **Biosafety Level:** 2
Biohazardous Agents: Human coronavirus
Strains: SARS-CoV-2 WA01/2020 **Biosafety Level:** 2
Biohazardous Agents: Human coronavirus
Strains: SARS-CoV-2 B117 (alpha) **Biosafety Level:** 2
Biohazardous Agents: Human coronavirus
Strains: SARS-CoV-2 B117 (MA-10 - mouse adapted) **Biosafety Level:** 2
Biohazardous Agents: Human coronavirus
Strains: SARS-CoV-2 B117 (MA-10 - mouse adapted) **Biosafety Level:** 2
Biohazardous Agents: Human coronavirus
Strains: SARS-CoV-2 Omicron Strain **Biosafety Level:** 2
Biohazardous Agents: Influenza A
Strains: A/northern shoveler/Mississippi/11OS145/2011 (H7N9) **Biosafety Level:** 2
Biohazardous Agents: Polio Virus
Strains: Type 1 Mahoney Strain **Biosafety Level:** 2
Biohazardous Agents: Enterovirus
Strains: Enterovirus-71 (EV-71) **Biosafety Level:** 2
Biohazardous Agents: Coxsackievirus
Strains: B3 (CVB3) **Biosafety Level:** 2
Biohazardous Agents: Human BetaCoronavirus
Strains: **Human coronavirus OC43** **Biosafety Level:** 2
Biohazardous Agents: Human BetaCoronavirus
Strains: **Human coronavirus HKU1** **Biosafety Level:** 2
Biohazardous Agents: Human AlphaCoronavirus
Strains: Human coronavirus NL63 **Biosafety Level:** 2
Biohazardous Agents: Human AlphaCoronavirus
Strains: Human coronavirus NL63 **Biosafety Level:** 2

Recombinant/Synthetic Nucleic Acid Molecules:
Host: E. coli **Vector/Plasmid:** pGEM
Inserted Nucleic Acids/Genes of Interest: Polio virus type 1
Host: E. coli **Vector/Plasmid:** pBluescript
Inserted Nucleic Acids/Genes of Interest: EV-D6 genome
Host: E. coli **Vector/Plasmid:** pUC-18
Inserted Nucleic Acids/Genes of Interest: EV-D6 genome Fermon
Host: E. coli **Vector/Plasmid:** Topo
Inserted Nucleic Acids/Genes of Interest: EV-71 genome
Host: E. coli **Vector/Plasmid:** Topo
Inserted Nucleic Acids/Genes of Interest: CVB3 genome
Host: E. coli **Vector/Plasmid:** CVB3 genome
Inserted Nucleic Acids/Genes of Interest: Beta Actin and mGFP
Host: E. coli **Vector/Plasmid:** pDZ
Inserted Nucleic Acids/Genes of Interest: Influenza Gene Segments - REverse Genetics System
Host: E. coli **Vector/Plasmid:** pHW2000
Inserted Nucleic Acids/Genes of Interest: Influenza Gene Segments - REverse Genetics System

Motion to return for modification and DMR review approval upon submission.
Approved 9, Abstention 1, Nays 0
Approved items to be addressed include:

Protocol Objectives:

- Please explain how "A/guinea fowl/Hong Kong/WF10/1999 (H9N2)" is not of asian-lineage.
- References for the JRL should be removed since the amendment is to establish the LPAIs at BSL2+.
- Clarify that all infectious avian influenza virus work will be done in the lab that is

specified in the permit, and only down-stream analyses will be done in the other labs listed. Include inactivation procedures that occur prior to transporting to other locations for analysis.

Microorganisms/Infectious Agents to be Used

- Please explain how "A/guinea fowl/Hong Kong/WF10/1999 (H9N2)" is not of asian-lineage in the protocol objectives.

Shipping Biological/Infectious Materials or Dry Ice

- Shipping training must be completed for protocol approval.

231 Loveday "Drop Based microfluidics for BSL 3 Pathogens"
Overview: This protocol aims to cover the study of viral infections at the single cell level using droplet microfluidics in a BSL3 setting. This amendment is to rescind the biosafety level from 3 to 2 for non-asian lineage low pathogenic avian influenza, per the new USDA permit attached.

Biohazardous Agents: Escherichia coli cloning
Strains: DH5 alpha, TOP10, STBL3 **Biosafety Level:** 1
Biohazardous Agents: Avian Influenza A Virus
Strains: A/mallard duck/Pennsylvania/10218/1984 (H5N2) **Biosafety Level:** 3
Biohazardous Agents: Avian Influenza A Virus
Strains: A/northern shoveler/Mississippi/11OS145/2011 (H7N9) **Biosafety Level:** 3
Biohazardous Agents: Avian Influenza A Virus
Strains: A/northern pintail/Illinois/10OS3959/2010 (H7N3) **Biosafety Level:** 3

Recombinant/Synthetic Nucleic Acid Molecules:
Host: E. coli **Vector/Plasmid:** pDz Plasmid
Inserted Nucleic Acids/Genes of Interest: Influenza A genes
Host: E. coli **Vector/Plasmid:** Influenza A genes
Inserted Nucleic Acids/Genes of Interest: Influenza A genes
Motion to return for modification and BSO approval upon submission.
Approved 9, Abstention 1, Nays 0
Approved items to be addressed include:

Amendment Information:

- Please add to the narrative here:
  - We wish to rescind A/northern shoveler/Mississippi/11OS145/2011 (H7N9) to Risk Group2, BSL2, per the updated USDA permit attached.
  - We will acquire new stocks and will not remove any virus stocks or samples from the JRL to work with in BSL-2, per amendment to IBC protocol 377.

Microorganisms/Infectious Agents to be Used

- Please amend the line for "A/northern shoveler/Mississippi/11OS145/2011 (H7N9)" to Risk Group 2, BSL2.

Shipping Biological/Infectious Materials or Dry Ice, training is due.

B. Unfinished Business
   1. ECP update – Ryan Brickman, Director of Safety and Risk Management, informed the committee that the updated ECP went to the EHS committee for review on August 22, 2025, and was approved. Works as University-wide document with added addendums to accommodate as needed. BSO will create an ECP for all MSU research laboratories handling human materials. IBC will review that version annually.
C. Biosafety Officer Updates
   1. Mark DeWald reported that USDA did an unannounced inspection the week of September 1, 2025, of the JRL/BSL3. No findings.
   2. Guide to Import, Export & Transfer Permits is up for 3-year renewal. BSO has changed the Guide to Import, Export and Transfer Permits to two new documents; Shipping Biological Materials – Quick Reference and Exporting, Importing and Shipping Biological Research Materials Regulatory Review Checklist and Record – Decision Tree

    i. Voting was tabled for next meeting after discussion of adding some additional information
3. IBC Manual is up for annual review. BSO made some minor changes to the IBC Program Manager duties section, IBC Record Keeping Requirements, Retention of Records and Reports of Unanticipated adverse events
    i. After discussion, approved to accept changes after Retention of Records time frame is confirmed.
4. NIH has launched an initiative to modernize and strengthen biosafety oversight. Comment period is open for suggestions/input.
5. USDA opened public comment period on department reorganization.

The meeting was adjourned at 12:43 p.m.