

Illinois State University
Institutional Biosafety Committee (IBC) Meeting Minutes

Date: 4/16/2026

Location: JH 228 & Zoom

Start time: 1:05 p.m. **End time:** 2:04 p.m.

Members Present: Adam McCrary, Tom Hammond, Viktor Kirik, Kathy Spence, Wolfgang Stein, Amy Gilliland

Members Absent: Riley Francis, Tom Anderson, Harmony Kiley

Guests Present: None

Staff Present: Jessica Lowe

I. Chair Reminder- Declare Conflicts of Interest for Protocol Review

- a. None

II. Review of 3/19/2026 IBC Meeting Minutes

- a. Approved

Motion: WS motioned to approve, VK seconds

For: 6; **Against:** 0; **Abstain:** 0

III. Prior Business

- a. IBC Chair, BSO, IACUC Chair, and REC conducted a 'Research and Teaching Compliance Committee Familiarization' meeting on March 20th in the Emergency Operations Center with representatives from ISU Police, Emergency Management, and Facilities Services.

IV. Protocol Review

- a. **Full Committee Review- New Applications**

- i.

IBC Protocol #	PI	Title	BSL	Risk Group	Building
IBC-2026-0000047	Marjorie Jones	Development of Anti-parasitic compounds	1	1	SLB

Project Overview:

This work involves the testing of various compounds for their potential effects on the viability of the parasitic protozoan *Leishmania tarentolae*. This species is not a human pathogen so can be safely used as a model system to test compounds direct or indirect effect on these cells in culture. *Leishmania* cells will be grown in sterile culture flasks (in brain heart sterile medium with added heme) and cell viability will be tested (using the MTT spectrophotometric method) with and without added test compounds to assess their effects. This is an extension of protocol # 03B-2023.

Risk Assessment/Discussion:

Low

Training:

CITI Training certificates were included in the protocol.

NIH Guidelines Section:

N/A- No work subject to NIH Guidelines.

Occupational Health Representative review:

This protocol does not require any medical screening. Appropriate controls are in place to mitigate injuries and lab-acquired infections.

Additional Comments:

- **Cell Lines, Tissues, etc.** – Provide additional information regarding exposures and responding to exposures.
- **Facilities:** Recommend that gloves be checked as this is basic lab safety PPE for BSL1.
- **Facilities:** Remove Biosafety Cabinet from engineering controls; the BSC sash was removed and the unit decommissioned as it is not required for BSL1. It can still be utilized as a workspace.
- **Transport/Shipping:** Check Yes for transportation within the building as solid and liquid wastes will be autoclaved in SLB.
- **Personnel:** Are students undergraduates and are any in a paid status? Undergraduate student workers are not required to complete CITI training under the conditions that they are constantly supervised by a trained employee and have completed and signed the current [Agreement to Adhere to Lab Safety Policies and OHS Training and Awareness Form](https://ehs.illinoisstate.edu/downloads/Agreement%20to%20Adhere%20to%20Lab%20Safety%20Policies%20and%20OHS%20Training%20and%20Awareness%20Form.docx) which is available at <https://ehs.illinoisstate.edu/downloads/Agreement%20to%20Adhere%20to%20Lab%20Safety%20Policies%20and%20OHS%20Training%20and%20Awareness%20Form.docx>. If they are paid or graduate assistants working under the protocol, then they must be included in the Personnel section with CITI Initial Biosafety Training certificates attached. The PI must complete CITI training course Initial Biosafety Training ASAP. The wrong course, Basic Introduction to Biosafety, was completed in 2024. The PI was automatically enrolled in the proper course, so she should see it upon logging in to CITI.
- **Personnel:** Select most applicable role for the PI, check yes for emergency contact, and check "Other" in Select Activities tab.
- **Risk Assessment:** Typo
- **Safety:** In 'Describe how you will prevent accidental injuries...', remove biological safety cabinet. Not sure how long sleeves are necessary especially since only safety glasses were included in the PPE section?
- **Safety:** It would be helpful to have more information on centrifuging precautions.
- **Safety:** Include gloves in reusable equipment section. What is the contact time for 70%ethanol? Describe how the waste will be discarded.
- **Safety:** In Containment, remove biosafety cabinet as it is N/A. No specialized containment is utilized other than standard microbiological practices and waste management.
- **Safety:** Provide answers to the requested information in 'Liquid Waste Treatment with Chemicals'
- **Accidental Spill/Splash Response:** In all tabs, indicate that only dry, non-flammable ethanol wipes may be autoclaved.
- **Accidental Spill/Splash Response:** Add decommissioned to biosafety cabinet reference in the 'Inside Biosafety Cabinet' tab.

Motion: Approve pending minor modifications listed above, with IBC chair review and confirmation. WS motioned to approve, VK seconds	For:6	Recuse:0	Against: 0	Abstain: 0	Absent: 3
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b. Full Committee Review- Amendments

i.

IBC Protocol #	PI	Title	BSL	Risk Group	Building
IBC-2026-0000032	Kyle Floyd	Regulation of Bacterial Surface Adhesion and Biofilm Formation	2	2	SLB

Project Overview:

The proposed work aims to understand the regulatory systems that control surface adhesion and biofilm formation within bacterial pathogens. The work will primarily focus on mechanisms of surface adhesion in *Vibrio cholerae* (O1 El Tor strains A1552 and C6706), the causative agent of the gastrointestinal diarrheal disease cholera. Environmental colonization of *V. cholerae* is mediated by the type IV mannose-sensitive hemagglutinin (MSHA) pilus, while host colonization is limited by the presence of the MSHA pilus. The goal of my lab is to decipher the transcriptional regulatory mechanisms that control MSHA pilus production, to either allow for colonization of the environment or host. Eventually, the lab will also examine regulation of surface adhesion within uropathogenic strains of *Escherichia coli* (UTI89) and *Klebsiella pneumoniae* (TOP52). For our studies, genes of interest will be cloned into vectors and proteins overexpressed, purified in K12 *E. coli* and characterized biochemically. Furthermore, we will create knock-out mutant strains in *V. cholerae* and uropathogenic *E. coli* by specifically deleting genes of interest. The gene deletion strains will be directly compared with their corresponding parental strains regarding their ability to colonize surfaces, form biofilms, and their motility. The gene deletion strains will also be complemented by transformation with the respective plasmid to determine whether the parental phenotype can be restored. We will also extract RNA and analyze the expression of various genes of interest via RNAseq, RT-PCR, and/or promoter-fusions

Risk Assessment/Discussion:

Medium

Training:

CITI Training certificates were included in the protocol.

NIH Guidelines Section:

Appendix C-II: This research involves the use of recombinant or synthetic nucleic acid molecules in *Escherichia coli* K-12 host-vector systems.

Section III-D1: This research involves the introduction of recombinant or synthetic nucleic acid molecules into Risk Group 2, Risk Group 3, Risk Group 4, or Restricted Agents.

Section III-D2: This research involves the introduction of DNA from Risk Group 2, Risk Group 3, Risk Group 4, or Restricted Agents into nonpathogenic prokaryotes or lower eukaryotes.

Section III-E1: This research involves recombinant or synthetic nucleic acid molecules containing no more than two-thirds of the genome of any eukaryotic virus.

Section III-F4: This research involves recombinant or synthetic nucleic acids that consist entirely of nucleic acids from a prokaryotic host, including its indigenous plasmids or viruses when propagated

only in that host (or a closely related strain of the same species), or when transferred to another host by well-established physiological means.

Section III-F8: This research involves recombinant or synthetic nucleic acids that do not present a significant risk to health or the environment as determined by the NIH Director following appropriate notice and opportunity for public comment (See Appendix C).

Appendix C-II: This research involves the use of recombinant or synthetic nucleic acid molecules in Escherichia coli K-12 host-vector systems.

Occupational Health Representative review:

Personnel under this protocol are being provided with occupational health screenings at OSF Occupational Health as a part of the IACUC protocol.

Additional Comments:

- **Overview:** The current protocol title is Regulation of Bacterial Surface Adhesion and Biofilm Formation. According to an award submission to RSP, there are two names for the project: Host-derived LCFAs Enhance Vibrio cholerae Pathogenesis (ISU project name) and Regulation of the Vibrio cholerae MSHA Pilus Drives Host Colonization and Pathogenesis (NIH project name). I recommend changing/updating the protocol title to reflect the NIH grant “Regulation of the Vibrio cholerae MSHA Pilus Drives Host Colonization and Pathogenesis” so they match.
- **Overview:** please state that the human cell lines, insects, and mice will be used for infection studies and will not be subject to genetic manipulation with rDNA. This helps explain why they are absent from the nucleic acids portion of the protocol.
- **Overview:** Update to include the use of research animals and how each biohazardous material in the protocol will be used/administered to animals.
- **NIH Guidelines:** Please check Appendix C1 unless the protocol uses an rDNA molecule with more than 1/2 of a viral genome. Please uncheck F4-unless there is a specific rDNA that only contains sequences derived from one prokaryotic host and the rDNA will only ever be placed in that host (for example, plasmid origin, markers, etc, are all from the same host). Please uncheck F8 - this is for protocols that have received direct approval from NIH
- **Cell Lines, Tissues, Etc.:** Caco-2 (ATCC #HTB-37) is a BSL-2 agent according to NIH. IBC is requesting BSL-2 designation.
- **Infectious Agents/Microorganisms:**
<https://www.ilga.gov/commission/jcar/admincode/077/077006900D03600R.html> Include reporting LAIs immediately to EHS who will report to the county health department within 24 hours as **Toxigenic Vibrio cholerae O1**
- See the Safety section to ensure follow-up and managing exposures are in alignment. In this case, medical follow up and treatment will be completed through a licensed healthcare professional. OSF Occupational Health is the preferred provider for ISU. Environmental Health and Safety will be notified of reported exposures immediately and the PI must complete applicable reports (iPeople Accident Reporting for employees, Risk Management Non-Employee Accident Reporting, and/or Cayuse Adverse Event Report).
- **Whole Animal Work:** Insects; If incubators are being used to store larvae, mark with Biohazard signage.
- **Whole Animal Work:** Mice; IBC can approve the use of biohazardous agents for infection and dietary studies and associated controls for biosecurity/biosafety, but the use of

vertebrate animals (i.e. mice) must be approved by the Institutional Animal Care and Use Committee before any ordering or research can begin under either protocol. This includes coordination with Animal Care staff.

- **Facilities:** The animal care SOP requires the use of shoe covers in animal housing areas. Per Animal Care Coordinator Jeremy Langdon, current rodent cages have filter paper that are not HEPA. Confirm with the PI whether HEPA filtered cages are required and determine how this will be funded and adopted. IBC will need to be consulted to make a final decision.
- **Transport/Shipping:** Add information for the animals and support facilities including the Vivarium and additional lab space.
- **Transport/Shipping:** Change room in SLB
- **Personnel:** For all personnel, update 'Select Activities' to include the biohazardous materials they will be working with. For the PI, all activities must be selected.
- **Safety:** All employee injuries and illnesses, or exposures requiring first aid or medical treatment, must be reported using Accident Reporting in iPeople. Exposures must be reported as an Adverse Event in Cayuse. **Cholera (Toxigenic *Vibrio cholerae* O1 or O139)** is a reportable disease requiring immediate notification to local public health authorities within 24 hours. EHS must be notified immediately of any exposures for the purposes of monitoring, making appropriate notifications and commencing investigation.
- In the other safety procedures section, identify how solid waste will be handled. Infected animal carcasses and tissues must be red bagged, frozen, and disposed of using the University's pathological waste vendor. A chest freezer for pathological waste will be available in the SLB dock. All solid or liquid waste being autoclaved must follow autoclave protocols and use steam sterilization integrator test strips to verify adequate sterilization prior to disposal.
- Please confirm that you mean 10% sodium hypochlorite for 30 minutes instead of 10% Household Bleach (0.6% Sodium hypochlorite) for 30 minutes.

Motion: Approve pending minor modifications and answers to the questions listed above, with IBC chair review and confirmation. AM motioned to approve, WS seconds	For: 6	Recuse: 0	Against: 0	Abstain: 0	Absent: 3
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c. Designated Member Review- Amendments

- i. IBC-2025-0000024 – Neuroscience of adolescent learning and motivation – Suzanne Nolan
 1. Approved; Adding personnel
- ii. IBC-2025-0000022 – Anaerobic digestion – LC Yang
 1. Approved; Adding room

d. Member Review- Upcoming for May Full Committee Review

- i. Dahl 05B-2025, 06B-2025
- ii. Vidal-Gadea 03B-2025
- iii. Wilkinson 04B-2023, 05B-2023
- iv. Sedbrook 06B-2023
- v. Edwards IBC-2026-0000040
 1. Still awaiting revisions

- vi. Calderon 01B-2023
 - 1. Still awaiting completion of training
- vii. Sadd IBC-2025-0000025
 - 1. Still awaiting revisions
- viii. Gatto
 - 1. Still awaiting revisions

V. New Business

- a. None

VI. Review of Incidents

- a. None

VII. Inspections/Ongoing Oversight

- a. Six labs in SLB/FSA were inspected, and the results of the inspections were reported to Pls, Biology Director, and IBC Chair.
- b. Scheduled for Tuesday May 5th from 1:30 pm - 4:00 pm

VIII. IBC Training

- a. None

IX. Public Comments

- a. None

X. Open Discussion

- a. None

XI. Next Scheduled Meeting Date

- a. Scheduled for Thursday, May 21st 1:00-2:30 p.m.
- b. JH 228 and Zoom

XII. Adjournment

- a. TH moved to adjourn the meeting at 2:04 p.m. AG seconded.