

# Institutional Biosafety Committee University of Nevada, Reno

## Meeting Minutes

February 11<sup>th</sup>, 2026

### General Information

- The IBC Chair called the meeting to order at 3:00 p.m.
- Meeting minutes approved at the March 2026 IBC meeting
- [Meeting conducted via Zoom](#)
- Total voting members present: 10

### Voting Members Present

1. Andrew Nuss, Scientist, 013
2. Benjamin Weigler, Scientist/Veterinarian/Animal Expert, 009
3. Cam Tran, Scientist/Chairperson, 014
4. Claudia Rueckert, Scientist/Vice Chairperson, 003
5. Evan Colletti, Community Member, 004
6. Jung Hwan Kim, Scientist, 012
7. Any Martin, Biosafety Officer, Committee Contact, 010
8. Robin Trimble, Community Member, 008
9. Shailesh Agarwal, Scientist, 015
10. Won-Gyu-Choi, Scientist, plant expert, 002

### Voting Members Absent

1. Paul Brett, Scientist, 001

### Others Present

1. Kristin Eliassen, non-voting committee contact
2. Jenn Thornton, non-voting committee contact
3. Keith Kikawa, Lab Safety Group Manager, EH&S
4. Brian Rector, GDMO Ad Hoc member

# Agenda for Full Committee Business

## Minutes

### **Review and approval of minutes for the January 14<sup>th</sup>, 2026 IBC meeting:**

There were no comments or concerns regarding these meeting minutes. A motion was made by 003 and seconded by 004 to approve them. The motion passed unanimously.

## Review Prior Business

None

## MOUA Reviews

### **Three-year Protocol Renewals**

#### ***Gulia-Nuss, B2026-01, Developing tools for arthropod gene-editing for understanding physiology, BSL-2 (COI: Nuss)***

Renewal of B2023-13

Member 013 recused themselves due involvement with this research project. Committee members discussed this submission. There was a motion made by 003 and seconded by 015 to approve the protocol once the last comment and training deficiency were addressed. The motion passed unanimously.

#### **Summary of work being conducted**

They are looking at developing anti-tick vaccine targets and CRISPR-mediated gene editing techniques for ticks. They also look at factors like insulin signaling that may affect mosquito reproduction.

They have updated information for Sarnash Beniwal, the lab manager, otherwise it does not appear they have changed anything since October 2025's amendment.

#### **Biosafety Level**

Rickettsia buchneri was listed in 3I as a BSL-2 agent, and their arthropod work was approved in the previous amendment for BSL-2 practices and ACL-2 containment.

Cloning and handling of E. coli alone without other organisms can be conducted with BSL-1 practices and at BSL-1 containment.

### NIH guidelines

#### **This protocol is exempt from NIH guidelines**

III-F-1 was listed and their reasoning for exemption (using K-12). They indicate that their genetically modified organism use is exempt since they will only express content already existing in nature.

### Last Assessment and biosafety concerns

8/4/2025 by Luis. There was a question about records of field-collected ticks, some clutter concerns, incompatible chairs, food identified, and overfilled biohazardous waste which have all been corrected.

#### ***Kivistik, B2026-02, Design and Characterization of a bioreactor, BSL-1 (COI: No)***

Renewal of B2023-07

There was a motion made by 002 and seconded by 015 to approve the protocol once the comments are addressed and responses entered into the text fields on the form. The motion passed unanimously.

### Summary of work being conducted

This MOUA covers course number ChE 442, "Unit Operations in Chemical Engineering". They aim to instruct students on microbiological techniques and offer them experience with bioprocessing operations using a 1L bioreactor. Students will also gain familiarity with isolating cellular components using size exclusion chromatography.

This renewal also updates some administrative information such as a new project title, updating the role of the instructor and TAs in overseeing student activities

### Biosafety Level

Their work with E. coli and cellular components including hemoglobin and Cytochrome C can be performed with BSL-1 practices and under BSL-1 containment. If they are isolating these from cells; however, it will depend on what cells they are isolating them from (e.g. human would be BSL 2 and require bloodborne pathogen training)

### NIH guidelines

#### **This protocol is exempt from NIH guidelines**

Section III-F-8, appendix C-II is listed and they will be using an E. coli K12 derivative as their only bacteria.

### **Last Assessment and biosafety concerns**

Last assessment on 05/16/2025 by Gillian Frihse. The only biosafety related concern was the lab lacked biosafety labels for equipment, which was completed on 6/2/2025.

### ***Renden, B2026-03, Presynaptic function at the calyx of Held, BSL-2 (COI: No)***

Renewal of B2023-13

There was a motion made by 004 and seconded by 002 to approve the protocol once the last training deficiency was addressed. The motion passed unanimously.

### **Summary of work being conducted**

They aim to understand the role bioenergetics and mitochondrial function plays in the presynaptic terminal of neurons, especially in neuropathies and dementias associated with aging and neurodegenerative diseases. They shall employ transgenic mouse models to address this aim and to model pathological disruptions in mitochondrial localization and function

This renewal added Matheus Hofner, a postdoctoral fellow, removed Sarpas Swain, and updated Ryan Durmin's job title to Postdoctoral Fellow.

### **Biosafety Level**

The use of Tetrodotoxin (TTX) can continue using BSL-2 practices and under BSL-2 containment, any material or animals exposed to TTX shall be handled with BSL-2 practices and BSL-2 procedures. The total amount of TTX owned shall not, at any time, exceed the Permissible Toxin Amount of 500mg without first notifying the University's Responsible Official (RO) or Alternate Responsible Officials (AROs) for further consultation.

Mouse work, and work with recombinant AAV, can continue using A/BSL-1 practices and under A/BSL-1 containment, provided these animals are not exposed to TTX or other BSL-2 agents.

The use of HEK293 cells has been discontinued by the PI and removed from this version of the protocol.

### **NIH guidelines**

They intend to use transgenic rodents and recombinant AAV, for which they have indicated Sections III-D-4, III-E-1, and III-E-3.

### **Last Assessment and biosafety concerns**

Last assessment on 10/28/2024 by Andy Giddings, Biosafety related findings included absence of biohazard labels, aspiration waste flasks not in secondary containment, presence of food, microwaves without labels indicating they are for research use only and trainings not being up to date, which have all been corrected as of 10/28/2024.

### **New Protocol Reviews**

None

### **MOUA Amendments**

#### ***Frese, B2024-03, Impact of dietary ingredients on key human gut microbes and human epithelial cell lines, BSL-2 (COI: No)***

There was a motion made by 010 and seconded by 008 to approve the protocol once the required biological specimen transportation training had been taken. The motion passed unanimously.

#### **Summary of work being conducted**

They aim to determine how dietary ingredients alter gut microbiome metabolism and epithelial responses. Using varying starting substrates, they will assess bacteria-derived metabolites, among other methods. They use mouse tissue donated from other labs as well as collecting human fecal samples and, now, blood and milk as controls for metabolites and potential bacterial contamination/sepsis in infants.

This amendment adds the collection of human blood and milk from Renown to their existing protocol.

#### **Biosafety Level**

Work with bacterial strains can continue using BSL-1 practices and under BSL-1 containment except for undefined isolated bacteroides species which shall continue at BSL-2 for practices and containment.

Work with human cell lines, blood, fecal mater, and milk samples shall continue using BSL-2 practices and under BSL-2 containment, additionally all personnel working with human cell lines, blood, and body fluids must complete annual bloodborne pathogens awareness training.

Work with animal tissue samples is best handled using BSL-2 practices and under BSL-2 containment since a biosafety cabinet is already available for their human work.

## NIH guidelines

### **This protocol is exempt from NIH guidelines**

They indicated Section III-F-1, Appenxic C-II which I agree with as they are not generating recombinant organisms and merely receiving fluids and tissues from collaborators.

### **Last Assessment and biosafety concerns**

Last assessment on 07/23/2025 by Gillian Frihse. Biosafety related findings include lacking biohazard stickers, which not been addressed in SafetyStratus at this time.

### ***Zandawala, B2023-50, Neuromodulation of glucose homeostasis and associated behaviors in Drosophila melanogaster (vinegar fly), Ixodes scapularis (blacklegged tick) and Ooceraea biroï (clonal raider ants), BSL-2 (COI: N0)***

There was a motion made by 015 and seconded by 003 to approve the protocol pending BSO review, assessment of the laboratory space and approval of the associates USDA APHIS permit. The motion passed unanimously.

### **Summary of work being conducted**

They aim to understand how neuropeptides and associated G-protein coupled receptors modulate behaviors such as feeding, metabolism, stress, reproduction using arthropod models.

This amendment adds work with *Oocerea biroï* which shall be obtained from the Kronauer lab at the Rockefeller University (<https://www.rockefeller.edu/research/kronauer-laboratory/160993-our-ants/>). To gain further experience with this model system, they plan to work extensively with Dr. Daniel Kronauer.

They are currently awaiting approval of a USDA APHIS PPQ-526 permit and have gotten approval to import the ants from Bryant McDowell, State Entomologist in the Nevada Division of Agriculture's Division of Plant Health and Compliance, once the UDA APHIS PPQ-526 permit is issued.

### **Biosafety Level**

Work with *Drosophila melanogaster* and *O. biroï* should be performed using arthropod containment level 1 (ACL-1) and BSL-1 practices and ACL/BSL-1 containment.

Work with *Ixodes scapularis* can continue using ACL/BSL-2 practices and ACL/BSL-2 containment.

Work with *E. coli* should be performed using BSL-1 practices and BSL-1 containment.

**NIH guidelines**

They indicated Section III-D-4 for using transgenic *D. melanogaster*. They also indicated Section III-F5 since they intend to use a K-12 derived strain of *E. coli*.

**Last Assessment and biosafety concerns**

Last assessment on 8/8/2025 by Gillian Frihse. Biosafety related findings include the presence of food and porous items, which have been addressed as of 8/14/2025, and out of date/missing training, which has not been addressed as of 1/26/2026.

**Designated Member Reviews (DMRs)**

None

**Closed Protocols**

None

# Agenda for Administrative Business

## Administrative Amendments

1. Kim, Aucoin, B2025-08, Biomarker Discovery and Development of Rapid Diagnostic Tests for Microbial Pathogens  
Amendment: Update to study personnel
2. El Zaklit, B2023-12, Cellular and Molecular Effects of High Intensity Nanosecond-Duration Electric Pulses on Adrenal Chromaffin Cells Using Fluorescence Microscopy  
Amendment: Update to study personnel
3. Ferreira dos Santos, B2023-15, Understanding the Functional Role of the Polyacetylenic Lipids Falcarinol and Falcarindiol in Plant Resistance to Necrotrophic Pathogens  
Amendment: Update to study personnel
4. Frese, B2024-03, Impact of dietary carbohydrates of key human gut microbes and human epithelial cell lines  
Amendment: Update to study personnel
5. Lee, B2024-29, Novel and repurposed agents against Candida biofilms  
Amendment: Update to study personnel
6. Omar, B2024-06, Physiological mechanisms of protein kinase A regulation  
Amendment: Update to study personnel
7. Parvin, B2024-44, Normalizing tumor microenvironment and identifying microbiome  
Amendment: Update to study personnel
8. Stan, B2024-47, Cancer chemoprevention studies with diet-derived bioactive compounds  
Amendment: Update to study personnel

## Other Business

None

## Meeting Close-out

Next meeting: March 11, 2026

Time adjourned: 4:01 p.m.