Institutional Biosafety Committee
University of Nevada, Reno

Meeting Minutes

November 12, 2025

General Information

- The IBC Chair called the meeting to order at 3:00 p.m.
- Meeting minutes approved at the December 2025 IBC meeting
- Meeting conducted via Zoom
- Total voting members present: 11; Quorum: 6

Voting Members Present

1. Andrew Nuss, Scientist, 013
2. Cam Tran, Scientist/Chairperson, 014
3. Claudia Rueckert, Scientist/Vice Chairperson, 003
4. Evan Colletti, Community Member, 004
5. Jung Hwan Kim, Scientist, 012
6. Keith Kikawa, Biosafety Officer, Committee Contact, 010
7. Paul Brett, Scientist, 001
8. Robin Trimble, Community Member, 008
9. Shailesh Agarwal, Scientist, 015
10. Walt Mandeville, Scientist/Alternate animal expert, 006
11. Won-Gyu-Choi, Scientist, plant expert, 002

Voting Members Absent

1. Benjamin Weigler, Scientist/Veterinarian/Animal Expert, 009

Others Present

1. Kristin Eliasen, non-voting committee contact
2. Jenn Thornton, non-voting committee contact
3. Lauren Davie, Administrative assistant, Research Integrity and Security
4. Andy Martin, Senior Lab Safety Specialist, EH&S

Agenda for Full Committee Business

Minutes

Review and approval of minutes for the October 8th, 2025 IBC meeting:

There were no comments or concerns regarding these meeting minutes. A motion was made by 002 and seconded by 010 to approve them. The motion passed unanimously.

Review Prior Business

None

MOUA Reviews

Three-year Protocol Renewals

None

New Protocol Reviews

None

MOUA Amendments

AuCoin, B2025-08, Molecular Biomarker Discovery and Development of Rapid Diagnostics for Emerging Infectious Diseases - BSL2 (COI – 013)

Member 013 recused themselves during the discussion due to a conflict of interest with this project. Committee members discussed this submission and approved it as revised. There was a motion made by 001 and seconded by 006. The motion passed unanimously.

Summary of work being conducted

This amendment is a collaboration between Dr.'s AuCoin and Kozel to study biomarkers of infection using monoclonal antibodies and other techniques to develop rapid diagnostic tests. This amendment adds a collaboration with Dr. Gulia-Nuss involving the development of biomarkers for the non-pathogenic bacterial endosymbiont of Ixodes scapularis, Rickettsia buchneri.

Biosafety Level

Rickettsia buchneri was listed in 3I as a BSL-2 agent, and their arthropod work is listed as conducted under ACL-2 practices and containment. Work shall be conducted with BSL-2 practices and containment and ACL-2 practices and containment where appropriate.

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

NIH guidelines

They propose sections III-D-1, III-D-2, and III-F (Appendix C-II).

Last Assessment and biosafety concerns (look up incident reports)

Last assessment on 1/10/2025 by Andy Giddings for the AuCoin and Kozel lab, no biosafety related findings.

Zandawala, B2023-50, Physiological mechanisms of protein kinase A regulation (COI: no) – BSL1

Committee members discussed this submission and approved it contingent on the PIs responses being added to the form in the text fields and on the completion of new lab members safety training. There was a motion made by 006 and seconded by 002. The motion passed unanimously.

Summary of work being conducted

They are investigating neuropeptides and GPCR-mediated effects on feeding, metabolism, stress, and reproduction of transgenic Drosophila melanogaster. They are adding (through this amendment) Ixodes scapularis behavioral and protein mapping studies.

Biosafety Level

Work shall be conducted with BSL-2 practices and containment and ACL-2 practices and containment where appropriate.

Cloning and handling of DH5a, BL21, and T7 E. coli can be conducted at BSL-1.

NIH guidelines

They propose sections III-D-1, III-D-2, and III-F (Appendix C-II).

Last Assessment and biosafety concerns (look up incident reports)

Last assessment on 8/8/2025 by Gillian. Biological safety concerns include: porous chairs, biohazardous sharps containers not being closed while not in use, and evidence of food in lab. All have been addressed as of 9/4/2025.

IBC Comments

1A7: It's noted above that this individual is no longer part of the lab. They should be deleted here.

PI response – removed as suggested.

2C1:

Some of this content would also be relevant to section 4A, especially about how CRISPR/Cas9 and transgenic Drosophila melanogaster are used.

No CRISPR/Cas9 and transgenic Drosophila melanogaster strains are generated in the lab. We contract an external vendor which performs CRISPR/Cas9 based mutagenesis. Transgenic strains are purchased from stock centers. These strains are used for behavioral and imaging experiments and are sacrificed after experiments.

Include experience on Ix. Scapularis ticks.

PI response - The lab also works with Ixodes ticks to anatomically map protein expression and perform behavioral studies. PhD student Billiah Bwana has experience working with ticks from her year long rotation in Dr. Monika Gulia-Nuss' lab. Billiah has experience with tick dissections and behavioral experiments which will be continued in the Zandawala lab. Dr. Meet Zandawala also has experience handling and dissecting ticks from collaboration with the Gulia-Nuss lab.

3B2: The use of K-12 E. coli is exempt under section III-F-8 appendix C-II. Also, please confirm if BL21 is on the K-12 background as I believe it is not and therefore would technically fall under section III-E (general) even if it is a common laboratory strain. Additional source: "E. coli Strains and NIH Guidelines by University of South Carolina" (https://sc.edu/about/offices_and_divisions/ehs/documents/biological_safety/e-coli-strains-nih-guidelines.pdf)

PI response - The lab does not currently have any E. coli strains.

3H: Please indicate yes or no to this question.

No has been indicated as requested regarding the use of GDMO arthropods.

3I: Please clarify what "E. coli strain T7" is. is this in reference to the T7 bacteriophage expression system or a specific strain of E. coli?

PI response - The lab currently does not have any E coli strains and so this item is deleted.

Include ticks here also.

PI response - Added info on ticks. I am not sure about the BSL classification but believe it is BSL1 based on consultation with other researchers.

4A:

I would appreciate an expansion of the experimental procedures involving recombinant DNA techniques such as answering how the products shall be utilized and if you are generating transgenic Drosophila melanogaster within the lab. Also for what purposes you plan to use the CRISPR/cas9 system mentioned in this MOUA.

PI response - Details on CRISPR/Cas9 added.

Please add what experimental procedures you plan on performing with Ixodes scapularis.

PI response - Details added.

4B: Please include what procedures you plan on performing with Ixodes scapularis.

PI response - Details added.

Section 5:

If you are using Ixodes scapularis, please list it here in the biological hazards section as well.

PI response - Details added.

In addition, it’s state above that the ticks to be used are pathogen-free. How will this be confirmed?

PI response - Pathogen-free status of ticks will be confirmed using PCR.

6L: Out-of-date EH&S training records.

6R: Please indicate yes or no to this question.

PI response – “no”, an IRB protocol is not needed.

6T: Please indicate measures for the new work involving Ixodes scapularis. Also, please confirm whether E. coli strains BL21 and T7 are K-12 derived.

PI response - Measures employed for Drosophila will also apply ticks. Additionally, only adult Ixodes scapularis ticks will be kept in the laboratory and used for experiments. Experiments will be performed with a small known number of ticks at a time so that any escapees can be determined by counting. Ticks will be anesthetized with CO2 in their storage counter first before transferring them to a closed behavioral arena or dissecting dish covered with double-sided tape.

7A: As noted above please answer the question regarding security procedures, fly work is mentioned but not ticks.

Work with both flies and ticks will be performed in the room with CO2 access. They will be anesthetized with CO2 before dissection or handling. The table on which the ticks will be handled will be lined with double sided tape to prevent ticks from escaping. Ticks will be incubated in closed containers (with small holes for ventilation but not large enough for escape) which will be kept in an incubator.

8F:

How will ticks be disposed of?

Live ticks or flies will first be killed by keeping them in -20deg freezer in HMS205 for at least a week. Following this, ticks and flies will be autoclaved and disposed off with other biohazard waste.

A -80 degree freezer should be used instead of a -20 degree freezer. – *Comment at the convened meeting in response to the PIs reply shown above.*

9A: Check if this is still accurate, since eye washes have been installed in all HMS labs a couple of years ago (or so I thought).

PI response - This has been corrected to indicate the updated location of the eyewash.

Designated Member Reviews (DMRs)

None

Closed Protocols

None

Agenda for Administrative Business

Administrative Amendments

1. Akin, B2023-43, Development of neural circuits underlying approach behaviors
   Amendment: Updating personnel
2. Gould, B2024-04, Neuromuscular junction; Glial effects of neurotransmission
   Amendment: Updating personnel
3. Hoy, B2023-43, Development of neural circuits underlying approach behaviors
   Amendment: Update study personnel
4. Riddle, B2024-15, Genetic Studies in Mexican Tetra
   Amendment: Update study personnel

Other Business

1. NIH annual report is due 12/2/2025 and will be submitted later in November by the IBC Office.
2. Andy Martin is now the alternate Institutional Biosafety Officer.

Meeting Close-out

Next meeting: December 10. 2025

Time adjourned: 3:59 p.m.