

# Minutes of Regular IBC Meeting

Date: March 9<sup>th</sup>, 2026

Location: Remote via Zoom

Call to Order: 2:31

**Members Present:** H. Blair (BSO), T. George (Community Member), K. Heath (Animal SME), A. Hilske (Plant SME), A. Mitra (Plant SME), W. Niu (Member), S. Tatineni (Member), D. Zinniel (Lab Rep)

**Members Absent:** D. Loy (Chair), K. O’Neill (Community Member), N. Sexton (Member), M. Wiebe (Member)

**Quorum Met:** Yes

**Ex-Officio Advisors:** D. Hamernik, B. Osthus, S. Quinn

**Others:** K. Evans, L. Gregurek, A. Jungck, L. Pingault, E. Schulz

**Review of Minutes from 2/9/2026 Meeting:**

Motion to approve minutes made by K. Heath, 2nd by D. Zinniel

Minutes approved unanimously as written.

For: 8

Against: 0

Abstained: 0

**Declaration of Conflicts of Interest: None.**

## I. PUBLIC SESSION

### A. Old Business:

**1. Tabled Protocol registrations: None**

**2. Protocols with Contingencies Met:**

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 36  |
| <b>Form ID:</b>                  | 26302   |
| <b>TITLE:</b>                    | <b>Regulation of Ovarian Somatic Cell, Oocyte, Embryo, and Placenta mRNA and Protein Expression</b> |
| <b>PI:</b>                       | <b>Jennifer Wood</b>  |
| <b>DEPT:</b>                     | Animal Science  |
| <b>Project Biosafety Level:</b>  | BSL-2, ABSL-1 (Animal)  |
| <b>NIH Guidelines reference:</b> | III-F-1, III-F-2, III-F-6, III-F-8, C-II, C-VII, C-VIII, III-E                                      |
| <b>Date of IBC Review:</b>       | 2/9/2026  |
| <b>IBC MOTION:</b>               | Approved contingent lab workers complete required trainings.  |
| <b>IBC ACTION:</b>               | <i>Adopted by voice vote</i>  |

**PROTOCOL NOTES:**

|                             |  |
|-----------------------------|--|
| <b>Date of PI Response:</b> | 3/10/2026  |
| <b>PI Response:</b>         | Training confirmations have been sent to the biosafety office. |

|                             |       |
|-----------------------------|-------|
| <b>Additional Comments:</b> | None. |
|-----------------------------|-------|

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 199   |
| <b>Form ID:</b>                  | 26339   |
| <b>TITLE:</b>                    | <b>Study of gut microbial community structure and function using metagenomics and metatranscriptomics approaches in ruminants and non-ruminants</b> |
| <b>PI:</b>                       | <b>Samodha Fernando</b>   |
| <b>DEPT:</b>                     | Animal Science  |
| <b>Project Biosafety Level:</b>  | BSL-2, ABSL-2 (Animal), BSL-1-P (Plant)   |
| <b>NIH Guidelines reference:</b> | III-F-4, III-F-6, III-F-8, C-II, C-III, C-V, C-VI, III-E, III-D-2-a, III-D-4, III-D-4-a, III-D-6  |
| <b>Date of IBC Review:</b>       | <b>2/9/2026</b>   |
| <b>IBC MOTION:</b>               | Approved contingent training is complete by personnel.  |
| <b>IBC ACTION:</b>               | <b><i>Adopted by voice vote</i></b>   |
| <b>PROTOCOL NOTES:</b>           |   |
| <b>Date of PI Response:</b>      | <b>2/24/2026</b>  |
| <b>PI Response:</b>              | Required training has been completed.   |
| <b>Additional Comments:</b>      | None.   |

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 237   |
| <b>Form ID:</b>                  | 26317   |
| <b>TITLE:</b>                    | <b>Role of the protein quality control in mitochondrial homeostasis and stress response</b>   |
| <b>PI:</b>                       | <b>Oleh Khalimonchuk</b>  |
| <b>DEPT:</b>                     | Biochemistry  |
| <b>Project Biosafety Level:</b>  | BSL-2   |
| <b>NIH Guidelines reference:</b> | III-F-1, III-F-4, III-F-5, III-F-8, C-I, C-II, C-III, III-E, III-E-1, III-D-2-a, III-D-3-a, III-D-4-a   |
| <b>Date of IBC Review:</b>       | <b>2/9/2026</b>   |
| <b>IBC MOTION:</b>               | Approved contingent any necessary USDA permitting is acquired.  |
| <b>IBC ACTION:</b>               | <b><i>Adopted by voice vote</i></b>   |
| <b>PROTOCOL NOTES:</b>           |   |
| <b>Date of PI Response:</b>      | <b>2/17/2026</b>  |
| <b>PI Response:</b>              | An application for Organisms and Vectors (OV) Interstate Transport Permit from USDA Animal and Plant Health Inspection Service (APHIS) is Pending |
| <b>Additional Comments:</b>      | Permit will be attached to protocol after it is approved.   |

## B. New Business:

**1. New Protocol Registrations:**

|  |  |
|--|--|
| <b>NuRamp ID:</b>                      | 1554   |
| <b>Form ID:</b>                        | <b>26306</b>   |
| <b>TITLE:</b>                          | <b>Functional validation of arthropods olfactory receptors.</b>  |
| <b>PI:</b>                             | <b>Lise Pingault</b>   |
| <b>DEPT:</b>                           | Entomology   |
| <b>Project Biosafety Level:</b>        | BSL-1, ACL-1 (Arthropod)   |
| <b>NIH Guidelines reference:</b>       | III-E, III-D-4, III-D-4-b  |
| <b>IBC MOTION:</b>                     | Approve as written.  |
| Contingencies/Issues:                  |  |
| <b>Made by:</b>                        | K. Heath   |
| <b>Seconded by:</b>                    | W. Niu   |
| <b>IBC ACTION:</b>                     |  |
| For:                                   | <b>8</b>   |
| Against:                               | <b>0</b>   |
| Abstained:                             | <b>0</b>   |
| <b>PROTOCOL REVIEW SUMMARY:</b>        |  |
| <b>Review of Protocol:</b>             |  |
| <b>Summary of Project(s):</b>          | This research aims to understand how beneficial parasitic wasps locate their insect hosts using smell. First, we will measure the activity (gene expression) of specific smell-related genes, called olfactory receptor genes, in parasitic wasps collected from different host plants. Second, we will test the function of selected olfactory receptor genes using a laboratory model insect, the fruit fly. |
| <b>Risk Assessment Considerations:</b> | N/A  |
| Genetic Material:                      | Olfactory receptor genes, pUASg.attB expression plasmid  |
| Vector system:                         | N/A  |
| Microbiological agents:                | E. coli  |
| Organisms:                             | Fruit fly, wasp  |
| OTCC:                                  | N/A  |
| Toxins:                                | N/A  |
| <b>IRB protocol(s):</b>                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |
| <b>IACUC Protocol(s):</b>              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |
| <b>Facility/Safety Summary:</b>        |  |
| Safety Concerns:                       | None.  |
| Facility Concerns:                     | None.  |
| Vaccines/Medical Surveillance:         | N/A  |
| <b>Administrative issues:</b>          |  |
| Current safety training for staff:     | Yes.   |
| Current equipment certification:       | Yes.   |
| Date/Result of                         | 2/27/2026 <b>Findings:</b>   |

|                             |   |
|-----------------------------|---|
| Pre-approval Safety Survey: | No findings.  |
| <b>IBC Discussion:</b>      | The committee asked PI about the probability of collected wasps from the field containing disease. PI confirmed that wasps collected are not known to carry plant pathogens and will be selected from plants without signs of disease. Laboratory space and containment practices were reviewed, and minor <i>Drosophila</i> containment recommendations were incorporated into the protocol. |

|                                  |  |
|----------------------------------|--|
| <b>NuRamp ID:</b>                | 1555   |
| <b>Form ID:</b>                  | 26320  |
| <b>TITLE:</b>                    | <b>Field-Collected Tick Behavioral Assays</b>  |
| <b>PI:</b>                       | <b>Eileen Hebets</b>   |
| <b>DEPT:</b>                     | School of Biological Sciences  |
| <b>Project Biosafety Level:</b>  | ACL-2 (Arthropod)  |
| <b>NIH Guidelines reference:</b> | N/A  |
| <b>IBC MOTION:</b>               | Approve with the following contingencies:  |
| Contingencies/Issues:            | <ul style="list-style-type: none"> <li>More information about the sequencing happening at UNMC, a satisfactory pre-approval survey, and all required training is completed.</li> </ul> |
| <b>Made by:</b>                  | A. Mitra   |
| <b>Seconded by:</b>              | H. Blair   |
| <b>IBC ACTION:</b>               |  |
| For:                             | <b>8</b>   |
| Against:                         | <b>0</b>   |
| Abstained:                       | <b>0</b>   |

**PROTOCOL REVIEW SUMMARY:****Review of Protocol:****Summary of Project(s):**

The long-term goal of this study is to understand how *I. scapularis* expansion contributes to the changing landscape of Lyme disease in the United States. This project assesses how *I. scapularis* genomic composition influences Lyme disease transmission risk.

**Risk Assessment Considerations:**

Genetic Material: N/A  
 Vector system: N/A  
 Microbiological agents: N/A  
 Organisms: Field collected ticks  
 OTCC: N/A  
 Toxins: N/A

**IRB protocol(s):**

Yes  No **SROC protocol:**  Yes  No

**IACUC Protocol(s):**

Yes  No

**Facility/Safety Summary:**

|  |   |  |
|--|---|--|
| Safety Concerns:                           | None.   |  |
| Facility Concerns:                         | None.   |  |
| Vaccines/Medical Surveillance:             | Tickborne Disease Monitoring  |  |
| <b>Administrative issues:</b>              |   |  |
| Current safety training for staff:         | Lab member needs to complete Biosafety 100, 101, and 201 training.  |  |
| Current equipment certification:           | Yes.  |  |
| Date/Result of Pre-approval Safety Survey: | N/A   | <b>Findings:</b>                       |
|  |   | Pre-approval survey not yet conducted. |
| <b>IBC Discussion:</b>                     | Committee asked how PI will handle ticks potentially contaminated with Lyme disease, and PI confirmed all ticks used in this study are field collected and are considered diagnostic. It is unknown whether they contain pathogenic disease agents or not during this stage of the project. All the ticks will be treated as if they all contain a pathogenic agent/Lyme disease, and will all be placed in ACL-2 setup for safety precautions. Committee wanted clarification and more information on the technical description of sequencing, approved protocol contingent on PI providing more sequencing information and lab members completing training. |  |

|                                  |  |
|----------------------------------|--|
| <b>NuRamp ID:</b>                | 1560   |
| <b>Form ID:</b>                  | 26354  |
| <b>TITLE:</b>                    | <b>Soybean crossing with Enlist E3 trait</b>                                     |
| <b>PI:</b>                       | <b>George Graef</b>  |
| <b>DEPT:</b>                     | Agronomy and Horticulture  |
| <b>Project Biosafety Level:</b>  | BSL-1-P (Plant)  |
| <b>NIH Guidelines reference:</b> | III-E-2  |
| <b>IBC MOTION:</b>               | Approve with the following contingencies:  |
| Contingencies/Issues:            | <ul style="list-style-type: none"> <li>Required training is completed</li> </ul> |
| <b>Made by:</b>                  | H. Blair   |
| <b>Seconded by:</b>              | D. Zinniel   |
| <b>IBC ACTION:</b>               |  |
| For:                             | <b>7</b>   |
| Against:                         | <b>0</b>   |
| Abstained:                       | <b>1</b>   |

**PROTOCOL REVIEW SUMMARY:****Review of Protocol:****Summary of Project(s):**

This research is for soybean variety development for Enlist E3 soybeans. Cross soybean plants in the growth chamber to obtain F1 seeds. The F1 plants will be grown in the field to obtain F2 seeds.

**Risk Assessment Considerations:**

|  |  |   |
|--|--|---|
| Genetic Material:                          | N/A  |   |
| Vector system:                             | N/A  |   |
| Microbiological agents:                    | N/A  |   |
| Organisms:                                 | Transgenic commercial soybean  |   |
| OTCC:                                      | N/A  |   |
| Toxins:                                    | N/A  |   |
| <b>IRB protocol(s):</b>                    | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>IACUC Protocol(s):</b>                  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |   |
| <b>Facility/Safety Summary:</b>            |  |   |
| Safety Concerns:                           | None.  |   |
| Facility Concerns:                         | None.  |   |
| Vaccines/Medical Surveillance:             | N/A  |   |
| <b>Administrative issues:</b>              |  |   |
| Current safety training for staff:         | Lab members need to complete Biosafety 100 and 101 trainings.  |   |
| Current equipment certification:           | Yes.   |   |
| Date/Result of Pre-approval Safety Survey: | N/A  | <b>Findings:</b><br>Greenhouse space only.  |
| <b>IBC Discussion:</b>                     | The Committee had no concerns about this protocol and deemed it a natural progression of the PI's current research, which will mainly be used for commercial purposes. |   |

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 1553  |
| <b>Form ID:</b>                  | <b>26305</b>  |
| <b>TITLE:</b>                    | <b>Regulating thermogenic adipose function to improve metabolic health in obesity and chronic diseases</b>  |
| <b>PI:</b>                       | <b>Hee Jin Jun</b>  |
| <b>DEPT:</b>                     | Nutrition and Health Sciences   |
| <b>Project Biosafety Level:</b>  | BSL-2, ABSL-1 (Animal)  |
| <b>NIH Guidelines reference:</b> | III-F-8, C-VII, III-E-1   |
| <b>IBC MOTION:</b>               | Approve with the following contingencies:   |
| Contingencies/Issues:            | <ul style="list-style-type: none"> <li>Satisfactory pre-approval survey is completed and clarification on Streptozotocin SOPs</li> </ul>  |
| <b>Made by:</b>                  | H. Blair  |
| <b>Seconded by:</b>              | D. Zinniel  |
| <b>IBC ACTION:</b>               |   |
| For:                             | <b>7</b>  |
| Against:                         | <b>0</b>  |
| Abstained:                       | <b>1</b>  |
| <b>PROTOCOL REVIEW SUMMARY:</b>  |   |
| <b>Review of Protocol:</b>       |   |
| <b>Summary of Project(s):</b>    | We will test causality using genetic and pharmacological mouse models, along with complementary mouse and human cell culture systems, to precisely modulate thermogenic fat function. |

|  |   |   |
|--|---|---|
|  | We will also evaluate interventions that manipulate thermogenic fat to treat and/or prevent chronic diseases with metabolic dysregulation.  |   |
| <b>Risk Assessment Considerations:</b>     |   |   |
| Genetic Material:                          | Genes associated with glucose homeostasis   |   |
| Vector system:                             | Adeno associated virus (AAV)  |   |
| Microbiological agents:                    | Adeno associated virus (AAV)  |   |
| Organisms:                                 | Transgenic mice   |   |
| OTCC:                                      | Mouse samples, human cell lines   |   |
| Toxins:                                    | N/A   |   |
| <b>IRB protocol(s):</b>                    | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>IACUC Protocol(s):</b>                  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |   |
| <b>Facility/Safety Summary:</b>            |   |   |
| Safety Concerns:                           | None.   |   |
| Facility Concerns:                         | None.   |   |
| Vaccines/Medical Surveillance:             | Hepatitis B vaccination   |   |
| <b>Administrative issues:</b>              |   |   |
| Current safety training for staff:         | Yes.  |   |
| Current equipment certification:           | Yes.  |   |
| Date/Result of Pre-approval Safety Survey: | N/A   | <b>Findings:</b><br>Pre-approval survey not yet conducted.                                |
| <b>IBC Discussion:</b>                     | The Committee requested additional details in the protocol, including the purpose and dosage of streptozotocin in mice, and asked that relevant procedures referenced in the IACUC protocol be included in the technical description. Approval will proceed following receipt of the requested clarifications and pre-approval visit. |   |

## 2. Protocol Amendments:

|                                  |  |
|----------------------------------|--|
| <b>NuRamp ID:</b>                | 1126   |
| <b>Form ID:</b>                  | 26359  |
| <b>TITLE:</b>                    | Molecular characterization of common animal viral pathogens                  |
| <b>PI:</b>                       | Hiep Vu  |
| <b>DEPT:</b>                     | Animal Science   |
| <b>Protocol Biosafety Level:</b> | BSL-2, ABSL-2 (Animal)   |
| <b>NIH Guidelines reference:</b> | III-F-6, III-E, III-E-1, III-D-1-a, III-D-2-a, III-D-3-a, III-D-4-a, III-D-7 |
| <b>IBC MOTION:</b>               | Approve as written.  |
| Contingencies/Issues:            |  |
| <b>Made by:</b>                  | K. Heath   |
| <b>Seconded by:</b>              | W. Niu   |
| <b>IBC ACTION:</b>               |  |

For: **8**  
 Against: **0**  
 Abstained: **0**

**PROTOCOL NOTES:****Review of Protocol:****Summary of Project(s):**

The overarching objective of my research is to develop efficacious vaccines against important viral pathogens such as porcine reproductive and respiratory syndrome virus (PRRSV), influenza A virus (IAV), and African swine fever virus (ASFV).

**Changes to the Protocol:**

Updated personnel, removed microbes and cells, updated gene list and research description.  
 Add bullet point 2.8 to project 2, which is influenza virus vaccine. In this section, I describe the overview of the generation of the lentivirus pseudoparticle containing the HA protein of highly pathogenic avian influenza virus, which will be used for measuring virus neutralization assay.

**Risk Assessment Considerations:**

Genetic Material: H5 gene of H5N1 influenza virus

Vector system: N/A

Microbiological agents: N/A

Organisms: N/A

OTCC: N/A

Toxins: N/A

**IRB protocol(s):**

Yes No **SROC protocol:** Yes No

**IACUC Protocol(s):**

Yes No

**Facility/Safety Summary:**

Safety Concerns: None.

Facility Concerns: None.

Vaccines/Medical Surveillance: N/A

**Administrative issues:**

Current safety training for staff: Yes.

Current equipment certification: Yes.

Date/Result of last EHS Survey:

Annual

2/27/2026

**Findings:**

No findings.

**IBC Discussion:**

The committee had no concerns about the proposed changes.

**NuRamp ID:**

950

**Form ID:**

26360

**TITLE:**

Metabolomics Core Facility

**PI:**

Sophie Alvarez Y Albala

**DEPT:**

Center for Biotechnology

**Protocol Biosafety Level:**

BSL-2

**NIH Guidelines reference:**

III-F-8, C-I, C-VII

|                       |                                  |
|-----------------------|----------------------------------|
| <b>IBC MOTION:</b>    | Approve as written.              |
| Contingencies/Issues: |                                  |
| <b>Made by:</b>       | W. Nu                            |
| <b>Seconded by:</b>   | D. Zinnel                        |
| <b>IBC ACTION:</b>    | <b><i>Approve as Written</i></b> |
| For:                  | <b>8</b>                         |
| Against:              | <b>0</b>                         |
| Abstained:            | <b>0</b>                         |

**PROTOCOL NOTES:**

|  |  |
|--|--|
| <b>Review of Protocol:</b>             |  |
| <b>Summary of Project(s):</b>          | The facility analyzes proteins and metabolites from a wide range of samples using mass spectrometry-based approaches.  |
| <b>Changes to the Protocol:</b>        | Added <i>Candida albicans</i> , <i>Candida parapsilosis</i> , <i>Candida krusei</i> , <i>Candida lusitanae</i> , <i>Candida auris</i> into microorganisms section  |
| <b>Risk Assessment Considerations:</b> |  |
| Genetic Material:                      | N/A  |
| Vector system:                         | N/A  |
| Microbiological agents:                | <i>Candida albicans</i> , <i>Candida parapsilosis</i> , <i>Candida krusei</i> , <i>Candida lusitanae</i> , <i>Candida auris</i>  |
| Organisms:                             | N/A  |
| OTCC:                                  | N/A  |
| Toxins:                                | N/A  |
| <b>IRB protocol(s):</b>                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |
| <b>IACUC Protocol(s):</b>              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |
| <b>Facility/Safety Summary:</b>        |  |
| Safety Concerns:                       | None.  |
| Facility Concerns:                     | None.  |
| Vaccines/Medical Surveillance:         | N/A  |
| <b>Administrative issues:</b>          |  |
| Current safety training for staff:     | Yes.   |
| Current equipment certification:       | Yes.   |
| Date/Result of last EHS Survey:        | Annual<br>4/28/2025  |
|  | <b>Findings:</b><br>No findings.   |
| <b>IBC Discussion:</b>                 | Committee wanted clarification on if the PI would receive samples frozen or not. The PI confirmed the organisms are obtained frozen from a recognized culture collection. The Committee reviewed the handling and inactivation steps and had no additional concerns. |

|                   |       |
|-------------------|-------|
| <b>NuRamp ID:</b> | 1380  |
| <b>Form ID:</b>   | 26362 |

|  |  |   |
|--|--|---|
| <b>TITLE:</b>                          | Production and storage of African Swine Fever Virus (ASFV) vaccine master seed.  |   |
| <b>PI:</b>                             | Scott McVey  |   |
| <b>DEPT:</b>                           | School of Veterinary Medicine and Biomedical Sciences  |   |
| <b>Protocol Biosafety Level:</b>       | BSL-3  |   |
| <b>NIH Guidelines reference:</b>       | III-E, III-D-3-e   |   |
| <b>IBC MOTION:</b>                     | Approve with the following contingencies:  |   |
|  | Contingencies/Issues:  | <ul style="list-style-type: none"> <li>Required training is completed</li> </ul>          |
| <b>Made by:</b>                        | A. Mitra   |   |
| <b>Seconded by:</b>                    | K. Heath   |   |
| <b>IBC ACTION:</b>                     |  |   |
|  | For:   | <b>8</b>  |
|  | Against:   | <b>0</b>  |
|  | Abstained:   | <b>0</b>  |
| <b>PROTOCOL NOTES:</b>                 |  |   |
| <b>Review of Protocol:</b>             |  |   |
| <b>Summary of Project(s):</b>          | Work consists in propagation of ASFV vaccine strains in cultured swine macrophages with the goal of obtaining master seeds stocks. |   |
| <b>Changes to the Protocol:</b>        | Updated personnel and Co-PIs   |   |
| <b>Risk Assessment Considerations:</b> |  |   |
|  | Genetic Material:  | N/A   |
|  | Vector system:   | N/A   |
|  | Microbiological agents:  | N/A   |
|  | Organisms:   | N/A   |
|  | OTCC:  | N/A   |
|  | Toxins:  | N/A   |
| <b>IRB protocol(s):</b>                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>IACUC Protocol(s):</b>              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |   |
| <b>Facility/Safety Summary:</b>        |  |   |
|  | Safety Concerns:   | None.   |
|  | Facility Concerns:   | None.   |
|  | Vaccines/Medical Surveillance:   | N/A   |
| <b>Administrative issues:</b>          |  |   |
|  | Current safety training for staff:   | Staff need to complete Biosafety 100, 101, and 201 trainings                              |
|  | Current equipment certification:   | Yes.  |
|  | Date/Result of last EHS Survey:  | Annual  |
|  |  | <b>Findings:</b>  |
|  | 11/18/2025   | No findings.  |
| <b>IBC Discussion:</b>                 | Committee did not have any issues with the proposed changes to the protocol.   |   |

|                   |     |
|-------------------|-----|
| <b>NuRamp ID:</b> | 273 |
|-------------------|-----|

|                                  |  |
|----------------------------------|--|
| <b>Form ID:</b>                  | 26300  |
| <b>TITLE:</b>                    | Stress tolerance in rice and wheat   |
| <b>PI:</b>                       | Harkamal Walia   |
| <b>DEPT:</b>                     | Agronomy and Horticulture  |
| <b>Protocol Biosafety Level:</b> | BSL-1, BSL-1-P (Plant)   |
| <b>NIH Guidelines reference:</b> | III-F-8, C-II, III-E, III-E-2, III-E-2-a, III-D-2-a                              |
| <b>IBC MOTION:</b>               | Approve with the following contingencies:  |
| Contingencies/Issues:            | <ul style="list-style-type: none"> <li>Required training is completed</li> </ul> |
| <b>Made by:</b>                  | H. Blair   |
| <b>Seconded by:</b>              | D. Zinniel   |
| <b>IBC ACTION:</b>               |  |
| For:                             | <b>8</b>   |
| Against:                         | <b>0</b>   |
| Abstained:                       | <b>0</b>   |

**PROTOCOL NOTES:****Review of Protocol:**

**Summary of Project(s):** Generation of transgenic rice plants for stress tolerance research. Testing of soybeans and maize transgenic plants generated by UNL Core Transformation Facility using the DNA sequence/genes from the corresponding species for testing of heat, drought and salinity tolerance.

**Changes to the Protocol:** Updated research description, added Saccharomyces to Section III, added soybean and maize transgenic plants to Section V, updated plasmid and genetic elements in Section VI

**Risk Assessment Considerations:**

Genetic Material: Salt tolerance genes

Vector system: N/A

Microbiological agents: Saccharomyces cerevisiae

Organisms: Soybean and maize

OTCC: N/A

Toxins: N/A

**IRB protocol(s):** Yes No **SROC protocol:** Yes No

**IACUC Protocol(s):** Yes No

**Facility/Safety Summary:**

Safety Concerns: None.

Facility Concerns: None.

Vaccines/Medical Surveillance: N/A

**Administrative issues:**

Current safety training for staff: Lab members need to complete biosafety 100 and 101

Current equipment certification: Yes.

|                                 |            |                        |
|---------------------------------|------------|------------------------|
| Date/Result of last EHS Survey: | Annual     | <b>Findings:</b>       |
|                                 | 11/11/2025 | All findings resolved. |

|                        |  |
|------------------------|--|
| <b>IBC Discussion:</b> | The committee found no issues with the proposed protocol changes and deemed it a natural progression of the PI's work. |
|------------------------|--|

### 3. Notice of NIH Exempt Protocol Approvals: None

### 4. Notice of Administratively Approved Amendments:

|                                  |  |
|----------------------------------|--|
| <b>NuRamp ID:</b>                | 1121   |
| <b>Form ID:</b>                  | 26324  |
| <b>TITLE:</b>                    | <b>Examining the role of the healthy gastrointestinal microbiome in preventing infection with antibiotic resistant pathogens</b>   |
| <b>PI:</b>                       | <b>Jennifer Auchtung</b>   |
| <b>DEPT:</b>                     | Food Science and Technology  |
| <b>Project Biosafety Level:</b>  | BSL-2, ABSL-2 (Animal)   |
| <b>NIH Guidelines reference:</b> | III-F-4, III-F-8, C-II, C-V, III-D-1-a, III-D-2-a  |
| <b>PROTOCOL NOTES:</b>           |  |
| <b>IRB protocol:</b>             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |
| <b>IACUC Protocol:</b>           | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |
| <b>Objective of Study:</b>       | As an extension of our work to understand how diet influences functions of the microbiota, we will be cultivating the microbiota and individuals microbes in the presence of different compounds that can be found in the diet to test effects on function(s). These studies will include growing microbes in the presence of dietary bioactives, such as extracellular vesicles (EVs) purified from chives, as well as toxic metals that can be introduced through the diet, such as cadmium. |
| <b>Changes to the Protocol:</b>  | Updated personnel, funding, pathogen inventory, and cell lines.  |
| <b>Review comments:</b>          | None.  |

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 60  |
| <b>Form ID:</b>                  | 26318   |
| <b>TITLE:</b>                    | <b>Enhancing phenotypic attributes of commodity crops through biotechnology</b>   |
| <b>PI:</b>                       | <b>Nathaniel Butler</b>   |
| <b>DEPT:</b>                     | Agronomy and Horticulture   |
| <b>Project Biosafety Level:</b>  | BSL-1, BSL-1-P (Plant)  |
| <b>NIH Guidelines reference:</b> | III-F-2, III-F-5, III-F-7, III-F-8, C-II, III-E, III-E-1, III-E-2, III-E-2-a, III-D-2-a, III-D-3-e  |
| <b>PROTOCOL NOTES:</b>           |   |
| <b>IRB protocol:</b>             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>IACUC Protocol:</b>           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   |
| <b>Objective of Study:</b>       | Conduct vector cloning of insect Bracon olfactory receptors (ORs) genes in an insect protein expression system for use by Dr. Lise Pingault (UNL) lab.        |

|                                 |  |
|---------------------------------|--|
| <b>Changes to the Protocol:</b> | Updated collaborators and genetic elements (added olfactory receptor genes). |
|---------------------------------|--|

|                         |       |
|-------------------------|-------|
| <b>Review comments:</b> | None. |
|-------------------------|-------|

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 1264  |
| <b>Form ID:</b>                  | <b>26316</b>  |
| <b>TITLE:</b>                    | <b>Approaches to understand cell-cell signaling</b> |
| <b>PI:</b>                       | <b>James Checco</b>                                 |
| <b>DEPT:</b>                     | Chemistry   |
| <b>Project Biosafety Level:</b>  | BSL-2   |
| <b>NIH Guidelines reference:</b> | III-F-8, C-I, C-II, III-E                           |

**PROTOCOL NOTES:**

|                      |   |                       |   |
|----------------------|---|-----------------------|---|
| <b>IRB protocol:</b> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <b>SROC protocol:</b> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
|----------------------|---|-----------------------|---|

|                        |   |
|------------------------|---|
| <b>IACUC Protocol:</b> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
|------------------------|---|

|                            |  |
|----------------------------|--|
| <b>Objective of Study:</b> | Our lab aims to understand the chemical components and interactions that facilitate cell-to-cell communication. To accomplish this goal, we will take model cell lines or various tissues and extract their chemical components for analysis using several analytical methods (primarily liquid chromatography and mass spectrometry). We also study activation of cell surface receptors using biochemical assays. Other projects involve developing and evaluating molecules to bind to particular proteins of interest. |
|----------------------------|--|

|                                 |   |
|---------------------------------|---|
| <b>Changes to the Protocol:</b> | Updated personnel to reflect recent changes for the Spring. Updated gene list. Added U-2 OS and HL-60 cell lines. |
|---------------------------------|---|

|                         |       |
|-------------------------|-------|
| <b>Review comments:</b> | None. |
|-------------------------|-------|

|                                  |   |
|----------------------------------|---|
| <b>NuRamp ID:</b>                | 719   |
| <b>Form ID:</b>                  | <b>26321</b>  |
| <b>TITLE:</b>                    | <b>The role of fatty acids in placenta, liver, brain, eye and fetal health</b>  |
| <b>PI:</b>                       | <b>Sathish Natarajan</b>  |
| <b>DEPT:</b>                     | Nutrition and Health Sciences   |
| <b>Project Biosafety Level:</b>  | BSL-2, ABSL-2 (Animal)  |
| <b>NIH Guidelines reference:</b> | III-F-1, III-F-2, III-F-8, C-II, C-VIII, III-E, III-D-1-a, III-D-2-a, III-D-3-a |

**PROTOCOL NOTES:**

|                      |   |                       |   |
|----------------------|---|-----------------------|---|
| <b>IRB protocol:</b> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <b>SROC protocol:</b> | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
|----------------------|---|-----------------------|---|

|                        |   |
|------------------------|---|
| <b>IACUC Protocol:</b> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
|------------------------|---|

|                            |   |
|----------------------------|---|
| <b>Objective of Study:</b> | We will determine the pathogenic role of Zika virus or West Nile Virus infection to prostate, brain, spleen and testis. |
|----------------------------|---|

|                                 |  |
|---------------------------------|--|
| <b>Changes to the Protocol:</b> | Updated personnel and research description, added mouse tissue, new lab space. |
|---------------------------------|--|

|                         |       |
|-------------------------|-------|
| <b>Review comments:</b> | None. |
|-------------------------|-------|

**5. Notice of Minor Modification Forms Approved:**

See attached report for a list of all Minor Modification forms received and approved since the last meeting.

**6. Notice of Protocol Annual Updates Received:**

See the attached report for a list of all Annual Update forms received and approved since the last meeting.

**7. Notice of Protocol Terminations:**

|  |   |
|--|---|
| <b>NuRamp ID:</b>                      | 97  |
| <b>TITLE:</b>                          | Population genomics of high altitude adaptation in deer mice ( <i>Peromyscus maniculatus</i> )  |
| <b>PI:</b>                             | Jay Storz   |
| <b>DEPT:</b>                           | School of Biological Sciences   |
| <b>Project Biosafety Level:</b>        | BSL-2   |
| <b>Project Termination Date:</b>       | 2/19/2026   |
| <b>PROTOCOL NOTES:</b>                 |   |
| <b>IRB protocol(s):</b>                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>SROC protocol:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>IACUC Protocol(s):</b>              | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No   |
| <b>Disposition of rDNA and agents:</b> | Materials destroyed.  |

**C. Other Business:****1. EHS Report****2. Conflict of Interest Statement and Confidentiality Agreement**

Committee discussed and approved updated documentation for Conflict of Interest Statements and Confidentiality Agreements

Motion for Confidentiality Agreement Implementation: Approve as written

For: 8

Against: 0

Abstained: 0

**II. ADJOURN**

**Motion:** H. Blair

**2nd:** A. Mitra

**Time Adjourned:** 3:42pm

IBC Annual Update Form Approvals  
since last IBC Meeting

| Form ID      | Approval Date | IBC Project ID | Project Title  | Protocol Status | Form Status | Lead PI           | Amendment Needed |
|--------------|---------------|----------------|--|-----------------|-------------|-------------------|------------------|
| UNL-00026165 | 2/25/2026     | UNL-00001109   | Daphnia pathogen experiments   | Approved        | Approved    | Clay Cressler     | No               |
| UNL-00026390 | 2/26/2026     | UNL-00000445   | Plant Microbiome Research  | Approved        | Approved    | Daniel Schachtman | No               |
| UNL-00026388 | 2/24/2026     | UNL-00001138   | Assessing allergic potential of proteins through expression in non-pathogenic E. coli  | Approved        | Approved    | Philip Johnson    | No               |
| UNL-00026387 | 2/23/2026     | UNL-00001359   | Assessing the role of fatty acid metabolism in development of metabolic diseases.  | Approved        | Approved    | Tomasz Bednarski  | No               |
| UNL-00026385 | 2/24/2026     | UNL-00000615   | Metabolic Engineering and Synthetic Biology  | Approved        | Approved    | Wei Niu           | No               |
| UNL-00026384 | 3/2/2026      | UNL-00000458   | Molecular biology and biochemistry underlying the interaction of tomato, tobacco (Nicotiana benthamiana), and Arabidopsis with Pseudomonas syringe | Approved        | Approved    | Lirong Zeng       | No               |
| UNL-00026383 | 2/26/2026     | UNL-00001483   | The Impact of Cancer Treatment on Lymphatic Vessel Regeneration and Remodeling   | Approved        | Approved    | Mohammad Razavi   | No               |
| UNL-00026382 | 2/23/2026     | UNL-00000027   | Applied Food Safety Microbiology and Risk assessment   | Approved        | Approved    | Jayne Stratton    | No               |
| UNL-00026381 | 2/26/2026     | UNL-00000060   | Enhancing phenotypic attributes of commodity crops through biotechnology   | Approved        | Approved    | Nathaniel Butler  | Yes              |
| UNL-00026371 | 2/10/2026     | UNL-00000073   | Growth Factor Involvement in Gonadal Development and Function  | Approved        | Approved    | Andrea Cupp       | No               |
| UNL-00026367 | 2/10/2026     | UNL-00000147   | Plant Transformation Core Research Facility  | Approved        | Approved    | Nathaniel Butler  | No               |
| UNL-00026364 | 2/16/2026     | UNL-00000413   | Genetic Improvement of Sorghum and Switchgrass for Energy Uses: Mechanisms controlling the biological pathways                                     | Approved        | Approved    | Scott Sattler     | No               |

**Minor Modification Forms Approved since Last IBC Meeting**

| Form ID      | IBC Project ID | Approval Date | ProjectTitle  | Protocol Status | Form Status | Lead PI           | Form Changes |
|--------------|----------------|---------------|---|-----------------|-------------|-------------------|--------------|
| UNL-00026394 | UNL-00000120   | 2/26/2026     | Replication and Assembly of RNA Viruses   | Approved        | Approved    | Asit Pattnaik     | Personnel    |
| UNL-00026389 | UNL-00001121   | 2/25/2026     | Examining the role of the healthy gastrointestinal microbiome in preventing infection with antibiotic resistant pathogens | Approved        | Approved    | Jennifer Auchtung | Personnel    |
| UNL-00026386 | UNL-00001109   | 2/25/2026     | Daphnia pathogen experiments  | Approved        | Approved    | Clay Cressler     | Personnel    |
| UNL-00026379 | UNL-00000117   | 2/19/2026     | Synthetic and Chemical Biology  | Approved        | Approved    | Jiantao Guo       | Personnel    |
| UNL-00026375 | UNL-00000092   | 2/16/2026     | Genetic Manipulation of Mycobacteria  | Approved        | Approved    | Raul Barletta     | Personnel    |
| UNL-00026374 | UNL-00001544   | 2/16/2026     | Detection of bacterial pathogens in food manufacturing samples.   | Approved        | Approved    | Heidi Leonard     | Personnel    |
| UNL-00026372 | UNL-00001450   | 2/25/2026     | Understanding the Cognitive and Brain Health in Relation to Diet and Dietary Interventions                                | Approved        | Approved    | Doug Schultz      | Personnel    |
| UNL-00026369 | UNL-00001449   | 2/9/2026      | An evaluation of Chloroviruses in an animal model of Amyotrophic Lateral Sclerosis  | Approved        | Approved    | Tom Petro         | Lab space    |
| UNL-00026366 | UNL-00001416   | 2/10/2026     | Management veterinary pest insects by RNAi/miRNA  | Approved        | Approved    | John Wang         | Personnel    |