

**Minutes**  
**October 30<sup>th</sup>, 2025**  
**Institutional Biosafety Committee**  
**Teleconference**

**Attendance**

**Members Present:**

T. Oomens (Chair)  
E. Lutter (Vice-Chair)  
A. Hall (Alt)  
A. Fewell (BSO)  
V. Freeman (Alt)  
M. Cabeen  
B. Epperley (Alt)  
C. Franks  
I. Girardi (Alt)  
J. Gallaway  
B. Holcomb  
A. Mitra (Alt)  
K. Southworth  
S. McFee (Alt)  
M. Hinsdale

**Members Absent:**

T. Essary (Alt)  
J. Olson (Alt)  
A. Ramachandran  
R. Matts  
J. Ballard (Alt)  
W. Kipgen (Alt)  
D. Maples (Alt)  
D. Christensen (Alt)  
D. Cunningham

**Non-Members Present:**

*Note: In the event that both a member and their alternate are present, only the primary member's vote will count unless the primary member allows the alternate to vote in their place.*

**Call to Order** - With a quorum present, the Chair called the meeting to order at 10:01 a.m.

**Approval of the September 25<sup>th</sup>, 2025 minutes** – No concerns were raised. A motion was made to approve by T. Oomens and seconded by A. Hall, majority vote was recorded, and the minutes were approved. K. Southworth and S. McFee abstained.

**Old Business**

**A. Protocol/Modification Update**

1. 23-21 Joy Scaria, “Role of the gut microbiome members in health and protection against infectious diseases” - Modification

**Approved – 9/25/25**

2. 24-01 Khursheed Iqbal, “Dissecting the Molecular regulators of Trophoblast Lineage Development and function.” - Modification

**Pending revisions**

3. 25-6 Kelly Harrison, “Effect of Sex-Hormones on HSV Latency and Reactivation.” - Modification

**Approved – 9/25/25**

4. 25-15 Liuling Yan, “Gene function in wheat.”

**Approved – 9/25/25**

5. 25-16 Lin Liu, "Pathogenesis and Therapy of Respiratory and Infectious Diseases."

Approved – 9/29/25

## **New Business**

### **B. Protocols/Modifications for Review by Full Committee**

1. 25-18 Chi Nguyen, "Functional and Physiological Characterization of Transgenic Lettuce and Ornamental Plant Lines Generated via Agrobacterium-Mediated Transformation"

**Category:** Biological Agent and r(s)NA

**NIH Guidelines:** III-D-5 and/or III-E-2

**Source of DNA:** Genomic, cDNA, and synthetic DNA sequences derived from *Lactuca sativa* (lettuce) and other ornamental plant species. Gene fragments also originate from publicly available databases (NCBI, Phytozome) and non-pathogenic plant species.

**Vector(s):** Binary plant transformation vectors derived from pCambia, pGWB, and POX135 backbones carrying CRISPR/Cas9, GUS, GFP, or RNAi expression cassettes. All plasmids contain Agrobacterium-compatible T-DNA borders, a plant promoter (CaMV 35S or Ubiquitin), and an antibiotic-resistance selection marker (kanamycin or hygromycin) used only for laboratory plant selection under BSL-1 P containment.

**Recipient Host(s):** *Lactuca sativa* (cv. Salinas and derived transgenic lines) Selected ornamental species (e.g., *Begonia semperflorens*, *Tagetes erecta*) *Escherichia coli* DH5a (cloning host, RG-1) *Agrobacterium tumefaciens* EHA105 or GV3101 (disarmed, RG-1 plant transformation host)

**Biosafety Level:** BSL-1

#### **Project Summary:**

Dr. Nguyen is a new PI establishing her plant lab here at OSU, she is previously from the University of Florida. This project aims to understand how specific genes regulate plant stress tolerance, flowering, and seed physiology using genetic transformation and molecular analysis. Transgenic lettuce and ornamental plant lines carrying targeted mutations or over-expression constructs will be evaluated under controlled greenhouse and growth-chamber conditions. The research seeks to improve plant resilience and inform breeding strategies for drought- and heat-tolerant crops and ornamentals.

A. Fewell gave an overview of the project explaining that Dr. Chi is a new P.I. and the project does not involve any pathogens, only transgenic material. A. Fewell and I. Girardi completed lab inspections for the space the week prior. The only item to be addressed was the need for a sharps policy.

#### **Items to be addressed:**

1. Include a sharps handling SOP/policy.

Motion to approve was made by T. Oomens and seconded by A. Hall, majority vote was recorded, and the protocol was approved pending one minor edit.

2. 25-19 Danny Maples, “Training and Exercise Biological Signatures Support Formerly: Pathogen detection-assay development under Dr. Jerry Malayer.”

**Category:** Biological Agent and r(s)NA

**NIH Guidelines:** III-F

**Source of DNA:** Synthetic DNA for Ba, Yp, and Ft purchased through Integrative DNA Technologies (IDT)

**Biosafety Level:** BSL-2

**Project Summary:**

Dr. Maples and Dr. Malayer's 19-25 BSL-2 IBC protocol was due to expire in November. This new protocol submission replaces it and covers the BSL-2 side of their work. The primary objective is to provide training and exercise support for military and first-responders under the Department of Homeland Security (DHS) office of Countering Weapons of Mass Destruction (CWMD). The sponsor is Lawrence Livermore National Laboratory (LLNL). In this work, Dr. Maples will provide biological signatures for the training exercises that can be detected on field-deployed assays and instruments. The signatures are typically inactivated cell lysates, DNA extracts, or synthetic DNA oligos, which are detected using qPCR or hand-held antibody-based assays. All materials are sent to LLNL for additional testing and validation.

A. Fewell gave an overview of the project explaining Dr. Maples work. One typo was noted where the volume of the concentration used was missing. The committee also requested that Dr. Maples confirm he is not combining the toxins together, only using them as separate toxins. All of Dr. Maples lab inspections are up to date.

**Items to be addressed:**

1. Add concentration volume.
2. Confirm he is not combining toxins, only working with them separately.

Motion was made to approve by A. Hall and seconded by K. Southworth, majority vote was recorded, and the protocol was approved pending minor clarifications.

*M. Hinsdale arrives at 10:29*

*M. Hinsdale left at 10:40*

*M. Hinsdale arrives at 10:52*

**C. Miscellaneous Business**

- Aaron reminded the committee to complete their IBC annual training quiz.

**Adjourn-** The meeting adjourned at 10:54 a.m.