10/7/2025 1:30-3:00pm Zoom Virtual Meeting

# Institutional Biosafety Committee Meeting minutes

# Meeting Attendance:

- Members in attendance:
  - o Elena Demireva
  - o Jamie Willard-Smith
  - o Carrie Anglewicz
  - Jonathan Hardy
  - o Dave Morgan
  - o Michael Bachmann
  - Sarah Roosa
  - Andras Komaromy
  - o Jan Patterson Samson
- Members not in attendance:
  - o Guo-Qing Song Raj Kulkarni
  - o Carolina de Aguiar Ferreira
  - o Simon Petersen-Jones
- Others in attendance:
  - o Chris Colvin
  - o Alessandra Hunt
  - Luis Ochoa Carrera

### Call to order:

Elena Demireva

#### Roll call:

Chris Colvin

# Discussion of the agenda:

• Approved with minor edit to #11(PI name and Department update).

### Discussion of minutes:

• Approved with minor edit to the date and NIH category for item #8.

10/7/2025 1:30-3:00pm Zoom Virtual Meeting

## Registration review:

Study Info

#### Safety0001318:

HPV infection and oncogenesis

**Training: Complete for all members listed** 

NIH III D-2-a, RG-2, BSL-2+

This registration has been approved with edits. Sarah Roosa abstains from the vote. The PI has been asked to clarify the following:

- Tissues
  - o 2: Describe the "other" material listed in the table in question 1.
  - o 3a: Update analyzer as the LSR II is no longer in service.
  - Update the Flow cytometry addendum safety # is not correct
- Cells
  - 5d: Update safety precautions from none to the PPE or engineering controls that are used as discussed with FACS Core
- Virus
  - The IBC recommends switching from a 2<sup>nd</sup> generation to 3<sup>rd</sup> generation or later lentivirus for increased biosafety for future experiments.
- rDNA Usage
  - o 8: Remove statement starting with "However, all these vector systems have been generally...."
  - o Discuss specifically the inserts that are used with the retrovirus (e.g. Cas9).
- Supporting Documents
  - o If using needles with safety features as stated in the exposure assessment page you will need the safer sharps evaluation form.
  - Update Safer sharps form statement "not necessary for evaluation", change to no other is available.

## Study Info

### Safety0001333:

- the study of mRNA translation and peptides in plants v3

**Training: Complete for all members listed** 

NIH III E-2-a, RG-1, BSL-1

- Basic Information
  - o Typo "adaption", change to adaptation.
- rDNA Usage
  - o 3b: Provide gene information for "other genes", if doing a screen you can state that.
- Exposure Assessment

10/7/2025 1:30-3:00pm Zoom Virtual Meeting

o 1: Provide more details on if transgenic plants are accidentally released.

### Study Info

### Safety0001337:

Transgenic Facility Safety 2025

**Training: Complete for all members listed** 

**NIH III E-3, RG-1, BSL-2** 

This registration has been approved with edits. Elena Demireva abstains from the vote. The PI has been asked to clarify the following:

- rDNA usage
  - o 3b: Fix list to make it more legible. There was some sort of formatting issue when the review was created.
- Exposure Assessment
  - o 3: Update eye wash flush date.

### Study Info

#### Safety0001339:

Inflammation and Autoimmunity Research Training: Complete for all members listed NIH III E, RG-1, BSL-2

- Biosafety Summary
  - o Provide more details on the work that is being performed, what is being measured, how are animals being used in the project.
- rDNA Usage
  - o 5a: Change to No if not using bacteria
- rDNA Work Description
  - o 1: Provide references or links for the purchased materials. Add the purchased constructs that are ready to transfect.
  - o 2: Add animals if they are receiving constructs or cells with rDNA.
- Exposure Assessment
  - o 1: Discuss the potential of Blood Borne Pathogen exposure with using human cell lines.
  - o 3: Update eye wash flush date.
- Supporting Documents
  - O Sharps review: Include all sharps used with human or infectious materials.
  - O Safer Sharps evaluation form is blank, fill in with the safer sharps that are being used as indicated on the Exposure Assessment page.

10/7/2025 1:30-3:00pm Zoom Virtual Meeting

#### Study Info

#### Safety0001342:

lab biol project safety protocols

**Training:** Complete for all members listed

NIH III D-4, RG-2, BSL-2

This registration has been approved with edits. The PI has been asked to clarify the following:

- Biosafety Summary
  - o Describe what the 293 cells are used for, are you making virus in house?
  - o Describe cholera toxin use.
- Cells
  - o Update all human cell lines to BSL-2.
  - o 5b: Update LSR II to a different analyzer as that is no longer in service.
- rDNA Work Description
  - o 2: Add mice, include other animals if they are recipients (rabbits, sheep, etc). Include all cell lines that are recipients. Remove bacterial hosts.
  - o 5: Change to Yes.
  - o 6: Change to Yes and include virus and pathogenic bacteria
- Exposure Assessment
  - o 1: Be more specific on possibility of exposure to blood borne pathogens with the use of human cell lines.
  - 5: Add another line with Bleach for Cholera toxin inactivation. In the Concentration box add 10% for Cholera toxin, Contact time 20 min.
- Supporting Documents
  - O Sharps Review: Update reasoning, one handed scoop and it's safe when closed is not sufficient answer for reasoning.

### Study Info

#### Safety0001348:

Research on nutrient transport and sensing in plants

Training: Complete for all members listed

NIH III E-2-a, RG-1, BSL-1

This registration has been approved as is.

## Study Info

## Safety0001349:|

- Monosynaptic Retrograde Tracing

**Training:** Complete for all members listed

NIH III D-E-3-a, RG-2, BSL-2

10/7/2025 1:30-3:00pm Zoom Virtual Meeting

- rDNA Usage
  - o 8: Discuss the risk associated with the use of AAV.
- rDNA Work Description
  - 1: Move MSU Policy for Staff Rabies Vaccination form to the supporting documents page.
  - o 6: Provide genus, species and strain for AAV and RbV
  - o 7: Yes for Cre/Lox system used.

### Study Info

#### Safety0001354:

Cerebellar circuit in Rett Syndrome

**Training: Complete for all members listed** 

NIH III D-4, RG-2, BSL-2

This registration has been approved with edits. The PI has been asked to clarify the following:

- Biosafety Summary
  - o 1: Remove the Animal sections, this is covered by your IACUC protocol.
- rDNA Work Description
  - o 5: Change to Yes.
  - o 6: Just include the genus, species and strain.
- Risk group
  - o FYI: Will leave at RG-2 for Cholera toxin use after checking on regulations.
  - o 2: Change to ABSL-2
- Exposure Assessment
  - o 2: What are the respirators used for and what kind are being used?
  - o 4: Add Sharps that are in your evaluation form (scalpels).

#### Study Info

#### Safety0001355:

**Host-pathogen interactions** 

**Training: Complete for all members listed** 

NIH III D-2-a, RG-2, BSL-2+

- Cells
  - 1: Mouse cells can be Updated/downgraded to BSL-1. All human cells are BSL-2, e.g. THP-1
  - 5e: Update addendum for Live primary cells from mouse bone marrow cells and Fixed bronchioalveolar lavage fluid to include method for inactivation (both boxes are checked).
- Bacteria
  - o 1: Update sources to be specific of the source of the material.

10/7/2025 1:30-3:00pm Zoom Virtual Meeting

- Biohazards
  - 2: #2 Remove sentence that states "Only very elderly and highly immunocompromised individuals are susceptible to Legionnaires' Disease and they are restricted from entering the lab."
- rDNA Work Description
  - o 2: Add mice and other primary and cell lines that will be used as recipients.
- Biosafety Additional Information
  - o 1: Add permit number for receiving materials. EHS will follow up on this at it is the responsibility of the receiver and is site specific.
- Supporting Documents
  - Sharps Review: Remove "cost" as a reasoning for not using safer sharps with infectious and pathogenic materials.

### Study Info

### Safety0001356: |

- Plant energy organelles: dynamics and roles in environmental response

Training: Complete for all members listed

NIH III E-2, RG-1, BSL-1

This registration has been approved with edits. The PI has been asked to clarify the following:

- rDNA Work Description
  - o 2: Add cowpea if it is used as a recipient.
- Exposure Assessment
  - 1: Describe if there are consequences to pollinated Arabidopsis plants growing in the field and what they are.

## Study Info

## Safety0001361:

GC dependent expression

**Training: Complete for all members listed** 

NIH III E-2-a, RG-1, BSL-1

This registration has been approved with edits. The PI has been asked to clarify the following:

- Exposure Assessment
  - o 3: Update Eye wash flush date.
  - o 5: Remove one of the 75% ETOH, if used for surface decontamination concentration should be 70% for 5 min of contact time.

## Study Info

Safety0001364:

Angiogenesis

**Training: Complete for all members listed** 

10/7/2025 1:30-3:00pm Zoom Virtual Meeting

#### NIH III D-4, RG-2, BSL-2

This registration has been approved with edits. The PI has been asked to clarify the following:

- Biosafety Summary
  - o 2: Describe the method used to inject the cells into zebrafish embyros, is this done with an apparatus or is this done by hand?
  - o Define DPF
- Exposure Assessment
  - o 1: Remove "... is non-infectious, cannot propagate outside specialized hosts, and has no impact on plants or the environment" statement. Address the possibility of exposure to Blood Borne Pathogens associated with the use of human cell lines.
- Supporting Documents
  - o Include a specific SOP for the microinjection procedure.

#### New Items:

• N/A

## Previous Submissions:

- Safety0001010
- Safety0001309
- Safety0001291

Next Meeting:

November 3, 2025 1:30 pm via zoom