

CMU Institutional Biosafety Committee

Meeting Minutes: May 27, 2025

Location: Virtual via Teams

Meeting start and quorum: Quorum was confirmed, the attendance of a non-affiliated community member was confirmed, and the meeting was called to order at 1:00 p.m.

1. Attendance

Voting members and roster roles

- Greg Colores, Chair
- Devin Boyles, Biosafety Consultant
- Kevin Park, Animal Expert
- Dawn Polanco, Non-affiliated Community Member

Staff, non-voting

- Belinda Adamson, DRC
- Kristin DeMuro, ADRC
- Jennifer Marrs, Coordinator

2. Review of Minutes

The IBC Chair asked if members had any concerns or suggested changes to the minutes distributed prior to the meeting. None were identified. Minutes from April 16, 2025, were accepted as submitted.

3. Updates and Announcements

The IBC Chair announced that the NIH recently released an implementation update promoting transparency under the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules. To meet these transparency aims, as of June 1, 2025, the NIH Office of Science Policy will publicly post the rosters of all registered IBCs. They will also post the contact information for the IBC Chair, BSO and IBC contact.

The NIH also expects that all approved meeting minutes from meetings taking place on or after June 1, 2025, be publicly posted on the institution's website.

4. IBC Registrations for Review

Three-year Renewal

Principal Investigator: Julien Rossignol

Registration Number: 2025-149

Registration Title: Delivery of large and small biomolecules, CRISPR Cas9 and gene regulatory plasmids using dendrimer nanoparticles in vitro and in vivo

Location: Health Professions Building; Health Professions Vivarium; CMED South

Project Overview

Agent name: CRISPR Cas9 Plasmids

Host: E. coli

Vectors: Adeno-associated virus 8; Adeno-associated virus 5/9

Genetic modifications: Virus and plasmids will be modified to insert different promoters and gene expression cassettes.

Applicable NIH Guidelines Section: NIH III-D-4-c

Required Training: Biosafety Training; Lab Safety Training; Radiation Safety Training for personnel doing the radioisotope work

Biosafety Level Assignment: BSL-1

Risk Assessment

The existing risk assessment documentation is adequate and covers the proposed work. There are no deviations from previously conducted activities that prompt a new risk assessment for outlined material in this current protocol.

Summary of Discussion

This application is a three-year renewal. Small and large reporter molecules will be attached to dendrimers and used in mice and cell culture to assess the utility of these molecules to help target specific cells and organelles. This project is being reviewed by the full committee because it involves the use of recombinant DNA in whole animals. All work will be conducted under BSL-1 containment.

This is a large umbrella protocol in connection with four IACUC protocols and a radiation protocol. The committee expressed concern about overlap among the protocols, including the following items:

- Lack of description about the handling and disposal of radioactive compounds.
- The application referred to the related IACUC protocols and radiation protocol but did not provide detailed descriptions.
- There was no description of which personnel will complete each procedure, including radioisotope work and injections, making it difficult to determine who had completed the proper training.
- In Section 3.D. of the application, the PI did not list the potential hazards of sharps injury and radioisotope disposal.

Modifications requested from the Principal Investigator

- Provide the following information:
 - A detailed description of the handling and disposal of radioactive compounds. Reference to Dr. McKee's radiation protocol is not sufficient.
 - Procedural detail related to handling and disposal of radioactive compounds in the context of the relevant IACUC protocols 2024-497 and 2024-381.

- Specify which personnel will complete each procedure, including who will perform the radioisotope work and injections, and whether the personnel are properly trained.
- Add relevant information, such as IACUC excerpts and radiation protocol excerpts, as notes or attachments under Section 7, Attachments.
- In Section 3.D., change the answer to “yes” regarding the potential hazards of sharps injury and the handling and disposal of radioisotopes. This will open Section 3.E, where the following should be described:
 - The hazards associated with using sharps, handling and disposing of radioisotopes, and accidental spills.
 - The measures that will be taken to minimize exposure to the hazards, including the personal protective equipment that will be used.

Vote: Request Modifications to Secure Approval

- Members present: 4
- Members absent: 1
- Votes for: 4
- Votes against: 0
- Abstained: 0
- Recused: 0

5. Protocol Approvals Since Last Meeting

1. IBC Protocol Submission

Protocol Number: 2022-1652

Protocol Title: Copine Proteins in Dictyostelium

Principal Investigator: Cynthia Damer

2. IBC Protocol Submission

Protocol Number: 2023-1092

Protocol Title: Fate of antibiotic resistance genes by anaerobic digestion of sludge (Microbial analysis is not conducted in [REDACTED])

Principal Investigator: Goksel Demirer

3. IBC Protocol Submission

Protocol Number: 2023-233

Protocol Title: Structure/Function Analysis of the Actin Crosslinking Domain of RTX Toxin from *Vibrio cholerae*

Principal Investigator: Stephen Juris

6. Adjournment

Meeting end time was 2:20 p.m. A quorum was maintained, and a non-affiliated community member was present for the duration of the meeting.