

CMU Institutional Biosafety Committee

Meeting Minutes: September 2, 2025

Location: Virtual via Teams

Meeting start and quorum: Quorum was confirmed, the attendance of at least one non-affiliated community member was confirmed, and the meeting was called to order at 3:00 p.m.

1. Attendance

Voting members and roster roles

- Greg Colores, Chair
- Devin Boyles, Biosafety Consultant
- Kevin Park, Animal Expert
- Grant Clarkson, Lab Safety Consultant
- Dawn Polanco, Non-affiliated Community Member
- Jeff Percha, Non-affiliated Community Member

Staff, non-voting

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

2. Review of Minutes

None.

3. Updates and Announcements

There were no announcements.

4. IBC Registrations for Review

Three-year Registration 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

Protocol entails the delivery of CRISPR Cas9 plasmids using dendrimer nanoparticles to efficiently target genes involved in neurodegenerative processes. Additionally, dendrimers will be used to direct large plasmids with fluorescent reporter molecules to regions of interest to visualize the efficiency of dendrimer-assisted targeting. These will be performed in cell culture then later into mice. If successful, this approach will be expanded to other models including stroke, glioblastoma and inflammation.

This is the fourth meeting convened to review this application. At the previous meeting on August 19, 2025, the IBC voted to request additional modifications to secure approval of the registration. A written request was sent to the investigator. The investigator resubmitted the application with modifications on August 25, 2025.

The committee reviewed and discussed the resubmission. The following concerns still remain:

Committee-requested modifications

- The protocol states that “All the genes that we are editing are of rodent nature.” The committee wants to know what is meant by this statement and would like detail for PSEN1, GSK3b and BMP1a.
- The IBC suggests that a statement be added to Section 3E acknowledging that with the use of guide RNAs there is a minor risk of genotoxic, immunological, or off target effects in the event of an injection injury, and there is a plan in place if this occurs.

Motion

Motion was made and seconded to request further modifications to secure approval. A fifth written request will be sent to the investigator.

Vote: Request Modifications to Secure Approval

- Members present: 6

- Members absent: 0
- Votes for: 6
- Votes against: 0
- Abstained: 0
- Recused: 0

5. Protocol Approvals Since Last Meeting

1. IBC Protocol Submission

Protocol Number: 2025-407

Protocol Title: Investigating the role of GATAD2 and the NuRD complex in FOXO/daf-16 regulation of stem cell fate

Principal Investigator: Xantha Karp

2. IBC Protocol Submission

Protocol Number: 2025-301

Protocol Title: Regulation of adult cell fate by FOXO and RNA binding proteins

Principal Investigator: Xantha Karp

6. New Business

None.

7. Adjournment

Meeting end time was 3:50 p.m. A quorum was maintained, and at least one non-affiliated community member was present for the duration of the meeting.