MINUTES OF THE INSTITUTIONAL BIOSAFETY COMMITTEE MEETING

Southern Illinois University Carbondale In-person at Woody Hall Conference Room 355 October 16, 2025 2:00pm-3:30pm

IBC Members Present

- 1. Derek Fisher (IBC Chair; gene drive modified organism expert)
- 2. Jennifer Harris (Animal containment expert)
- 3. Ami Ruffing (Environmental health and lab safety expert)
- 4. Sarah Kroenlein (Research Compliance)
- 5. John Lenzini (Local non-affiliated member, environmental health expert)
- 6. Jacob Nordman (Human gene transfer expert; animal containment expert)
- 7. Judy Davie (Human gene transfer expert; animal containment expert)
- 8. Jose Franco Da Cunha Leme Filho (Plant containment expert)

Other Individuals in Attendance

9. Rachel Swetz, IACUC Coordinator, Office of Research Compliance (serving as minute taker)

CALL TO ORDER AND OPENING REMARKS

Dr. Fisher (Chairperson) called the meeting to order at 2:00PM with a quorum present. The IBC has 11 voting members, and 6 members are required to conduct business.

The IBC Chair reminded all members present to identify any conflicts of interest as each registration is reviewed. Dr. Fisher also reminded the committee to send their one-page CVs to Dr. Wood so that he can update SIUC's listing on the NIH website. The Office of Research Compliance will also save a copy of the CVs for their files.

APPROVAL OF SEPTEMBER MEETING MINUTES

Dr. Fisher opened the floor for discussion of the September 2025 minutes.

Dr. Nordman moved to approve the minutes, and Dr. Davie seconded the motion.

Total voting: 8 Approve: 8 Oppose: 0 Abstain: 0

REVIEW OF MUAS, RENEWALS, AND AMENDMENTS

Amendment to MUA#1403 - Lentiviral Particle-Mediated Over-Expression or Knock-down of Specific Proteins in the Brains of Rats in Vivo, submitted by Dr. Lydia Arbogast and Dr. Phil Jensik. Applicable NIH Guidelines: Sections VIII-E, III-D-3-a, Appendix B-1

Dr. Fisher summarized the MUA amendment request. The current MUA involves the injection of lentiviral or adeno-associated virus (AAV) particles into targeted brain areas in rats. The proposed amendment would extend this study to mice.

Plasmids used to generate the lentiviral particles and for AAV production will be purchased from a commercial source such as Cell Biolabs and Addgene. Lentiviral particles are replication deficient. Non-replicating and self-inactivating long terminal repeat further negates the possibility of viral replication. After preparation, lentivirus or AAV will be injected into the targeted brain area of mice and rats. Once injected, lentivirus and AAV will remain contained within the animal.

The determination to use lentivirus or AAV will be based on *in vitro* studies using cells lines as the constructs which most effectively knock-down or express genes or as the construct able to accept the size of the insert DNA. Typically, lentivirus constructs can accept longer DNA inserts. When a choice is available, the AAV will be preferred because of its greater safety profile.

None of the transgenes produced will encode tumorigenic or toxin molecules. Although NIH considers the handling of purified AAV production without "helper" adenovirus as BSL1 (Appendix B-1), the virus will be produced using the same safety conditions as lentiviral production, BSL2 (III-D-3-a).

Only Dr. Arbogast and Dr. Jensik will perform lentivirus or AAV injections, and both have been trained in laboratory safety practices, including sharps safety precautions, prior to performing injections in mice and rats. All required trainings are complete for all lab staff listed in the registration.

Health surveillance is not necessary as there are no pathogenic entities.

The committee provided general reflections and noted that the proposed work has received IACUC approval.

Dr. Fisher moved to approve the amendment to MUA#1403 as is, and Dr. Leme seconded the motion.

Total voting: 8 Approve: 8 Oppose: 0 Abstain: 0

Conflict of Interest: None.

DISCUSSION OF PROPOSED IBC POLICIES

Policy 260 – ORC Responsibilities

Dr. Fisher summarized the policy and opened the floor for discussion.

Dr. Nordman moved to approve the policy as written, and Dr. Davie seconded the motion.

Total voting: 8 Approve: 8 Oppose: 0 Abstain: 0

Policy 300 – MUAs

Dr. Fisher summarized the policy and opened the floor for discussion. The committee provided general comments about *de novo* reviews and closeout procedures.

Dr. Fisher moved to approve the policy as written and Dr. Nordman seconded the motion.

Total voting: 8 Approve: 8 Oppose: 0 Abstain: 0

REVIEW OF INCIDENTS

Nothing to report.

PUBLIC COMMENTS

There were no public comments.

ANNOUNCEMENTS

The IBC Chairperson moved to adjourn the meeting at 2:10PM. The next meeting is scheduled for November 20, 2025, at 2pm in Woody Hall conference room 355.