Institutional Biosafety Committee (IBC) Meeting Minutes

Date: November 11, 2025
Time: 2:01 PM – 2:56 PM
Location: Teams

Attendees:
- Dr. Matt Finley (Chair)
- Dr. Bindu Kumar, MD (IBC Member)
- Dr. Judy Daviau (Veterinary Consultant)
- Dr. Lauren Merlo (IBC Member)
- Andrea Sipple (Community Member)
- Gwendolyn Gilliard (Community Member)
- Talulla Palumbo (IBC Administrator)
- Kamila Bedelbaeva (IBC Member)

Absent:
- Anthony Ashton (IBC Member)
- John Medendorp (IBC Member)

Guests:
- Dr. Matthew Charman (LIMR Principal Investigator)

1. Call to Order
- The meeting was called to order at 2:01 PM by Matt. A quorum was confirmed.

2. Approval of Previous Minutes
- Minutes from the previous IBC meeting (July 8, 2025, and January 14, 2025) were reviewed.
    - **Motion to approve: Judy**
    - **Seconded by: Lauren**
        - Outcome: Minutes approved unanimously, with no corrections.

3. Old Business
- Matt noted one previously reviewed protocol under old business:
    - A biosafety study submitted by Dr. Pestell, which was approved by Designated Member Review (DMR).
    - No additional items under old business.

4. New Business

A. Protocol B26-3071: Immune Response Elicited Against Picornaviruses–Dr. Amy Rosenfeld
Discussion Highlights:
- IACUC and Biosafety Sequence:
    - Lauren raised concern regarding the order of IACUC and IBC approvals. She questioned whether IBC could approve work before full IACUC approval since the protocol references animal use.
    - Matt clarified that an initial IACUC protocol was approved solely for the transfer and breeding of animals from FDA to LIMR.
    - The full scope of viral work in animals will be added later through an amendment once IBC approval is obtained.
    - Animal Work Details: Members emphasized that the current submission lacks sufficient details about proposed animal work.
    - Judy requested a general outline or table describing:
        - Strain of animals to be used
        - Specific viruses (ex: enterovirus A71, poliovirus, or others)
        - Method of inoculation or exposure, risk aspect (ex: injection vs. aerosol)
        - Biosafety containment location (ex: vivarium biohazard suite)
    - The committee stressed the need to understand these factors to assign the correct biosafety level (BSL) and ensure staff safety.

- Clarification on Poliovirus Use:
  Dr. Kumar inquired whether work with polio virus would occur at LIMR and if any immunization or antibody verification was required for researchers.
    - Matt clarified that no poliovirus work will be performed at LIMR; such work will remain off-site. LIMR is not authorized for polio virus use.
- Concerns Noted:
  Lauren observed inconsistencies in the protocol—references to animal use were made while Section 7.1 (Animal Housing) was checked "No." The committee agreed this section likely refers to "specialized housing" rather than standard housing, but more clarification is needed.
- Committee Conclusion:
  - The protocol is incomplete and requires revision to include detailed biosafety and animal-use information.
  - The committee recommends a table summarizing virus type, biosafety level, animal model, and housing location.
  - Dr. Rosenfeld will be invited to the next IBC meeting to provide clarification.
  - Work cannot proceed until the IBC has reviewed and approved the revised submission.
- **Judy motions to move on to the next protocol, Matt seconds**

Protocols submitted by Dr. Matthew Charman: (Joins meeting)

B26-3072: Cloning of Novel Recombinant Plasmid DNAs
B26-3073: Ectopic Expression of Proteins of Interest In Mammalian Cell Culture
B26-3074: Generation and Use of Adenoviruses and Adenovirus Vectors
B26-3075: Generation and use of Recombinant Proteins
B26-3076: Generation of Lentivirus Transduced Cells
B26-3077: Culture and Use of Mammalian Cells

B. B26-3072: Cloning of Novel Recombinant Plasmid DNAs
   - Overview: Standard molecular cloning using common laboratory E. coli strains (BSL1).
   - Discussion: Routine molecular biology procedures; no novel hazards identified.
   - BSL Designation: BSL-1.
   - Committee Questions: None.

C. B26-3073: Ectopic Expression of Proteins of Interest In Mammalian Cell Culture.
   - Overview: Protein expression and purification in mammalian systems for functional studies.
   - Hazard Assessment: Work limited to non-pathogenic DNA and protein expression; no viral or animal work.
   - Committee Questions: None.

D. B26-3074: Generation and Use of Adenoviruses and Adenovirus Vectors
   - Overview: Production of recombinant adenoviruses for use in mammalian cell lines to study viral engineering and gene delivery.
   - Safety Discussion:
     - Dr. Charman described extensive in vitro viral work with no animal component.
     - Standard BSL-2 containment and biosafety cabinet use required.
     - Decontamination of materials at point of use and within cabinet emphasized.
     - Dr. Kumar discussed occupational health implications, noting that adenovirus infections are generally mild and endemic.
     - Documentation was provided about each adenoviruses

E. B26-3075: Generation and Use of Recombinant Proteins.
   - Overview: Recombinant protein expression using bacterial systems (E. coli BL21).
   - Committee Questions: None.

F. B26-3076: Generation and Use of Lentivirus-Transduced Cells
   - Overview: Lentiviral vectors (HIV-based backbone) will be used for stable gene delivery in mammalian cells to study viral structural proteins.
   - Discussion: This protocol generated significant discussion due to biosafety and occupational health considerations.

    - Sharps Elimination: Dr. Charman has modified lab procedures to eliminate the use of needles to prevent needlestick injuries.
    - Exposure Risk: Dr. Kumar confirmed that all lentiviral vectors, though replication-incompetent, must be treated as potential HIV exposures.
        - Exposure via mucosal membranes, open skin, or needlesticks would warrant HIV post-exposure prophylaxis (PEP).
- Policy Development: LIMR currently lacks a specific Lentiviral Exposure Response Policy. Matt, Dr. Kumar, and Talulla will develop institutional guidelines based on policies from Columbia and Cornell for inclusion in future protocols.
    - Dr. Kumar provided links to documents on exposure to lentiviruses
- Containment: Protocol inconsistencies noted between BSL-2 and BSL-2+ checkboxes. All lentiviral work will be standardized as BSL-2+ with enhanced PPE.
- Protective Measures Discussed:
    - Use of arm covers to eliminate wrist/forearm exposure gaps.
    - Face shields or eye protection where splashing or aerosol generation is possible.
    - Maintaining biosafety cabinet sash at proper height to ensure airflow and containment.
    - Training reinforcement for all staff, including new researchers.
- Replication Competence Testing:
    - Committee discussed optional testing for replication-competent lentivirus (RCL).
    - Dr. Charman noted that while reversion is considered highly unlikely, outsourcing periodic RCL testing could be considered for institutional reassurance.
- Committee Concern:
    - Judy expressed concern regarding casual language minimizing risk and stressed the need to plan for worst-case scenarios.
    - The committee also noted the importance of assuming some staff may be immunocompromised or pregnant, given that such conditions cannot be disclosed under HIPAA.
- Committee Action:
    - Lentiviral protocol tabled pending development of institutional exposure response policy and clarification of containment standards.
    - Dr. Charman may not begin lentiviral work until IBC approval is finalized.

G. B26-3077: Culture and Use of Mammalian Cells
- Overview: Routine mammalian cell culture for virus propagation and cell-based assays.
- Clarification: Section 1 listed BSL-1, while Section 5 listed BSL-2; corrected to BSL-2 for consistency.

5. Protocol Approval Summary
- The IBC approved five of seven submitted protocols.
- Approved Protocols:
    - B26-3072
    - B26-3073
    - B26-3074
    - B26-3075
    - B26-3077
- Not Approved and further Clarifications needed:
    - B26-3071 (Dr. Rosenfeld)
    - B26-3076 (Lentivirus-Transduced Cells)

6. Next Steps
- Dr. Rosenfeld to attend December 2025 IBC meeting to discuss the enterovirus protocol.
- Draft Lentiviral Exposure Response Policy to be prepared for committee review.

7. Adjournment
- The meeting adjourned at 2:56 PM.
- Next IBC meeting tentatively scheduled for early December 2025.