CDC Institutional Biosafety Committee (IBC) Meeting Minutes

Date: July 24, 2025
Time: 1:00 – 2:30 PM
Location: MS Teams meeting

Member	Attendance	Member	Attendance
1. NCEZID/DVBD1	☐	13. OLSR/DCLSR2	☒
2. NCIRD/DVD	☒	14. OLSR/OD4	☐
3. NCEZID/DHCPP1	☒	16. OLSR/DCLSR3	☒
4. OLSR/OD1	☒	17. NCEZID/OD	☐
5. OCOO/OSSAM/OHC	☒	18. OLSR/OD2	☒
6. NCEZID/DVBD2	☒	19. NCHHSTP/DHP2	☒
7. OLSR/OD3	☒	20. Outside Member/Atlanta1	☐
8. NCEZID/OD2	☒	21. Outside Member/Atlanta2	☒
9. NCHHSTP/DTE	☒	22. Outside Member/Fort Collins	☒
10. NCIRD/ID	☒	23. Outside Member/Puerto Rico	☒
11. NCIRD/CORVD	☒	24. GHC/OD	☒
12. OLSR/DCLSR1	☒	Administrators	4

Agenda

1. Welcome from the Chair
2. Review and approval of June 20, 2025, Meeting Minutes.
3. Review of protocols:
    1) IBC-2025-249 Original
    2) IBC-2025-250 Renewal
    3) IBC-2025-252 Original
    4) IBC-2025-254 Original
    5) IBC-2025-259 Renewal
4. Other Business

Principal Discussion

- Quorum confirmed.
- Meeting called to order at 1:31 pm
- Welcome from the Chair
- Review and approval of the June 20, 2025, meeting summary. Approved as written.

Review of IBC Registrations

1. IBC-2025-249 Original

General Project Description: The purpose of the studies is to validate environmental surveillance assays to detect human pathogens in wastewater.

Approximate percentage of the viral genome used: <1/2

Applicable Sec of NIH Guidelines: III-F-1
Required biological containment level for the work to be implemented: BSL-2.
General points discussed:

- Section 1.3:
  - Please clarify whether the gBlock ordered from IDT will be subjected to cloning, propagation or any other recombinant work.
  - Please clarify which clade of mpox and influenza strain will be used in the study
- Section 2.6:
  - Section 2.6 a Please specify the subtypes of influenza virus and Mpox clade, then select BSL on the left accordingly. For example, clade I Mpox and HPAI H5 or H7 influenza virus are select agents. Bio containment level for the source of DNA/RNA should be BSL-3 or BSL-3E.
  - Section 2.6b. Please change No to Yes, if source DNA/RNA are derived from select agent.

Committee Action: Exempt with changes.

2. IBC-2025-250 Renewal

General Project Description: The Method Optimization and Distribution for Diagnostics and Surveillance (MODDS) team proposes the use of synthetic ribonucleic acid (RNA) sequences as positive control template for real-time reverse-transcription polymerase chain reaction (rRT-PCR) assays or cloning the complementary DNA (cDNA) as a template for sequencing. These nucleic acids do not encode virulence factors or toxins. Further, they cannot be transcribed nor translated into functional or toxic molecules in animals or cell lines as they lack the specific sequences and modifications.
Approximate percentage of the viral genome used: <1/2
Applicable Sec of NIH Guidelines: III-F-1
Required biological containment level for the work to be implemented: BSL-2.
General points discussed:

- Section 1.3
  - As stated in Section 1.3, the commercially acquired plasmids will not be propagated in prokaryotic organisms or lower eukaryotic host-vector systems. However, section 2.8a mentioned pUC vector and E. coli. Please clarify whether the study involves propagation of pUC vector with the recombinant insert derived from the plasmids obtained from the vendor.
- Section 2.8a
  - Please clarify why E. coli was not described in Section 1.3 but mentioned in Section 2.8a.
- Section 3
  - Complete this section if the study involves the propagation of the pUC plasmid.

Committee Action: Exempt with changes.

3. IBC-2025-252 Original

General Project Description: The purpose of this work is to synthesize positive control reagents for use in the Botulinum Toxin Real-time PCR Assay distributed by the Laboratory Response Network.
Approximate percentage of the viral genome used: N/A
Applicable Sec of NIH Guidelines: III-D-2, III-F-8
Required biological containment level for the work to be implemented: BSL-2
General points discussed:

- Inconsistency among sections:
  - DH5alpha and TOP10 were listed in Section 2.8a, However, Section 3.2 only listed BL21-DE3. Please make sure those E. coli hosts are listed consistently in Sections 2.8, and 3.2, 3.3

Committee Action: Approved with changes.

4. IBC-2025-254 Original

General Project Description: To develop and evaluate the immunogenicity and efficacy of novel mRNA/LNP vaccines targeting immunogenic antigens of CCHFV, and to optimize these constructs for protective efficacy against viral challenge in animal models.
Approximate percentage of the viral genome used: <1/2.
Applicable Sec of NIH Guidelines: III-D-1, III-D-3-c, III-D-4-a, III-D-4-b.
Required biological containment level for the work to be implemented: BSL-2 and BSL-4
General points discussed:

- Section 1.3
    - pVAX1-T7 is included in Section 2.8a. However, in Section 1.3 there is no description regarding whether the construct will be propagated in E. coli. Please clarify this discrepancy in Section 1.3, and complete Section 2.8a and Section 3 accordingly.
- Section 3:
    - Section 3.2 indicates that E. coli is used but lacks a description in Section 1.3. Please clarify whether *E. coli* is used for propagation in this study. If there is no plasmid propagation, then E.c oli should be omitted from the registration
    - Section 3.3 This section needs to be marked as "Yes" because DH5alpha is K-12. Again, please describe whether *E. coli* DH5 alpha will be used in this study.

Committee Action: Approved with changes.

5. IBC-2025-259 Renewal

General Project Description: The purpose of this study is to characterize the immune response to variola virus by designing and creating a proteome microarray of variola virus. The arrays will be used to screen sera from smallpox infected individuals, including smallpox convalescent sera from humans and variola challenged animal models, to identify the immunoreactivity to each variola virus protein. It is hypothesized that differences in responses may be seen relative to examination with previous vaccinia orthopoxvirus microarrays. There is also strong interest in develop improved and species-specific diagnostics for smallpox. Our laboratory is developing monoclonal antibodies for variola virus. Antibodies will be characterized, including identification of the antigenic target, by screening available monoclonal antibodies against this variola proteome array.
Approximate percentage of the viral genome used: <1/2
Applicable Sec of NIH Guidelines: III-D-1, III-D-2-a, III-D-2-b, III-D-3-a
Required biological containment level for the work to be implemented: BSL-2, BLS-2E, BLS-4
General points discussed:

- Section 1.3.
    - Please clearly indicate whether any mammalian systems will be used in this study.
- Section 2.7a
    - If mammalian systems will be used for the work, please specify the cell line here. Currently there is only one insect cell line SF-21 listed here.

Committee Action: Approved with changes.

Other Business

- Meeting adjoined at 2:44 pm.

Reynolds M. Salerno -S

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Reynolds M Salerno, PhD
Director, Office of Laboratory Systems and Response