**Lundquist Institute for Biomedical Innovation**
**at Harbor-UCLA Medical Center**

**Institutional Biosafety Committee**
**Meeting Minutes**
*04/14/2026*
*Zoom Virtual Conference*

| MEMBERS PRESENT | MEMBERS ABSENT |
|---|---|
| Jonathan Abdala, B.S. | |
| David Applebaum, M.S. | |
| Helen Chun, Ph.D. | |
| Begona Diaz, Ph.D. | Fang Wang, Ph.D. |
| Rami Doueiri, Ph.D. | |
| Scott Filler, M.D. | |
| Catalina Guerra, DVM | |
| Adrienne Zweifel, Ph.D. | |

| STAFF PRESENT | STAFF ABSENT |
|---|---|
| Elizabeth Burrola, CIP | |
| Rosa Harmon, CPIA | Rosemary Madnick, MBA |
| Annie Hilo | |

1. **CALL TO ORDER**
   The meeting was called to order by Scott Filler, M.D. at 3:00 PM.

2. **MEETING MINUTES**
   The minutes of the March 10, 2026 meeting were presented.

   A motion was made and seconded to APPROVE the minutes.

   **Vote**: For - 6, Opposed - 0, Absent – 2, Abstained - 0, Recused – 0 (Mr. Applebaum and Dr. Guerra arrived after the vote to approve the previous meeting minutes.)

3. **BUA REVIEW**

   A. **Initial Reviews**
   **IBC #:** IBC 2026-33547-01
   **PI:** Shakti Singh, M.S., Ph.D.
   **iRIS Ref #:** 063942

   **Summary:** This project focuses on the development of cyclic antifungal peptides (CAFPs), a new class of antifungal compounds that kill fungi by disrupting their cell membranes and can enhance the activity of existing antifungal drugs. Preliminary data indicate that several lead peptides are effective against drug-resistant strains of C. albicans and A. fumigatus.

   **Inserts:** NA

   **Vectors:** NA

**Pathogens:** *Candida albicans, Aspergillus fumigatus*

**Risk Assessment:** Risk Group 2

**Containment:** BSL-2

**Training:** Training has been verified by the Research Compliance Office Staff and EHS.

**NIH Guidelines:** NA

**Conflicts:** NA

**Motion:** A motion was made and seconded to DEFER approval of the BUA due to the required changes being significant enough to require convened IBC review.

**Modifications Required to BUA:**

1. **Section 8.0 - Infectious Agents (Excluding Viral Vectors)**

- For *Aspergillus fumigatus*, the PI is to change the answer to the question "Will the agent be administered to animals?" from no to yes.

- For item 8.2 Occupational Exposure, the PI is to acknowledge whether the lab will be growing the *Aspergillus* under conditions that will produce spores. If yes, the PI is to discuss the infectious dose (if known).

- For item 8.2 Occupational Exposure, the PI is to provide specific details about the types of drugs to which the laboratory strains are resistant. These drugs were referenced in the Project Overview in Section 5.0.

2. **Section 13.0 - Research with Eukaryotic Hosts (Including Fungi)**

If the human cell lines or blood products will be used for in vitro challenge assays involving *Candida* or *Aspergillus*, the answer to the question "Will the research use eukaryotic cells?" should be yes. The PI is to limit the requested information to the cell line type (i.e. human lung fibroblast cell line) instead of the name.

3. **Section 16.0 - Experimental Procedures and Emergency Response**

The PI is to be reminded that this document is to be written in such a way that someone without a specific scientific background can understand what is being done. In general, more details regarding the specific assays need to be provided.

- In Vitro Procedures and Containment-
  a. The PI is to add how a broth microdilution assay to determine MICs is performed.
  b. The PI is to add how the pathogens will be grown (shaking vs. standing culture and if the former, how is the vessel closed).
  c. The PI is to add how a biofilm assay is performed.
  d. The PI is to add how a checkerboard synergy assay is performed.
  e. The PI is to add how a time kill study is performed.

f. The PI is to add how a cytotoxicity assay is performed.
g. The PI is to add how a hemolysis assay is performed.
h. The PI is to discuss how the pathogens will be handled in preparation for the mouse inoculations (dilution, plating, spec for ODs?).
i. To keep the workflow, it is recommended that a section be added after the in vivo procedures discussing the processing of harvested materials, the PI is to add the following items to this section.
    1. What tissues are harvested at the experimental endpoint and how are they processed?
    2. How are they processed (homogenization, use of sharps, etc)

- In Vivo Procedures and Containment (The PI is to separately describe the experiments and mitigation plans involving Candida and Aspergillus. This is due to the different routes of transmission.)-
    a. The PI is to add details for the inoculations, including (1) agent, (2) dose, (3) route, and (4) whether the mouse will be anesthetized or awake and restrained. If restrained, provide details on how this is done (hand vs. use of a restrainer device).
    b. The PI is to provide details on the size of the aerosol chamber and how the lab will utilize it within the biological safety cabinet without blocking the grates to ensure proper functioning of the cabinet.
    c. The PI is to explain the second part of the sentence "Animal tissues collected post infection are handled as biohazardous materials and fixed or decontaminated before removel from containment.
    d. The PI is to discuss how blood will be collected from mice that have been inoculated.
    e. The PI is to clarify where is necropsy performed, if all tissues are fixed prior to transport outside of the animal procedure room, if there is any special requirement for disposing carcasses or decontaminating surgical material, and if personnel will wear N95 during necropsy.

- Decontamination and Waste Disposal - since the terminal inactivation of agents is discussed lower in the section, the PI is to update this section to discuss the disinfection of surfaces and non-disposable equipment (aerosol chamber) and PPE (if the lab intends to use a PAPR).

- For item 16.4, the PI is to indicate how fungo are oxygenated when they are grown in liquid media and if there is a risk of aerosol formation during that process.

- Fungi likely need to be centrifuged prior to adding them to mammalian cells. If so, the PI is to include this step in the description of procedures, state where the centrifuges are located and whether they have a sealed rotor and how the nearby surfaces are decontaminated after centrifugation.

- The PI is to clarify if the downstream evaluation of infected culture cells involve opening tissue culture plates out of the hood or using additional equipment, and how the infected eukaryotic cells will be disposed.

**Vote**: For - 8, Opposed - 0, Absent - 0, Abstained – 0, Recused – 0

B. **Amendments**
**IBC #:** IBC 2024-22629-01
**PI:** Hema Ramkumar, M.D.
**iRIS Ref #:** 063896

**Summary:** This amendment will add the following to the BUA:

- A handheld thermal imager (Topon Technology, TC004 Mini) will be added to record images during the suprachoroidal injection procedure.
- New batch of AAV8 BMI1 (Forge-26-043)
- FITC-Dextran (MW 50k, Sigma-Aldrich #FD500S-250MG, 50mg/ml for Suprachoroidal injection.
- Suprachoroidal needles (new delta type: SupraX, compare to previous alpha type OCLX-001) and Clearside microinjector (Clearside SCS microinjector)

**Inserts:** NA

**Vectors:** AAV8 BMI1, AAV8 EGFP

**Pathogens:** NA

**Risk Assessment:** Risk Group 1

**Containment:** BSL-1

**Training:** Training has been verified by the Research Compliance Office Staff and EHS.

**NIH Guidelines:** IIID or IIIE pending PI response

**Conflicts:** NA

**Motion:** A motion was made and seconded to REQUIRE MODIFICATIONS TO SECURE APPROVAL of the BUA.

**Modifications Required to BUA:**

1. In the IBC Amendment Form, the PI is to correct the typo in "2. New bench of AAV8 BMI1 (Forge-26-043)" to "New batch."

2. **Section 5.0 - Project Overview**

If DNA plasmids are being used in animals as represented in Section 10.1, the PI is to update this section to include this information. The PI is to introduce what the lab will be looking for after the AAV is administered and how this is done (i.e. microscopy for localization of protein, tissues harvested for immunohistochemistry, etc).

3. **Section 6.0 - NIH Guidelines/IBC Review Exemptions**

The PI needs to select either NIH Guidelines Section III-D or III-E.

4. **Section 9.0 - Viral Vectors for Recombinant or Synthetic DNA**

The PI is to explicitly state whether the AAV administered is expected to leave the ocular area and access the blood.

The AAV-EGFP described in Section 9.2 (second entry) indicates that the fluorescent reporter EGFP and a His-tag may be used in this work. If this is the case, the PI is to select the "Non-Hazardous Nucleic Acids" box and provide the requested information.

5. **Section 10.0 - DNA Plasmids**

The PI is to confirm that plasmids will be administered directly to animals. If plasmids will be propagated in E.coli (due to the origin of replication), the PI is to select the "Prokaryotic Hosts" box and complete Section 12.0 - Research with E.coli or Other Prokaryotic Hosts.

6. **Section 11. 0 - Encoded Recombinant or Synthetic DNA Sequences**

The AAV-EGFP described in Section 9.2 (second entry) indicates that the fluorescent reporter EGFP and a His-tag may be used in this work. If this is the case, the PI is to select the "Non-Hazardous Nucleic Acids" box and provide the requested information.

7. **Section 12.0 - Research with E. coli or Other Prokaryotic Hosts**

If DNA plasmids with an E.coli origin of replication are being propagated and purified in E.coli (or whatever other procedures are being performed), the PI is to revise the response to "Yes" and add the strain of E.coli used in this section.

8. **Section 14. 0 - Research with Whole Plants and/or Animals as Hosts**

The PI is to revise the response to "Yes" and complete this section to include mouse, rabbit, and minipig entries.

Covered activities in the BUA must be in agreement with the IACUC protocol. If the PI is no longer performing work in a rabbit model, this will need to be removed from the IACUC protocol.

9. **Section 16.0 - Experimental Procedures and Emergency Response**

The PI is to complete the following for item 16.1:

1. Experimental Procedures-
    a. Acknowledge which specific procedures pose a risk of exposure to AAV/rDNA via:
        i. Aerosol (pipetting, centrifugation, homogenization, vortexing, etc)
        ii. Use of sharps
    b. Include the procedures involving AAV as it pertains to the rabbits and minipigs (since those models are represented in the pending IACUC protocol currently under review)
    c. Provide the following information for each animal model

i. Agent being delivered (AAV)
ii. Dose
iii. Route of inoculation
iv. Whether the animal will be anesthetized or awake but restrained. If restrained, describe how this is performed (hand restraint or using a restrainer)
v. Blood draws or other sampling performed on the animal after the inoculation, but before the experimental endpoint
vi. Tissues/Materials harvested from the animals
vii. Processing of materials harvested from animals

2. Containment Practices
   a. Include BSL1/ABSL1 containment conditions.
   b. Replace phrases such as "using appropriate containment practices" with what those containment practices are.
   c. if the syringe that is used to inoculate animals will be loaded with AAV in the lab (in the BSC) and transported to the animal facility, how is it transported (recapped needle using single handed method, closed, sealed container, etc)?

3. Training of Personnel – Acceptable

4. PPE
   a. Replace the conditional statements with specific examples of when PPE is worn
      i. eye protection- "a risk of splashes or exposure"
      ii. masks or face protection-"as appropriate based on procedure"
   b. Replace the phrase "according to institutional policies" with what those policies are.

5. Decontamination Procedures - Acceptable

6. Waste Disposal - Acceptable

7. Animal Containment and Handling - Acceptable

10. **Section 16.0 - Experimental Procedures and Emergency Response**

The PI is to revise the response in item 16.2 since item 16.1 indicated the use of a BSC ("Open handling of viral vectors (e.g., aliquoting, dilution, syringe loading) will be performed in a certified Class II biosafety cabinet"). The PI is to clearly indicate the location of the BSCII.

For item 16.3, if plasmids will be transformed into *E.coli* or other prokaryotic hosts, the PI is to describe how this is done and elaborate more on the established protocols to minimize exposure. The PI is to also note BSL2 training is needed since virus preparation occurs in BSL2.

For item 16.4, under the risk assessment of the genes of interest, the PI is to verify that none of the work performed would fall under the definition of a gene drive.

For item 16.4, the PI is to specify where goggles will be worn (please note they must be worn at all times in BSL2 per Biolab's guidelines.

For item 16.5 under Liquid Waste, the PI is to confirm that liquid waste will be autoclaved on site. If all liquid waste will be bleached, the PI is to unselect this box.

For item 16.5, the PI is to note bleach must never come in contact with ethanol or else chloroform gas is created. The PI is to also note the contact time for AAV8 with bleach to be neutralized.

11. Rabbit Model. The PI is to confirm that AAV was used in the rabbit model without IBC oversight because the rabbit work was not present in the approved BUA in 2023.

**Vote**: For – 8, Opposed - 0, Absent - 0, Abstained – 0, Recused – 0

**IBC #:** IBC 2025-U-F-PU
**PI:** Priya Uppuluri, Ph.D.
**iRIS Ref #:** 063858

**Summary:** This amendment will add the procedures for the foreign body biofilm model in the BUA and outline the following: (1) how the catheter pieces will be infected with *C. albicans*, and (2) how the infected catheter pieces will be handled before insertion into the mouse.

**Inserts:** Nourseothricin N-acetyl transferase (NAT)

**Vectors:** CRISPR/Cas9

**Pathogens:** *Aspergillus fumigatus, Rhizopus delemar, Candida: albicans, auris, glabrata, tropicalis, krusei, Trichophyton mentagrophytes, Mucor circinelloides*

**Risk Assessment:** Risk Group 2

**Containment:** BSL-2

**Training:** Training has been verified by the Research Compliance Office Staff and EHS.

**NIH Guidelines:** III-D. III-F

**Conflicts:** NA

**Motion:** A motion was made and seconded to REQUIRE MODIFICATIONS TO SECURE APPROVAL of the BUA.

**Modifications Required to BUA:**

1. **Section 12.0 - Research With Eukaryotic Hosts (Including Fungi)**

The PI is to revise the response in item 12.1 to "Yes" and complete this section.

2. **Section 14.0 - Research Using Gene Editing**

The PI is to clarify whether there is any intention to delete specific genes in these organisms, for example, by following up on hits identified during screening of the *C. albicans* mutant libraries. The PI is to revise the response in this section accordingly, if applicable.

**Vote**: For - 8, Opposed - 0, Absent - 0, Abstained – 0, Recused – 0

4. **OTHER BUSINESS**

a. Safety Committee Report – Accidents/Spills
Mr. Applebaum stated no incidents were reported.

b. IBC Clearance for IACUC Approval discussion
Tabled for the next meeting due to time constraints.

c. TLI IBC Procedures document draft – DMR Process
The Committee reviewed the newly added DMR process section in the Procedures document, including the criteria that define which types of amendments qualify. Amendments that increase the study's risk profile, as well as any submissions involving noncompliance, will continue to require review by the full Committee. The Committee voted to approve and seconded the updated Procedures document, incorporating the newly drafted DMR process section.

The members also discussed the possibility of modifying the BUA approval periods so that all approvals expire on the last day of the approval month. Staff will evaluate this proposal and bring it back to the Committee for further discussion.

d. Self-Assessment Tool: Physical Containment – Laboratory Environment section
Tabled for the next meeting due to time constraints.

With no further business, the meeting adjourned at 4:09 AM

Respectfully submitted,

Signed by:
Scott Filler
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Scott Filler, M.D.
Chair, Institutional Biosafety Committee

cc: Research Committee Agenda