THE UNIVERSITY OF UTAH

INSTITUTIONAL BIOSAFETY COMMITTEE
MEETING MINUTES

June 18, 2026
Meeting was convened at 11:00 AM
Hybrid Meeting

Voting Members Present:
☒Cecilia Gerstner (IBC Chair)
☒Jeff Clifford (IBC Vice Chair)
☒Debbie Eckert (BSO)
☒Chris Hunter (ABSO)
☒Isaac Martineau (BS Specialist)
☐Ricky Bell (IBC Member)
☐Neil Bowles (IBC Member)
☒Jessica Brown (IBC Member)
☒Allison Carey (IBC Member)
☒Scott Cho (IBC Member)
☒David Gillespie (IBC Member)
☐Talia Karasov (Plant Expert)
☒John Kriesel (HGT Expert)
☒Karla McHale (IBC Member)
☐Bart Mickelsen (IBC Member)
☐Kate Modzelewska (IBC Member)
☒Andy Phillips (IBC Member)
☒Robert Sperling (IBC Member)
☒Alton Swennes (Animal Expert)
☒David Thomas (IBC Member)
☒Michael Voight (IBC Member)
☐Tom Wachter (IBC Member)
☒Zemin Zhou (IBC Member)
☐Wendy Zhu (IBC Member)

Quorum was present; 7 are required to conduct business.

Conflict of Interest Declaration

Cecilia for protocol #52-26.

Review of May 21, 2026 Minutes

Motion: **Approve**
Vote for Motion: 13 in favor of the motion
4 Abstain

Old Business

#127-22.03 Yue Lu. A digital microfluidic approach to rapidly determine the sterility of biopharmaceutic delivery vesicles; digital microfluidic methods to monitor the human gut microbiota. Amendment to add new projects with many bacterial agents. BSL-2.

The Digital Pharmaceutics Laboratory aims to develop and apply state-of-the-art technologies to understand disease pathologies and treatment response as well as develop treatment strategies for cancer, infectious disease, and beyond.PI has not responded to post-review memo. Reminder email sent 5/14/26, 6/11/26.

#36-26 Shannon Buckley-McKeown. Posttranslational regulation of normal and malignant hematopoiesis.

Molecular mechanisms regulating leukemia and lymphoma

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **Biosafety Manual:**
  - Page 5, Section B.1.b. Background, in the risk assessment for Murine Leukemia Retrovirus replace ecotropic with amphotropic since it can infect more than just murine cells. Replace the description of risk to include the possibility of a single round of infection and possible integration at an exposure site.
  - Page 6, Section B.3.a. note that this post-exposure prophylaxis also extends to exposures to retroviral vectors, like their MLV vectors.

Lab responded to post-review memo. Response were evaluated by BSO and ABSO. Approval granted 06/02/26

#41-26 Haley Licon. Project 1: Molecular regulation of Toxoplasma's sexual cycle; Project 2: A Scalable System for Conditional Overexpression in Toxoplasma gondii.

Their research is focused on the genetic programs that control life stage conversion in the apicomplexan parasite, Toxoplasma gondii. They are particularly interested in the process of sexual development, which is restricted to feline hosts. Currently, they are using functional genomics and transgenic parasite modeling to map the transcriptional architecture of Toxoplasma's pre-sexual and sexual stages, as well as both fixed and live cell imaging to assess development over time. They are also interested in exploring the host environmental factors that induce the transition from asexual to sexual reproduction.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **Biosafety Manual:**
  - Section F. Lab SOPs, it is noted that all waste from experiments with the potential to lead to oocyst generation, both liquid and solid, will be autoclaved prior to disposal. To do this safely since bleach cannot be autoclaved, PI needs to add in a step to deactivate the bleach with sodium thiosulfate before autoclaving.
  - Page 18, Section 2 Live Imaging, step d, add another point that says “This includes IBC registration and periodic EHS biosafety inspections.”

Lab responded to post-review memo. Response were evaluated by BSO and ABSO. Approval granted 06/05/26.

#47-26 Stavros Drakos. Understanding the mechanism of AEBP1-Mediated fibrosis post-Cardiac injury in heart failure; Transcriptional Regulation of Gene Expression in Post-myocardial Infarction Fibrosis; Viral transfection using AAV; Viral transfection using Adenovirus; Mechanism of Eccentric Cardiomyocyte Hypertrophy Secondary to Mitral Regurgitation.

Their overall research focuses involve understanding the etiology and the progression of heart failure (HF). Their interests are directed toward elucidation of molecular pathways and mechanism that leads to HF in human. Their research utilize both the actual human diseases and animal models to dissect the causes and effects of HF to identify and develop therapeutic targets for intervention that will benefit HF patients. Their goal is to understand the recovery process using the observed recovery paradigm in their study of mechanical circulatory support in HF patient. They would like to identify the therapeutic targets the can be developed as viable intervention for treatment of HF patients.

Outstanding issues to be addressed which were communicated to PI through post-review memo.
SciShield https://utah.scishield.com/node/1448234/biologicals/bioSummary

- In the Project Form 'Mechanism of Eccentric Cardiomyocyte Hypertrophy Secondary to Mitral Regurgitation'
  - Update the containment to be 'BSL2' to capture the use of human tissues in the project
- In the table titled “Plasmids Used in Lab,” hATF3 indicates that they are producing the viral particle, but elsewhere in the registration it is stated that these will be purchased. Change the answer to “Viral Particle Production” to say ‘No.’
- In the Viral Vector Registration Forms Step 5 Safety:
  - Include a water rinse between the application of bleach and ethanol solutions to avoid chemical incompatibilities.
- In the ‘Viral Vector Registration Form-AAV9’
  - Update Step 5, details for disinfection, to include direct disposal of syringe/needle unit into sharps container, rather than the indicated overnight disinfection described. This is done in an attempt to minimize sharps handling.

Biosafety Manual:

- Section B.3. Training.
  - Include Initial 'Viral Vector Training: Repeated every 3 years'
- Appendix 2: Post-exposure Standard Operating Procedure

    - Update the question "if yes, have personnel been offered vaccination" to be 'No' or 'N/A' as a vaccination is not available for these agents.
- Appendix 7: Provide the viral vector maps to accompany the sequences provided.

Lab responded to post-review memo. Response were evaluated by BSO and ABSO. Approval granted 06/04/26

#29-24.10 Allison Carey. Amendment to add Mycobacterium tuberculosis and Mycobacterium bovis.

Their lab is focused on the genetics and genomics of pathogenic mycobacteria, including the global health pathogen Mycobacterium tuberculosis and a group of environmental mycobacteria called 'non-tuberculous mycobacteria' (NTM). They seek to understand how bacterial genetic diversity impacts clinically relevant phenotypes including antibiotic resistance, pathogenesis, and vaccine escape. They use advanced bacterial genetic tools including transposon mutagenesis and barcoding combined with in vitro models as well as mouse and cell culture models of infection to address these questions.

Specific comments in the lab-specific BSL-3 manual have been provided. Establishment of BSL-3/ABSL-3 Facility Governance policy is still underway. The protocol is approved on the contingencies that: 1) comments are addressed in the lab-specific BSL-3 manual to the satisfaction of the BSL-3 Operations Team, 2) BSL-3/ABSL-3 Facility governance is finalized and approved by the VPR, 3) the facility is commissioned and operational.

#62-24.01 Michael Kay. Amendment to add new pseudovirus to protocol.

Their lab uses mirror-image phage display and structural-assisted design to develop D-peptide inhibitors of biomedically relevant protein/protein interactions. Currently, they are targeting enveloped viral entry of coronaviruses, HIV, and henipaviruses and historically they have had programs targeting filoviruses and paramyxoviruses. Additionally, they have projects aimed at discovering inhibitors of Shiga toxin (only the non-toxic B subunit) and FimH, a bacterial adhesion factor. A key component of the mirror-image phage display process is a D-protein target. To continually expand the range of targets available, their lab also develops new techniques for chemical protein synthesis, attempting to increase the length of proteins accessible to routine chemical synthesis.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- SciShield:
    - In the project titled *Inhibiting Entry of Membrane Viruses,* add a statement that the pseudovirus will be purchased from commercial source.
    - In the viral vector form for Nipah Pseudovirus, replace references of 10% bleach with “a freshly prepared 1:10 dilution of bleach”.
- Biosafety Manual
    - In Section B Background, Step 1 Risk Assessment, third paragraph about alphavirus based pseudovirus add that NSP2 protein is known to be cytopathic and may lead to a cytoxic effect on cells and tissues around the exposure site.

Lab responded to post-review memo. Response were evaluated by BSO and ABSO. Approval granted 06/04/26.

#22-25.01 Ramesh Goel. Amendment to add Leclercia sp. (BSL-2)

They are currently engaged in environmental and applied microbiology research, including biological reactor systems for sustainable nutrient removal, bacteriophages research on nutrient cycling and horizontal gene transfer in wetlands, and disinfection kinetics of antibiotic resistant bacteria and gene expression of antibiotic resistance genes.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **General Question:**

- The IBC was told at renewal in 2025 that most of the agents in their lab are in long-term storage. At the beginning of Appendix 4 (SOP) there was a statement, “The agents listed in this section are currently in long-term storage. PI needs to contact the Biosafety Office prior to using these agents.” In the current Appendix 4, that statement has been removed. Are the agents in their lab, except Leclercia and Microcoleus, still in archival storage, or have they begun working with them again? If the latter, the IBC will need to extend their review to cover these agents.

- **Biosafety Manual**
  - Page 64, Microcoleus sp Culturing Protocol, add a note to the Methods section that states that all work with Microcoleus will take place in a biosafety cabinet.
  - Page 67, Section 6.4, currently states that they are going to add 5mL of acidified methanol into a 1.5 or 2 mL microcentrifuge tube. Edit this section with the correct volumes, since 1.5 mL or 2 mL tubes will be unable to hold 5 mL.
    - Also note, only small amounts of organic solvents can be used in a BSC since filtered air from the BSC is recirculated into the room, unless connected to the building’s HVAC system.

Lab responded to post-review memo. Response were evaluated by BSO and ABSO. Approval granted 06/01/26

#128-25.01 Randy Peterson. Amendment to add Lentiviral Vector into protocol.

The Peterson lab is using the tools of chemical biology to investigate complex in vivo phenomena. By conducting high-throughput screens with intact, living zebrafish, small molecules can be discovered that alter virtually any biological process. The lab is applying this approach in three areas: 1) developmental biology, including cardiovascular development and germ cell development; 2) disease physiology, including heart failure, anemia, and neurodegenerative diseases; and 3) animal behaviors. In each of these areas, the novel small molecules discovered are providing new biological insights and/or novel therapeutic opportunities.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **SciShield:**
  - Edit the ‘Second Generation Integrase Competent and Deficient Lentiviral Systems’ project form and update the containment level to Biosafety Level 2 Enhanced (BSL-2+).
    - In the same project form, update the rooms and spaces.
  - In the Recombinant or Synthetic Nucleic Acid Molecules Survey, update questions 4, 6, 6a, 6b to be ‘Yes’ .
  - In the Human Source Survey, update responses to include:
    - 'Infect/transduce human cells with recombinant viruses'
    - 'Infect/transduce human cells with viral vectors'
    - 'Use cell lines for packaging viral vectors'
    - Be sure to save these updates within the 'Save and Continue' tab
  - Add Lentivirus to the table of Viruses used in Lab.
- **Biosafety Manual:**
  - Appendix 2 Post-exposure Standard Operating Procedure
    - Incorporate the following information for lentivirus post-exposure prophylaxis:
      - Visit the Occupational Medicine Clinic. Managing occupational exposure to HIV-based viral vectors relies on the use of antivirals targeting the pre-integration steps, in order to prevent insertional mutagenesis. Post-exposure prophylaxis (PEP) should be administered as soon as possible, within 72 hours following any exposure. The following post-exposure prophylaxis regimens are available:
        - Preferred single-tablet regimen:
          - Bictegravir (50 mg)/tenofovir alafenamide (25 mg)/emtricitabine (200 mg) (Brand name: Biktarvy) once daily
        - Preferred multi-tablet regimen:
          - Dolutegravir (Brand name: Tivicay) 50 mg taken once a day for 7 days

- Tenofovir disoproxil fumarate/emtricitabine (Brand name: Truvada) 300 mg taken once a day for 7 days

Important Notes:

- These recommendations are for replication-deficient vectors.
- Replication-competent vectors would require 28 days of treatment as with HIV.

- **Documentation:**
  - To comply with NIH regulations, the IBC is required to publish minutes from convened meetings, which they provide on the IBC website https://ibc.utah.edu/meeting-minutes.php . PI needs to inform us if their IBC registration contains proprietary information that cannot be included in the minutes.
  - PI needs to verify laboratory signage (BSL2/ABSL2 Warning sign) is up to date. Updated signage can be requested on SAM https://sam.ehs.utah.edu/ehsa/
  - Due to the risks associated with the agents used in their laboratory, enrollment in the Occupational Medicine Hepatitis B program and the Immunocompetence program is required, regardless of vaccination status.
    - Contact Dr. Andy Phillips with Occupational Medicine for access to the health screening questionnaire in Open Range.
    - In the email, provide the lab name and all lab personnel uNIDs to Dr. Phillips.
    - Once contact with Dr. Phillips has been obtained this item is considered complete by the IBC.

Lab responded to post-review memo. Response were evaluated by BSO and ABSO. Approval granted 06/02/26.

#48-26 Nitin Phadnis. Molecular basis of speciation in Drosophila; Molecular basis of segregation in Drosophila.

Understanding the genetic and molecular basis of speciation in Drosophila.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **SciShield:**
  - In the Project Forms: Provide experimental details and procedures/techniques used. Specifically, include a description of how genetic manipulation in the flies is being performed. Include whether or not any of the genetic manipulations lead to the formation of a gene drive, how containment is accomplished to prevent the release of genetically engineered flies, and how the flies are decontaminated prior to disposal.
  - In the Recombinant or Synthetic Nucleic Acid Molecules Survey:
    - This survey has additional questions 7-G, 7-H that have been added since their last renewal. Provide an answer to these questions.
- **Biosafety Manual:**
  - Section C.4. Incident Reporting:
    - Update the link for incident reporting to https://sam.ehs.utah.edu/ehsa/
  - Section D.3. Experimental Standard Operation Procedures:
    - Provide SOPs for the use and handling of arthropods.
- **Documentation:**
  - Provide documentation that all personnel have completed lab-specific training within the past year. This can be accomplished by review and signing the Biosafety manual and SOPs.

PI has not responded to post-review memo. Reminder email sent 06/11/26.

Protocols for Review With 3 Year Approval

#07-24.01 Saffeez Saffarian. Amendment to add H1N1 influenza A.

They are currently investigating the replication cycle of negative sense RNA viruses using VSV as a model system. Specifically they are interested in the mechanism by which RNA dependent RNA polymerases transcribe and replicate their genome. They are also investigating the budding of HIV virus, specifically focusing on the essential interactions that lead to production of infectious HIV particles from the host cell.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **In Biosafety Manual:**
  - In appendix 4, H1N1 Reverse Genetics and Nanoluc Reporter Protocol, replace ALL references to glass beakers and glass labware with plastic.

PI Cites NIH Guidelines: III-D-7
Agent: Influenza H1N1
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Insertions: NanoLuc in the open reading frame of the viral genome, resulting in slight loss of viral fitness.

Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anesthetization☐ | Restraints ☐ | Safer Sharps☐ | Enhanced PPE ☒ | Treatment Available ☒ | Vaccine Available ☒
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Approve with contingencies at Biosafety Level 2 Enhanced (BSL-2+)
Vote for Motion: 17 For Motion | Abstain

#44-26 Darrel Davis. Antiviral Drug Discovery; SARS-CoV-2 Drug Discovery.

Antiviral and Anticancer Drug Discovery.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **SciShield:**
  - Remove Kimberly Coffman as a delegate from the lab.

- **Documentation:**
  - To ensure effective lab leadership, the IBC requires the PI to complete all biosafety training relevant to the lab protocols. Provide documentation that Darrell Davis has completed:
    - BSL-2/BBP training,
    - Viral Vector Training
    - Biosafety Manual Review

PI Cites NIH Guidelines: III-D-1, III-D-3, III-E-1
Agent: Hepatitis C Virus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Zika Virus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: OC43
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐

Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: SARS-CoV-2 replicons
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☐ | Anesthetization☐ | Restraints ☐ | Safer Sharps☐ | Enhanced PPE ☒ | Treatment Available ☒ | Vaccine Available ☒
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Solid Front Rear Closing Gown, Double Gloves, Safety Glasses
Motion: Approve with contingencies at Biosafety Level 2 Enhanced (BSL-2+)
Vote for Motion: 17 For Motion | Abstain

#49-26 Matthew VanBrocklin. CVA21; Human Rhinovirus.

Cancer research, immunotherapy, and virotherapy, utilizing in vitro and in vivo modeling studies.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **General Clarification:**
  - The laboratory website references CRISPR-based recombination studies using adenoviral vectors. PI needs to clarify whether this work is currently ongoing in the laboratory. If so, it must be included with the registration and approved by the IBC.
- **SciShield:**
  - The locations where research is conducted must be included with their registration. PI needs to send a list of Rooms and/or Spaces used along with a brief descriptor of how the space is used (i.e. lab, surgical, cell culture, etc.) to the Biosafety Office at biosafety@ehs.utah.edu
    - Include vivarium housing locations (including ABSL2 animal housing)
    - After the spaces have been created, they will be notified and may return to the Project Form(s) to link the space with appropriate project(s).
  - In the 'Recombinant or Synthetic Nucleic Acid Molecules Survey'
    - Q4: The registration does not describe the introduction of rsNA into Risk Group 2,3,4 or restricted agents. Change this answer to 'No', or include an explanation of this work in their response to the IBC.
    - Q5: The registration does not describe the cloning of rsNA from Risk Group 2,3,4 or restricted agents cloned into a nonpathogenic prokaryotic of lower eukaryotic host vector system. Change this answer to 'No', or include an explanation of this work in their response to the IBC
  - In the Project Form '*CVA21'*. Provide the current IACUC protocol number.
  - In the Project Form '*Human Rhinovirus'*. Provide the current IACUC protocol number.
  - Verify the list of personnel affiliated with the project is accurate. The list of personnel listed in the Pathogen Registration Forms is different from personnel listed in the Project Forms.
- **Biosafety Manual:**
  - Section B. Background mentions reovirus, however there are no other mentions of this agent. Remove reovirus from this section if they are not using it in the lab.
    - If they are using it, contact biosafety office at biosafety@ehs.utah.edu for additional instructions on how to add it to the registration.
  - Section B.5 Training.
    - Remove "through RATS" as the RATS training module no longer is in use.
    - Update the link provided to the Institutional Biosafety Manual to the current manual https://ibc.utah.edu/biosafety-policies.php
  - Section C.3 Hepatitis B Vaccination:
    - Hepatitis B vaccination records are maintained in digital format by the Occupational Medicine Team. Delete the paragraphs beginning

        - *'However, if an employee chooses to decline vaccination, the employee must sign a declination form.'*
        - '*Vaccination will be coordinated and paid for through OEHS, as provided by the Student Health Clinic.'*
- Section C.6 Incident Reporting:
    - The contact information for the University of Utah Benefits Department is incorrect.
    - PI needs to update with correct information or remove the statement '
        - The Benefits Department is located:
        - 250 East 200 South, Suite 125
        - Salt Lake City, Utah 84111
        - Phone: 801.581.2169
- Section F.2 Laundry:
    - The address for the Hospital Laundry and Linen Services has changed from the School of Medicine. PI needs to update the address in their biosafety manual with the following:
        - "The University of Utah Hospital can be used to clean contaminated clothing and other articles that require laundering. Linen Services can be found in the lower level of the Acute Care Building in the University Hospital, 801-581-2200."
- In Section I
    - Provide SOPs for work involving human and mouse tissue experiments.
    - Add details about the injections done in animals. Pay attention to details such as restraining or anesthetizing the mice, the kind of needle/sharps used, if the work is being performed in a biosafety cabinet, etc. .
- Remove Appendix 4. Hepatitis B Vaccination Attestation forms are digitally managed by the Occupational Medicine Program.

- **Documentation:**
    - To comply with NIH regulations, the IBC is required to publish minutes from convened meetings, which they provide on the IBC website https://ibc.utah.edu/meeting-minutes.php . PI needs to inform us if their IBC registration contains proprietary information that cannot be included in the minutes.
    - PI needs to verify laboratory signage (BSL2/ABSL2 Warning sign) is up to date. Updated signage can be requested on SAM https://sam.ehs.utah.edu/ehsa/
    - Due to the risks associated with the agents used in their laboratory, enrollment in the Occupational Medicine Hepatitis B program and the Immunocompetence program is required, regardless of vaccination status.
        - Contact Dr. Andy Phillips with Occupational Medicine for access to the health screening questionnaire in Open Range.
        - In the email, provide the lab name and all lab personnel uNIDs to Dr. Phillips.
        - Once contact with Dr. Phillips has been obtained this item is considered complete by the IBC.
    - The individuals listed below are listed as active personnel on the Project Form(s) in SciShield. Complete the applicable training modules:

        - Only personnel listed in the table and who have provided complete all required training requirements will be approved for work under this registration.
        - To update active personnel, PI needs to log in to SciShield and revise the personnel listed on the Project Form(s).
        - Information on training can be found at: https://ibc.utah.edu/training.php

PI Cites NIH Guidelines: III-D-1, III-D-2, III-D-3, III-D-4, III-D-4-a, III-D-4-b, III-E, III-E-3
Agent: Coxsackie A21
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Human Rhinovirus
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☐ |

Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Risk Assessment: Sharps☒ | Vortexing ☒ | Sonicating☐ | Cell Sorting☒ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anesthetization☐ | Restraints ☒ | Safer Sharps☒ | Enhanced PPE ☐ | Treatment Available ☒ | Vaccine Available ☒
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Table
Vote for Motion: 17 For Motion | Abstain

#50-26 Alessandra Angelucci. Anatomy, Physiology, and imaging of the visual cortex.

Visual Neuroscience.

Outstanding issues to be addressed which were communicated to PI through post-review email.

- In SciShield:
  - In the Animal Source Materials Survey, select “Obtain cell lines or tissues that carry human transmissible pathogens.”
- Documentation:
  - Provide training documents for laboratory personnel.

PI Cites NIH Guidelines: III-D-1, III-D-4-a, III-D-4-b, III-E-3
Agent: Adeno-Associated Viral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Transgenes and Sources: mCherry, oF, CamKII cre, GFP, GAD Cre, TVA, GCaMP6f, dTomato, S5E2 from mouse sources

Agent: Rabies Viral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☐ | Narrowed Tropism ☒ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Deletions: delta G
Transgenes and Sources: EGFP, mCherry, BFP, TD tomato, GPRB2, Arch T, Ch2 from synthetic sources

Agent: Canine Adenoviral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☒ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Transgenes and Sources: Cre

Agent: Yellow Fever Viral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Transgenes and Sources: mVenus, mCherry, Cre, NS1-Cre from synthetic sources

Agent: Lentiviral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐

Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☒ | Narrowed Tropism ☐ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Transgenes and Sources: FuG-E, EYFP-WPRE, EYFP from synthetic sources

Risk Assessment: Sharps☒ | Vortexing ☐ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anesthetization☒ | Restraints ☐ | Safer Sharps☒ | Enhanced PPE ☐ | Treatment Available ☒ | Vaccine Available ☐
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Approve with contingencies at Biosafety Level (BSL-2) and Animal Biosafety Level 2 (ABSL-2)
Vote for Motion: 17 For Motion | Abstain

#52-26 Nels Elde. Evolutionary potential of a model poxvirus; Investigating horizontal gene transfer in coronaviruses; Defining the antiviral effector repertoire of divergent species; Co-evolution of Guanylate Cyclase C and uroguanylin in mammals; Infection Biology in Zebrafish.

Host-pathogen interactions are battlefronts for influence over host functions. From an evolutionary perspective each interaction can bear heavily on the fitness of both hosts and pathogens. Therefore, these interactions drive some of the most rapid evolution found in nature and can provide basic insights into the evolutionary process.
They study the consequences of pathogen-driven evolution on cells and host immunity factors. Protein surfaces at these interfaces often evolve in a manner resembling molecular arms races. They are also interested in cases where pathogens use molecular mimicry to gain advantages against hosts. In addition, they use experimental evolution to determine the evolutionary potential of viruses and understand the rules by which they adapt.
While experiments based on phylogenetic reconstructions, provide a powerful means of retrospectively studying host-pathogen interactions, experimental evolution offers a prospective view of virus evolution where potential adaptations can be monitored in real-time. Recent advances in deep sequencing coupled with recombinant tools make it possible to quickly determine the genetic basis of a variety of adaptations. They are using experimental evolution to address open questions related to virus evolution, such as mechanisms of rapid evolution and the trade-offs between host range and virulence

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **SciShield:**
  - Verify the personnel listed on the Pathogen and Viral Vector Forms are current and reflect workers listed in the Project Forms.
    - References to legacy staff are included in the Pathogen/Viral Registration forms. Update Step 5 on all Pathogen/Viral registration forms as necessary to include current personnel.
  - The Microbial Agent Survey indicates planned work with Spring Virema of Carp Virus (SVCV) and that it is a select agent. Although SVCV is not a select agent, they must determine if they will need a USDA permit for their work.
    - Remove the reference, found in the Microbial Agents Survey, to SVCV being a select agent.
    - Verify if a USDA permit is required for this viral agent.
  - Edit an existing project description or create a new project to describe the work with Spring Virema of Carp Virus (SVCV)
  - Edit an existing project description or create a new project to describe the work with the human sperm samples.
    - Specify the source of the sperm as well as use of it in the lab.
  - Add OC43 and monkeypox to the viruses used in lab table. https://utah.scishield.com/node/420743/biologicals/bio/virus_input?gids[]=420743&destination=node/420743/biologicals/bioSummary
  - Add Cryptococcus neoformans to the fungus/yeast used in lab table. https://utah.scishield.com/node/420743/biologicals/bio/fungi_yeast_input?gids[]=420743&destination=node/420743/biologicals/bioSummary
  - On the Pathogen Registration Form - Cryptococcus neoformans:

    - Step III: Safety, update the “Describe the use of PPE” section. Lab coats, gloves, and safety glasses are a minimum requirement for this work. Those using a respirator will enroll in the Occupational Medicine Respiratory Protection Program. (Remove reference to Derek and OEHS).
    - Step IV: Risk Assessment, in the “Provide a risk assessment for working with this agent” section, apply similar updates regarding respiratory protection.
- On the Pathogen Registration Form - OC43:
    - Step III: Safety, update the explain section of the “Are there any health restrictions for handling these agents?” to remove the reference to Dr. Goldstein.
- On the Pathogen Registration Form - Monkeypox form:
    - Step IV: Risk Assessment, review this section and provide relevant updates to vaccination and/or antiviral recommendations.
- On the Viral Vector Registration Form - Third generation lentiviral packaging system (Trono Lab) form,
    - Step 1 update the question. *Have any changes been made to the natural host range or tropism*? to be 'Yes' due to changes in tropism (VSV pseudotype)
    - Step 5: Safety: Include nitrile gloves in the "General Personal Protective Equipment" list.
- On the Viral Vector Registration Form - lentiCRISPR v2 form,
    - Step 1 update the question. *Have any changes been made to the natural host range or tropism*? to be 'Yes' due to changes in tropism (VSV pseudotype)
- On the Viral Vector Registration Form-pSCRPSY
    - Step 1 update the question. *Have any changes been made to the natural host range or tropism*? to be 'Yes' to changes in tropism (due to VSV pseudotype)
- Create a Pathogen Registration Form for the use of Spring Virema of Carp Virus:

- **Biosafety Manual:**
    - Section B. Background
        - Add to the risk assessment of Coxsackievirus B3 (CVB3) to include the risks to immunocompromised individuals.
        - Add a risk assessment for Monkeypox.
        - Provide information supporting Spring Virema of Carp Virus (SVCV)
    - Section C.6. Hepatitis B Vaccination
        - Hepatitis B vaccination records are maintained in digital format by the Occupational Medicine Team. Delete the paragraph beginning 'However, if an employee chooses to decline vaccination, the employee must sign a declination form.'
        - Update the statement 'Vaccination will be coordinated and paid for through OEHS, as provided by the Student Health Clinic.' to indicate replace 'Student Health Clinic' with 'RedMed'
    - Section C.8 Incident Reporting:
        - The contact information for the University of Utah Benefits Department is incorrect.
        - PI needs to update with correct information.

          The Benefits Department is located:

          250 East 200 South, Suite 125

          Salt Lake City, Utah 84111

          Phone: 801.581.2169

    - Clarify the process for laundering reusable lab coats(as indicated in SciShield)
        - If reusable laboratory coats are utilized, provide a description of the laundering process.
        - Section L of the BSL2 Biosafety Manual Template https://ibc.utah.edu/_resources/documents/templates/biosafety_level_2__manual_template2024.docx contains a reference for this information.
        - Create ‘Section I: Laundry: in the current biosafety manual to describe this process.
    - Appendix 2 Post-exposure Standard Operating Procedure
        - Incorporate the following information for Recombinant Lentivirus and Recombinant HIV Particles SOP post-exposure prophylaxis:

        - Visit the Occupational Medicine Clinic. Post-exposure prophylaxis (PEP) should be administered as soon as possible, within 72 hours following any exposure. The following post-exposure prophylaxis regimens are available:
            - Preferred single-tablet regimen:
                - Bictegravir (50 mg)/tenofovir alafenamide (25 mg)/emtricitabine (200 mg) (Brand name: Biktarvy) once daily
            - Preferred multi-tablet regimen:
                - Dolutegravir (Brand name: Tivicay) 50 mg taken once a day for 7 days
                - Tenofovir disoproxil fumarate/emtricitabine (Brand name: Truvada) 300 mg taken once a day for 7 days
    - Remove Appendix 5. Hepatitis B Vaccination Attestation forms are digitally managed by the Occupational Medicine Program.
    - The IBC requires laboratory-specific SOPs to be included in the biosafety manual.
        - Include a section with SOPs for all viral vectors, pathogens, and human source materials.
        - Be sure to include SVCV and human sperm, since they were added to their registration and no details of their use have been provided.
- **Documentation:**
    - To comply with NIH regulations, the IBC is required to publish minutes from convened meetings, which they provide on the IBC website https://ibc.utah.edu/meeting-minutes.php . PI needs to inform us if their IBC registration contains proprietary information that cannot be included in the minutes.
    - PI needs to verify laboratory signage (BSL2/ABSL2 Warning sign) is up to date. Updated signage can be requested on SAM https://sam.ehs.utah.edu/ehsa/
    - Due to the risks associated with the agents used in their laboratory, enrollment in the Occupational Medicine Hepatitis B program and the Immunocompetence program is required, regardless of vaccination status.
        - Contact Dr. Andy Phillips with Occupational Medicine for access to the health screening questionnaire in Open Range.
        - In the email, provide the lab name and all lab personnel uNIDs to Dr. Phillips.
        - Once contact with Dr. Phillips has been obtained this item is considered complete by the IBC.
    - The individuals listed below are listed as active personnel on the Project Form(s) in SciShield. Complete the applicable training modules:
    - Only personnel listed in the table and who have provided complete all required training requirements will be approved for work under this registration.
    - To update active personnel, PI needs to log in to SciShield and revise the personnel listed on the Project Form(s).
    - Information on training can be found at: https://ibc.utah.edu/training.php

PI Cites NIH Guidelines: III-D-1, III-D-2, III-D-3, III-D-4, III-D-4-a, III-D-4-b, III-E-1
Agent: Vaccinia virus (Western Reserve, IHD-J, Copenhagen)
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Cryptococcus neoformans
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Coronavirus OC43
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Equine Coronavirus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐

Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Mouse Hepatitis Virus
Tissue Culture ☐ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Yellow Fever Virus (17-D)
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☒ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Dengue Virus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Zika Virus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Coxsackievirus B3
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Venezuelan Equine Encephalitis Virus TC-83
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☒ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Insertions: GFP reporter
Agent: West Nile Virus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Rhabdovirus Indiana Vesiculovirus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Lentiviral Vector
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☒ | Narrowed Tropism ☐ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Transgenes and Sources: C15ORF48 from human sources

Agent: Retroviral Vector
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☒ | Narrowed Tropism ☐ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Transgenes and Sources: Glutamate Cyclase-C (GC-C) from primates

Agent: Adeno-Associate Viral Vector
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Transgenes and Sources: harbiTRIM from iguana sources

Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☒ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anesthetization☐ | Restraints ☒ | Safer Sharps☐ | Enhanced PPE ☐ | Treatment Available ☒ | Vaccine Available ☒
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Solid Front Rear Closing Gown, Double Gloves, Safety Glasses
Motion: Table
Vote for Motion: 16 For Motion | 1 Abstain

#53-26 Josh Bonkowsky. Development and Leukodystrophy Disease in the Zebrafish Nervous System; Gene Therapy and Microglial Transplant in a Rodent Model of Vanishing White Matter Disease; Investigating PEX 1 and ATAD1 gene therapy in vitro and in vivo for Peroxisomal Biogenesis Disorders (PBDs); Elucidating the Role of Microglia, Astrocytes, and the Integrated Stress Response (ISR) in Adrenoleukodystrophy (ALD).

Developmental neurobiology.

Outstanding issues to be addressed which were communicated to PI through post-review email.

- Provide training documentation for all lab workers, including the PI.

PI Cites NIH Guidelines: III-D-1, III-D-3, III-D-4, III-D-4-a, III-D-4-b, III-D-4-c-(2), III-E, III-E-1, III-E-3
Agent: Adeno-Associated Viral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Transgenes and Sources: Eif2b5, GFAP, GfaABC1D, CAG from human sources

Agent: Retroviral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☒ | Narrowed Tropism ☐ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Transgenes and Sources: PEX1, ATAD1 from human sources

Agent: Lentiviral Vector
Tissue Culture ☒ | Animal Work ☒ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☒ | Narrowed Tropism ☐ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Transgenes and Sources: hTERT, PEX13 from human sources

Risk Assessment: Sharps☒ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☒
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anesthetization☐ | Restraints ☐ | Safer Sharps☒ | Enhanced PPE ☒ | Treatment Available ☒ | Vaccine Available ☐
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Solid Front Rear Closing Gown, Double Gloves, Safety Glasses
Motion: Approve with contingencies at Biosafety Level 2 Enhanced (BSL-2+) and Animal Biosafety Level 1 (ABSL-1)
Vote for Motion: 16 For Motion | 1 Abstain

#111-25.01 Eric Schmidt. Amendment to add Staphylococcus aureus, Pseudomonas aeruginosa, Salmonella typhimurium to registration.

Their lab focuses on the biosynthesis of natural products in marine animals.

All pre-screen comments were resolved and no additional concerns were raised during the meeting.

PI Cites NIH Guidelines: III-E
Agent: Staphylococcus aureus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Pseudomonas aeruginosa
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Salmonella typhimurium
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐

Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anesthetization☐ | Restraints ☐ | Safer Sharps☐ | Enhanced PPE ☐ | Treatment Available ☒ | Vaccine Available ☐
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Approve with contingencies at Biosafety Level 2 (BSL-2)
Vote for Motion: 16 For Motion | 1 Abstain

#39-25.02 Hossein Montazerian. Amendment to add Staphylococcus aureus to animals.

Outstanding issues to be addressed which were communicated to PI through post-review memo.
SciShield https://utah.scishield.com/

- Provide the ABSL2 location where mice exposed to Staphylococcus aureus will be housed. Consult with the Office of Comparative Medicine for assistance with locating the proper housing and procedure spaces.

Documentation:

- Verify the list of workers included with the SciShield registration is accurate and congruent with the workers listed on the biosafety manual attestation roster and with workers listed in SAM.

    - The table below represents workers currently attached to a BSL2 project listed in SciShield.
- Verify all personnel have completed the following training modules
    - Bloodborne Pathogens/BSL2 training
    - Biosafety Manual Review and attestation
    - Animal Biosafety Level 2 Training
- Only personnel listed in the table and who have completed all required training requirements will be approved for work under this registration.
- To update active personnel, please log in to SciShield and revise the personnel listed on the Project Form(s).
- Information on training can be found at: https://ibc.utah.edu/training.php

PI Cites NIH Guidelines: n/a
Agent: Staphylococcus aureus
Tissue Culture ☒ | Animal Work ☐ | Patient Samples ☐ | Human Gene Transfer ☐ | Environment Samples ☐
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Risk Assessment: Sharps☒ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anesthetization☐ | Restraints ☐ | Safer Sharps☒ | Enhanced PPE ☐ | Treatment Available ☒ | Vaccine Available ☐
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Approve with contingencies at Biosafety Level 2 (BSL-2) and Animal Biosafety Level 2 (ABSL-2)
Vote for Motion: 16 For Motion | 1 Abstain

Protocols for Review With 5 Year Approval

None

Protocols for Review, Requiring IBC Approval Before Initiation, Transfer of rsNA into Humans

None

Tabled/Pending Protocols

#19-25.03 JB. Lubin. Amendment to add Akkermansia ssp. Desulfovibrio piger, Citrobacter rodentium, and Candida ssp.

Their lab is dedicated to understanding of how the intersection of diet and microbial metabolism in the infant microbiome impacts neonatal infection and immunity. Their research is focus on mouse models of infant microbial communities and incorporates microbiology, genetics, biochemistry, bioinformatics and immunology.

Outstanding issues to be addressed which were communicated to PI through post-review memo.

- **SciShield:**
    - Describe the use of Candida in a relevant project form. In the description include a brief description and rationale for the of use of Candida in the gut. The IBC is concerned of the use of Candida auris due to its significant morbidity and mortality in hospital-acquired infections and its antifungal resistance.
    - In all of the Pathogen Registration Forms:
        - Step 3 Safety:
            - Remove reference to 'skirt' being worn as proper laboratory attire.
            - Update required PPE to include Lab coat, nitrile gloves, safety glasses.
            - Update to indicate centrifuge safety cups are used with all Risk Group 2 materials.

- Provide individual Pathogen Registration Forms for each Candida species as the Risk Assessment is different for each of the listed strains.
  - Include the 'Institutional Collaborator' supplying the material in response to the question '*Where will they obtain the infectious agent?'*
  - Due to an elevated risk of work with Candida auris, include BSL2 Enhanced PPE of Solid Front/Rear Closing Lab coat, Double Nitrile Gloves, Safety Glasses.

- **Biosafety Manual:**
  - Provide an SOP for the use of Candida spp. The SOP should include the species of any animal model used, a description of the experimental procedure(s), a description of the laboratory biological safety containment used for the injection (e.g., indicate if a biosafety cabinet will be used during the injection), precautions for needle safety, and a brief overview of the injection process, including the route of administration and safety devices used during injection.
  - In the Handling and Administration of Pertussis Toxin (PTX) SOP
    - Step 3 states *'Load syringes inside the BSC immediately before injection; keep capped until animals are restrained.'*
      - It appears the syringe is loaded with Pertussis Toxin, then the needle is re-capped until the animal is restrained. Provide clarification of needle safety to indicate the needle is not recapped and does not pose a threat to worker safety.

Alternatively, the needle could be removed via the tool on the sharps container lid, and replaced with a new needle to avoid a recapping procedure

Lab/Protocol Closures

None

Spills and Incidents

None

Other Business

Reminder: upcoming job opening in Biosafety Office