THE UNIVERSITY OF UTAH

INSTITUTIONAL BIOSAFETY COMMITTEE
MEETING MINUTES

February 19, 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

None

Review of January 22, 2026 Minutes

Motion: **Approve**
Vote for Motion: 17 in favor of the motion
2 Abstain

Old Business

#02-26 Baoyu Liu. Beta-cell self-antigen recognition by diabetogenic CD8 T cells.

The overall focus of their research is to investigate specific antigen recognition by the immune system. They use novel biophysical methods (e.g. micropipette adhesion frequency assay and biomembrane force probe) to characterize how adaptive lymphocytes recognize their antigens in the context of viral infection, autoimmunity, and tumor immunology.

A portion of the requested changes had been made in SciShield, but were not visible to the committee due to system error. ABSO worked with the PI to resolve system error. Approved 1/23/26

#04-26 Sungjin Park. Neuron-glia Interactions for the Development and Function of the Nervous System.

They are currently investigating the signaling mechanisms in the nervous system and the sensory system. In particular, they are focusing on neuron-astrocyte communications and ECM formation.

Outstanding issues to be resolved:

- **SciShield:**
  - Submit all the changes made to SciShield by “Certifying” the registration. There is a big blue oval button that says “Certify” on the bottom of the screen when you follow the link. An email has been sent to PI from SciShield with instructions on how to accomplish this.
    - Note: Only the PI is able to certify the registration.

- **Documentation:**
    - The recombinant expression of alpha toxin from Clostridium septicum in a non-K12 strain of E. coli (such as BL21), requires registration with the NIH Office of Science Policy (OSP) according to Appendix F-I of the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules. Contact the Biosafety Office for next steps.

PI responded to post-review. Responses were evaluated by BSO and ABSO. Approval granted 1/27/26.

#09-26 Martin Golkowski. Hepatocellular Carcinoma PPG; Studying kinase functions in liver cancer therapy resistance and metastasis; U-PAG Proteomics Summer Workshop.

Outstanding issues to be resolved:

- **In SciShield:**
    - In the Recombinant or Synthetic Nucleic Acid Molecules Survey, change:
    - Q6-B) to “Yes” Due to use of helper plasmids during lentiviral vector production.
    - Answer Q11.
        - The most common reasons for this question to be answered ‘yes’ include protein expression in non-K12 E. coli (such as BL21) or transfection of expression plasmids into mammalian cells.
    - In the Project Form Studying kinase functions in liver cancer therapy resistance and metastasis
    - Remove ABSL-1 containment. Animal containment is not required on this project as work is done by the PRR Core Facility.
    - Verify that personnel listed on the projects are current.
- **In Biosafety Manual:**
    - In Section B.1., Risk Assessment, for lentivirus include the risk of inflammation and integration at an exposure site.
    - In Section B.3, Prophylaxis and treatment options, include the recommended post-exposure prophylaxis for a lentiviral vector exposure to be:
        - Dolutegravir 50 mg taken once a day for 7 days AND Tenofovir disoproxil fumarate 300 mg taken once a day for 7 days. Treatment should begin as soon as possible, and definitely within 72 hours.
    - In Section B.4., Methods of Disinfection and Inactivation, change "bleach" to "a freshly prepared 1:10 dilution of bleach"
    - Section C.3: Hepatitis B vaccination records are maintained in digital format by the Occupational Medicine Team. Remove the two paragraphs, starting with “However” and ending with “Student Health Clinic.”
        - Remove Appendix 4. Hepatitis B Vaccination Attestation forms are digitally managed by the Occupational Medicine Program.
- 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
    - In Section D.2. PI needs to add the following information: safety goggles or safety glasses must be worn, including when using a faceshield.
    - 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.
    - The 39-page Exposure Control Plan is superfluous, and it can be removed. Section B.3., Bloodborne Pathogen Regulations, serves as the Exposure Control Plan.
- **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 the

biosafety office if Their IBC registration contains proprietary information that cannot be included in the minutes.
- Verify laboratory signage (BSL2/ABSL2 Warning sign) is up to date. Contact the Biosafety Team (biosafety@ehs.utah.edu) for updated signage as needed.
- As shipping is indicated in the registration. PI needs to provide documentation that personnel have completed the Shipping Category B Infectious Substances and Dry Ice Training within the past two years.
- Consult with Dr. Andy Phillips at Occupational Medicine Clinic regarding enrollment in the Immunocompetence and Hepatitis B Programs. Provide him with the lab name and all lab personnel uNIDs.
- Provide documentation that personnel have completed the Bloodborne Pathogens Exposure/BSL2 training within the past year, as determined by their job duties.
    - The IBC recognizes the BBP/Needlestick awareness training module offered by U Health, this training does not have a BSL2 training component. EHS offers a BSL2/BBP combination course.
    - While the BBP component is required annually, the BSL2 training is valid for 3 years.
    - PI needs to confirm the BSL2 training date listed in the training records in SAM are resulting from the EHS BSL2/BBP course.
    - Information on training can be found at: https://ibc.utah.edu/training.php
    - Training courses can be registered on LearningHub

PI responded to post-review. Responses were evaluated by BSO and ABSO. Approval granted 2/2/26.

#17-25.01 Jun Yang. Amendment to add AAV vector.

They are investigating the function of several genes in photoreceptors and hair cells in vitro and in vivo. For the in vivo studies, they utilize various mouse mutant models. For the in vitro studies, they will use a combination of molecular, cellular and biochemical approaches. The genes They are interested in are directly associated with human inherited retinal degeneration and hearing loss.

Outstanding issues to be resolved:
- **In SciShield:**
    - In the Project form, *Mechanistic and therapeutic studies on retinal degeneration and hearing loss using mouse,* remove all references to lentivirus, lentiviral vectors, and CRISPR/Cas9.
    - In the Human Source Materials Survey, remove references to iPSCs.

PI responded to post-review. Responses were evaluated by BSO and ABSO. Approval granted 1/23/26.

Protocols for Review With 3 Year Approval

#01-26 Ayako Yamaguchi. Functional analyses of the neural circuits underlying vocal production in Xenopus laevis.

The focus of their research is to understand how the motor programs are generated by the nervous system using frog vocalizations as a model. They have used behavioral, histological, and electrophysiological technique to analyze the vocal pathways. In addition, they are starting to use optogenetics technique by expressing optogenetics sensors/actuators in the nervous system of the frog to monitor and control the activity of neurons.

Outstanding issues to be addressed which were communicated to PI through post-review memo:
- **SciShield:**
    - In the Animal Source Survey:
        - Remove the checkbox 'Carrying no pathogens and no recombinant DNA into laboratory animals'
        - Add 'Carrying recombinant DNA into laboratory animals'
        - Save changes when complete.
    - In the Recombinant or Synthetic Nucleic Acid Molecules Survey

        - Update the chart in Q7-D-i) to reflect the work being done.
        - Update Q7-E-iii) to “No” since it doesn’t seem like Their lab is propagating the animals.
        - Update Q7-F-i) to include the work in Their lab.
    - In the Table of Cells Used in Lab:
        - Include all cell lines used in the laboratory.
    - In the Table of Tissues Used in Lab:
        - Include all tissues used in the lab.
    - In the Viral Vector Registration Form *'AAV with fluorophores'*
        - Step 5 Safety: Remove vinyl gloves from the table of PPE
        - Step 4: Change answer to “Will Their laboratory be producing transgenic or knockout animals using this vector system?” to “Yes”
    - Viral Vector Registration – G-deleted VSV encoding ArchT-GFP
        - Step 4, change answer to “Will Their laboratory be producing transgenic or knockout animals using this vector system?” to “Yes”
        - Update 'Surgical Mask' to be 'N-95 respirator'
    - Viral Vector Registration – G-deleted VSV encoding GtACR2-EYFP
        - Step 4, change answer to “Will Their laboratory be producing transgenic or knockout animals using this vector system?” to “Yes”
        - Update 'Surgical Mask' to be 'N-95 respirator'
    - Viral Vector Registration – G-deleted VSV encoding GCamp6f
        - Step 4, change answer to “Will Their laboratory be producing transgenic or knockout animals using this vector system?” to “Yes”
        - Update 'Surgical Mask' to be 'N-95 respirator'
- **Biosafety Manual:**
    - Section I, experimental procedures
        - Step I: “No personnel will be allowed to enter the BSL-2 room without the appropriate N-95 respirator during viral vector injection procedure” - the door should ideally not be opened at all during this procedure. People should not be coming in and out
        - Steps IV and VI: Change times listed so that the disinfection time is consistent (listed as 10 minutes one place and 20 minutes in the other for the same disinfectant and the same virus)
        - Step XII: Rinse centrifuge tube with water between bleach and ethanol
        - Clarify if it is the brain or the frog being transferred to the electrophysiological recording room and if the frog is being moved live but anaesthetized, clarify the container type.
        - Not fixing the brains with paraformaldehyde doesn’t match the registration answers given earlier
        - Section i.5 is referenced but there is no i.5, only two i.4 sections.
        - Step XIII: Change to include a water rinse between bleach and ethanol
        - Step XIV: Since the water of the pre-injection tank was in the room where the virus was manipulated, it should still be disinfected prior to disposal down the sink.
    - In 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.
        -
- **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/
    - The OSHA Bloodborne Pathogen Standards requires enrollment in the Hepatitis B program when working with human source materials, regardless of vaccination status. Contact Dr. Andy Phillips at 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.

    - Laboratory work with VSV requires enrollment in Occupational Medicine's Immunocompetence program. Contact Dr. Andy Phillips at Occupational Medicine at Occupational Medicine for instructions to access the program. Provide the lab name and uNIDs for all lab personnel.
    - 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.
    - Provide documentation that personnel have completed the EHS BSL-2/BBP classes within the past year, as determined by their job duties.
  - Information on training can be found at: https://ibc.utah.edu/training.php
- Training courses can be registered on LearningHub **General Questions:**
  - Clarify if viral vectors (AAV, VSV) are used with this registration.
    - If viral vectors are no longer in use, contact biosafety@ehs.utah.edu for next steps directives, including a revised memorandum of corrections.
  - Clarify the locations of animal procedure and housing locations.

PI Cites NIH Guidelines: III-D-1, III-D-4-a, III-D-4-b
Agent: Vesicular Stomatitis 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 ☐
Deletions: G-deleted
Transgenes and Sources: Arch T-GFP, GtACR2-EYFP, GCamp6f, dTomato from jellyfish sources.

Agent: AAV
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: GFP from jellyfish

Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☐ | Fume Hood☐ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☒ | Restraints ☐ | Safer Sharps☐ | Enhanced PPE ☐ | Treatment Available ☐ | Vaccine Available ☐| Respirator ☒
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Table
Vote for Motion: 19 For Motion

#15-26 Ami Patel. Mechanisms of resistance to MEK Inhibition in RAS-pathway activated chronic myelomonocytic leukemia.

Chronic myelomonocytic leukemia (CMML) is an aggressive hematologic malignancy associated with dismal survival outcomes and low curative potential. Treatment options are extremely limited, poorly tolerated and fail to address many disease-related symptoms. Targeted agents represent a promising therapeutic opportunity for CMML patients with mutations that lead to aberrant signal transduction through the RAS/mitogen activated kinase (MAPK) pathway. The proposed research aims to understand whether this subset of CMML patients could benefit from treatment with cobimetinib, a specific inhibitor of RAS/MAPK signaling. The proposed research aims to understand, prevent and overcome anticipated MEK inhibitor resistance. Laboratory-based preclinical studies will utilize advanced high throughput sequencing and target validation methodologies in cell lines, primary CMML cells and patient derived xenograft models of CMML to help identify mechanisms of resistance that can be cross-referenced with clinical trial findings. Pathways implicated in MEK inhibitor resistance may be candidates for targeted inhibition, leading to the development of novel combinatorial treatment strategies in RAS-activated CMML.

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

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-D-4-c-(2), III-E, III-E-1, III-E-3
Agent: Lentivirus
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: shRNA, sgRNA from human sources; Cas9 and BiolD2/TurboID from bacteria sources

Agent: MSCV
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: MAPK7, MAPK13, MAP2K2, MAP4K2, JakV617F from human sources

Risk Assessment: Sharps☒ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☒
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☐ | 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 at Biosafety Level 2 Enhanced (BSL-2+) and Animal Biosafety Level 2 (ABSL-2)
Vote for Motion: 19 For Motion

#16-26 Sankar Swaminathan. Role of EBV and KSHV in Carcinogenesis (Renewal of existing protocol #59-14).

Their research studies are aimed at understanding the mechanisms by which human cancer-causing herpesviruses interact with the host cell. They study Epstein-Barr virus (EBV) and Kaposi's sarcoma-associated virus (KSHV).

Outstanding issue to be resolved which was communicated to PI through post-review memo:

- **Biosafety Manual:**
  - Please remove page 46 of the biosafety manual, since these are not applicable to their lab.

PI Cites NIH Guidelines: III-D-1, III-D-3, III-E1
Agent: Epstein-Barr 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: Kaposi’s Sarcoma Associated Herpesvirus
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: Lentivirus
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: EBV ZTA, EBV SM from EBV; SRp20, ISG54, IFIT4, CTCF, Rad21, HDAC8, SMC3, ORF50 from human sources

Agent: VSV
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: Junin GP from Junin virus

Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☒ | Centrifuging☐ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☐ | 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: 19 For Motion

#17-26 Conan Kinsey. Resistance Mechanisms and Immuno-Oncology with Combined MAP Kinase and Autophagy Inhibition in Gastrointestinal Malignancies.

The Kinsey Laboratory is interested in combining targeted therapies with autophagy inhibition in pancreatic and gastrointestinal cancers for rapid translation to patients. Dr. Kinsey published a manuscript describing the synergistic cytotoxicity of combining MEK1/2 and autophagy inhibition in RAS/RAF mutated cancers and is the primary investigator of two investigator-initiated clinical trials for pancreatic and gastrointestinal cancers resulting from this work.

Targeted therapies have been successful in some malignancies; however, a vast majority of cancers do not respond to predicted vulnerabilities. They have demonstrated that these non-responsive malignancies likely activate protective mechanisms such as autophagy, which result in primary resistance. Dr. Kinsey's laboratory works with cancer-derived cell lines, patient-derived organoids, and patient-derived xenograft models to evaluate the mechanistic, diagnostic, prognostic, and therapeutic potential of novel targeted combinations

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

- **SciShield:**
  - In the Viral Vector Form for pBABe-puro:
    - Step 5, Safety:
      - *Provide details for your method of disinfection or decontamination:* 80% ethanol is still referenced. Please change this reference to 70%.
- **Biosafety Manual:**
  - In Appendix 5, Section D, please provide your SOP for performing the injections into animals.

PI Cites NIH Guidelines: III-D-1, III-D-3, III-D-4, III-D-4-a, III-D-4-c-(2), III-E, III-E-3
Agent: Lentivirus
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: Fluorescent proteins, MYC T58A, MYC WT, ATG4b DN, shRNAs from mouse source

Agent: Retrovirus
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, GFP from mouse sources.

Agent: PDX Transduced Cells
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☒ | Anaesthetization☒ | 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 2 (ABSL-2)
Vote for Motion: 18 For Motion | 1 Abstain

#69-25.01 Martin Distel. Amendment to add Lentiviral vector.

The lab focus is on establishing pediatric cancer models in zebrafish (Danio rerio) through genetic approaches and xenotransplantation of human cancer cells, including patient-derived cancer cells. They will generate transgenic fish through integration of vectors/plasmids using Tol2 recombinase system. Their expression systems in zebrafish are typically Gal4 and Cre-based, which allows us to target (human) oncogenes to specific cell types in zebrafish. The goal of their projects is to better understand the origin of tumors and tumor development to ultimately identify novel and better therapeutic strategies to treat pediatric cancers. Genes and drugs identified in these studies are relevant to pediatric cancer due to the high degree of conservation of genetic and molecular pathways between zebrafish and humans. Therefore, findings in zebrafish can be translated to human patients.

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

- **In SciShield:**
  - Add lentivirus to the table titled “Viruses Used in Labs.”
  - In the viral vector form, change the name to Lentiviral vsvg-pax2 to add clarity to the name.
  - In the viral vector form, Step 2, *Will another laboratory or a commercial supplier be involved in the production of the vector preparation?* Change answer to “yes”

PI Cites NIH Guidelines: III-D-1, III-D-3, III-E-1
Agent: Lentivirus
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: Pax2, VSVg, fluorescent marker from viral sources.

Risk Assessment: Sharps☒ | Vortexing ☒ | Sonicating☐ | Cell Sorting☒ | Centrifuging☒ | Oncogene ☒
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☒ | 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 1 (ABSL-1)
Vote for Motion: 18 For Motion | 1 Abstain

#15-24.01 Jessica Kramer. Amendment to add Candida albicans.

Synthesis of glycopolymers, polypeptides. Engineering of cell-surface proteins. Study of the epithelial glycocalyx.

Outstanding issues to be resolved which were communicated to PI through a post-screen memo.

- Please edit the SOP for handling Candida albicans in appendix 5:

- Because of the pathogenicity of Candida albicans, all manipulations need to take place in a biosafety cabinet.
- Flames and/or intense heat is not allowed in a BSC as it can interfere with the function of the cabinet, as well as damage the HEPA filter. Alternatives to flame sterilized loops would be using disposable loops, or using a bead sterilizer. You can choose which is a better fit for your lab.
- Secondary containment is necessary when the culture flask is on the orbital shaker, which can be as simple as a Ziploc bag

PI Cites NIH Guidelines: III-D-1, III-D-2, III-D-3, III-E, III-E-1
Agent: Candida albicans
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☒ | Anaesthetization☐ | 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: 18 For Motion | 1 Abstain

#76-24.02 Karen Wilcox. Amendment to add Lentiviral vector.

Two separate labs, the ADD Program (Skaggs Hall) and a separate research lab in SMBB.
ADD Program- drug development
SMBB- research on epilepsy

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

PI Cites NIH Guidelines: III-D-4, III-D-4-a, III-D-4-b, III-D-4-c-(2), III-E-3
Agent: Lentivirus
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: NEUROG2, ASCL1 from human sources; DLX2, Reverse Tetracycline Transactivator from mouse sources.

Risk Assessment: Sharps☐ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☐ | 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 at Biosafety Level 2 (BSL-2)
Vote for Motion: 16 For Motion | 3 Abstain

#84-24.05 Scott Hale. Amendment to add Lentiviral Vector

Their lab studies T cell responses to acute and chronic viral infections and in response to model vaccination in mice. Their goal is to understand how effective T cell responses are generated to induce long lasting protective immunity.

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

- **Biosafety Manual:**
  - Section B.1. The end of the lentivirus section says "no vaccines or post-exposure treatment options are available". Remove "post-exposure treatment options" from this sentence.
  - Section B.3. says "post-exposure prophylaxis for occupational exposure with HIV-based viral vectors may include the use of antiretroviral drugs." – Change 'may include' to 'includes.'

PI Cites NIH Guidelines: III-D-1, III-D-4, III-4-a, III-4-b, III-D-7, III-E
Agent: Lentivirus
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: Il2ra, Stat5a, Scramble from mouse sources.

Risk Assessment: Sharps☒ | Vortexing ☒ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☒ | 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 | 3 Abstain

#35-23.03 Jennifer Weidhaas. Amendment to add project with sewer samples.

They conduct environmental engineering research with a particular focus on waterborne pathogens and the fate and transport of hazardous chemicals in the environment.

Outstanding issue to be addressed which was communicated to PI through post-review memo.
Biosafety Manual:

- In the '*Protocol for enriching Acinetobacter radioresistens on 13C media and flushing at NRH*'
  - In the 'Preparations' section. To avoid a possible horizontal drug resistance transfer, indicate only strains without antibiotic resistance will be utilized.
  - In step 7 indicate the toilet seat will remain covered for a minimum of 5 minutes to allow any aerosols to settle.

PI Cites NIH Guidelines: n/a
Agent: Acinetobacter radioresistens
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 ☐ *specifically using a strain that is not carbapenem resistant.*
Risk Assessment: Sharps☐ | Vortexing ☐ | Sonicating☐ | Cell Sorting☐ | Centrifuging☐ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☒ | Fume Hood☒ | Sealed Rotor or Safety Buckets☒ | Anaesthetization☐ | 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 | 3 Abstain

Protocols for Review With 5 Year Approval

#14-26 Kenneth Aston. Assessment of PGC migration in zebrafish embryos.

Their lab studies male infertility, and genetic and epigenetic factors that influence fertility. They use next gene sequencing methods to identify variants associated with different infertility phenotypes, and then use various animal models to validate and further explore variants and epigenetic signatures of interest

All pre-screen concerns were addressed and no additional concerns were raised during the meeting.
PI Cites NIH Guidelines:
Agent: CRISPR/Cas9
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: Fluorescent labeling in zebrafish model.

Risk Assessment: Sharps☒ | Vortexing ☐ | Sonicating☐ | Cell Sorting☐ | Centrifuging☒ | Oncogene ☐
Risk Mitigation: Biosafety Cabinet☐ | Fume Hood☒ | Sealed Rotor or Safety Buckets☐ | Anaesthetization☐ | 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 at Biosafety Level 1 (BSL-1) and Animal Biosafety Level 1 (ABSL-1)
Vote for Motion: 15 For Motion | 4 Abstain

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

None

Pending Protocols

None

Lab/Protocol Closures

None

Spills and Incidents

#94-24 Needlestick Incident
BOR_00001497 Work performed in non-approved location.

Other Business

IBC Meetings from January to April will be held in HSEB 2958.

Next IBC meeting will be held on March 19, 2026 in HSEB 2958.