THE UNIVERSITY OF UTAH

INSTITUTIONAL BIOSAFETY COMMITTEE
MEETING MINUTES

July 17, 2025
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 June 19, 2025 Minutes

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

Old Business

#66-23.01 Jessica Brown. Amendment to add new project titled *Field Collection of Cryptococcus neoformans.* BSL-2+.

PI is still addressing the post-review.

#86-23.02 Zak Davis. Amendment to add CAV and G-Deleted Rabies Viral Vector.

PI addressed all safety concerns. Discussion was held between lab and BSO. Approval granted 6/24/25.

#62-25 John Kriesel. Investigating Intrathecal Antibodies Against Twenty Bacteria in the Spinal Fluid From Patients With Demyelinating Diseases.

Clinical Virology, DNA/RNA Sequencing, Serology

Outstanding issues that were to be resolved and were communicated to PI in post-review memo.

- **Biosafety Manual:**
  - Multiple agents are found in SciShield, which are not described in the biosafety manual, Section C.
    - Bacteria:
      - Aerococcus spp.
      - Peptostreptococcus spp.
      - Prevotella spp.

        - Parabacteroides spp.
    - Fungi:
        - Nakaseomyces
        - Debromyces
    - Viruses:
        - CMV
        - EBV
        - Herpes Simplex Types 1 and 2
        - Human herpesvirus Type 6 and 7
        - Tobamovirus
  - If they are using these agents, PI needs to update their biosafety manual to include them.
    - Include these agents in the table of Biological Agents Used in this Laboratory(pg3)
    - Provide information in Section C for these agents.
- Provide an SOP for the use of the fungi and viral agents in Section F of the manual.

PI has not responded to post-review memo.

#63-25 Matthew Wachowiak. Dynamics and Modulation of Glomerular Coding in the Olfactory Bulb.

The goal of their research is to understand sensory encoding and brain processing of olfactory information.

Outstanding issues to be addressed:
- **SciShield:**
  - Verify the list of personnel attached to the Project Form is complete.
    - The '*Viral Vector Form – AAV2'* contains personnel not listed in the Project Form.
- **Biosafety Manual:**
  - In Appendix 1 (pg18) [redacted] is listed as an emergency contact. However, [redacted] is not listed as personnel. PI needs to clarify and/or update as necessary.
  - In section I (pg14) Update the text 'Biosafety Officer (EHS): Neil Bowles'
    - Remove the name 'Neil Bowles' from the template as Dr. Bowles is no longer affiliated with the University.

PI responded to post-review memo. Responses were evaluated by BSO and ABSO. Approval granted 7/8/25.

#69-25 Martin Distel. Modeling Pediatric Cancer in Zebrafish; Generation of transgenic zebrafish through single cell injections. Injecting transduced cancer cells into fish embryos.

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:
- **SciShield:**
  - In the Project Form 'Modeling Pediatric Cancer in Zebrafish':
    - Change the containment to BSL-2.
- **In the Biosafety Manual:**
  - For the plasmids being injected into zebrafish, provide plasmid maps as an appendix, and update the Table of Contents to include these maps.

- Delete the sections which are not pertinent to their research, specifically the protocols detailing determining the infectious units and transduction of cells since the Pulsipher lab should be doing this (p. 42-44).
- Provide their SOP for injecting cells into zebrafish in the lab specific SOP section.

PI responded to post-review memo. Responses were evaluated by BSO and ABSO. Approval granted 7/3/25.

Protocols for Review, Requiring IBC Approval Before Initiation

#53-25 Sheri Holmen. Identification and characterization of drivers of melanoma brain metastasis; A high-throughput model for human melanoma; Defining the role of BRAF in glioma initiation and maintenance; Exploiting the vulnerabilities in mutant IDH gliomas; Precision Medicine Model for Pediatric Glioblastoma.

Their lab is focused on defining critical targets in cancer cells that can become the focus for therapeutic intervention. Because of the high cost of developing new therapies, it is essential to first identify which genetic alterations can be productively targeted. They are concentrating initial efforts on using a genetic approach in tumors that are refractory to conventional therapies including metastatic melanoma and glioblastoma. They plan to further validate these targets using pharmacological inhibitors of clinical importance.

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

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: Avian Leukosis Virus
Tissue Culture ☒ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☒ | Wild Type Tropism ☐| Antibiotic Resistance ☐
Replication Competence: only competent in TVA expressing cells, not competent in mammalian cells.
Transgenes and Sources: Akt, Braf, N/HRAS, MEK, IDH, Myc, MET, Bad/Bim, Pten from human source. Cre from bacteriophage source.

Agent: Lentivirus
Tissue Culture ☒ Animal Work ☒
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: MET, BRAF, KIT, AKT, EGFR, IDH, BRCA from human source. 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 ☐
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: 18 For Motion | 1 Abstain

#59-25 Alex Shcheglovitov. Signaling in the Central Nervous System.

Synaptic abnormalities are the major risk factor for the development of psychiatric disorders associated with autism, schizophrenia, and intellectual disability. Although significant progress has been made in understanding the genetics of these disorders the cellular and molecular mechanisms remain largely unknown. As a result, drugs currently prescribed to patients are largely unspecific with multiple side effects. The major focus of their lab is to understand molecular mechanisms responsible for the development and function of synapses in human neurons under normal and pathological conditions. They have developed a set of methods to derive human neurons from induced pluripotent

stem cells (iPSCs) and to investigate their cellular and molecular properties in-vitro and in-vivo. To visualize human iPSC-derived neurons in the context of the rodent brain, they need to label them with fluorescent proteins. As human iPSC-derived neurons are extremely unsusceptible for transfections, they need to use lentiviruses. Also using replication incompetent rabies viruses will allow us to map neuronal connections of the transplanted human neurons in the rodent brain.

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

PI Cites NIH Guidelines: III-D-1, III-D-3, III-D-4-a, III-D-4-b, III-E, III-E-1
Agent: AAV
Tissue Culture ☐ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒ | Antibiotic Resistance ☐
Transgenes and Sources: mCherry, hChR2 from jellyfish.

Agent: Lentivirus
Tissue Culture ☒ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☒ | Replication Incompetent ☒ | Second Generation ☐ | Third Generation ☒ | Expanded Tropism ☒ | Narrowed Tropism ☐ | Wild Type Tropism ☐ | Antibiotic Resistance ☐
Transgenes and Sources: ChR2, GCaMP6, smFP-HA, RCaMP, smFP-FLAG from synthetic sources; TVB receptor, TVA receptor from chicken; B19 from rabies; TurboRFP from sea anemone; GFP from jellyfish.

Agent: Rabies
Tissue Culture ☒ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☒ | Replication Incompetent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☒ | Wild Type Tropism ☐ | Antibiotic Resistance ☐
Deletions: Glycoprotein deletion.
Transgenes and Sources: GFP, mCherry 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 ☒
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 1 Stepdown (ABSL-1+)
Vote: 17 For Motion | 2 Abstain

#64-25 Jessica Sewell. The neural basis of sickness behavior.

They study the neurons that control sickness behaviors in mice.

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

PI Cites NIH Guidelines: III-B-1, III-D-4, III-D-4-a, III-D-4-c-(2), III-E-3
Agent: AAV
Tissue Culture ☐ Animal Work ☒
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, eGFP, mRuby from human sources. dTA, EYFP from bacteria 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 1 (BSL-1) and Animal Biosafety Level 1 (ABSL-1)
Vote for Motion: 18 For Motion | 1 Abstain

#75-25 Christopher Conrady. The immunological response to bacterial and viral infection with the eye.

Their lab is focused on better understanding the ocular immune response both in health and diseases. Specifically, they are interested in better understanding the immune response to infectious diseases in the eye and when aberrant immune responses are activated (autoimmunity). With a better understanding of these responses, they hope to identify therapeutic targets to improve visual outcomes from these conditions that are typically associated with relatively poor vision.

Outstanding issues to be resolved and were communicated to PI in a post-review memo:

- **SciShield:**
    - Provide clarity on which envelope glycoprotein is packaged into their lentiviral particles. In the registration it is stated for the lentiviral work that you will not be pseudotyping with VSVg since you will only be propagating the virus at the U. However, since the viral vector is replication incompetent, in order to propagate it at the U you will need to transfect with multiple plasmids: 1) their lentiviral transfer vector (with the LTRs and the gene of interest), 2) a packaging plasmid (containing gag and pol), 3) an envelope glycoprotein expression plasmid (this plasmid is often p-VSVg, but it could also be from a mouse-specific virus like MMLV), 4) sometimes additional plasmids such as one expressing Rev, if this is a later generation system.
        - Alternatively, if that process is performed at a vendor site and they provide you with viral particles, they will still use an envelope glycoprotein expression plasmid in their process. Provide clarity as to which envelope glycoprotein is used for their lentiviral preps.
- **Biosafety Manual:**
    - In the registration, on the lentiviral form in SciShield and in the gene editing questionnaire in the biosafety manual it is stated that you are using lentivirus to knock out their genes of interest using CRISPR/Cas9. However, the viral vector map you provided on pg. 37 of their biosafety manual is for a lentiviral expression plasmid (not a CRISPR/Cas9 vector). Provide the vector map for the CRISPR/Cas9 vector.
    - The IBC requires injections of Risk Group 2 pathogens into mice to be performed in a biosafety cabinet. Provide clarification and assurance that Risk Group 2 bacterial and viral agents are injected within a biosafety cabinet (BSC). This can be accomplished by updating the text in:
        - Appendix 11, Step 8 to include ‘Within a biosafety cabinet, a sclerotomy will then be…’
        - Appendix 12, Section E, Step 3 to include ‘Virus will be introduced, working within a biosafety cabinet, via media or subretinal injection.
        - Remove Appendices 19, 21, and 22.

PI Cites NIH Guidelines: III-D-1, III-D-3, III-D-4, III-D-4-b
Agent: Risk Group 2 Bacteria, Staphylococcus epidermidis and aureus, Streptococcus pneumoniae and pyogenes.
Tissue Culture ☒ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Enterotoxin
Tissue Culture ☒ Animal Work ☒

Agent: Varicella Zoster Virus
Tissue Culture ☐ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☒ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐

Agent: Herpes Simplex 1 and 2
Tissue Culture ☒ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☐| Antibiotic Resistance ☐

Agent: Vesicular stomatitis virus.
Tissue Culture ☒ Animal Work ☒
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 ☐
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: UNC93B1, TLR-3, IRF-3 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: 18 For Motion | 1 Abstain

#76-25 Bradley Cairns. The Role of Rsc1 and Rsc2 Chromatin Remodeling proteins in yeast; Roles of Epigenetic Changes and Transcription Factors in Spermatogenesis; Mechanistic Regulation of SWI/SNF-Family Chromatin Remodeling Complexes; Study human testis development via genomics and molecular approaches; Activity and regulation of the BAF chromatin remodeling complex; Chromatin reprogramming in preimplantation development; The Role of mDUX in Mouse Zygotic Genome Activation (ZGA) and Early Embryo Development; Establishment of Developmental Gene Silencing by Non-canonical Polycomb Complexes in Early Embryos; Germ Cell and Early Embryo Epigenetics in Zebrafish.

Chromosome Dynamics: They are interested in how chromatin structure helps regulate gene transcription, and how this process is misregulated in cancer. They address and approach this broad issue in several ways. First, they purify and characterize large protein complexes that remodel and modify chromosome structure. They are also interested in epigenetics, and how chromatin structure and DNA methylation/demethylation dynamics are used in germ cells to poise the genome for development, and in embryos to guide developmental processes. They use genetic, biochemical, and genomic methods to address these problems, and use yeast, zebrafish, and human cells.

Outstanding issues to be resolved and were communicated to PI in a post-review memo:

- **SciShield:**
  - Update references to 1:10 bleach to be ‘freshly prepared 1:10 dilution of bleach’.
  - In the Viral Vector Form - pLV_EF1a_INSERT_P2A_loxP_FLUOROPHORE_loxP_STOP
    - In Step 1 Vector Information: Update the ‘Virus Type’ to be Lentivirus.
    - In Step 5 Safety:
      - Update the PPE list to include Solid Front/Rear Closing Gown

- Complete the question What adverse effects might result from inadvertent contact (inhalation, ingestion, auto-inoculation) with this vector?:

PI Cites NIH Guidelines: III-D-1, III-D-3, III-D-4, III-E, III-E-1
Agent: Lentivirus
Tissue Culture ☒ Animal Work ☐
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: Cas9 and large T antigen from bacteria. gRNA from mouse. TERT and cMyc 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 with contingencies at Biosafety Level 2 Enhanced (BSL-2+) and Animal Biosafety Level 1 (ABSL-1)
Vote for Motion: 18 For Motion | 1 Abstain

#79-25 Gianna Hammer. Antigen Presenting Cells and Inflammation.

They are a mucosal immunologists and a “gut lab”. Bottom line, if it lives, visits, or is influenced by the gut, then this is something they want to understand. As PI of the Hammer lab, I view the gut as an “untapped resource” from which to glean information about host-microbe interactions, the balance that enables peace with microbiota, and also, how the balance must be swayed to battle against pathogens and cancer. They have ongoing research programs investigating immune dynamics in the healthy gut, the inflamed gut, the pathogen-infected gut, and colorectal cancer.

Outstanding issues to be resolved and were communicated to PI in a post-review memo:

- **SciShield:**
  - They have made the following changes for you and need you to certify the registration when you are able to access SciShield again. To do so, go to their biological summary here: https://utah.scishield.com/node/1998593/biologicals/bioSummary. There will be a blue oval button at the bottom left of the browser for submission. PI needs to click that and then initial the statements in the pop-up window as their final certification.
    - They removed references to replication-incompetent retrovirus or lentivirus found in the descriptive text sections of the Human Source Material Survey and Animal Source Material Survey.
    - In the Recombinant or Synthetic Nucleic Acid Molecules Survey, they updated Q6 to ‘No’ as you will not work with recombinant viral vectors in tissue culture.

- **Biosafety Manual:**
  - PI needs to provide emergency phone numbers for PI and lab manager as well as location of emergency equipment on page 23.

- **Documentation:**
  - Human cell lines are considered human source material and subject to compliance with OSHA Bloodborne Pathogens Standard (29CFR 1910.1030) https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030. If you are no longer using or storing human cell lines, they will need to make additional updates to their SciShield registration. If that is the case, PI needs to contact us at biosafety@ehs.utah.edu and let us know to remove the human cell line work from their SciShield registration.

- If you are still working with human cell lines, contact Dr. Andy Phillips [redacted] at Occupational Medicine for access to the Hepatitis B questionnaire in Open Range. In the email, provide the lab name and all lab personnel uNIDs
- The individuals listed below are currently associated with project forms in SciShield and require additional training documentation. PI needs to refer to the table provided and upload the relevant training certificates to SAM.

PI Cites NIH Guidelines: III-D-4, III-D-4-a, III-D-4-b, III-D-4-c-(2), III-E-3
Agent: Diphtheria Toxin
Tissue Culture ☐ Animal Work ☒
Agent: Citrobacter rodentium
Tissue Culture ☐ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☒ -Streptomycin 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) and Animal Biosafety Level 2 (ABSL-2)
Vote for Motion: 18 For Motion | 1 Abstain

#80-25 K.C. Brennan. Investigating Shared Mechanisms of Migraine and Brain Injury; 1. Cortical spreading depresssion in the origins of the migraine attack and Astrocytic mechanisms a genetic model of migraine.

To understand the mechanisms of migraine and post-traumatic headache. They use a variety of techniques including optical intrinsic signal imaging, two-photon microscopy, and electrophysiology.

Outstanding issues to be resolved and were communicated to PI in a post-review memo:

- **Biosafety Manual:**
  - Provide plasmid/vector maps for the Adeno-Associated Virus (AAV) as an appendix.

- **Documentation:**
  - The individuals listed below are currently associated with project forms in SciShield and require additional training documentation. PI needs to refer to the table provided and upload the relevant training certificates to SAM.

PI Cites NIH Guidelines: III-D-4, III-D-4-a, III-D-4-c-(2), III-E-3
Agent: AAV
Tissue Culture ☐ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☒ | Replication Competent ☐ | Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Tetrodotoxin
Tissue Culture ☐ Animal Work ☒
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: 18 For Motion | 1 Abstain

#84-25 Jessica Shay. Understanding metabolic modulator of hepatic stress.

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

PI Cites NIH Guidelines: III-D-4, III-D-4-a, III-D-4-c-(2), III-E-3
Agent: AAV
Tissue Culture ☐ Animal Work ☒
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: TBG and Cre 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) and Animal Biosafety Level 1 (ABSL-1)
Vote for Motion: 18 For Motion | 1 Abstain

#85-25 Matt Bettini. Cellular and molecular mechanisms of T cell function; Mechanisms of T cell function.

The focus of their research program is understanding central tolerance mechanisms and their dysregulation in autoimmunity. Currently funded projects are aimed at elucidating parameters of beta cell antigen specific T cell development, mechanisms important for tolerance induction to intestinal microbes, and cross talk between the gut and thymus in adults and neonates.

Outstanding issues to be resolved and were communicated to PI in a post-review memo:

- **SciShield:**
  - They have made the following changes for you and need you to certify the registration when you are able to access SciShield again. To do so, go to their biological summary here: https://utah.scishield.com/node/1984744/biologicals/bioSummary . There will be a blue oval button at the bottom left of the browser for submission. PI needs to click that and then initial the statements in the pop-up window as their final certification.
    - In the Animal Source Survey: They made an edit Survey Responses to remove the text ‘Carrying no pathogens and no recombinant DNA into laboratory animals’.
- **Biosafety Manual:**
  - Section B: Risk Assessment (pg5): contains reference to ecotropic viral vectors and references pVSV-g for the envelope protein. Remove ‘ecotropic’ from the text
- **Documentation:**
  - The individuals listed below are currently associated with project forms in SciShield and require additional training documentation. PI needs to refer to the table provided and upload the relevant training certificates to SAM.

PI Cites NIH Guidelines: III-D-3, III-D-4, III-D-4-a, III-D-4-b, III-E-1, III-E-3
Agent: E.coli 2-2 and Helicobater hepaticus
Tissue Culture ☐ Animal Work ☒
Agent Characteristics: Attenuated/Vaccine Strain ☐ | Replication Incompetent ☐ | Replication Competent ☐ |

Second Generation ☐ | Third Generation ☐ | Expanded Tropism ☐ | Narrowed Tropism ☐ | Wild Type Tropism ☒| Antibiotic Resistance ☐
Agent: Retrovirus
Tissue Culture ☒ Animal Work ☒
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) and Animal Biosafety Level 2 (ABSL-2)
Vote for Motion: 18 For Motion | 1 Abstain

Protocols for Review, Requiring IBC Notice Simultaneous with Initiation

#74-25 Amy Barrios. Phosphatase assay development.

PI Cites NIH Guidelines: III-E
Agents: Human Cells, Expressing protein in BL21 E. coli
Tissue Culture X Animal Work ☐
Risk Assessment: Sharps☐| Vortexing ☐| Sonicating☐| Cell Sorting☐| Centrifuging☐
Risk Mitigation: Biosafety Cabinet X | Fume Hood☐| Sealed Rotor or Safety Buckets☐| Anaesthetization☐| Safer Sharps☐
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Approve at Biosafety Level 2 (BSL-2)

#84-25 David Grainger. In vivo use of human and rodent mesenchymal stem cell sheets for tissue regeneration.

Pharmaceutical and biomaterials chemistry involving synthetic chemistry, biochemistry, cell culture, pathogen culture, biohazards and histological processing.

PI Cites NIH Guidelines: III-D-4-c-(2), III-E-3
Agents: human cells into animals
Tissue Culture ☐ Animal Work X
Risk Assessment: Sharps X| Vortexing ☐| Sonicating☐| Cell Sorting☐| Centrifuging☐
Risk Mitigation: Biosafety Cabinet☐| Fume Hood☐| Sealed Rotor or Safety Buckets☐| Anaesthetization☐| Safer Sharps☐
Disinfectant: Freshly Prepared 1:10 Dilution of Bleach
PPE: Laboratory Coat, Gloves, Safety Glasses
Motion: Approve at Biosafety Level 2 (BSL-2) and Animal Biosafety Level 1 (ABSL-1)

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

#82-25 Brian McClune. (IBC_00000386) BMS CA0881007 (WCG) >> A Phase III, Randomized, Open-Label, Multicenter Study to Compare the Efficacy and Safety of BMS-986393, a GPRC5D-directed CAR-T Cell Therapy, Versus Standard Regimens in Adult Participants with Relapsed or Refractory and Lenalidomide-refractory Multiple Myeloma

PI Cites NIH Guidelines: III-C
Agents: BMS-986393
Risk Assessment: Sharps X | Vortexing ☐| Sonicating☐| Cell Sorting☐| Centrifuging☐
Risk Mitigation: Biosafety Cabinet X | Fume Hood☐| Sealed Rotor or Safety Buckets☐| Anaesthetization☐| Safer Sharps X
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: 9 For Motion
15 Abstain

#88-25 Narendranath Epperla. (IBC_00000391) CRISPR CRSP-ONC-006 (SIRB) >> A Phase 1/2, Open-Label, Multicenter, Dose Escalation and Cohort Expansion Study of the Safety and Efficacy of Anti-CD19 Allogeneic CRISPR-Cas9–Engineered T Cells (CTX112) in Subjects With Relapsed or Refractory B Cell Malignancies.

PI Cites NIH Guidelines: III-C
Agents: CTX112
Risk Assessment: Sharps X | Vortexing ☐| Sonicating☐| Cell Sorting☐| Centrifuging☐
Risk Mitigation: Biosafety Cabinet☐| Fume Hood☐| Sealed Rotor or Safety Buckets☐| Anaesthetization☐| Safer Sharps X
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: 10 For Motion
14 Abstain

Pending Protocols

None

Lab/Protocol Closures

None

Spills and Incidents

None

Other Business

None

Public Comments

None

Meeting concluded at 11:49 AM.

Next IBC Meeting will be held Thursday, August 21, 2025.