SAFETY Meeting Minutes
UAMS IBC

MEETING TIME RECORDS

Meeting start time: 6/5/2026 12:02 PM
Meeting end time: 6/5/2026 2:12 PM
Meeting type: Virtual

Name of Regular/Alternate Member	Status (Member or Alternate)	Present by Teleconference?
Ha-Neui Kim	Member	Yes
Matthew Jorgenson	Member	No
Robert Hunter	Member	No – voted by email
Kimberly Murphy	Member	Yes
Lindsey Clark	Member	Yes
James Douglas	Member	Yes
James Bishop	Member	No
Youssef Aachoui	Member	Yes
Jia Liu	Member	Yes
Yuet-Kin Leung	Member	Yes
Melaney Gee	Member	Yes
Mark Manzano	Member	No
Antino Allen	Member	Yes
KyoungHyun Kim	Member	Yes
James Townsend	Member	Yes
Shengyu Mu	Member	Yes
Kikumi Ono-Moore	Ex officio	Yes
Zhiqiang Qin	Member	Yes
Lawson Birmingham	Member	Yes
Andre Ewell	Member	Yes

QUORUM INFORMATION

Number of SAFETY members on the roster: 19
Number required for quorum: 10
Quorum: Yes

All members present via teleconference received all pertinent material before the meeting and were able to actively and equally participate in all discussions.

ATTENDANCE STATUS AND VOTING KEY	
ABSTAIN:	Present for the vote but not voting "For" or "Against."
ABSENT:	Absent for discussion and voting for reasons other than a conflict of interest.
RECUSED:	Absent from the meeting during discussion and voting because of a conflict of interest.
SUBSTITUTION:	When regular members and their alternate(s) are listed in the ATTENDANCE table above and an alternate member serves as a substitute for the regular member this identifies the name of the alternate to indicate which individual is serving as the voting member for this vote. May be deleted if there are no substitutions.

GUEST NAMES

Previous Meeting minutes approved: Yes

REVIEW OF SUBMISSIONS

The review and discussion of the protocols listed below included the following elements: the agents involved and their characteristics; types of manipulations planned; the source(s) and nature of the nucleic acid sequences; the host organism(s) and vector(s) to be utilized; whether expression of a foreign gene is intended and, if so, the specific protein(s) to be produced; the containment conditions to be applied, including biosafety level and any special provisions; and the relevant sections of the NIH Guidelines.

All IBC members present were reminded to identify any conflicts of interest as each registration was reviewed.

For each protocol reviewed, it was confirmed that the Principal Investigator (PI) and laboratory personnel have received appropriate training in the safe conduct of research.

De Novo Review

1. Review of SPROTO202600000038

Title:	Regulation of invasion (BP311)
Investigator:	Katie Ryan
Submission ID:	SPROTO202600000038
Description:	Investigating the role of metastasis and cell adhesion in vitro and in vivo. Performing small molecule inhibitor screens to identify new therapeutic targets.

	In vitro: Cell lines will be transfected with siRNA (transient) or shRNA constructs (stable) to knock down expression of target proteins, such as Rnd3, plus or minus treatment with inhibitors. These cells will then be assays in various ways: Invasion, wound healing, proliferation assays, western blotting, qPCR, microscopy, mass spectometry. The goal is to determine how low expression of Rnd3 effects the phenotype of different cell lines and how Rnd3 regulates these effects. In vivo: Human and mouse lung cancer cell lines expressing Luciferase tag will be transfected with shRNA constructs to stably knock down Rnd3 expression. The stable cell lines Control vs Rnd3 knockdown, will be injected into animals either by subcu. injection with primary tumor size and metastasis measured, or by tail vein injection with tumor burden measured over time. The goal is to investigate if knocking down Rnd3 expression decreases primary tumor growth, metastasis and tumor burden compared to control cells. A total of 244 animals will be used in the AUP, from these animals the 144 should present primary tumors which will be removed and processed. All 244 of the animals will have their lungs, spleen, kidneys and liver removed for analysis of metastatic tumor growth. The biosafety aspects of the proposed project include: - The use of established human and mouse cell lines which are commercially available. - The use of recombinant proteins purified from bacteria. This involves routine use of plasmids containing genes that encode for human proteins, antibiotic resistance genes for selection, and proteins (or peptides) that facilitate purification and/or imaging. The bacterial strains used in the proposed research are all derived from Escherichia coli. - Cell lines will also be manipulated using siRNA oligos and shRNA plasmids to deplete proteins of interest or over expressing proteins of interest - Small molecule inhibitors will be developed for this project. Testing of the compounds will be performed in my lab on human cell lines in a BSL-2 biosafety cabinet. All cell culture and bacterial preps will be decontaminated with 10% bleach prior to disposal, appropriate for their biosafety level.

Agent Containment:	Biological Containment Levels: • Animal Tissue: BSL-2 • E. coli: BSL-2 • MeWo Human Melanoma Cell Line: BSL-2 • OPM2: BSL-2 • LP-1 Human Myeloma Cell Line: BSL-2 • LC-2/ad: BSL-2 • H929 Human Myeloma Cell Line: BSL-2 • KM12 Human Cell Line: BSL-2 • U266: BSL-2 • RPMI8226 Human Myeloma Cell Line: BSL-2 • H460 (NSCLC cell line): BSL-2 • KMS11 Human Myeloma Cell Line: BSL-2 • H23 Human Cell Line: BSL-2 • KMS18 Human Myeloma Cell Line: BSL-2 • H1975: BSL-2 • HCC827 Human Cell Line: BSL-2 • L363 Human Myeloma Cell Line: BSL-2 • MM1.S: BSL-2 • H1437: BSL-2 • JJN3: BSL-2 • H358 Human Cell Line: BSL-2 • EJM Human Myeloma Cell Line: BSL-2 • H520 Human Cell Line: BSL-2 • HeLa cells: BSL-2 • H1299 (NSCLC cell line): BSL-2 • HEK293T Human Cell Line: BSL-2 • A375 Human Melanoma Cell Line: BSL-2 • THP-1: BSL-2 • A549 Red-FLuc: BSL-2 • HaCaT: BSL-2 • B16-F10: BSL-2 • KMS12BM Human Myeloma Cell Line: BSL-2 • LLC: BSL-2 • KMS12PE Human Myeloma Cell Line: BSL-2 • A101D Human Melanoma Cell Line: BSL-2 • A549: BSL-2 • LLC-Fluc Murine Cell Line: BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-D-4-b • Section III-D-4-a • Section III-D-4 • Section III-D-2-a • Section III-D-2 • Section III-D

	• Section III-D-4-c

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

Initial Protocol

2. Review of SPROTO202600000036

Title:	Developments of Various Disease Animal Models and Evaluating Drug Effects
Investigator:	Donghoon Yoon
Submission ID:	SPROTO202600000036
Description:	The PI proposes generating primary tumor cells or human/mouse tumor cell lines expressing Lenti-CV-Gluc-T2A-RedFluc-T2A-Puro and pLenti-CMV-GLuc-stable-T2A-EGFP. These Lenti vectors will be obtained from an outside vendor. The generated cells will be engrafted into animals to monitor engraftment and tumor growth/metastasis using in vivo imaging (IVIS). In addition, these animals will receive therapeutic drugs, including chemotherapeutic or immunotherapeutic agents, to test their efficacy in tumor-bearing models. Additionally, PI acquired Luciferin/Luciferase-expressing bacterial strains (LAC and PAO), which will be injected into the wound sites of mice and monitored for growth, biofilm formation, and wound closure. * IVIS will monitor those human firefly luciferases gene-infected tumor cells in vivo imaging. In addition, serum from these animals will be drawn and test for serological markers (serum Immunoglobulin, human tumor cells by FACS, etc.) * We will use aerosol precautions, BSC, CFH, etc. for the containment when dealing with engrafted animals and handing serum and chemicals. * We will evaluate the correlation of disease stage and luciferase signals. Pathological symptoms of both diseases

	include collagen degradation as diseases progress. Its detection that has been developed by PI would be beneficial for early detection of the disease. * We will investigate the pathophysiology of chronic wound healing and test novel therapy. Our study will benefit to chronic wound patients.
Agent Containment:	Biological Containment Levels: • 22Rv1: BSL-2 • Human Tumor Tissue: BSL-2 • Human Bone Marrow: BSL-2 • Lentivirus: BSL-2 • Pseudomonas aeruginosa: BSL-2 • Staphylococcus aureus: BSL-2 • E. coli: BSL-2 • HBL-1 Human Cell Line: BSL-2 • DU145: BSL-2 • PC3: BSL-2 • HT Human B Cell Lymphoma Cell Line: BSL-2 • JJN3: BSL-2 • HDF: BSL-2 • FaDu: BSL-2 • SU-DHL-4 Human Cell Line (SUDHL4): BSL-2 • DLBCL cells: BSL-2 • HaCaT: BSL-2 • 5TGM1: BSL-2 • SU-DHL-5 Human Cell Line (SUDHL5): BSL-2 • Myeloma cells: BSL-2 • U266: BSL-2 • H929-Luciferase stable cell line: BSL-2 • ARP-1 Human Myeloma Cell Line: BSL-2 • OPM2: BSL-2 • MDA-MB-231 (Human TNBC cell line): BSL-2 • E0771 Murine Cell Line: BSL-2 • HEK293T Human Cell Line: BSL-2 • Human primary bone marrow cells: BSL-2 • U2932 Human Cell Line: BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-D-4 • Section III-D-1 • Section III-D-2 • Section III-D • Section III-D-3

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

Initial Protocol

3. Review of SPROTO202500000057

Title:	Preclinical assessment of natural products in oncology
Investigator:	Alicja Urbaniak
Submission ID:	SPROTO202500000057
Description:	This research evaluates natural products and their chemically modified derivatives for potential anti-cancer activity in breast cancer and melanoma models, as well as anti-mast cell activity to explore their potential as therapeutics for asthma. The work focuses on assessing cytotoxicity, selectivity, and mechanisms of action using established preclinical approaches. Particular emphasis is placed on compounds that modulate pathways involved in tumor progression and immune responses. The overall goal is to identify promising therapeutic candidates with favorable efficacy and safety profiles for further development in solid tumors, including aggressive and treatment-resistant subtypes, as well as for asthma management.
Agent Containment:	Biological Containment Levels: • 4T1 Murine Cell Line: BSL-1 • MDA-MB-231 (Human TNBC cell line): BSL-2 • A375 Human Melanoma Cell Line: BSL-2 • SK-MEL-5: BSL-2 • Animal Blood: BSL-2 • E0771 Murine Cell Line: BSL-2 • MDA-MB-468 (TNBC cell line): BSL-2 • Animal Tissue: BSL-2 • MCF10A Human Cell Line: BSL-2 • LUVA Human Mast Cell Line: BSL-2 • B16F10 Murine Melanoma: BSL-1
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-D-4-a • Section III-D

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

De Novo Review

4. Review of SPROTO202600000037

Title:	Antiserum Generation Core (Cloning and expression)
Investigator:	Jon Blevins
Submission ID:	SPROTO202600000037
Description:	The PI operates a Center Core to generate antigen-reactive antisera for UAMS investigators. This service includes limited cloning and recombinant protein expression solely to produce inactive, non-infectious, non-toxic antigens for antibody production. Investigators supply genomic or cloned DNA templates for PCR amplification; the Core does not culture or propagate pathogenic microorganisms. Genes are cloned into standard expression vectors, expressed in established E. coli expression strains, and purified using routine biochemical methods. Purified recombinant proteins are used as antigens. Immunizations are performed under approved IACUC protocols. Based on the non-pathogenic nature of the work, ABSL-2 containment has not been required by UAMS DLAM or the IBC.
Agent Containment:	Biological Containment Levels: • Animal Blood: BSL-2 • E. coli: BSL-2
Applicable NIH Guidelines:	• Section III-D-2-a • Section III-D-2 • Section III-D

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

Initial Protocol

5. Review of SPROTO202600000030

Title:	Jamsen Lab Biosafety Protocol
Investigator:	Joonas Jaemsen
Submission ID:	SPROTO202600000030
Description:	This research aims to define the molecular mechanisms by which DNA polymerases coordinate repair of DNA double-strand breaks. The central question is how distinct polymerases and nucleases contribute to DSB repair, mutagenesis, and genome stability. The primary objectives are to (1) determine how DNA polymerase λ and DNA polymerase θ perform DNA synthesis on defined DNA substrates that mimic double-strand break intermediates, (2) characterize the mechanistic features that distinguish their activities, including nucleotide selection, extension across mismatches, and processing of damaged DNA ends, and (3) assess the contribution of replicative polymerase δ in later stages of repair and its functional interplay with repair polymerases. To address these objectives, the study will use a combination of biochemical, structural, and molecular approaches. These include in vitro DNA synthesis assays on defined substrates, kinetic analysis of nucleotide incorporation, and structural studies using X-ray crystallography and cryo-electron microscopy to visualize polymerase–DNA complexes. Complementary cell-based assays will be used to evaluate repair outcomes and pathway usage in a controlled experimental setting. Overall, this work will provide mechanistic insight into how DNA polymerases contribute to double-strand break repair and how their activities shape genome integrity in normal and disease contexts.
Agent Containment:	Biological Containment Levels: • Adenoassociated virus AAV: BSL-2 • PEO4: BSL-2 • HeLa cells: BSL-2 • HEK293T Human Cell Line: BSL-2 • E. coli: BSL-1 • U2OS: BSL-2 • MDA-MB-468 (TNBC cell line): BSL-2
Applicable NIH Guidelines:	• Section III-D-2 • Section III-D

	• Section III-D-3 • Section III-D-3-a

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

De Novo Review

6. Review of SPROTO202600000033

Title:	Intracellular Pathogen Infection (BP160)
Investigator:	Daniel Voth
Submission ID:	SPROTO202600000033
Description:	Our research is centered on how certain bacteria that cause pneumonia and interact with human lung cells. We focus on three pathogens—Coxiella burnetii, Staphylococcus aureus, and Acinetobacter baumannii—to understand how they infect cells and grow within the lungs. Using a combination of cell biology, molecular biology, and biochemistry, we examine bacterial interaction with human cells. Our experiments use mammalian cell lines, human cells lines, and human tissue. Characterizing how these bacteria behave in human lung tissue will improve our understanding of pneumonia and drive development of better treatments. The work described above falls within risk group 2 and is performed at BSL-2. Applicable NIH Guidelines include Section III-D1 and III-D2.
Agent Containment:	Biological Containment Levels: • Primary Human Tissue: BSL-2 • LukS (S. aureus toxin subunit): BSL-2 • HlgB (S. aureus toxin subunit): BSL-2 • LukF (S. aureus toxin subunit): BSL-2 • LukA (S. aureus toxin subunit): BSL-2 • Protective antigen (Anthrax toxin component): BSL-2 • LukB (S. aureus toxin subunit): BSL-2 • Lethal Factor (Anthrax toxin component): BSL-2 • HlgC (S. aureus toxin subunit): BSL-2 • Hla (S. aureus toxin): BSL-2

	• Reovirus: BSL-2 • E. coli: BSL-2 • Legionella pneumophila strain LELA3118: BSL-2 • Legionella pneumophila strain GS3001: BSL-2 • E. coli: BSL-2 • Coxiella burnetii Nine Mile II (RSA439) BSL-2 Avirulent Derivatives: BSL-2 • Staphylococcus aureus: BSL-2 • E. coli: BSL-2 • Legionella pneumophila strain JR32: BSL-2 • E. coli: BSL-2 • Legionella pnuemophila (AA100) BSL-2 Derivatives: BSL-2 • Staphylococcus aureus: BSL-2 • Acinetobacter baumanni: BSL-2 • Human Primary Cell Line: BSL-2 • NCI-H292: BSL-2 • THP-1: BSL-2 • HL-60 (Human Leukemia Cell Line): BSL-2 • A549: BSL-2 • HEK293T Human Cell Line: BSL-2 • Vero: BSL-2 • HeLa cells: BSL-2
Applicable NIH Guidelines:	• Section III-D-1 • Section III-D-2 • Section III-D

a. **Determination:** Deferred (Tabled for Discussion). Chair will gather information to share with committee members at next meeting.

b. **Required modifications:**

c. **Votes:**

For: 15
Against: 0
Recused: 0
Absent: 4
Abstained: 0

De Novo Review

7. Review of SPROTO202600000034

Title:	GHV Pathogenesis (BP121)
Investigator:	James Forrest
Submission ID:	SPROTO202600000034
Description:	The goal of this work is to characterize viral and host factors involved in Gammaherpesvirus pathogenesis. Murine gammaherpesvirus 68 (MHV68) is the primary infectious

	agent used in our lab, but we commonly work with other pathogens including: Kaposi sarcoma-associated herpesvirus (KSHV), Epstein Barr virus (EBV), mammalian reovirus, and malaria parasites - Plasmodium yoelii and P. chabaudi. We also use viruses such as vesicular stomatitis virus (VSV), Adenovirus, and adenovirus-associated virus (AAV) as vectors for protein expression and/or vaccine delivery. Finally, human and other mammalian cell lines will be employed in our laboratory to explore interactions between viruses of interest and cells. • In our laboratory, we will use multiple agents that are classified as BSL-II pathogens (i.e, Murine gammaherpesvirus 68 (MHV68), Kaposi sarcoma-associated herpesvirus (KSHV), Epstein Barr virus (EBV), mammalian reovirus, vesicular stomatitis virus (VSV), vaccinia virus-expressing T7 (VACV vTF7-3), adenovirus, adenovirus-associated virus (AAV), and replication deficient retroviruses. We also use BSL-1 agents, Plasmodium yoelii and P. chabaudi. When using, protective measures and containment protocols will be used, including use of PPE and BSCs. • In our laboratory, we will use recombinant DNA in many instances. First, we will make viral mutants using standard homologous recombinant DNA protocols in order to examine their role in virulence and physiology. This involves amplifying DNA from the virus surrounding the area of interest to be targeted for mutation and cloning these regions into cloning vectors in standard laboratory strains of E. coli. These cloning vectors also contain antibiotic resistance markers for selection of transformants and/or counterselection cassettes in the case of generating clean mutations. Second, we will make complementation, overexpression, inducible expression, or reporter constructs to express genes of interest from viruses. This will involve amplifying DNA from the infectious agent and cloning it into plasmids for expression in mammalian cells. Once generated, these constructs will be transfected in mammalian cells. This will allow our laboratory to analyze interactions between viral and host proteins, rescue attenuated virus-strains, and assess impact of expression on host pathways. As a final use of recombinant DNA, it is common that we need to generate and purify recombinant protein for assays to evaluate phenotypes and/or antibody generation. To generate recombinant protein, DNA is amplified from a source DNA of interest and cloned into expression vectors in standard cloning/expression strains of E.

	coli. Protein is subsequently isolated from E. coli and used for downstream assays. • In our laboratory, animal infection models will be used. These include studies of acute and chronic gammaherpesvirus infection. These procedures will be performed in a DLAM facility or in the laboratory with IACUC approval. When performing these procedures in the DLAM facility, virus must be transported from the laboratory to DLAM, and this represents the only time when virus will be removed from the laboratory or storage location. • In our laboratory, we will handle human blood samples from UAMS or ACH clinics in sealed tubes to test for the presence of antibodies against SARS-CoV-2. Serum will be heat-inactivated and subsequent steps will be performed under containment in a BSC. Biohazard waste will be collected in biohazard bags that are sealed and disinfected with 70% EtOH prior to removal from containment. • In our laboratory, mammalian cell lines will be used to assess interactions between viruses and cells. All cell lines will be stored in our lab -80 freezer, or departmental liquid nitrogen storage tanks and only used in the laboratory. • In our laboratory, we utilize hazardous chemicals such as tamoxifen derivatives, BrdU, and EdU. We administer tamoxifen and derivatives to mice or tissue culture cells to induce CRE recombinase for gene target gene deletion. We administer BrdU or Edu to mice to evaluate cellular DNA replication during GHV infection.
Agent Containment:	Biological Containment Levels: • Animal Tissue: BSL-2 • Human Blood: BSL-2 • Animal Serum: BSL-2 • Reovirus: BSL-2 • MMLV: BSL-2 • Vaccinia virus: BSL-2 • Gammaherpes virus: BSL-2 • Murine Cytomegalovirus (Murid Herpesvirus-1): BSL-2 • Vescicular Stomatitis Virus: BSL-2 • Human gammaherpesvirus 8 (HHV-8) Kaposi's Sarcoma Associated Herpesvirus: BSL-2 • Epstein-Barr virus: BSL-2 • E. coli: BSL-2

	• Plasmodium yoeli: BSL-1 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • Plasmodium chabaudi AS: BSL-1 • E. coli: BSL-2 • MEF (Mouse Embryo Fibroblasts): BSL-2 • P3X63Ag: BSL-2 • SL4: BSL-2 • CRFK: BSL-1 • RAW 264.7 Macrophage Cell Line: BSL-2 • iSLK-BAC16: BSL-2 • SL5: BSL-2 • SVEC4-10: BSL-2 • Fcwf-4: BSL-1 • NSO: BSL-2 • A20: BSL-2 • Chinese Hamster Ovary (CHO) Cells: BSL-2 • S11: BSL-2 • Hep-2: BSL-2 • FC114E.Tr: BSL-1 • MB114: BSL-2 • HE1: BSL-2 • BHK-21: BSL-2 • NIH 3T3-CreERT2: BSL-2 • C57BL/6 p53-/- 3T3: BSL-2 • M12: BSL-2 • IMR90: BSL-2 • HeLa cells: BSL-2 • HE2: BSL-2 • 3T3: BSL-2 • BCBL-1 (KSHV+ lymphoma cell line): BSL-2 • BOSC23: BSL-2 • NIH 3T3 ATRflox/flox CreERT2: BSL-2 • PBMC: BSL-2 • C57BL/6 3T3: BSL-2 • NIH3T12: BSL-2

	• A549: BSL-2 • SL1: BSL-2 • BC3: BSL-2 • TIVE-LTC (KSHV+ immortalized endothelial cell line): BSL-2 • Vero-Cre: BSL-2 • HEK293T Human Cell Line: BSL-2 • NIH 3T12 Flp: BSL-2 • SL2: BSL-2 • SL3: BSL-2 • iSLK: BSL-2 • Vero: BSL-2 • Adenoassociated virus AAV: BSL-2 • Adenovirus: BSL-2 • SARS-CoV-2: BSL-2+
Applicable NIH Guidelines:	• Section III-D-1 • Section III-D-2 • Section III-D-3

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

De Novo Review

8. Review of SPROTO202600000041

Title:	Organoids & Xenograft mouse and rat models (BP236)
Investigator:	Ikjae Shin
Submission ID:	SPROTO202600000041
Description:	Project Overview Principal Investigator (Registration Number): Ikjae Shin (2026501) Research Summary This research project focuses on advancing oncology-based precision medicine through the establishment of sophisticated preclinical cancer models. The study utilizes human cancer cell lines (e.g., H460) and patient-derived tissues to develop xenograft models and organoids. A primary objective is to enhance liquid biopsy techniques by analyzing biomarkers,

	such as circulating tumor DNA (ctDNA) and extracellular vesicles (EVs), to provide real-time insights into tumor dynamics and treatment response. Genetic Modifications and Host-Vector Systems The investigator proposes to use lentiviral vectors to genetically modify human cancer cell lines to express luciferase. These modifications enable the use of optical imaging techniques for the biological visualization and orthogonal validation of disease burden within the models. Methodology and Risk Mitigation The project involves the transplantation of tumor fragments or modified cell lines into immune-deficient rodent models (mice and rats) to recapitulate the physiological and molecular characteristics of human cancer. All recombinant DNA work and associated laboratory procedures will be conducted under (e.g., BL2) containment. Personnel will adhere to established safety protocols, including the use of appropriate personal protective equipment (PPE) and sharps safety precautions to mitigate the risk of accidental exposure. NIH Guidelines Section This research is subject to the NIH Guidelines under Section - Recombinant or Synthetic Nucleic Acids: Section III-D-1, III-D-1-a, III-D-3 and III-D-3-a.
Agent Containment:	Biological Containment Levels: • Urine: BSL-2 • Primary Human Tissue: BSL-2 • Human Tumor Tissue: BSL-2 • Animal Tissue: BSL-2 • Human Blood: BSL-2 • Lentivirus: BSL-2 • HCC-78: BSL-2 • A549: BSL-2 • H1650: BSL-2 • MCF10A X-MAN Ras-WT: BSL-2 • MCF10A Human Cell Line: BSL-2 • H460 Red-FLuc: BSL-2 • HCC-78 Red-FLuc: BSL-2 • H1975: BSL-2 • HEK293T Human Cell Line: BSL-2 • H2009: BSL-2 • MCF10A KRAS G12V/+: BSL-2 • MCF-10F: BSL-2 • MCF10A KRAS G12V/+ Red-FLuc: BSL-2

	• H460 (NSCLC cell line): BSL-2 • H2009 Red-FLuc: BSL-2 • LC-2/ad: BSL-2 • H596: BSL-2 • EML4-ALK Fusion-A549 Isogenic: BSL-2 • MDA-MB-453 Cell Line: BSL-2 • H596 Red-FLuc: BSL-2 • H2122: BSL-2 • LC-2/ad Red-FLuc: BSL-2 • CCD-19Lu: BSL-2 • EML4-ALK Fusion-A549 Isogenic Red-FLuc: BSL-2 • MDA-MB-231 (Human TNBC cell line): BSL-2 • MCF10A Red-FLuc: BSL-2 • A549 Red-FLuc: BSL-2 • MCF7 Human Cell Line: BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-D-1 • Section III-D-3 • Section III-D-3-a

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.

c. **Votes:**

For:	15
Against:	0
Recused:	0
Absent:	4
Abstained:	0

De Novo Review

9. Review of SPROTO202600000042

Title:	Burdine Lab Biosafety
Investigator:	Marie Burdine
Submission ID:	SPROTO202600000042
Description:	This research project investigates immune cell responses and transplant-associated immunobiology using murine and ex vivo tissue models. Studies involve the handling and analysis of mouse tissues, human blood and spleen specimens obtained from approved sources, primary cell cultures, and established cell lines for mechanistic and translational immunology studies. Experimental procedures may include tissue processing, cell

	isolation, flow cytometry, molecular biology assays, transcriptomic and proteomic analyses, drug exposure studies, and functional immune assays. Human-derived materials will be handled under Biosafety Level 2 (BSL-2) containment practices in accordance with institutional biosafety policies and NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules where applicable. Potential biohazards include exposure to human bloodborne pathogens, sharps injuries, and chemical hazards associated with laboratory reagents. Personnel will utilize appropriate personal protective equipment (PPE), including laboratory coats, gloves, and eye protection. All biological waste, sharps, and chemically contaminated materials will be disposed of according to institutional Environmental Health and Safety (EHS) procedures. No intentional propagation of infectious human pathogens is performed under this protocol. All recombinant DNA, viral vectors, or genetically modified materials, if used, will be handled according to approved institutional biosafety procedures and NIH containment requirements. The overall objective of this work is to better understand immune regulation, inflammatory signaling, and therapeutic modulation in transplantation and immune-mediated disease models.
Agent Containment:	Biological Containment Levels: • Animal Blood: BSL-1 • Primary Human Tissue: BSL-2 • Adenovirus: BSL-2 • Lentivirus: BSL-2 • E. coli: BSL-2 • HCT116: BSL-2 • PANC1: BSL-2 • HEK293T Human Cell Line: BSL-2 • MiaPaCa: BSL-2 • Jurkat T Cells: BSL-2 • Animal Tissue: BSL-1 • Human Blood: BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-E-3 • Section III-E • Section III-D-1 • Section III-D

a. **Determination:** Modifications Required

b. **Required modifications:** Please review and respond to all comments throughout submission.
c. **Votes:**
For: 15
Against: 0
Recused: 0
Absent: 4
Abstained: 0

Amendment/CR
10. Review of SAMENDCR202600000051

Title:	Amendment/CR for SPROTO202500000035
Investigator:	Behjatolah Karbassi
Submission ID:	SAMENDCR202600000051
Description:	
Agent Containment:	
Applicable NIH Guidelines:	

a. **Determination:** Approved
b. **Required modifications:** No modifications required
c. **Votes:**
For: 15
Against: 0
Recused: 0
Absent: 4
Abstained: 0

REVIEW OF OTHER AGENDA ITEMS

- Administrative approvals were acknowledged.
- Welcome to members
- No inspection findings to report.
- No other new business was discussed