SAFETY Meeting Minutes
UAMS IBC

MEETING TIME RECORDS

Meeting start time: 4/3/2026 12:03 PM
Meeting end time: 4/3/2026 12:43 PM
Meeting type: Virtual

Name of Regular/Alternate Member	Status (Member or Alternate)	Present by Teleconference?
Ha-Neui Kim	Member	Yes
Matthew Jorgenson	Member	Yes
Robert Hunter	Member	No – voted by e-mail
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	No
Melaney Gee	Member	Yes
Mark Manzano	Member	Yes
Christine Simecka Morgan	Member	No
Antino Allen	Member	No
KyoungHyun Kim	Member	Yes
James Townsend	Ex Officio	No
Shengyu Mu	Member	Yes
Kikumi Ono-Moore	Ex Officio	No
Zhiqiang Qin	Member	Yes

QUORUM INFORMATION

Number of SAFETY members on the roster: 17
Number required for quorum: 9
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.

Initial Protocol

1. Review of SPROTO202600000010

Title:	DNA Damage Repair Response in Cancer Therapy (BP185)
Investigator:	Fen Xia
Submission ID:	SPROTO202600000010
Description:	This research investigates molecular mechanisms linking cellular metabolism, DNA damage repair, and tumor

	progression. Using replication-defective lentiviral vectors, we will modulate expression of selected genes involved in DNA damage response and metabolic signaling pathways in cultured human and mouse cell lines. These studies aim to better understand how alterations in these pathways contribute to cancer development and therapeutic response. Complementary in vivo studies will utilize established mouse models to evaluate the functional relevance of these pathways in tumor growth and treatment response. We will assess the effects of targeted molecular inhibitors and radiation therapy, alone and in combination, on tumor progression and immune responses. Imaging and molecular analyses will be used to evaluate treatment outcomes. All recombinant DNA experiments will be conducted under appropriate biosafety containment in accordance with NIH guidelines. Animal studies will follow institutional and regulatory requirements for humane care and use.
Agent Containment:	Biological Containment Levels: • Retrovirus: BSL-2 • Lentivirus: BSL-2 • E. coli: BSL-2 • MOE1A: BSL-2 • FaDu: BSL-2 • MOC2-luc: BSL-2 • MOE1B: BSL-2 • Mouse T Cells: BSL-2 • BT20 Human Cell Line: BSL-2 • U251N: BSL-2 • SKOV3: BSL-2 • U87 Human Glioblastoma Cell Line: BSL-2 • DU145: BSL-2 • 4T1 Murine Cell Line: BSL-1 • B16-F10-luc: BSL-2 • Sq1979 (Mouse Oral Squamous Carcinoma Cell Line): BSL-1 • C57BL/6 MEF: BSL-1 • B16-F10-SKO: BSL-1 • GL261-luc (Mouse Glioblastoma Cell Line): BSL-2 • T47D: BSL-2 • LLC: BSL-2 • HCT116: BSL-2 • 53BP1 T336A MEF: BSL-2 • E0771 Murine Cell Line: BSL-1 • SB28 (Mouse Glioblastoma Cell Line): BSL-2

	• DF-1: BSL-1 • B16-F10: BSL-1 • Pan02: BSL-1 • T98G: BSL-2 • SCC7 (Mouse Oral Squamous Carcinoma Cell Line): BSL-1 • PC3: BSL-2 • Myeloma cells: BSL-2 • HeLa cells: BSL-2 • A549: BSL-2 • ID8 p53/BRCA1/2 Knockout Cells: BSL-2 • MOC2 (Mouse Oral Squamous Cell Carcinoma (OSCC) Cell Line): BSL-2 • Human Embryonic Kidney 293 (HEK293): BSL-2 • MCF7 Human Cell Line: BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-E • Section III-D-1 • Section III-D • Section III-E-1

a. **Determination:** Approved

b. **Required modifications:**
Committee Determination: Modifications Required.
Please review and respond to all comments throughout submission.
Please contact BSO with any questions/concerns.

c. **Votes:**

For:	12
Against:	0
Recused:	0
Absent:	5
Abstained:	0

Initial Protocol

2. Review of SPROTO202600000018

Title:	Regulation of Alternative Splicing and NMD
Investigator:	Mohammad Rahman
Submission ID:	SPROTO202600000018
Description:	RNA processing misregulation has been highlighted as a critical driver of pathogenesis in recent decades. Alternative splicing (AS) and nonsense-mediated decay (NMD) are two fundamental mechanisms in RNA processing that play important roles in controlling gene expression. AS generates

	different mRNA isoforms that can encode functionally distinct proteins. NMD is a surveillance mechanism that degrades erroneous transcripts selectively. AS often generates mRNAs with a premature termination codon, which are recognized and degraded by NMD. This intricate mechanism is called AS-coupled-NMD (AS-NMD), which is strictly regulated in normal physiology and often fine-tuned in a tissue-specific manner. However, AS-NMD is frequently misregulated (suppressed or induced) in human diseases, such as cardiac and liver dysfunction, brain and developmental abnormalities, diabetes, lupus, and cancer. To date, the causes and molecular regulation of aberrant AS-NMD remain overall poorly understood. Therefore, elucidating the regulation of AS-NMD is crucial to understand this vital mechanism in different tissues and diseases. The project will determine the regulation of AS and NMD in different tissues (such as hematopoietic and mammary gland tissues) and different diseases (such as hematopoietic and breast malignancies). 1. Aberrantly regulated AS or NMD targeted genes will be identified from RNA-sequencing analysis either from model cells or public database and confirmed by experimental validation. 2. Identified targeted genes will be investigated to characterize regulatory cis-elements in RNA and critical interacting protein partners driving aberrant AS and NMD. 3. Specific validated genes will be targeted for modulation of aberrant AS and NMD using RNA-based tools, such as antisense oligonucleotides.
Agent Containment:	Biological Containment Levels: • Lentivirus: BSL-2 • Retrovirus: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • E. coli: BSL-2 • K-562 Cell Line (Human Lymphoblasts): BSL-2 • K-562 Cell Line (Human Lymphoblasts): BSL-2 • K052 (KO52) Human Acute Myeloid Leukemia Cell Line: BSL-2 • HEK293T Human Cell Line: BSL-2 • HeLa cells: BSL-2 • MCF7 Human Cell Line: BSL-2 • MDA-MB-231 (Human TNBC cell line): BSL-2 • U2OS: BSL-2

	• MOLM-13 (Human Acute Myeloid Leukemia Cell Line): BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-D-4-a • Section III-D

a. **Determination:** Approved

b. **Required modifications:**
Committee Determination: Modifications Required.
Please review and respond to all comments throughout submission.
Please contact BSO with any questions/concerns.

c. **Votes:**

For:	12
Against:	0
Recused:	0
Absent:	5
Abstained:	0

De Novo Review

3. Review of SPROTO202600000022

Title:	Poxvirus immune evasion and use in cancer therapy
Investigator:	Jia Liu
Submission ID:	SPROTO202600000022
Description:	We study how viral proteins affecting host response even in the hosts that the viruses cannot cause infection-related diseases. This effect is caused by special viral molecules and we are studying in our laboratory to understand how they do so. We will use cell culture system to understand what happens. We sometimes generate mutant proteins and mutant viruses expressing the mutant proteins for our studies. We will use replication-defective vectors for the stable expression of proteins in cells. For our study, biosafety relevant subjects are human cells, recombinant DNA (rDNA), and microbes. We also use animals for our study.
Agent Containment:	Biological Containment Levels: • Human Blood: BSL-2 • Reovirus: BSL-2 • Myxoma virus: BSL-2 • Sendai virus: BSL-2 • Vesicular Stomatitis Virus: BSL-2 • Vaccinia virus: BSL-2 • Ectromelia virus: BSL-2

	• Cowpoxvirus: BSL-2 • Zika virus: BSL-2 • Retrovirus: BSL-2 • E. coli: BSL-2 • Human Primary Cell Line: BSL-2 • U2OS: BSL-2 • HeLa cells: BSL-2 • U-937 (Human Myeloid Leukemia Cell Line): BSL-2 • Huh7: BSL-2 • THP-1: BSL-2 • A549: BSL-2 • HepG2: BSL-2 • HEK293T Human Cell Line: BSL-2
Applicable NIH Guidelines:	• Section III-F • Section III-E • Section III-D-1 • Section III-D-2 • Section III-D • Section III-D-3 • Section III-E-1 • Section III-F-8

a. **Determination:** Modifications Required

b. **Required modifications:**
Committee Determination: Modifications Required.
Please review and respond to all comments throughout submission.
Please contact BSO with any questions/concerns.

c. **Votes:**

For:	11
Against:	0
Recused:	0
Absent:	5
Abstained:	1

Note of correction: - Dr. Liu abstained from the vote rather than recused. The minutes have been corrected here and a note entered into Muse.

De Novo Review

4. Review of SPROTO202600000013

Title:	Chemotherapy Suppression of lymphatic function (BP246)
Investigator:	Amanda Fil
Submission ID:	SPROTO202600000013
Description:	Arm lymphedema is a common complication after breast cancer surgery/radiation. Clinical studies show that incidence and severity of arm lymphedema is increased if doxorubicin (DOX), cyclophosphamide (CYP), and/or docetaxel (DOCE) is included in the chemotherapy regimen. The mechanism for this remains unclear. The goal of these studies are to determine if DOX, CYP, or DOCE directly suppresses lymphatic contractile function, and if a class of drugs called ryanodine receptor blockers (including ryanodine, dantrolene, and S107) can restore lymph vessel contractions as a possible therapeutic intervention to reduce lymphedema. Aim 1 Our project will determine if DOX, CYP, and DOCE suppress spontaneous contractions of isolated lymph vessels and evaluate if DOX, CYP, and DOCE disrupt calcium signaling and oxidative stress in the muscle cells of lymph vessels. These studies will consist of both in vitro and ex vivo functional studies that will be performed in Dr. Stolarz's lab or collaborator laboratories. These studies will involve administering DOX, CYP, or DOCE to isolated lymph vessels or isolated lymph muscle cells in isolated vessel perfusion chamber or in cell culture. These studies will also include adenoviral knockdown of ryanodine receptors (RYRs) or overexpression of superoxide dismutase proteins (MnSOD, CuZnSOD) in isolated cultured lymph vessels. Adenoviral vectors will be added to the isolated lymph vessels or lymph muscle cells in the BSC for 1-2 days, then washed out, and cells/tissue will continue in culture for 5-7 days. Chemotherapy will be reconstituted in a certified fume hood and administered in the BSC for longitudinal studies or on the benchtop for terminal studies. For terminal studies, individual transfected lymph vessels will be cannulated in the isolated vessel chamber (one at a time) outside of the BSC to analyze contractile patterns at baseline and in response to chemotherapy. Lab personnel will wear gloves, lab coat, and eye protection when handling chemotherapy. All solutions and disposables contaminated with chemotherapy will be disposed of in the yellow biohazard containers. Aim 2 Our project also will measure lymph vessel contraction and lymph flow in the intact rat mesenteric lymphatic bed using

	high resolution optical imaging. Rats will be anesthetized and a single loop of mesentery will be exposed on a heated microscope stage to visualize lymph flow. Then animals will be dosed with chemotherapy (DOX, CYP, or DOCE) and lymph flow will be measured in the acute setting, or incision will be closed and lymph flow will be measured at a later timepoint. These studies will be done in the laboratory, and DOX, CYP, or DOCE will be administered (iv injection) acutely and chronically to normal healthy rats. Rats undergoing chronic chemotherapy treatment will be returned to the animal facility until the endpoint of the study (2, 7, or 21 days after dosing), and housed on ventilated racks. Rats will be considered biohazards for 72 hours following chemotherapy injection, and will be handled in a BSC during this time. After 72 hours, rats will be transferred to new clean cage and old cage will be disposed as biohazard by DLAM. Lymph flow will be assessed and tissues will be harvested in the laboratory. Aim 3 We will also assess lymph flow and efficacy in tumor-bearing rats (MATBIII rat model) to determine if circulating chemotherapy (DOX, CYP, or DOCE) suppresses lymph vessel contractions and lymph flow in vivo to cause lymphedema and whether RYR blockers protect against chemotherapy injury without effecting the tumor efficacy of the chemotherapy. MATBIII rat model is to implant the rat MATBIII mammary gland tumor cells in the rat mammary fat pads to create a rat mammary cancer model. Tumor inoculation will be done in the animal facility and tumors will be imaged in the ultrasound core facility. Tumor bearing rats will be administered chemotherapy ± dantrolene and housed in the animal facility until the endpoint of the study. Lymph flow will be assessed and tissues will be harvested in the laboratory. Rats undergoing chemotherapy treatment will be housed on ventilated racks. Rats will be considered biohazards for 72 hours following chemotherapy injection, and will be handled in a BSC during this time. After 72 hours, rats will be transferred to new clean cage and old cage will be disposed as biohazard by DLAM.
Agent Containment:	Biological Containment Levels: • Adenovirus: BSL-2 • Primary Rat Lymph Muscle Cells: BSL-1 • 13762 MAT B III (rat adenocarcinoma cell line): BSL-1 • Rat Aorta Cell Line : BSL-1 • Animal Tissue: BSL-1

Applicable NIH Guidelines:	• Section III-D • Section III-D-3

a. **Determination:** Modifications Required

b. **Required modifications:**
Committee Determination: Modifications Required.
Please review and respond to all comments throughout submission.
Please contact BSO with any questions/concerns.

c. **Votes:**

For:	12
Against:	0
Recused:	0
Absent:	5
Abstained:	0

Initial Protocol

5. Review of SPROTO202600000020

Title:	Cancer and bone (BP272)
Investigator:	Jesus Delgado-Calle
Submission ID:	SPROTO202600000020
Description:	Overall rationale: Once cancer in bone (CIB) develops, it is currently incurable. CIB causes bone pain, pathologic fractures, and spinal cord and nerve compression syndromes that increase morbidity and decrease quality of life in cancer patients. The bone destruction is characterized by localized skeletal lesions that form due to increased bone resorption and rarely heal due to a concomitant suppression of bone formation, even when the patient is in long-term remission. Further, bone cells support the growth of cancer cells and protect them from therapies. The overall goal of these studies is to examine the contribution of the interactions between bone cells and cancer cells to CIB to tumor growth, bone destruction, and resistance to therapies.
Agent Containment:	Biological Containment Levels: • Animal Blood: BSL-2 • Animal Blood: BSL-1 • Primary Human Tissue: BSL-2 • Animal Tissue: BSL-1 • Animal Tissue: BSL-2 • Lentivirus: BSL-2 • Ocy454: BSL-1 • KMS-4: BSL-2

	• MDA-MB-231 (Human TNBC cell line): BSL-2 • E0771 Murine Cell Line: BSL-2 • U266: BSL-2 • JJN3: BSL-2 • BT20 Human Cell Line: BSL-2 • 5TGM1: BSL-2 • HS5 Human Cell Line: BSL-2 • ST2: BSL-1 • Animal Cells: BSL-1 • MM1.S: BSL-2 • Vk12653 Murine Bortezomib-Resistant Myeloma Cell Line: BSL-2 • Vk12598 Murine Bortezomib-Resistant Myeloma Cell Line: BSL-2 • MLO-Y4: BSL-2 • OPM2: BSL-2 • MLO-A5: BSL-2 • Py8119 cells : BSL-2 • MCF7 Human Cell Line: BSL-2 • MCF10A Human Cell Line: BSL-2 • TRAMP-C1: BSL-1 • LNCaP: BSL-2 • PC-3: BSL-2 • 4T1 Murine Cell Line: BSL-2
Applicable NIH Guidelines:	• Section III-D-1-a • Section III-D-4-c-(1) • Section III-D

a. **Determination:** Approved

b. **Required modifications:**
Committee Determination: Modifications Required.
Please review and respond to all comments throughout submission.
Please contact BSO with any questions/concerns.

c. **Votes:**

For:	12
Against:	0
Recused:	0
Absent:	5
Abstained:	0

REVIEW OF OTHER AGENDA ITEMS

- No other new business was discussed