

IBC Meeting Minutes
8/10/2026 12:05 PM
CMRI Conference Room 31 & Teams

MEETING TIME RECORDS**Meeting start time:** 12:05**Meeting end time:** 13:28**VOTING MEMBER ATTENDANCE**

Name of IBC Member	Committee Role	Late Arrival Time	Early Departure Time
Daniel Heruth	Chair, Animal Expert, Lab Rep		
Todd Bradley	Co-Chair, Lab Rep		
Paul Ramlow	BSO, Animal Expert, Lab Rep		
Vivekanand Yadav	Alternate Lab Rep		
James Slaughter	Local Non-Affiliated	12:13	
Judy Dilts	Local Non-Affiliated		
Tamie Crutchfield	Occupational Health		

VOTING MEMBERS ABSENT

Tarak Srivastava	Lab Rep		
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NON-VOTING MEMBERS PRESENT

Foster St. Claire	AV & Ex-Officio		
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ADMINISTRATIVE STAFF

Saskia Miller	Director of the ORI		
Lizzie Short	Associate Director of the IBC		
Daniel Crabtree	Sr. IBC Manager		
Kelleigh Pearson	Administrative Project Coordinator		

QUORUM INFORMATION**Number of SAFETY members on the roster:** 7**GUEST NAMES**

No guests at this meeting.

Conflict of Interest (COI): Chair reminded the Committee to declare any COI.

Previous Meeting minutes approved:

A motion to approve was made and seconded. The motion passed with 6 votes in favor, 1 absent.

BIOSAFETY COMMITTEE UPDATES

1. Biological Safety Officer (BSO) Updates

The BSO reported that no laboratory incidents have been reported since the previous meeting. Additionally, no outstanding biosafety concerns were identified during recent laboratory walkthroughs. The BSO informed the Committee that annual laboratory surveys are scheduled to begin in the near future.

The Chair provided an update on upcoming facility developments, including plans related to the Good Manufacturing Practice (GMP) facility. The Chair noted that facility designs and associated plans will be presented to the IBC for review and discussion at a future meeting.

2. Office of Research Integrity (ORI) Updates

The Associate Director provided an overview of the institution's implementation plan for the new United States Government Policy for Stopping High-Risk Life Sciences Research. The Associate Director explained that investigators will be required to complete a new assessment form and certify that their research does not involve dangerous gain-of-function (DGOF) or International Research of Concern (IROC) activities, as applicable.

The Committee was informed that the institution's EQuIP (Ethics, Quality, and Institutional Practices) fellows will attend the September 10, 2026 IBC meeting as part of their program activities.

REVIEW OF SUBMISSIONS

De Novo Review

3. Review of IBC00123

Title:	Immune and stem cell function in leukemia
Investigator:	John Perry
Submission ID	IBC00123
Attempt to Express Foreign Genes:	NA
Protein Produced:	dCas9, various fluorophores (GFP, BFP, etc.)

Agent Characteristics:	Biological Agent Sources: • Existing stored samples acquired from KU Med or CMH and newly acquired samples from approved clinical trials at CMH or the CMH Biorepository. • Stowers Institute for Medical Research (SIMR); University of Kansas Medical Center (KUMC); CMRI • ATCC • New England Biolabs • AddGene Recombinant Nucleic Acid Work: We will clone dCas9 fused to a fluorescent gene and lentivirally infect immortal cell lines to create a stable dCas9 line. We will then be generating sgRNA fragments and cloning them into lentiviral vectors that will be used to infect the dCas9 stable immortal cell lines. Vectors: Plasmids: 1) pLX_311-KRAB-dCas9 = deactivated Cas9 fused to a KRAB domain 2) pXPR_118 = deactivated Cas9 expression 3) pU6-sgGFP-NT1 = used as the base for insertion of various sgRNAs and barcodes – will exist in many forms depending on the gene of interest Viruses 1) dCas9 vector-containing virus = used to make stable dCas9 lines 2) sgRNA vector-containing virus = used to infect dCas9 stable lines with sgRNA libraries
Agent Containment:	Biological Containment Levels: • Human Derived Blood and Blood Types: BSL-2 • Non Human Derived Blood and Blood Types: BSL-2 • THP-1: BSL-2 • HEK-293T: BSL-2 • K-562: BSL-2 • JURKAT: BSL-2 • KASUMI-1: BSL-2 • Escherichia coli K12 or derivative: BSL-1 • Lentivirus (specify generation): BSL-2 • NALM-6: BSL-2 • SEM: BSL-2
Applicable NIH Guidelines:	• Section III-D-4-a • Section III-D-4 • Section III-D • Section III-D-3

Determination: Modifications Required

Last day of continuing review period: 8/9/2027

Required modifications:

1. Basic Information Section
 - a. Revise the research summary to include a layperson-friendly explanation of the research objectives and significance, rather than focusing solely on research techniques.
2. Tissues, Blood, or Body Fluids Section
 - a. For the Human-Derived Blood and Blood Products agent, describe the use of these materials in animals, as indicated in Question 3.
 - b. For the Non-Human-Derived Blood and Blood Products agent, specify:
 - i. The species from which blood and tissue samples will be obtained (e.g., mouse, rat, pig, non-human primate).
 - ii. Whether samples originate from healthy animals or experimentally infected animals.
 - iii. Clarify whether materials are still being obtained from Stowers and remove this source if no longer applicable.
 - c. Identify the species involved in any cross-species transplantation studies.
 - d. Update references from the Animal Resource Center (ARC) to the Comparative Medicine Center (CMC).
3. Viruses or Prions Section
 - a. Clarify the concentration referenced in this section.
4. Biohazards Section
 - a. Revise the description to include the source, quantity, amount used, and whether the materials will be used in animals or humans, consistent with the information provided for other agents.
5. Recombinant or Synthetic Nucleic Acid Work Description Section
 - a. Provide the specific genome-wide screening kit number.
 - b. Identify the key components of the screening library or kit, as applicable, including targeted genes, inserts/constructs, fluorophores, and other relevant genetic elements or reagents.
 - c. Specify whether the screen involves gene overexpression, gene knockout, or both.
 - d. Specify which human and mouse cell types will be used for CRISPR-mediated genome screening.
 - e. Add descriptions for the SEM and NALM-6 cell lines.
6. Animals Section
 - a. Clarify whether an active IACUC protocol is in place authorizing animal housing at the University of Kansas Medical Center (KUMC) Animal Facility.

7. Risk Group and Containment Practices Section
 - a. Include the applicable NIH Guidelines section, Biosafety Level (BSL), and Animal Biosafety Level (ABSL).
8. Exposure Assessment and Protective Equipment Section
 - a. Include bloodborne pathogen risks associated with the handling of human blood samples.
9. Dual Use Research of Concern Section
 - a. Revise the response to clearly explain why the work does not meet Dual Use Research of Concern criteria.
10. Waste Management Section
 - a. Specify the use of 70% ethanol if applicable.
11. Genome Editing Technologies Section
 - a. Provide the specific number of targets included in the screen, even if the approach is genome-wide.
 - b. Clarify the type of gene modifications being performed (e.g., gain-of-function, loss-of-function, or both).
 - c. Ensure responses regarding the function of genes after modification are consistent with the statement that both gain- and loss-of-function libraries will be screened.

Comments:

The BSO provided an overview of the three-year renewal submission. The Chair then opened the protocol for Committee discussion.

The Committee first reviewed the Tissues, Blood, or Body Fluids section. For the human-derived blood and blood products agent, a member noted that Question 3 indicates these materials will be used in animals and requested that a description of the animal use be included in this section. During discussion of the non-human-derived blood and blood products agent, members requested that the PI specify the species from which blood and tissue samples will be obtained and indicate whether the samples originate from healthy or experimentally infected animals. A member also asked whether materials are still being obtained from Stowers and recommended removing this source if it is no longer applicable. Regarding cross-species tissue transplantation, members requested clarification regarding the species that will be transplanted into mice and requested that references to the Animal Resource Center (ARC) be updated to the Comparative Medicine Center (CMC).

The Committee next reviewed the Viruses or Prions section. A member requested clarification regarding the concentration reported in this section.

During review of the Biohazards section, a member noted that the description should provide the same level of detail included for other agents, including the source, quantity, amount used, and whether the materials will be used in animals or humans.

The Committee then discussed the Recombinant or Synthetic Nucleic Acid Work Description section. A member requested that the PI provide the specific genome-wide screening kit number and identify the key components of the screening system, including target genes, inserts or constructs, fluorophores, and other relevant genetic elements or reagents. The Chair led a discussion regarding CRISPR/Cas9 technologies and noted that this topic would be beneficial for a future IBC continuing education session. Additional comments included requests for clarification regarding whether the screen involves gene overexpression, gene knockout, or both; identification of the human and mouse cell types that will be used for CRISPR-mediated genome screening; and descriptions of the SEM and NALM-6 cell lines.

The Animals section was subsequently reviewed. A member inquired whether the PI has an active IACUC protocol authorizing the housing of animals at the University of Kansas Medical Center (KUMC) Animal Facility and requested clarification.

In the Risk Group and Containment Practices section, a member requested that the PI identify the applicable NIH Guidelines section, Biosafety Level (BL), and Animal Biosafety Level (BL-N).

The Committee discussed the response regarding the "Direct Route" question within the transportation section. Following discussion, members agreed that the existing response was adequate and the comment was withdrawn.

Review of the Exposure Assessment and Protective Equipment section resulted in a request to include bloodborne pathogen risks associated with handling human blood samples.

For the Dual Use Research of Concern section, a member requested that the PI revise the response to explain why the proposed research does not meet Dual Use Research of Concern criteria.

The Committee also reviewed the Waste Management section, where a member noted that the use of 70% ethanol should be specified if applicable to the laboratory's procedures.

Discussion of the Genome Editing Technologies section resulted in several requests for clarification. Members noted that a specific number of targets should be provided even if the screen is genome-wide in nature. Additional clarification was requested regarding the direction of gene modification, as the study appeared to involve gene knockouts. Because the PI indicated that both gain- and loss-of-function libraries would be screened, members requested that the response describing the function of genes after modification be updated to accurately reflect both types of modifications.

Finally, the Committee reviewed the Basic Information section. A member requested that the research summary be revised to include a layperson-friendly explanation of

the project's objectives and significance rather than focusing primarily on the research techniques employed.

Following discussion, a motion was made to require modifications to the protocol. The motion was seconded and approved.

Votes:

For: 7
Against: 0
Recused: 0
Absent: 0
Abstained: 0

Initial Protocol

4. Review of IBC00124

Title:	Cancer Therapeutics
Investigator:	Yong Li
Submission ID	IBC00124
Attempt to Express Foreign Genes:	This protocol involves the expression of foreign genes from living organisms in mammalian cells and mice using recombinant and synthetic nucleic acid technologies. Foreign genes may include mammalian genes and other therapeutic or experimental transgenes relevant to cancer, immunology, metabolic disease, aging, and gene delivery research. Expression may be achieved through plasmid DNA constructs, DNA vaccines, genome-editing vectors, transgenic animals, engineered cell lines, and lipid nanoparticle-mediated delivery of nucleic acids. These genes are introduced to evaluate gene expression, immune responses, therapeutic efficacy, disease mechanisms, pharmacology, and delivery platform performance. The expressed gene products are not expected to increase pathogenicity, toxicity, transmissibility, or environmental risk beyond those associated with the approved experimental systems. The work will be conducted in accordance with institutional biosafety policies, NIH Guidelines, and applicable containment requirements.
Protein Produced:	Proteins potentially produced in this research include: reporter proteins, Recombinant proteins, potentially associated with cancer therapy, will be encoded by experimental plasmids, DNA vaccines, transgenes, genome-editing constructs, or lipid nanoparticle-delivered nucleic acids used for studies of cancer, immunotherapy, aging, obesity, metabolic disease, gene delivery, and therapeutic development. Recombinant monoclonal antibodies, bispecific antibodies, antibody fragments, and antibody-derived proteins directed

	against disease-associated proteins will be produced and evaluated. Additional proteins encoded by future research constructs may include therapeutic antigens, cytokines, immune modulators, reporter proteins, genome-editing enzymes, and other mammalian proteins relevant to the approved research aims.
Agent Characteristics:	Biological Agent Sources: • Past Institution • Thermo Fisher Cat 18265017 and C101010 • Commercial • Mice from an approved IACUC protocol • Experimental mice from an approved IACUC protocol Recombinant Nucleic Acid Work: We will use the following vectors: gWIZ, NTC9385R and an antibiotic-free vector we developed ourselves, namely, pIR for the delivery of recombinant DNAs. Vectors: NTC-9385R: Commercially available from Aldevron. An anti-biotic free non-viral DNA vector suitable for gene delivery for both in vitro transfections and in vivo injections. gWIZ: Commercially available from TwistBio. A commonly used non-viral DNA vector suitable for gene delivery for both in vitro transfections and in vivo injections. pIR: Our own lab developed anti-biotic free non-viral DNA vector suitable for gene delivery for both in vitro transfections and in vivo injections.

Agent Containment:	Biological Containment Levels: A20: BSL-1, A375: BSL-2, 1R5: BSL-2, 4T1 (mouse breast cancer cell line): BSL-2, A549 (Human Lung Adenocarcinoma): BSL-2, ARH-77: BSL-2, AU565: BSL-2, B16-F0: BSL-1, B16-F10: BSL-1, BJAB: BSL-2, BT549: BSL-2, BXPC-3: BSL-2, CMT167: BSL-2, COLO-320: BSL-2, CT26: BSL-1, EMT6: BSL-1, Escherichia coli (DH5 alpha, One Shot Top10, and Mach1): BSL-1, Expi293: BSL-2, GL261: BSL-1, H1048: BSL-2, H1105: BSL-2, H1299: BSL-2, H1770: BSL-2, H2087: BSL-2, H2196: BSL-2, HBL-1: BSL-2, HCC70: BSL-2, HELA: BSL-2, HEK-293T: BSL-2, HT-29: BSL-2, Human Derived Blood and Blood Types: BSL-2, HCT-116: BSL-2, ID8: BSL-1, KASUMI-1: BSL-2, LLC1: BSL-1, LS1034: BSL-1, MC38: BSL-2, MC38-hPD-L1: BSL-2, MC38-hPD-L1 K136R: BSL-2, Mouse Tissue: BSL-1, MYD88-null HEK293T: BSL-2, NIH3T3 (mouse fibroblast cell line): BSL-1, Non Human Derived Blood and Blood Types: BSL-2, NUGC3: BSL-2, OCI-LY-19: BSL-2, PA-TU-8988T: BSL-2, Renca: BSL-1, RPCI.WM1: BSL-2, SK-BR-3: BSL-2, SU-DHL-2: BSL-2, SU86-86: BSL-2, SW1088: BSL-2, TMD8: BSL-2, TS/A: BSL-2, WiDr: BSL-2.
Applicable NIH Guidelines:	• Section III-E-3 • Section III-D-4-a • Section III-F-8-C-VII • Section III-E-1 • Section III-F-8-C-VIII

Determination: Modifications Required**Last day of continuing review period:** 8/9/2027**Required modifications:**

1. Basic Information Section
 - a. Revise the Summary of Research to better describe the research objectives in lay terms.
 - b. Include a lay description of the nanoparticles and their purpose in the study.
2. Tissues, Blood, or Body Fluids Section
 - a. Specify the company or source from which human materials will be obtained.
 - b. Verify and clarify the reported volume of human blood (10-20 L), as the volume appears excessive.
 - c. Specify the source of animals, including where mice will be obtained or purchased.
 - d. Revise quantity information to describe blood volumes and the number of collection tubes rather than animal numbers.

- e. For mouse tissues, describe the specific tissues that will be collected and how they will be used.
 - f. Revise quantity information for mouse tissues to reflect the approximate number and amount of tissue samples rather than the number of mice.
 - g. Include the transfer of human peripheral blood mononuclear cells (PBMCs) into NSG mice.
 - h. Provide the approximate quantities of tissues and PBMCs that will be used.
- 3. Primary Cells or Cell Lines Section
 - a. Update the biocontainment levels for the listed cell lines to reflect Biosafety Level 2 handling, these comments have been added to the protocol.
- 4. Bacteria, Yeasts, Fungi, or Parasites Section
 - a. Describe the non-viral vectors being used rather than indicating "None" in response to the question regarding other microorganisms.
- 5. Recombinant or Synthetic Nucleic Acid Work Description Section
 - a. Include a description of safety precautions associated with the work.
 - b. Provide additional detail regarding experimental procedures.
 - c. Describe how recombinant nucleic acids will be introduced into cells and indicate whether expression will be transient or stable.
 - d. Provide details regarding the lentiviral vectors and delivery strategies being used.
 - e. Describe the use of lentivirus, including its purpose within the study.
 - f. Explain how shRNA constructs will be delivered for gene silencing.
 - g. Provide the appropriate genus and species information.
 - h. Clarify the response regarding living organisms and ensure that any animal-related information is described in the appropriate section.
 - i. Remove references to unspecified "other reporter proteins" and specifically identify all reporter proteins to be used.
 - j. Add any future reporter proteins through amendment rather than using open-ended descriptions.
 - k. Describe the use of lipid nanoparticle-delivered nucleic acids and DNA vaccines, including information consistent with other relevant sections of the protocol.
 - l. Describe the safety precautions that will be implemented when working with nanoparticles.
- 6. Animals Section
 - a. Clarify whether immunocompromised animals will be used.
 - b. Identify the specific animal strains and provide a description of how each strain will be utilized in the study.

7. Exposure Assessment and Protective Equipment Section
 - a. Describe the risks associated with lentiviral vectors.
 - b. Include bloodborne pathogen risks associated with human blood and human-derived cell lines.
 - c. Describe the protective measures used to mitigate these risks.
8. Dual Use Research of Concern Section
 - a. Revise the response to clearly explain why the research does not meet Dual Use Research of Concern criteria.

Comments:

The BSO provided an overview of the above initial protocol. The Chair then opened the protocol for Committee discussion.

The Committee first reviewed the Basic Information section. Members requested that the Summary of Research be revised to better describe the objectives of the research in lay terms. Additionally, members requested that the summary include an explanation of the nanoparticles being used and their role within the study.

The Committee then discussed the Tissues, Blood, or Body Fluids section. Members requested that the PI specify the company or source from which human materials will be obtained and clarify whether the CMC is involved in providing any materials. Members also requested that the source of the mice, including the vendor from which they will be purchased, be identified. During discussion, a member noted that the reported volume of human blood (10-20 L) appeared excessive and requested clarification regarding the accuracy of the stated volume. Additional comments included requests to revise quantity information to reflect blood volumes and the number of collection tubes rather than animal numbers. For mouse tissues, members requested that the specific tissues to be collected be described and that quantities be reported as the approximate number and amount of tissue samples rather than the number of animals. Members also requested that the transfer of human peripheral blood mononuclear cells (PBMCs) into NSG mice be included and that approximate quantities of both tissue samples and PBMCs be provided.

The Primary Cells or Cell Lines section was subsequently reviewed. Following Committee discussion, members agreed that most of the listed cell lines should be handled at Biosafety Level 2 (BSL-2) and requested that the containment designations be updated accordingly throughout the protocol.

During review of the Bacteria, Yeasts, Fungi, or Parasites section, the Committee noted that the response to the question regarding other microorganisms was listed as "None." A member requested that the non-viral vectors being used in the study be described.

The Committee next reviewed the Recombinant or Synthetic Nucleic Acid Work Description section. Members requested that the PI provide additional detail regarding the experimental procedures and describe the safety precautions associated

with the work. Clarification was requested regarding how rDNA would be transferred, including whether expression would be transient or stable. Members noted that lentivirus is referenced elsewhere in the protocol but that sufficient details regarding the vectors, delivery strategies, and intended use were not provided in this section. Additional clarification was requested regarding the delivery of shRNA constructs for gene silencing and the appropriate genus and species information associated with the work. The Committee also discussed Question 9, noting that it pertains to living organisms, and requested more complete descriptions regarding any mouse expression systems being utilized. Following discussion, the Committee recommended removing references to unspecified "other reporter proteins" and instead listing all reporter proteins individually. Members agreed that any future additions should be submitted through protocol amendment. The Committee further noted that lipid nanoparticle-delivered nucleic acids and DNA vaccines are referenced within the protocol but are not adequately described in other applicable sections. Members requested that these materials be more fully described and that safety precautions for handling nanoparticles be included.

The Committee then reviewed the Animals section. Members requested clarification regarding whether immunocompromised animals will be used and asked that the specific animal strains and their intended uses be clearly described.

In the Exposure Assessment and Protective Equipment section, members noted that the risks associated with lentiviral vectors should be described. Members also requested that bloodborne pathogen risks associated with human blood and human-derived cell lines be addressed.

Finally, the Committee reviewed the Dual Use Research of Concern section and requested that the response be revised to clearly explain why the proposed research does not meet the criteria for Dual Use Research of Concern.

A motion was made to require modifications to the protocol. The motion was seconded and approved.

Votes:

For:	7
Against:	0
Recused:	0
Absent:	0
Abstained:	0

REVIEW OF OTHER AGENDA ITEMS**5. Review of Minors in Research Laboratories:**

Description:	Initial documentation/publication. This has been in development for approximately one year. The IBC last reviewed it in November 2025, at which time the committee requested a final review following comments from the Office of General Counsel (OGC). The policy has since been reviewed and approved by OGC and is now active. Please review the policy and provide any comments or suggested revisions. If no further changes are needed, we can consider the IBC review complete.
Notes:	The BSO provided an overview of the revisions made to the Minors in Research Laboratories policy following review by the Office of General Counsel (OGC). An Occupational Health and Safety member asked who would be responsible for reviewing students' medical conditions, noting that this information is not currently collected from participating students by the Occupational Health office. It was also discussed that students typically complete requirements through Graduate Medical Education (GME). The BSO suggested coordinating with GME and reviewing its existing policies and procedures to ensure consistency. The Committee discussed injury and medical coverage considerations for minors working in research laboratories. A member noted that Occupational Health would not cover injuries sustained by non-employee students and asked whether a parental waiver addressing treatment authorization, emergency medical care, and related matters is required. The Associate Director referenced the existing High School Student Laboratory Worker Agreement Form as a potential mechanism for addressing these concerns. The BSO agreed to obtain and distribute the form to the Committee for review. Following discussion, the Committee requested that the policy be circulated for an email vote after members have had an opportunity to review the High School Student Laboratory Worker Agreement Form. The Committee agreed to review the form and subsequently conduct an email vote on the policy.

6. Review of Review and Presentation of Proposed 4th Floor Remodel Floor Plans:

Description:	The BSO will present the proposed floor plans for the 4th floor remodel and provide an overview of the project.
Notes:	The BSO and Chair presented an overview of the proposed fourth-floor remodel and reviewed the associated floor plans with the Committee. Following the presentation, the Committee discussed the proposed renovations and had no significant concerns. A motion was made to approve the proposed fourth-floor remodel plans. The motion was seconded and approved. Vote: 7 in favor, 0 opposed.

ACKNOWLEDGMENTS SECTION

The following items were approved outside of a convened IBC meeting. The Committee reviewed and acknowledged the following items during this meeting.

<u>ID</u>	<u>Name</u>	<u>State</u>	<u>Specialist</u>	<u>Agenda Type</u>
SAMEND202600000001	Amendment for IBC00086	Approved	Elizabeth Short	Admin Approval
SAMEND202600024	Amendment for IBC00088	Approved	Daniel Crabtree	Admin Approval
SAMEND202600026	Amendment for IBC00105	Approved	Daniel Crabtree	Admin Approval
SAMEND202600030	Amendment for IBC00084	Approved	Daniel Crabtree	Admin Approval
SAMEND202600031	Amendment for IBC00086	Approved	Elizabeth Short	Admin Approval
SAMEND202600032	Amendment for IBC00116	Approved	Daniel Crabtree	Admin Approval
SAMEND202600034	Amendment for IBC00086	Approved	Elizabeth Short	Admin Approval
SAMEND202600035	Amendment for IBC00116	Approved	Elizabeth Short	Admin Approval
SAMEND202600036	Amendment for IBC00111	Approved	Daniel Crabtree	Admin Approval
SAMEND202600038	Amendment for IBC00105	Approved	Daniel Crabtree	Admin Approval
SAMEND202600039	Amendment for IBC00111	Approved	Daniel Crabtree	Admin Approval